



**BUILDING**

# **CATALOGUE**

**JULY 2018**



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## General installation instructions for valves and fittings

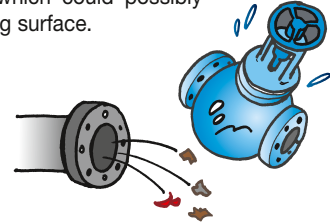
### 1. Storage

Before installation, please store the valves and fittings in a dry place to protect them from harsh weather conditions, wind and sand. Please leave the goods in their original packing and do not remove the flange or end protections. Please handle the products with care. Do not drop or drag them on the floor.



### 2. Cleaning of pipes

Before installing the valves and fittings on the pipes, please clean the pipes with water or compressed air. Please check for welding spatters or metal chips which could possibly damage the valves' sealing surface.



### 3. Deviations of pipes

Before installing the valves and fittings, please check the pipe dimensions with the equipment already in place. Please also verify the correct alignment of the upstream and downstream pipes. Do not count on the valves and fittings to make up for pipe deviations. This might result in sealing leakages, blockings or mechanical ruptures.



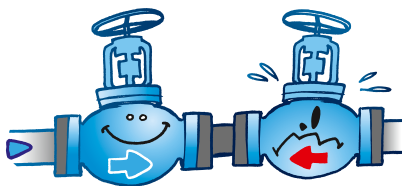
### 4. Expansion joints

For pipes carrying heat transfer fluids, please anticipate the compensation of dilatations with the help of adapted equipment (loops and/or expansion joints). Their absence may lead to mechanical ruptures and a blocking of the valves.



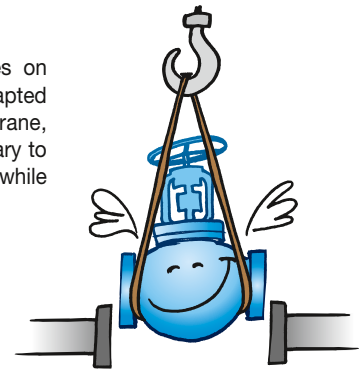
### 5. Mounting direction

A certain number of devices does not necessarily have a symmetrical functioning. It is essential to comply with the mounting direction indicated by the engraved or stamped arrow on the body and adapt it to the direction of the fluid flow.



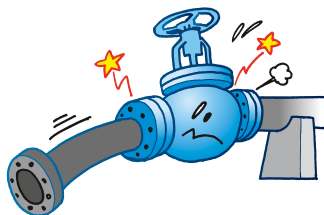
### 6. Slings

When installing the valves on the pipes, please use adapted lifting devices (bridge crane, forklift, hoist). It is necessary to align the valve correctly while installing it.



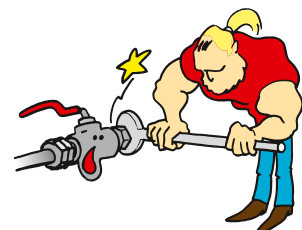
### 7. Support

For valves representing a significant weight in comparison with the pipes' solidity, it is essential to provide an additional support independently from the pipes. Likewise, the valves cannot serve as support for pipes since they have to be supported themselves. The failure to respect these rules can lead to leakages, blockages and breakages.



### 8. Tightening

For threaded and flanged valves and fittings, please use a suitable tightening torque. Insufficient tightening can result in leakages. Overtightening can lead to blocking the valve or mechanical ruptures. The coupling torques are indicated on every product manual.



## Selecting your valve

Aspects to take into consideration when determining a valve.

### Service conditions

Fluid used:

- Phase: gas, liquid or powdered
- Nature: water, air, petrol, solvent...
- Classification acc. to Regulation n°1272 (hazardous, non-hazardous)

Operating pressure: allowable maximum and minimum

Operating temperature: allowable maximum and minimum

### Type of the valves and its functionality

Type:

- Ball valve
- Butterfly valve
- Globe valve
- Needle valve
- Gate valve
- Knife gate valve
- Check valve
- Control valve
- Safety valve
- Pressure regulating valve
- Strainers
- etc.

Function: sectioning, regulation, balancing, safety, passing, releasing...

### Features

- Material of the body, the closing member, the seats and gaskets
- Nominal diameter and bore
- Type of connection:
  - Threaded: BSP/NPT/SMS
  - Welding: SW/BW
  - Flanged: various standards
  - Quick couplings (camlock, symmetrical, clamp...)
- Face-to-face dimension acc. to EN 558 or others
- Type of operation:
  - Manual valves: handle, handwheel, lever, gear box
  - Actuated valves: pneumatic, hydraulic, electric

### Other factors

- Environmental conditions & installation location of the valves
- Standards: ISO, EN, ANSI, other specific national standards, fire safe, fugitive emissions...
- Required certification: CE-PED, ATEX, inspection documents acc. to EN 10204, hydraulic test
- Service lifetime, cycles and expected wear
- Maintenance procedures and spare parts availability

## Summary of inspection documents acc. to EN 10204:2004

| EN 10204 Reference | Designation of the document type         | Document content   | Document validated by  |
|--------------------|--|--|--|
| Type 2.1           | Declaration of compliance with the order | Statement of compliance with the order.  | The manufacturer   |
| Type 2.2           | Test report                              | Statement of compliance with the order, with indication of results of non-specific inspection. | The manufacturer   |
| Type 3.1           | Inspection Certificate 3.1               | Statement of compliance with the order, with indication of results of specific inspection.     | The manufacturer's authorized inspection representative independent of the manufacturing department  |
| Type 3.2           | Inspection Certificate 3.2               | Statement of compliance with the order, with indication of results of specific inspection.     | The manufacturer's authorized inspection representative independent of the manufacturing department and either the purchaser's authorized inspection representative or the inspector designated by the official regulations. |

## Diameter equivalences table

| DN            | 8    | 10   | 15    | 20    | 25    | 32     | 40     | 50    | 65     | 80    | 100     | 125     | 150     | 200     | 250 | 300 |
|---------------|------|------|-------|-------|-------|--------|--------|-------|--------|-------|---------|---------|---------|---------|-----|-----|
| NPS           | 1/4" | 3/8" | 1/2"  | 3/4"  | 1"    | 1 1/4" | 1 1/2" | 2"    | 2 1/2" | 3"    | 4"      | 5"      | 6"      | 8"      | 10" | 12" |
| Metric        | 8/13 | 8/13 | 15/21 | 20/27 | 26/34 | 33/42  | 40/49  | 50/60 | 66/76  | 80/88 | 102/114 | 125/139 | 150/168 | 200/219 | -   | -   |
| Plastic pipes | -    | -    | 20    | 25    | 32    | 40     | 50     | 63    | 75     | 90    | 110     | -       | -       | -       | -   | -   |

## Foreword on the new Pressure Equipment Directive (2014/68/EU)

On May 15<sup>th</sup>, 2014, the new Pressure Equipment Directive (PED) has been adopted by the European Parliament and the Council of the European Union. This recast of the former 97/23/EC Directive is meant to be transferred and enforced in 2 steps:

- **June 1<sup>st</sup>, 2015:** Start of application of the Art. 13 of the new PED, introducing a new determination of fluid groups acc. to the Classification, Labelling and Packaging (CLP) Regulation (EC 1272/2008). This article replaces the Art. 9 of the 97/23/EC Directive.
- **July 19<sup>th</sup>, 2016:** Start of full application of the new 2014/68/EU Directive.

Some essentials of the former PED remain unchanged such as the scope, the "Essential Safety Requirements" (Annex I), the "Conformity Assessment Tables" (Annex II), and the CE marking requirements.

However, concerning changes, in addition to the classification of fluids, the new PED defines the obligations and responsibilities of importers (Art.8) and distributors (Art. 9), and it reevaluates four of the conformity assessment modules (Annex III) as follows:

| 97/23/EC   | A1 | B1              | B                   | C1 |
|------------|----|-----------------|---------------------|----|
| 2014/68/EU | A2 | B (design type) | B (production type) | C2 |

It is also quite noticeable that the Art. 3, §3 of the 97/23/EC Directive, defining the exclusions of the PED's Technical Requirements, becomes the Art. 4, §3 under the 2014/68/EU Directive.

Finally, the Article 48, §3 of the new PED establishes that "certificates and decisions issued by conformity assessment bodies under Directive 97/23/EC shall be valid under this Directive," therefore all the certificates issued under the former PED by our manufacturers remain valid until their renewal. We decided to present a summary of the 2014/68/EU Directive. The references to the PED corresponding to each item are related to the certifications valid on the date of issue of this catalogue.

## PED - Pressure Equipment Directive (2014/68/EU)

### 1 - Scope

The PED applies to the design, manufacture and conformity assessment of pressure equipment and assemblies with a maximum allowable pressure (PS) greater than 0,5 bar such as: vessels, pressurised storage containers, heat exchangers, steam generators, boilers, industrial pipes, safety devices, pressure accessories, valves and fittings.

**Equipment excluded from the PED** (CE marking prohibited) :

- Equipment with PS < 0,5 bar (Art. 1 §1)
- Valves and fittings < DN32 (Art. 4 §3)

DN: Nominal size  
PS: Maximum allowable pressure  
TS: Maximum/minimum allowable temperature

### 2 - Classification & fluid groups acc. to Regulation n°1272/2008 (2014/68/EU Directive, Art. 13, §1)

Fluids means gases, liquids and vapours in pure phase as well as mixtures thereof. Fluids may contain a suspension of solids.

| Group 1 - Hazardous fluids  |                                      | Group 2 - Non hazardous fluids          |  |
|---|--------------------------------------|---|--|
| explosive, extremely flammable, highly flammable, flammable<br>(max. allowable temp. above flashpoint), pyrophoric, very toxic, toxic, oxidizing. |                                      | other fluids not referred to in Group 1 |  |
| <b>Liquids</b><br>example: fuel   | <b>Gases</b><br>example: natural gas | <b>Liquids</b><br>example: water        | <b>Gases</b><br>example: saturated steam |

### 3 - Risk categories (Annex II)

Risk category IV only applies for safety devices.

#### 3/1 - Dangerous gases (Group 1), example: natural gas (Annex II, table 6)

| Class | PN | DN   | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 |  |
|-------|----|------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|--|
|       |    | 2,5  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 6    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 10   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 16   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 150  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 25   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 40   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 300  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 63   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 100  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 600  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 1500 |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |
|       |    | 2500 |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |  |

#### 3/2 - Other gases (Group 2), example: air (Annex II, table 7)

| Class | PN | DN   | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|-------|----|------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|       |    | 2,5  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 6    |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 10   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 16   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 150  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 25   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 40   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 300  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 63   |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 100  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 600  |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 1500 |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 2500 |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |

#### 3/3 - Dangerous liquids (Group 1), example : fuel (Annex II, table 8)

| Class | PN | DN        | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|-------|----|-----------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|       |    | 2,5       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 6         |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 10        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 16        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 150       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 25        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 40        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 300       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 63        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 100       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 600       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 1500      |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 2500      |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | > 500 bar |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |

#### 3/4 - Other liquids (Group 2), example: water (Annex II, table 9)

| Class | PN | DN        | 15 | 20 | 25 | 32 | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 |
|-------|----|-----------|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
|       |    | 2,5       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 6         |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 10        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 16        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 150       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 25        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 40        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 300       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 63        |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 100       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 600       |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 1500      |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | 2500      |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |
|       |    | > 500 bar |    |    |    |    |    |    |    |    |     |     |     |     |     |     |     |     |     |     |



## 4 - Conformity assessment procedures (Art. 4 + Annex III)

|              | Without Quality Assurance  |  | With Quality Assurance  |   |
|--------------|--|--|---|---|
|              | type   | unit   | type  | unit  |
| Category I   | <b>Module A</b><br>Internal production control (self-certification)  |  | -   |   |
| Category II  | <b>Module A2</b><br>Internal manufacturing control & Random checks<br>+ monitoring of final assessment by NB |  | <b>Module D1</b><br>Production process QA by NB   | <b>Module E1</b><br>Final product inspection QA by NB   |
| Category III | <b>Module B (design type) + C2</b><br>EU design-examination<br>+ conformity to type by NB<br>& Random checks | <b>Module B (design type) + F</b><br>EU design-examination<br>+ product verification by NB | <b>Module B (production type) + E</b><br>EU type-examination<br>+ product QA by NB            | <b>Module H</b><br>Full QA = Quality system assessment<br>& surveillance by NB                          |
|              |  |  | <b>Module B (design type) + D</b><br>EU design-examination + production process QA by NB      |   |
| Category IV  | <b>Module B (production type) + F</b><br>EU type-examination<br>+ product verification by NB                 | <b>Module G</b><br>EU unit verification by NB  | <b>Module B (production type) + D</b><br>EU type-examination<br>+ production process QA by NB | <b>Module H1</b><br>Full QA + design-examination<br>+ special surveillance of final<br>assessment by NB |

QA: Quality assurance / NB: Notified bodies

## 5 - Notified bodies

List of notified bodies operating with our manufacturers under 97/23/EC & 2014/68/EU Directives:

| 0035  | 0036  | 0038  | 0045  | 0056  | 0062  | 0409  | 0496  | 0497  | 0948  | 1115  |
|---|---|---|---|---|---|---|---|---|---|---|
|  |  |  |  |  |  |  |  |  |  |  |
| <b>TÜV Rheinland Industrie Service</b>  | <b>TÜV Süd Industrie Service</b>  | <b>Lloyd's Register Verification</b>  | <b>TÜV Nord Systems</b>   | <b>ECA Grupo Bureau Veritas</b>   | <b>Bureau Veritas</b>   | <b>Inspecta Sweden</b>  | <b>DNV GL Business Assurance Italia</b>   | <b>CSI</b>  | <b>TÜV Italia</b>   | <b>Consorzio Pascal</b>   |
| Germany<br>Köln   | Germany<br>München  | UK<br>London  | Germany<br>Hamburg  | Spain<br>Barcelona  | France<br>Neully  | Sweden<br>Stockholm   | Italy<br>Vimercate  | Italy<br>Bollate  | Italy<br>Sesto San Giovanni   | Italy<br>Milano   |



## ATEX Directive (2014/34/EU)

Directive on equipment and protective systems intended for use in potentially explosive atmospheres.

### 1 - Area classification

| Gases | Dusts | Definition of zone  |
|-------|-------|---|
| 0     | 20    | areas where an explosive atmosphere is expected to exist continuously or for long periods of time or more than 1000h/year.                      |
| 1     | 21    | areas where an explosive atmosphere is expected to exist for short periods of time and less than 1000h/year.                                    |
| 2     | 22    | areas where an explosive atmosphere is not expected and if released, it will only exist for a very short period of time and less than 10h/year. |

### 2 - ATEX marking - Example & explanation

|  | II                               | 2 | G | Eex  | ia   | IIC | T6  |
|---|----------------------------------|---|---|--|--|-----|---|
|   |                                  |   |   |  |  |     | <b>T1</b> 450°C<br><b>T2</b> 300°C<br><b>T3</b> 200°C<br><b>T4</b> 135°C<br><b>T5</b> 100°C<br><b>T6</b> 85°C |
|   |                                  |   |   |  | <b>"IIC"</b> Explosion group (gas group):<br><b>I</b> Methane (Mining)<br><b>IIA</b> less easily ignited such as Propane<br><b>IIB</b> easily ignited such as Ethylene<br><b>IIC</b> most easily ignited such as Hydrogen & Acetylene  |     |   |
|   |                                  |   |   |  | <b>"ia"</b> Type of protection:<br><b>d</b> Flameproof pressure-resistant encapsulation<br><b>e</b> Increased safety<br><b>ia/ib</b> Intrinsic safety ("ia" for zone 0 / "ib" sufficient for zone 1)<br><b>ma/mb</b> Encapsulated ("ma" for zone 0 / "mb" sufficient for zone 1) |     |   |
| <b>"Eex"</b> Explosion protection   |                                  |   |   |  |  |     |   |
|   |                                  |   |   | <b>"G"</b> Environment:<br><b>G</b> Gas group<br><b>D</b> Dust group   |  |     |   |
|   |                                  |   |   | <b>"2"</b> Equipment Category:<br><b>1</b> Category 1 - Equipment that is intended for use in zone 0 or 20<br><b>2</b> Category 2 - Equipment that is intended for use in zone 1 or 21<br><b>3</b> Category 3 - Equipment that is intended for use in zone 2 or 22<br><b>M1</b> Mining<br><b>M2</b> Mining |  |     |   |
|   |                                  |   |   | <b>"II"</b> Equipment Group:<br><b>I</b> Mining - Category M1 and M2.<br><b>II</b> All other places - Category 1, Category 2 & Category 3.   |  |     |   |
|  | Marking for explosion protection |   |   |  |  |     |   |

## Ingress Protection rating (IP code)

Degree of protection provided by the product enclosure; marked on the product in the form of an "IP" code.

| First digit:<br>solid particle protection |  | Second digit:<br>liquid ingress protection |   |
|---|--|--|---|
| <b>4</b>                                  | Element<br>$\varnothing \geq 1 \text{ mm}$ | <b>0</b>                                   | Not protected   |
| <b>5</b>                                  | Dust protected                             | <b>1</b>                                   | Protected against vertical dripping water   |
| <b>6</b>                                  | Dust tight                                 | <b>2</b>                                   | Protected against dripping water up to 15° from vertical                                  |
|   |  | <b>3</b>                                   | Protected against spraying water & rain up to 60° from vertical                           |
|   |  | <b>4</b>                                   | Protected against splashing water from all directions                                     |
|   |  | <b>5</b>                                   | Protected against water jets  |
|   |  | <b>6</b>                                   | Protected against heavy seas & high pressure water jets                                   |
|   |  | <b>7</b>                                   | $\downarrow < 1 \text{ m}$<br>Protection against the effects of immersion inferior of 1 m |
|   |  | <b>8</b>                                   | $\downarrow < 1 \text{ m}$<br>Protection against submersion superior of 1 m               |

Example: IP **54** would indicate a dust protected (first digit 5) piece of equipment which is protected against splashing water (second digit 4).

## Pressure ratings

| Standard                            | Temp. | Pressure        |         |        |          |          |          |         |          |          |          |  |  |  |
|-------------------------------------|-------|-----------------|---------|--------|----------|----------|----------|---------|----------|----------|----------|--|--|--|
|                                     |       | 20 bar          | 50 bar  | 63 bar | 69 bar   | 100 bar  | 138 bar  | 150 bar | 207 bar  | 250 bar  | 420 bar  |  |  |  |
| Max. allowable pressure             |       |                 |         |        |          |          |          |         |          |          |          |  |  |  |
| ISO                                 | 20°C  | PN20            | PN50    | PN63   | -        | PN100    | -        | PN150   | -        | PN250    | PN420    |  |  |  |
| ANSI B 16.34                        | 454°C | 150 lbs (300°C) | 300 lbs | -      | 400 lbs  | 600 lbs  | -        | 900 lbs | -        | 1500 lbs | 2500 lbs |  |  |  |
| API 602 (forged)                    | 454°C | -               | -       | -      | -        | -        | 800 lbs  | -       | -        | 1500 lbs | -        |  |  |  |
| API 6A / CWPP (Cold Water Pressure) | 16°C  | -               | -       | -      | API 1000 | API 1500 | API 2000 | -       | API 3000 | -        | API 6000 |  |  |  |
| WOG (Water Oil Gas)                 | 16°C  | -               | -       | -      | 1000 psi | 1500 psi | 2000 psi | -       | 3000 psi | -        | 6000 psi |  |  |  |

## Steam table

Relative pressure / Temperature correlation table for saturated steam (rounded to 1 decimal).

| bar | °C    | bar  | °C    | bar  | °C    | bar | °C    | bar | °C    | bar | °C    | bar | °C    | bar | °C    |
|-----|-------|------|-------|------|-------|-----|-------|-----|-------|-----|-------|-----|-------|-----|-------|
| 0,5 | 111,6 | 6    | 165,0 | 11,5 | 189,9 | 19  | 212,4 | 30  | 235,7 | 45  | 258,8 | 100 | 311,7 | 155 | 345,3 |
| 1   | 120,4 | 6,5  | 167,8 | 12   | 191,6 | 20  | 214,9 | 31  | 237,5 | 50  | 265,2 | 105 | 315,3 | 160 | 347,9 |
| 1,5 | 127,6 | 7    | 170,5 | 12,5 | 193,4 | 21  | 217,3 | 32  | 239,2 | 55  | 271,1 | 110 | 318,8 | 165 | 350,4 |
| 2   | 133,7 | 7,5  | 173,0 | 13   | 195,1 | 22  | 219,6 | 33  | 240,9 | 60  | 276,7 | 115 | 322,1 | 170 | 352,8 |
| 2,5 | 139,0 | 8    | 175,4 | 13,5 | 196,7 | 23  | 221,9 | 34  | 242,6 | 65  | 281,9 | 120 | 325,3 | 175 | 355,1 |
| 3   | 143,7 | 8,5  | 177,7 | 14   | 198,3 | 24  | 224,0 | 35  | 244,2 | 70  | 286,8 | 125 | 328,4 | 180 | 357,5 |
| 3,5 | 148,0 | 9    | 179,9 | 14,5 | 199,9 | 25  | 226,1 | 36  | 245,8 | 75  | 291,5 | 130 | 331,5 | 185 | 359,7 |
| 4   | 151,9 | 9,5  | 182,0 | 15   | 201,4 | 26  | 228,1 | 37  | 247,4 | 80  | 295,9 | 135 | 334,4 | 190 | 361,9 |
| 4,5 | 155,6 | 10   | 184,1 | 16   | 204,4 | 27  | 230,1 | 38  | 248,9 | 85  | 300,1 | 140 | 337,2 | 195 | 364,1 |
| 5   | 158,9 | 10,5 | 186,1 | 17   | 207,2 | 28  | 232,0 | 39  | 250,4 | 90  | 304,2 | 145 | 340,0 | 200 | 366,2 |
| 5,5 | 162,1 | 11   | 188,0 | 18   | 209,8 | 29  | 233,9 | 40  | 251,8 | 95  | 308,0 | 150 | 342,7 | 210 | 370,2 |

## Threaded connection standards

| BSP parallel thread ISO 228 & ISO 7 Rp for female thread       |                  | BSPT conical thread ISO 7 for male thread only                                     |       |       |       |       | NPT conical thread ANSI B1.20 for both male & female thread |        |       |        |       |       |
|--|------------------|--|-------|-------|-------|-------|---|--------|-------|--------|-------|-------|
|  |                  |  |       |       |       |       |   |        |       |        |       |       |
| H = 0,9604 x pitch<br>h = 0,6043 x pitch<br>r = 0,1373 x pitch |                  | H = 0,9604 x pitch<br>h = 0,6043 x pitch<br>r = 0,1373 x pitch<br>conicity: 6,25 % |       |       |       |       | H = 0,866 x pitch<br>h = 0,800 x pitch<br>conicity: 6,25 %  |        |       |        |       |       |
| Ø  |                  | 1/4"   | 3/8"  | 1/2"  | 3/4"  | 1"    | 1 1/4"  | 1 1/2" | 2"    | 2 1/2" | 3"    | 4"    |
| BSP thread   | threads per inch | 19   | 19    | 14    | 14    | 11    | 11  | 11     | 11    | 11     | 11    | 11    |
|  | pitch (mm)       | 1.337  | 1.337 | 1.814 | 1.814 | 2.309 | 2.309   | 2.309  | 2.309 | 2.309  | 2.309 | 2.309 |
| NPT thread   | threads per inch | 18   | 18    | 14    | 14    | 11.5  | 11.5  | 11.5   | 11.5  | 8      | 8     | 8     |
|  | pitch (mm)       | 1.411  | 1.411 | 1.814 | 1.814 | 2.209 | 2.209   | 2.209  | 2.209 | 3.175  | 3.175 | 3.175 |

## Materials (EN 1503)

### Carbon steel

Forged carbon steel (EN 10222-2)

| NF A 36-605 | EN 10222 | DIN 2528 | WN°    | ASTM               | Min. temp.     | Max. temp.       |
|-------------|----------|----------|--------|--------------------|----------------|------------------|
| A48 AP      | P 245 N  | C22.8    | 1.0460 | A 105<br>A 350 LF2 | -20°C<br>-46°C | +425°C<br>+425°C |

Cast steel (EN 10213-2)

| NF     | EN 10213-2 | DIN    | WN°              | ASTM                   | Min. temp.     | Max. temp.       |
|--------|------------|--------|------------------|------------------------|----------------|------------------|
| A48 CM | GP 240 GH  | GSC-25 | 1.0619<br>1.1156 | A 216 WCB<br>A 352 LCB | -29°C<br>-45°C | +425°C<br>+345°C |

### Stainless steel

Forged stainless steel (EN 10222-5)

| NF A 36-607    | DIN 17-440        | WN°    | ASTM          | Min. temp. | Max. temp. |
|----------------|-------------------|--------|---------------|------------|------------|
| AF Z6 CN18-09  | X5 CrNi 18-10     | 1.4301 | A 182 F 304   | -196°C     | +815°C     |
| AF Z2 CN18-10  | X2 CrNi 19-11     | 1.4306 | A 182 F 304 L | -196°C     | +425°C     |
| AF Z6 CND17-11 | X5 CrNiMo 17-12-2 | 1.4401 | A 182 F 316   | -196°C     | +815°C     |
| AF Z2 CND17-12 | X2 CrNiMo 17-12-2 | 1.4404 | A 182 F 316 L | -196°C     | +455°C     |

Cast stainless steel (EN 10213-4)

| NF A          | DIN 17-445         | WN°    | ASTM       | Min. temp. | Max. temp. |
|---------------|--------------------|--------|------------|------------|------------|
| Z6 CN 18.10 N | GX6 CrNi 18-9      | 1.4308 | A 351 CF8  | -196°C     | +815°C     |
|               | GX2 CrNi 19-11     | 1.4309 | A 351 CF3  | -196°C     | +425°C     |
| Z6 CND18.12N  | GX6 CrNiMo 19-11-2 | 1.4408 | A 351 CF8M | -196°C     | +815°C     |
|               | GX2 CrNiMo 19-11-2 | 1.4409 | A 351 CF3M | -196°C     | +455°C     |

### Cast iron & ductile iron (EN 1503-3)

Cast iron

| NF A 32-101 | EN 1561    | DIN 1691 | WN°    | ASTM           | Min. temp. | Max. temp. |
|-------------|------------|----------|--------|----------------|------------|------------|
| FGL 200     | EN-GJL 250 | GG 25    | 0.6020 | A 48 class 308 | -10°C      | +200°C     |
| FGL 250     | EN-GJL 200 | GG 20    | 0.6023 | A 48 class 358 | -10°C      | +200°C     |

Ductile iron

| NF A 32-201 | EN 1563       | DIN 1693 | WN°    | ASTM              | Min. temp. | Max. temp. |
|-------------|---------------|----------|--------|-------------------|------------|------------|
| FGS 500-7   | EN-GJS-500-7  | GGG 50   | 0.7050 | A 536 Gr 80-55-06 | -15°C      | +350°C     |
| FGS 400-15  | EN-GJS-400-15 | GGG 40   | 0.7040 | A 536 Gr 65-45-12 | -15°C      | +350°C     |
| FGS 400-18  | EN-GJS-400-18 | GGG 40.3 | 0.7043 | A 536 Gr 60-40-18 | -20°C      | +350°C     |

### Brass (EN 1503-4 / EN 12165)

| EN 12420 | DIN        | WN°    | ASTM         | Min. temp. | Max. temp. |
|----------|------------|--------|--------------|------------|------------|
| CW 617N  | Cu Zn40Pb2 | 2.0402 | B 124 C37700 | -10°C      | +200°C     |
| CW 614N  | Cu Zn39Pb3 | 2.0372 | B 124 C38500 | -10°C      | +200°C     |
| CW 510L  | Cu Zn42    |        | B 124 C28500 | -10°C      | +200°C     |

### Bronze (EN 1503-4)

| EN 1982 | DIN           | WN°    | ASTM        | Min. temp. | Max. temp. |
|---------|---------------|--------|-------------|------------|------------|
| CC 491K | CuSn5Zn5Pb5-C | 2.1096 | B 62 C83600 | -10°C      | +260°C     |
| CB 491K | CuSn5Zn5Pb5-B | 2.1097 | B 30 C83600 | -10°C      | +260°C     |

## Usual working conditions for elastomeres on our butterfly valves

| Elastomere     | Min. / Max. temperature | Use  | Not recommended   |
|----------------|-------------------------|--|---|
| EPDM           | -10°C/+110°C            | Cold and hot water, sea water, alkaline products, sodium hydroxide.                  | Hydrocarbons, steam, gases, acids, oil, freon.              |
| NBR            | -10°C/+90°C             | Non aromatic hydrocarbons, natural gas, greases, oil, compressed air, glycol, water. | Atmospheric environment, petrol, solvents.                  |
| FKM            | -5°C/+180°C             | Acids, greases, hydrocarbons, petrol, fuel, oil, gases.                              | Steam and hot water (max. 130°C), freon, alkaline products. |
| Natural rubber | -10°C/+60°C             | Spirit, acetone, food, abrasive powders.   | Acids and hydrocarbons.                                     |
| Silicone       | -30°C/+150°C            | High temperature, air or inert gases.  | Steam and hot water (max. 100°C), solvents.                 |
| Food silicone  | -30°C/+150°C            | Food.  | Other applications.   |

General information provided for informational purpose only. Please check on data sheets for appropriate restrictions.

# Technical manual

## Flanges dimensions

### EN 1092-1 - Steel flanges

| Dimensions in mm | ISO PN10    |     |    |        |        | ISO PN16    |     |    |        |        | ISO PN25    |     |    |        |        | ISO PN40    |     |    |        |        |
|------------------|-------------|-----|----|--------|--------|-------------|-----|----|--------|--------|-------------|-----|----|--------|--------|-------------|-----|----|--------|--------|
|                  | Union sizes |     |    | Screws |        | Union sizes |     |    | Screws |        | Union sizes |     |    | Screws |        | Union sizes |     |    | Screws |        |
|                  | DN          | D   | K  | L      | Number | Ø           | D   | K  | L      | Number | Ø           | D   | K  | L      | Number | Ø           | D   | K  | L      | Number |
| 10               | 90          | 60  | 14 | 4      | M 12   | 90          | 60  | 14 | 4      | M 12   | 90          | 60  | 14 | 4      | M 12   | 90          | 60  | 14 | 4      | M 12   |
| 15               | 95          | 65  | 14 | 4      | M 12   | 95          | 65  | 14 | 4      | M 12   | 95          | 65  | 14 | 4      | M 12   | 95          | 65  | 14 | 4      | M 12   |
| 20               | 105         | 75  | 14 | 4      | M 12   | 105         | 75  | 14 | 4      | M 12   | 105         | 75  | 14 | 4      | M 12   | 105         | 75  | 14 | 4      | M 12   |
| 25               | 115         | 85  | 14 | 4      | M 12   | 115         | 85  | 14 | 4      | M 12   | 115         | 85  | 14 | 4      | M 12   | 115         | 85  | 14 | 4      | M 12   |
| 32               | 140         | 100 | 18 | 4      | M 16   | 140         | 100 | 18 | 4      | M 16   | 140         | 100 | 18 | 4      | M 16   | 140         | 100 | 18 | 4      | M 16   |
| 40               | 150         | 110 | 18 | 4      | M 16   | 150         | 110 | 18 | 4      | M 16   | 150         | 110 | 18 | 4      | M 16   | 150         | 110 | 18 | 4      | M 16   |
| 50               | 165         | 125 | 18 | 4      | M 16   | 165         | 125 | 18 | 4      | M 16   | 165         | 125 | 18 | 4      | M 16   | 165         | 125 | 18 | 4      | M 16   |
| 65               | 185         | 145 | 18 | 8*     | M 16   | 185         | 145 | 18 | 8*     | M 16   | 185         | 145 | 18 | 8      | M 16   | 185         | 145 | 18 | 8      | M 16   |
| 80               | 200         | 160 | 18 | 8      | M 16   | 200         | 160 | 18 | 8      | M 16   | 200         | 160 | 18 | 8      | M 16   | 200         | 160 | 18 | 8      | M 16   |
| 100              | 220         | 180 | 18 | 8      | M 16   | 220         | 180 | 18 | 8      | M 16   | 235         | 190 | 22 | 8      | M 20   | 235         | 190 | 22 | 8      | M 20   |
| 125              | 250         | 210 | 18 | 8      | M 16   | 250         | 210 | 18 | 8      | M 16   | 270         | 220 | 26 | 8      | M 24   | 270         | 220 | 26 | 8      | M 24   |
| 150              | 285         | 240 | 22 | 8      | M 20   | 285         | 240 | 22 | 8      | M 20   | 300         | 250 | 26 | 8      | M 24   | 300         | 250 | 26 | 8      | M 24   |
| 200              | 340         | 295 | 22 | 8      | M 20   | 340         | 295 | 22 | 12     | M 20   | 360         | 310 | 26 | 12     | M 24   | 375         | 320 | 30 | 12     | M 27   |
| 250              | 395         | 350 | 22 | 12     | M 20   | 405         | 355 | 26 | 12     | M 24   | 425         | 370 | 30 | 12     | M 27   | 450         | 385 | 33 | 12     | M 30   |
| 300              | 445         | 400 | 22 | 12     | M 20   | 460         | 410 | 26 | 12     | M 24   | 485         | 430 | 30 | 16     | M 27   | 515         | 450 | 33 | 16     | M 30   |
| 350              | 505         | 460 | 22 | 16     | M 20   | 520         | 470 | 26 | 16     | M 24   | 555         | 490 | 33 | 16     | M 30   | 580         | 510 | 36 | 16     | M 33   |
| 400              | 565         | 515 | 26 | 16     | M 24   | 580         | 525 | 30 | 16     | M 27   | 620         | 550 | 36 | 16     | M 33   | 660         | 585 | 39 | 16     | M 36   |

\* Under specific agreement between parts; 4 hole flanges may be provided.

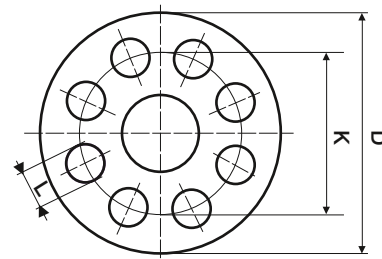
### EN 1092-2 - Cast iron flanges

| Dimensions in mm | ISO PN10    |      |    |        |        | ISO PN16    |      |    |        |        | ISO PN25    |      |    |        |        | ISO PN40    |     |    |        |        |
|------------------|-------------|------|----|--------|--------|-------------|------|----|--------|--------|-------------|------|----|--------|--------|-------------|-----|----|--------|--------|
|                  | Union sizes |      |    | Screws |        | Union sizes |      |    | Screws |        | Union sizes |      |    | Screws |        | Union sizes |     |    | Screws |        |
|                  | DN          | D    | K  | L      | Number | Ø           | D    | K  | L      | Number | Ø           | D    | K  | L      | Number | Ø           | D   | K  | L      | Number |
| 10               | 90          | 60   | 14 | 4      | M 12   | 90          | 60   | 14 | 4      | M 12   | 90          | 60   | 14 | 4      | M 12   | 90          | 60  | 14 | 4      | M 12   |
| 15               | 95          | 65   | 14 | 4      | M 12   | 95          | 65   | 14 | 4      | M 12   | 95          | 65   | 14 | 4      | M 12   | 95          | 65  | 14 | 4      | M 12   |
| 20               | 105         | 75   | 14 | 4      | M 12   | 105         | 75   | 14 | 4      | M 12   | 105         | 75   | 14 | 4      | M 12   | 105         | 75  | 14 | 4      | M 12   |
| 25               | 115         | 85   | 14 | 4      | M 12   | 115         | 85   | 14 | 4      | M 12   | 115         | 85   | 14 | 4      | M 12   | 115         | 85  | 14 | 4      | M 12   |
| 32               | 140         | 100  | 19 | 4      | M 16   | 140         | 100  | 19 | 4      | M 16   | 140         | 100  | 19 | 4      | M 16   | 140         | 100 | 19 | 4      | M 16   |
| 40               | 150         | 110  | 19 | 4      | M 16   | 150         | 110  | 19 | 4      | M 16   | 150         | 110  | 19 | 4      | M 16   | 150         | 110 | 19 | 4      | M 16   |
| 50               | 165         | 125  | 19 | 4      | M 16   | 165         | 125  | 19 | 4      | M 16   | 165         | 125  | 19 | 4      | M 16   | 165         | 125 | 19 | 4      | M 16   |
| 65               | 185         | 145  | 19 | 4*     | M 16   | 185         | 145  | 19 | 4*     | M 16   | 185         | 145  | 19 | 8      | M 16   | 185         | 145 | 19 | 8      | M 16   |
| 80               | 200         | 160  | 19 | 8      | M 16   | 200         | 160  | 19 | 8      | M 16   | 200         | 160  | 19 | 8      | M 16   | 200         | 160 | 19 | 8      | M 16   |
| 100              | 220         | 180  | 19 | 8      | M 16   | 220         | 180  | 19 | 8      | M 16   | 235         | 190  | 23 | 8      | M 20   | 235         | 190 | 23 | 8      | M 20   |
| 125              | 250         | 210  | 19 | 8      | M 16   | 250         | 210  | 19 | 8      | M 16   | 270         | 220  | 28 | 8      | M 24   | 270         | 220 | 28 | 8      | M 24   |
| 150              | 285         | 240  | 23 | 8      | M 20   | 285         | 240  | 23 | 8      | M 20   | 300         | 250  | 28 | 8      | M 24   | 300         | 250 | 28 | 8      | M 24   |
| 200              | 340         | 295  | 23 | 8      | M 20   | 340         | 295  | 23 | 12     | M 20   | 360         | 310  | 28 | 12     | M 24   | 375         | 320 | 31 | 12     | M 27   |
| 250              | 395         | 350  | 23 | 12     | M 20   | 405         | 355  | 28 | 12     | M 24   | 425         | 370  | 31 | 12     | M 27   | 450         | 385 | 34 | 12     | M 30   |
| 300              | 445         | 400  | 23 | 12     | M 20   | 460         | 410  | 28 | 12     | M 24   | 485         | 430  | 31 | 16     | M 27   | 515         | 450 | 34 | 16     | M 30   |
| 350              | 505         | 460  | 23 | 16     | M 20   | 520         | 470  | 28 | 16     | M 24   | 555         | 490  | 34 | 16     | M 30   | 580         | 510 | 37 | 16     | M 33   |
| 400              | 565         | 515  | 28 | 16     | M 24   | 580         | 525  | 31 | 16     | M 27   | 620         | 550  | 37 | 16     | M 33   | 660         | 585 | 41 | 16     | M 36   |
| 450              | 615         | 565  | 28 | 20     | M 24   | 640         | 585  | 31 | 20     | M 27   | 670         | 600  | 37 | 20     | M 33   | 685         | 610 | 41 | 20     | M 36   |
| 500              | 670         | 620  | 28 | 20     | M 24   | 715         | 650  | 34 | 20     | M 30   | 730         | 660  | 37 | 20     | M 33   | 755         | 670 | 43 | 20     | M 39   |
| 600              | 780         | 725  | 31 | 20     | M 27   | 840         | 770  | 37 | 20     | M 33   | 845         | 770  | 41 | 20     | M 36   | 890         | 795 | 49 | 20     | M 45   |
| 700              | 895         | 840  | 31 | 24     | M 27   | 910         | 840  | 37 | 24     | M 33   | 960         | 875  | 44 | 24     | M 39   |             |     |    |        |        |
| 800              | 1015        | 950  | 34 | 24     | M 30   | 1025        | 950  | 41 | 24     | M 36   | 1085        | 990  | 50 | 24     | M 45   |             |     |    |        |        |
| 900              | 1115        | 1050 | 34 | 28     | M 30   | 1125        | 1050 | 41 | 28     | M 36   | 1185        | 1090 | 50 | 28     | M 45   |             |     |    |        |        |
| 1000             | 1230        | 1160 | 37 | 28     | M 33   | 1255        | 1170 | 44 | 28     | M 39   | 1320        | 1210 | 5  | 28     | M 52   |             |     |    |        |        |

\* Under specific agreement between parts; 8 hole flanges may be provided.

### EN 1759-1 / ANSI B16.5 - Steel flanges

| Dimensions in mm | ISO PN20 - ANSI 150 |      |       |        |    | ISO PN50 - ANSI 300 |       |       |        |    |        |
|------------------|---------------------|------|-------|--------|----|---------------------|-------|-------|--------|----|--------|
|                  | Union sizes         |      |       | Screws |    | Union sizes         |       |       | Screws |    |        |
|                  | NPS                 | DN   | D     | K      | L  | Number              | Ø     | D     | K      | L  | Number |
| 1/2"             | 15                  | 88,9 | 60,5  | 15,8   | 4  | M 14                | 95,3  | 66,5  | 15,8   | 4  | M 14   |
| 3/4"             | 20                  | 98,6 | 69,9  | 15,8   | 4  | M 14                | 117,4 | 88,6  | 19     | 4  | M 16   |
| 1"               | 25                  | 108  | 79,4  | 15,8   | 4  | M 14                | 124   | 88,9  | 19     | 4  | M 16   |
| 1 1/4"           | 32                  | 117  | 88,9  | 15,8   | 4  | M 14                | 133   | 98,4  | 19     | 4  | M 16   |
| 1 1/2"           | 40                  | 127  | 98,4  | 15,8   | 4  | M 14                | 156   | 114,3 | 22,2   | 4  | M 20   |
| 2"               | 50                  | 152  | 120,4 | 19     | 4  | M 16                | 165   | 127   | 22,2   | 8  | M 20   |
| 2 1/2"           | 65                  | 178  | 139,7 | 19     | 4  | M 16                | 190   | 149,2 | 22,2   | 8  | M 20   |
| 3"               | 80                  | 190  | 152,4 | 19     | 4  | M 16                | 210   | 168,3 | 22,2   | 8  | M 20   |
| 4"               | 100                 | 229  | 190,5 | 19     | 8  | M 16                | 254   | 200   | 22,2   | 8  | M 20   |
| 5"               | 125                 | 254  | 215,9 | 22,2   | 8  | M 20                | 279   | 235   | 22,2   | 8  | M 20   |
| 6"               | 150                 | 279  | 241,3 | 22,2   | 8  | M 20                | 318   | 269,9 | 22,2   | 12 | M 20   |
| 8"               | 200                 | 343  | 298,4 | 22,2   | 8  | M 20                | 381   | 330,2 | 25,4   | 12 | M 24   |
| 10"              | 250                 | 406  | 362   | 25,4   | 12 | M 24                | 444   | 387,4 | 28,5   | 16 | M 27   |
| 12"              | 300                 | 483  | 431,8 | 25,4   | 12 | M 24                | 521   | 450,8 | 31,8   | 16 | M 30   |
| 14"              | 350                 | 533  | 476,2 | 28,5   | 12 | M 27                | 584   | 514,4 | 31,8   | 20 | M 30   |
| 16"              | 400                 | 597  | 539,8 | 28,5   | 16 | M 27                | 648   | 571,5 | 35     | 20 | M 33   |



# Technical manual

## Face to face dimensions (EN 558)

### Main basic series

(dimensions in mm)

| DN         | 10  | 15   | 20    | 25  | 32  | 40   | 50  | 65  | 80  | 100 | 125 | 150 | 200  | 250  | 300  | 350  | 400  | 450  | 500  | 600  |
|------------|-----|------|-------|-----|-----|------|-----|-----|-----|-----|-----|-----|------|------|------|------|------|------|------|------|
| Series 1   | 130 | 130  | 150   | 160 | 180 | 200  | 230 | 290 | 310 | 350 | 400 | 480 | 600  | 730  | 850  | 980  | 1100 | 1200 | 1250 | 1450 |
| Series 2   | 210 | 210  | 230   | 230 | 260 | 260  | 300 | 340 | 380 | 430 | 500 | 550 | 650  | 775  | 900  | 1025 | 1150 | 1275 | 1400 | 1600 |
| Series 3   | 102 | 108  | 117   | 127 | 140 | 165  | 178 | 190 | 203 | 229 | 254 | 267 | 292  | 330  | 356  | 381  | 406  | 432  | 457  | 508  |
| Series 4   | -   | 140  | 152   | 165 | 178 | 190  | 216 | 241 | 283 | 305 | 381 | 403 | 419  | 457  | 502  | 762  | 838  | 914  | 991  | 1143 |
| Series 5   | -   | 165  | 190   | 216 | 229 | 241  | 292 | 330 | 356 | 432 | 508 | 559 | 660  | 787  | 838  | 889  | 991  | 1092 | 1194 | 1397 |
| Series 7   | 108 | 108  | 117   | 127 | 146 | 159  | 190 | 216 | 254 | 305 | 356 | 406 | 521  | 635  | 749  | -    | -    | -    | -    | -    |
| Series 10  | -   | 108  | 117   | 127 | 140 | 165  | 203 | 216 | 241 | 292 | 330 | 356 | 495  | 622  | 698  | 787  | 914  | 978  | 978  | 1295 |
| Series 12  | 130 | 130  | 130   | 140 | 165 | 165  | 203 | 222 | 241 | 305 | 356 | 394 | 457  | 533  | 610  | 686  | 762  | 864  | 914  | 1067 |
| Series 13  | -   | -    | -     | -   | -   | 106  | 108 | 112 | 114 | 127 | 140 | 140 | 152  | 165  | 178  | 190  | 216  | 222  | 229  | 267  |
| Series 14  | 115 | 115  | 120   | 125 | 130 | 140  | 150 | 170 | 180 | 190 | 200 | 210 | 230  | 250  | 270  | 290  | 310  | 330  | 350  | 267  |
| Series 15  | -   | -    | -     | 120 | 140 | 240  | 250 | 270 | 280 | 300 | 325 | 350 | 400  | 450  | 500  | 550  | 600  | 650  | 700  | 800  |
| Series 16  | -   | -    | -     | -   | -   | 33   | 43  | 46  | 64  | 64  | 70  | 76  | 89   | 114  | 114  | 127  | 140  | 152  | 152  | 178  |
| Series 18  | 80  | 80   | 90    | 100 | 110 | 120  | 135 | 165 | 185 | 229 | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    |
| Series 19  | -   | 140  | 152   | 165 | 178 | 190  | 216 | 241 | 283 | 305 | 381 | 403 | 419  | 457  | 502  | 572  | 610  | 660  | 711  | 787  |
| Series 20  | -   | -    | -     | -   | -   | 33   | 43  | 46  | 46  | 52  | 56  | 56  | 60   | 68   | 78   | 78   | 102  | 114  | 127  | 154  |
| Series 21  | -   | 152  | 178   | 216 | 229 | 241  | 267 | 292 | 318 | 356 | 400 | 444 | 533  | 622  | 711  | 838  | 864  | 978  | 1016 | 1346 |
| Series 25  | -   | -    | -     | -   | -   | -    | -   | -   | 49  | 56  | 64  | 70  | 71   | 76   | 83   | 92   | 102  | 114  | 127  | 154  |
| Series 26  | -   | -    | -     | -   | -   | 240  | 250 | 290 | 310 | 350 | 400 | 450 | 550  | 650  | 750  | 850  | 950  | 1050 | 1150 | 1350 |
| Series 27  | 115 | 115  | 120   | 125 | 130 | 140  | 150 | 170 | 180 | 190 | 325 | 350 | 400  | 450  | 500  | 550  | 762  | -    | 914  | -    |
| Series 28  | 130 | 130  | 150   | 160 | 180 | 200  | 230 | 290 | 310 | 350 | 400 | 450 | 550  | 650  | 750  | 850  | 950  | -    | 1150 | -    |
| Series 29  | 108 | 108  | 117,5 | 127 | 127 | 136  | 142 | 154 | 160 | 172 | 186 | 200 | 228  | 255  | 285  | 315  | 340  | 360  | 380  | 425  |
| Series 33  | -   | -    | -     | -   | -   | 152  | 178 | 216 | 254 | 305 | 381 | 457 | 584  | 711  | 813  | 889  | 991  | 1092 | 1194 | 1397 |
| Series 47  | -   | -    | 75    | 80  | 90  | 100  | 110 | 130 | 150 | 160 | 200 | 210 | -    | -    | -    | -    | -    | -    | -    | -    |
| Series 48  | -   | -    | -     | -   | -   | 180  | 200 | 240 | 260 | 300 | 350 | 400 | 500  | 600  | 700  | 800  | 900  | 1000 | 1100 | 1300 |
| Series 49  | -   | 16   | 19    | 22  | 28  | 31,5 | 40  | 46  | 50  | 60  | 90  | 106 | 140  | -    | -    | -    | -    | -    | -    | -    |
| Series 52  | 25  | 31,5 | 35,5  | 40  | 45  | 56   | 63  | 71  | 80  | 110 | 125 | 160 | 200  | 250  | 280  | -    | -    | -    | -    | -    |
| Series 54  | -   | -    | 229   | 254 | 279 | 305  | 368 | 419 | 381 | 457 | 551 | 610 | 737  | 838  | 965  | 1029 | 1130 | 1219 | 1321 | 1549 |
| Series 55  | -   | 216  | 229   | 254 | 279 | 305  | 368 | 419 | 470 | 546 | 673 | 705 | 832  | 991  | 1130 | 1257 | 1384 | 1537 | 1664 | 1943 |
| Series 56  | -   | 264  | 273   | 308 | 349 | 384  | 451 | 508 | 578 | 673 | 794 | 914 | 1022 | 1270 | 1422 | -    | -    | -    | -    | -    |
| Series 69  | -   | -    | -     | 140 | 165 | 178  | 216 | 254 | 305 | 356 | 432 | 508 | 660  | 787  | 914  | 991  | 1092 | -    | -    | -    |
| Series 70  | -   | -    | -     | 140 | 165 | 178  | 216 | 254 | 305 | 406 | 483 | 559 | 711  | 864  | 991  | 1067 | 1194 | 1346 | 1473 | -    |
| Series 71  | -   | -    | -     | 186 | 232 | 232  | 279 | 330 | 368 | 457 | 533 | 610 | 762  | 914  | 1041 | 1118 | 1245 | 1397 | -    | -    |
| Series 77  | -   | 318  | 318   | 318 | -   | 381  | 400 | 441 | 660 | 737 | -   | 864 | 1022 | 1372 | 1575 | 1803 | -    | -    | -    | -    |
| Series 91  | -   | -    | -     | -   | -   | 310  | 350 | 425 | 470 | 550 | 650 | 750 | 950  | 1150 | 1350 | 1550 | 1750 | 1950 | 2150 | -    |
| Series 92  | 230 | 230  | 260   | 260 | 300 | 300  | 350 | 400 | 450 | 520 | 600 | 700 | 800  | 900  | 1050 | -    | -    | -    | -    | -    |
| Series 99  | -   | -    | -     | -   | -   | 270  | 300 | 360 | 390 | 450 | 525 | 600 | 750  | 900  | 1050 | 1200 | 1350 | 1500 | 1650 | -    |
| Series 105 | -   | 292  | 292   | 292 | -   | 333  | 375 | 410 | 441 | 511 | -   | 714 | 914  | 991  | 1130 | 1257 | 1422 | 1727 | -    | -    |
| Series 106 | -   | 292  | 292   | 292 | -   | 333  | 375 | 410 | 460 | 530 | -   | 768 | 972  | 1067 | 1219 | 1257 | 1422 | 1727 | -    | -    |
| Series 107 | -   | 50   | 50    | 60  | 65  | 80   | 95  | 110 | 145 | 170 | -   | -   | -    | -    | -    | -    | -    | -    | -    | -    |
| Series 108 | -   | -    | -     | -   | -   | -    | -   | -   | 48  | 54  | -   | 57  | 64   | 71   | 81   | 92   | 102  | 114  | 127  | 154  |
| Series 109 | -   | -    | -     | -   | -   | -    | -   | -   | 48  | 54  | -   | 59  | 73   | 83   | 92   | 117  | 133  | 149  | 159  | 181  |
| Series 110 | -   | -    | -     | -   | -   | -    | -   | -   | 54  | 64  | -   | 78  | 102  | 117  | 140  | 155  | 178  | 200  | 216  | 232  |

### Origin of basic series

|    |                                    |    |                                       |     |                                    |
|----|------------------------------------|----|---------------------------------------|-----|------------------------------------|
| 1  | DIN 3202-1, series F1              | 19 | ANSI B16.10, table 2, column 1        | 55  | ANSI B16.10, table 6, column 5     |
| 2  | DIN 3202-1, series F2              | 20 | ANSI B16.10, table 9, column 3 & 4    | 56  | ANSI B16.10, table 7, column 1 & 2 |
| 3  | ANSI B16.10, table 1, column 8 & 9 | 21 | ANSI B16.10, table 10, column 16 & 18 | 69  | ANSI B16.10, table 5, column 2 & 6 |
| 4  | ANSI B16.10, table 2, column 11    | 25 | BS 2080, table 1, series 64           | 70  | ANSI B16.10, table 6, column 2 & 6 |
| 5  | ANSI B16.10, table 4, column 5     | 26 | ANSI B16.10, table 9, column 4        | 71  | ANSI B16.10, table 7, column 2 & 5 |
| 7  | BS 2080, table 1, series 7         | 27 | DIN 3357-2 ff                         | 77  | ANSI/ISA S75.16-1994 table 1       |
| 10 | ANSI B16.10, table 1, column 16    | 28 | DIN 3357-2 ff                         | 91  | DIN 3202-1, series F9              |
| 12 | ANSI B16.10, table 1, column 3     | 29 | NFE 29 - 377                          | 92  | DIN 3202-1, series F3              |
|    | BS 2080, table 1, series 12        | 33 | ANSI B16.10, table 4, column 6        | 99  | DIN 3202-1, series F8              |
| 13 | BS 2080, table 1, series 13        | 47 | DIN 3202-1, series F19                | 105 | ANSI/ISA S75.16 table 1            |
| 14 | DIN 3202-1, series F4              | 48 | DIN 3202-1, series F6                 | 106 | ANSI/ISA S75.16 table 1            |
| 15 | DIN 3202-1, series F5              | 49 | DIN 3202-3, series F4                 | 108 | API 609, table 2 - Class 150       |
| 16 | BS 2080, table 1, series 16        | 52 | DIN 3202-3, series F5                 | 109 | API 609, table 2 - Class 300       |
| 18 | BS 2080, table 1, series 18        | 54 | ANSI B16.10, table 5, column 5        | 110 | API 609, table 2 - Class 600       |

## Lexicon

### Main standardisation organisations

|              |  |
|--------------|--|
| <b>AFNOR</b> | Association Française de Normalisation         |
| <b>ANSI</b>  | American National Standard Institute           |
| <b>API</b>   | American Petroleum Institute                   |
| <b>ASME</b>  | American Society of Mechanical Engineers       |
| <b>ASTM</b>  | American Society for Testing Materials         |
| <b>DIN</b>   | Deutsches Institut für Normung                 |
| <b>ISO</b>   | International Organisation for Standardisation |
| <b>NACE</b>  | National Association of Corrosion Engineers    |

### Usual abbreviations

|            |  |
|------------|--|
| <b>DN</b>  | Nominal size   |
| <b>NPS</b> | Nominal pipe size  |
| <b>PS</b>  | Maximum allowable pressure   |
| <b>TS</b>  | Minimum/maximum allowable temperature  |
| <b>BSP</b> | British Standard Pipe thread (BSP: Parallel, acc. to ISO 228 / BSPT: Tapered, acc. to ISO 7) |
| <b>NPT</b> | National Pipe Tapered, acc. to ANSI B1.20  |
| <b>BW</b>  | Butt Weld, acc. to ASME B16.9  |
| <b>SW</b>  | Socket Weld, acc. to ASME B16.11   |
| <b>RF</b>  | Raised flange, acc. to ISO 1092-1 & ANSI B16.5   |
| <b>M</b>   | Male   |
| <b>F</b>   | Female   |
| <b>PDW</b> | Potable Drinking Water   |

|             |                                   |
|-------------|-----------------------------------|
| <b>IP</b>   | Ingress Protection (see page 8)   |
| <b>ATEX</b> | Explosive Atmosphere (see page 7) |






|             |                           |
|-------------|---------------------------|
| <b>V AC</b> | Volts Alternating Current |
| <b>V DC</b> | Volts Direct Current      |
| <b>Nm</b>   | Newton metre              |
| <b>PSI</b>  | Pounds per Square Inch    |

### Common material abbreviations

|             |   |
|-------------|---|
| <b>ABS</b>  | Acrylonitrile Butadiene Styrene                           |
| <b>CR</b>   | Polychloroprene (such as Neoprene®)                       |
| <b>CSM</b>  | Chlorosulphonated Polyethylene (such as Hypalon®)         |
| <b>ECO</b>  | Epichlorhydrin Rubber                                     |
| <b>EPDM</b> | Ethylene Propylene Diene Monomer                          |
| <b>FKM</b>  | Fluorinated Propylene Monomer (such as Viton®)            |
| <b>HDPE</b> | High Density Polyethylene                                 |
| <b>NBR</b>  | Nitrile Butadiene Rubber                                  |
| <b>NR</b>   | Natural Rubber  |
| <b>PA</b>   | Polyamide   |
| <b>PE</b>   | Polyethylene  |
| <b>PEEK</b> | Polyether Ether Ketone                                    |
| <b>PES</b>  | Polysulfone   |
| <b>PEX</b>  | Cross-linked Polyethylene                                 |
| <b>POM</b>  | Polyoxymethylene  |
| <b>PP</b>   | Polypropylene   |
| <b>PPG</b>  | Polypropylene Glycol                                      |
| <b>PTFE</b> | Polytetrafluoroethylene                                   |
| <b>PU</b>   | Polyurethane  |
| <b>PVC</b>  | Polyvinyl Chloride  |
| <b>PVDF</b> | Polyvinylidene Fluoride                                   |
| <b>RTFE</b> | Reinforced Polytetrafluoroethylene (with 15% glass fiber) |
| <b>SAN</b>  | Styrene Acrylonitrile                                     |
| <b>SBR</b>  | Styrene Butadiene Rubber                                  |

## Main pictograms used in this publication






### Connections

-  BSP threaded, see usual abbreviations above.
-  NPT threaded, see usual abbreviations above.
-  SMS threaded.
-  Socket weld, see usual abbreviations above.
-  Butt weld, see usual abbreviations above.

### General certifications

-  Products certified in conformity with the 97/23/EC Directive. Apply only for valve above 1". May refer to 2006/95/EC Directive when applies.
-  Products certified in conformity with the 97/23/EC Directive by a notified body (XXXX: ID of the NB). Apply only for valve above 1".
-  Products certified in conformity with the API-6D Standard (XXXX: certificate number).
-  Product delivered by an ISO 9001 certified company.
-  Product delivered by an API Spec Q1 registered company.
-  Product certified in conformity with the 94/9/EC Directive or 2014/34/EU Directive.
-  Fire safe certified products (different standards may apply).
-  Fugitive emission tests certification in conformity with the ISO 15848 or API 622.
-  Product certified in conformity with German TA Luft regulation (Technische Anleitung zur Reinhaltung der Luft).
-  Materials for use in H2S containing environments







### Specific certifications on products

-  3.1 certification available. 10€/DN when ordered along with the products. ⚠ 30€/DN when ordered afterwards.
-  ATEX marking & certification available. 3€/pc, to be ordered along with the products.
-  ATEX marking & certification available. 10€/pc, to be ordered along with the products.
-  Safety Integrity Level certification under IEC EN 61508 (X: grade from 1 to 4, see page 8).
-  Ingress protection rating (XX: grade, see page 8)

### Specific approvals on products

-  NF ROB-GAZ, French approval for gas.
-  French approval for drinkable water.
-  UK approval for drinkable water.
-  German approval for drinkable water.
-  Polish approval for drinkable water.
-  U.S. Food & Drugs Administration. Complies with the FDA positive list of Food Contact Substances.

### Marine approval on products

-  Bureau Veritas Marine recognition MODE II
-  Bureau Veritas Type Approval
-  Lloyd's Register Type Approval
-  Det Norske Veritas Type Approval
-  Germanischer Lloyd Type Approval
-  American Bureau of Shipping Type Approval

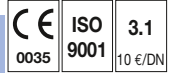


# Valves for general purpose & industry

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## 1 piece body

97/23/EC Directive N°0035 - Risk category III / module H - PTFE seats - Reduced bore - Locking device - PS: 40 bar - TS: -20°C/+180°C.



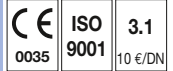
### 708 - Stainless steel (BSP)

CF8M body & ball.

| Ø    | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 708002 | 708003 | 708004 | 708005 | 708006 | 708007 | 708008 | 708009 |

## 2 piece body

97/23/EC Directive N°0035 - Risk category III / module H - PTFE seats - Full bore - Anti-blowout stem - Locking device - PS: see table - TS: -20°C/+180°C.

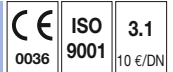


### 705 - Carbon steel (BSP)

A216WCB body - CF8M ball.

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 63     | 63     | 63     | 63     | 50     | 50     | 40     | 40     | 25     | 25     |
| code     | 705002 | 705003 | 705004 | 705005 | 705006 | 705007 | 705008 | 705009 | 705010 | 705011 |

97/23/EC Directive N°0036 - Risk category III / module H - RTFE seats - Full bore - Anti-blowout stem - Locking device - PS: see table - TS: -20°C/+180°C.

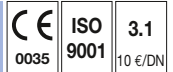


### 7151 - Stainless steel - S-First (BSP)

CF8M body & ball.

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 63     | 63     | 63     | 63     | 50     | 50     | 40     | 40     | 25     | 25     | 16     |
| code     | 715102 | 715103 | 715104 | 715105 | 715106 | 715107 | 715108 | 715109 | 715110 | 715111 | 715112 |

97/23/EC Directive N°0035 - Risk category II / module D1 - PTFE seats - Full bore - Anti-blowout stem - Locking device - PS: see tables - TS: -20°C/+180°C.



### 715 - Stainless steel (BSP)

CF8M body & ball.

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 63     | 63     | 63     | 63     | 50     | 50     | 40     | 40     | 25     | 25     | 16     |
| code     | 715002 | 715003 | 715004 | 715005 | 715006 | 715007 | 715008 | 715009 | 715010 | 715011 | 715012 |

### 789 - Stainless steel (BSP) male-female

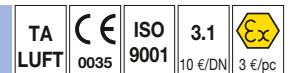
CF8M body & ball.



| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 63     | 63     | 63     | 63     | 50     | 50     | 40     | 40     |
| code     | 789002 | 789003 | 789004 | 789005 | 789006 | 789007 | 789008 | 789009 |

## 2 piece body - High temperature

2014/68/EU Directive N°0035 - Risk category II / module H - PTFE + graphite seats - Full bore - Anti-blowout stem - Locking device - PS: 63 bar - TS: -20°C/+200°C - ⚠️ Steam up to 11 bar max.



### 714 - Stainless steel (BSP)

CF8M body & ball.

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 63     | 63     | 63     | 63     | 63     | 63     | 63     | 63     |
| code     | 714002 | 714003 | 714004 | 714005 | 714006 | 714007 | 714008 | 714009 |



## 2 piece construction - 3 way

97/23/EC Directive N°0035 - Risk category II / module D1 - PTFE seats - 4 seats / 3 way tightness - Reduced bore - Anti-blowout stem - Locking device - ISO pad - PS: 40 bar - TS: -30°C/+140°C.

CE 0035 ISO 9001 3.1 10 €/DN



**780 - Stainless steel - L port**

**781 - Stainless steel - T port**

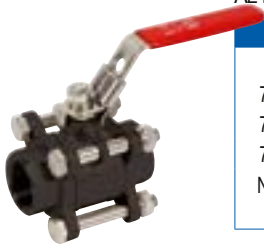
CF8M body & ball.

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 780 code | 780002 | 780003 | 780004 | 780005 | 780006 | 780007 | 780008 | 780009 |
| 781 code | 781002 | 781003 | 781004 | 781005 | 781006 | 781007 | 781008 | 781009 |

## 3 piece body

2014/68/EU Directive N°0038 - Risk category III / module H - RTFE seats - Full bore - Anti-blowout stem - Locking device - PS: see tables - TS: -20°C/+180°C. - **Compressed air: 20 bar max. up to 1", 16 bar above.**

CE 0038 ISO 9001 3.1 10 €/DN



**796 - Carbon steel**

**798 - Carbon steel**

**797 - Carbon steel**

**796 - Carbon steel**

A216WCB body - F304 ball.

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     | 2 1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 63     | 63     | 63     | 63     | 40     | 40     | 40     | 40     | 25     | 25     | 20     |
| 796 code | 796002 | 796002 | 796004 | 796005 | 796006 | 796007 | 796008 | 796009 | 796010 | 796011 | 796012 |
| 797 code | 797008 | 797010 | 797015 | 797020 | 797025 | 797032 | 797040 | 797050 | 797065 | 797080 | 797100 |
| 798 code | 798008 | 798010 | 798015 | 798020 | 798025 | 798032 | 798040 | 798050 | 798065 | 798080 | 798100 |
| NPT code | 796102 | 796103 | 796104 | 796105 | 796106 | 796107 | 796108 | 796109 | -      | -      | -      |

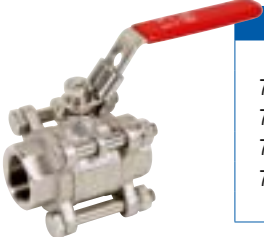
**790 - Stainless steel**

**792 - Stainless steel**

**791 - Stainless steel**

**744 - Stainless steel**

CF8M body & ball.



| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     | 2 1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 63     | 63     | 63     | 63     | 40     | 40     | 40     | 40     | 25     | 25     | 20     |
| 790 code | 790002 | 790003 | 790004 | 790005 | 790006 | 790007 | 790008 | 790009 | 790010 | 790011 | 790012 |
| 791 code | 791008 | 791010 | 791015 | 791020 | 791025 | 791032 | 791040 | 791050 | 791065 | 791080 | 791100 |
| 792 code | 792008 | 792010 | 792015 | 792020 | 792025 | 792032 | 792040 | 792050 | 792065 | 792080 | 792100 |
| 744 code | 744002 | 744003 | 744004 | 744005 | 744006 | 744007 | 744008 | 744009 | 744010 | 744011 | 744012 |

## 3 piece body flanged

2014/68/EU Directive N°0038 - Risk category III / module H - Flanged RF PN40 - EN 558 series 1 - RTFE seats - Full bore - Anti-blowout stem - Locking device - PS: 40 bar - TS: -20°C/+180°C.

CE 0038 ISO 9001 3.1 10 €/DN



**730 - Carbon steel**

A216WCB body - CF8M ball.

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    |
| code         | 730015 | 730020 | 730025 | 730032 | 730040 | 730050 | 730065 | 730080 | 730100 |

**731 - Stainless steel**

CF8M body & ball.

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    |
| code         | 731015 | 731020 | 731025 | 731032 | 731040 | 731050 | 731065 | 731080 | 731100 |



**Spare stem extension** for 796-797-798-790-791-792-744 and 730-731

| Ø      | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1 1/4"  | 1 1/2"  | 2"      |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|
| height | 125,50  | 125,50  | 125,50  | 125,50  | 125,50  | 125,50  | 127,50  | 127,50  |
| code   | 9810611 | 9810611 | 9810612 | 9810612 | 9810613 | 9810613 | 9810614 | 9810614 |



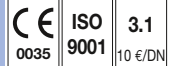
**Spare blue sleeve** for 796-797-798-790-791-792-744

| Ø    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1 1/4"  | 1 1/2"  | 2"      | 2 1/2"  | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 9830444 | 9830444 | 9830444 | 9830444 | 9830445 | 9830445 | 9830446 | 9830446 | 9830447 | 9830447 | 9830448 |



## Wafer

97/23/EC Directive N°0035 - Risk category II / module D1 - Flanged RF PN16 - RTFE seats - ISO pad - Locking device from DN25 to DN100 - Anti-blowout stem - PS: 16 bar - TS: -20°C/+180°C.

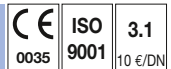


**771 - Stainless steel**  
CF8M body & ball.

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 35     | 39     | 44     | 52     | 64     | 83     | 100    | 121    | 152    | 179    | 202    |
| code         | 771015 | 771020 | 771025 | 771032 | 771040 | 771050 | 771065 | 771080 | 771100 | 771125 | 771150 |

## Split body - S-First

97/23/EC Directive N°0035 - Risk category II / module D1 - Flanged RF PN16 - PTFE + fiberglass seats - Full bore - Anti-blowout stem - Antistatic device - ISO pad - Locking device - PS: see tables - TS: -10°C/+180°C.



**764 - Carbon steel**  
A216WCB body - F304 ball - EN 558 series 27.

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 115    | 120    | 125    | 130    | 140    | 150    | 170    | 180    | 190    | 325    | 350    |
| PS           | 40     | 40     | 40     | 40     | 40     | 40     | 16     | 16     | 16     | 16     | 16     |
| code         | 764015 | 764020 | 764025 | 764032 | 764040 | 764050 | 764065 | 764080 | 764100 | 764125 | 764150 |

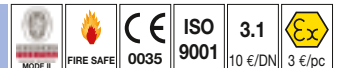


**765 - Stainless steel**  
CF8M body - F316 ball - EN 558 series 27.

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 115    | 120    | 125    | 130    | 140    | 150    | 170    | 180    | 190    | 325    | 350    |
| PS           | 40     | 40     | 40     | 40     | 40     | 40     | 16     | 16     | 16     | 16     | 16     |
| code         | 765015 | 765020 | 765025 | 765032 | 765040 | 765050 | 765065 | 765080 | 765100 | 765125 | 765150 |

## Split body - Fire safe

2014/68/EU Directive N°0035 - Risk category II / module H - Fire safe API 607 - Bureau Veritas Marine recognition MODE II - Flanged RF PN16 - RTFE seats - Full bore - Anti-blowout stem - Antistatic device - ISO pad - Locking device - PS: see tables - TS: -20°C/+200°C - ⚠️ **Steam up to 11 bar max.**



**762 - Carbon steel**  
A216WCB body - CF8M ball - EN 558 series 27.

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200*   |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 115    | 120    | 125    | 130    | 140    | 150    | 170    | 180    | 190    | 325    | 350    | 400    |
| PS           | 40     | 40     | 40     | 40     | 40     | 40     | 16     | 16     | 16     | 16     | 16     | 16     |
| code         | 762015 | 762020 | 762025 | 762032 | 762040 | 762050 | 762065 | 762080 | 762100 | 762125 | 762150 | 762200 |

\* not fire safe.



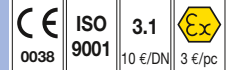
**763 - Stainless steel**  
CF8M body & ball - EN 558 series 27.

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200*   |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 115    | 120    | 125    | 130    | 140    | 150    | 170    | 180    | 190    | 325    | 350    | 400    |
| PS           | 40     | 40     | 40     | 40     | 40     | 40     | 16     | 16     | 16     | 16     | 16     | 16     |
| code         | 763015 | 763020 | 763025 | 763032 | 763040 | 763050 | 763065 | 763080 | 763100 | 763125 | 763150 | 763200 |

\* not fire safe.

## Flanged - 3 way

97/23/EC Directive N°0038 - Risk category III / module H - Flanged RF PN16 - RTFE seats - 4 seats / 3 way tightness - Full bore - Anti-blowout stem - PS: 16 bar.



**783 - Carbon steel - L port**

**784 - Carbon steel - T port**

A216WCB body - CF8 ball - TS: -20°C/+150°C.

| DN       | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 783 code | 783025 | 783032 | 783040 | 783050 | 783065 | 783080 | 783100 | 783125 | 783150 |
| 784 code | 784025 | 784032 | 784040 | 784050 | 784065 | 784080 | 784100 | 784125 | 784150 |

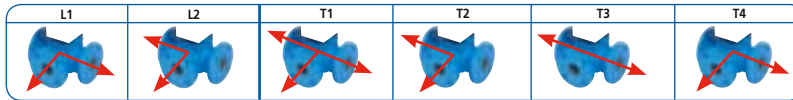


**785 - Stainless steel - L port**

**786 - Stainless steel - T port**

CF8M body & ball - TS: -30°C/+150°C.

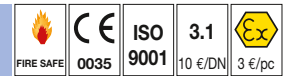
| DN       | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 785 code | 785025 | 785032 | 785040 | 785050 | 785065 | 785080 | 785100 | 785125 | 785150 |
| 786 code | 786025 | 786032 | 786040 | 786050 | 786065 | 786080 | 786100 | 786125 | 786150 |



## Double offset butterfly valves

### Carbon steel & stainless steel

97/23/EC Directive N°0035 - Risk category III / module H - Fire safe ISO 10497 - Wafer between flanges PN16/25 - PTFE seats (15% graphite filled) - ISO pad - TS: -29°C/+210°C - **Supplied with gearbox above DN150** - ⚠️ Steam up to 10 bar max.



Face to face according to EN 558 series 20 / ISO pad according to ISO 5211

| DN               | 40      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| face to face "E" | 43      | 46      | 47      | 53      | 57      | 56      | 62      | 68      | 78      | 78      | 102     |
| ISO pad          | F07/F05 | F07/F05 | F10/F07 | F10/F07 | F10/F07 | F10/F07 | F12/F10 | F12/F10 | F14/F12 | F14/F12 | F16/F14 |
| square drive     | 11      | 11      | 14      | 14      | 17      | 17      | 19      | 22      | 27      | 27      | 36      |

**1113 - Body A216WCB / Disc CF8M**

| DN        | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)  | 25      | 25      | 25      | 16/25*  | 16/25*  | 16/25*  | 16/25*  | 16/25*  | 16/25*  | 25      | 25      |
| PN16 code | -       | -       | -       | 1113101 | 1113126 | 1113151 | 1113201 | 1113251 | 1113301 | -       | -       |
| PN25 code | 1113050 | 1113065 | 1113080 | 1113100 | 1113125 | 1113150 | 1113200 | 1113250 | 1113300 | 1113350 | 1113400 |

\* PS: 16 bar for PN16 valves, 25 bar for PN25 valves.

**1114 - Body CF8M / Disc CF8M**

| DN        | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)  | 25      | 25      | 25      | 25      | 25      | 25      | 25      | 25      | 25      | 25      | 25      |
| PN25 code | 1114050 | 1114065 | 1114080 | 1114100 | 1114125 | 1114150 | 1114200 | 1114250 | 1114300 | 1114350 | 1114400 |

**1193 - Spare gearbox with position indicator**

| DN   | 50      | 65      | 80      | 100     | 125     | 150     |
|------|---------|---------|---------|---------|---------|---------|
| code | 1193001 | 1193001 | 1193002 | 1193003 | 1193004 | 1193004 |

**983132 - Spare ductile iron lever**

| DN   | 50      | 65      | 80      | 100     | 125     | 150     |
|------|---------|---------|---------|---------|---------|---------|
| code | 9831320 | 9831320 | 9831321 | 9831321 | 9831322 | 9831322 |



MOUNTING  
12 €/pc

# Gate valve



97/23/EC Directive N°0038 - Risk category III / module H - CF8M body & gate - Metal seats - Full bore - Non rising stem - PS: 16 bar - TS: -20°C/+180°C.

|            |             |                |
|------------|-------------|----------------|
| CE<br>0038 | ISO<br>9001 | 3.1<br>10 €/DN |
|------------|-------------|----------------|

## 106 - Stainless steel

| Ø    | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|
| code | 106004 | 106005 | 106006 | 106007 | 106008 | 106009 |

# Globe valve



97/23/EC Directive - Risk category I / module A - CF8M body - CF8M globe - Metal seat - PS: 16 bar - TS: -20°C/+180°C - ⚠️ **Not suitable for steam.**

|    |             |                |
|----|-------------|----------------|
| CE | ISO<br>9001 | 3.1<br>10 €/DN |
|----|-------------|----------------|

## 485 - Stainless steel

| Ø    | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|
| code | 485004 | 485005 | 485006 | 485007 | 485008 | 485009 |

# Y-strainers



97/23/EC Directive N°0035 - Risk category III / module H - CF8M body - F304 screen - Mesh 1 mm - With draining cap - PS: 16 bar - TS: -20°C/+200°C.

|            |             |                |
|------------|-------------|----------------|
| CE<br>0035 | ISO<br>9001 | 3.1<br>10 €/DN |
|------------|-------------|----------------|

## 230 - Stainless steel

| Ø    | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 230002 | 230003 | 230004 | 230005 | 230006 | 230007 | 230008 | 230009 |

97/23/EC Directive N°0036 - Risk category III / module H - Flanged RF PN40 - EN 558 series 1 - A216WCB body - F304 screen - PS: 40 bar - TS: -20°C/+425°C.

|            |             |                |
|------------|-------------|----------------|
| CE<br>0036 | ISO<br>9001 | 3.1<br>10 €/DN |
|------------|-------------|----------------|

## 235 - Carbon steel - High temperature

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| mesh (mm)    | 1      | 1      | 1      | 1      | 1      | 1      | 1,25   | 1,25   | 1,6    | 1,6    | 1,6    | 1,6    |
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    |
| code         | 235015 | 235020 | 235025 | 235032 | 235040 | 235050 | 235065 | 235080 | 235100 | 235125 | 235150 | 235200 |

2014/68/EU Directive N°0035 - Risk category III / module H - Flanged RF PN16 - EN 558 series 1 - CF8M body - F304 screen - PS: 16 bar - TS: -20°C/+200°C.

|            |             |                |  |
|------------|-------------|----------------|--|
| CE<br>0035 | ISO<br>9001 | 3.1<br>10 €/DN |  |
|------------|-------------|----------------|--|

## 240 - Stainless steel

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| mesh (mm)    | 0,8    | 0,8    | 0,8    | 0,8    | 0,8    | 0,8    | 1      | 1      | 3      | 3      | 3      | 3      |
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    |
| code         | 240015 | 240020 | 240025 | 240032 | 240040 | 240050 | 240065 | 240080 | 240100 | 240125 | 240150 | 240200 |

Excluded from 2014/68/EU Directive (article 4, §3) - Stainless steel body - F304 disc - FKM seat - PS: 16 bar - TS: -10°C/+150°C.

ISO  
9001

### 327 - Full stainless steel F304 326 - Full stainless steel F316



| Ø            | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     | 2 1/2" | 3"     | 4"     |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 66     | 66     | 66     | 72     | 83     | 105    | 115    | 125    | 145    | 162,5  | 189,5  |
| 327 code     | 327002 | 327003 | 327004 | 327005 | 327006 | 327007 | 327008 | 327009 | 327010 | 327011 | 327012 |
| 326 code     | 326002 | 326003 | 326004 | 326005 | 326006 | 326007 | 326008 | 326009 | 326010 | 326011 | 326012 |

2014/68/EU Directive N°0035 - Risk category II / module H - CF8M body - F316 disc - Metal-metal tightness - PTFE body seats - PS: 63 bar - TS: -20°C/+200°C.

10 €/DN 3 €/pc

### 380 - 3 piece body 381 - 3 piece body 384 - 3 piece body 382 - 3 piece body



| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     | 2 1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 380 code | 380002 | 380003 | 380004 | 380005 | 380006 | 380007 | 380008 | 380009 | 380010 | 380011 | 380012 |
| 384 code | 384002 | 384003 | 384004 | 384005 | 384006 | 384007 | 384008 | 384009 | -      | -      | -      |
| 381 code | 381008 | 381010 | 381015 | 381020 | 381025 | 381032 | 381040 | 381050 | 381065 | 381080 | 381100 |
| 382 code | 382008 | 382010 | 382015 | 382020 | 382025 | 382032 | 382040 | 382050 | 382065 | 382080 | 382100 |

97/23/EC Directive N°0036 - Risk category II / module A1 - Between flanges PN10/16/25/40 & ANSI 150 & 300 - EN 558 series 49 - CF8M body - F316 disc - Metal-metal tightness - PS: 40 bar - TS: -20°C/+200°C.

10 €/DN 3 €/pc

### 390 - Stainless steel - S-First



| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 16     | 19     | 21     | 27     | 31     | 40     | 46     | 50     | 60     |
| code         | 390015 | 390020 | 390025 | 390032 | 390040 | 390050 | 390065 | 390080 | 390100 |

2014/68/EU Directive N°0035 - Risk category II / module H - Between flanges PN10/16/25/40 & ANSI 150 - CF8M body - F316 disc - Metal-metal tightness - PS: 40 bar - TS: -20°C/+200°C.

10 €/DN 3 €/pc

### 386 - Stainless steel



| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 16,5   | 20     | 22     | 28     | 32     | 40     | 46     | 50     | 60     |
| code         | 386015 | 386020 | 386025 | 386032 | 386040 | 386050 | 386065 | 386080 | 386100 |

97/23/EC Directive N°0035 - Risk category III / module H - CF8M body & plate - Metal-metal tightness - PS: 16 bar - TS: -20°C/+200°C - Not suitable for pulsatory pace - Max. speed 3m/sec.

10 €/DN 3 €/pc

### 320 - Stainless steel



| Ø    | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 320002 | 320003 | 320004 | 320005 | 320006 | 320007 | 320008 | 320009 |

2014/68/EU Directive N°0035 - Risk category III / module H - Between flanges PN16 - PS: 16 bar up to DN200, 10 bar above - TS: -10°C/+180°C - Not suitable for pulsatory pace - Max. speed 3m/sec.

10 €/DN

### 365 - Stainless steel CF8M - FKM gasket



| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    | 450    | 500    | 600    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 14     | 14     | 14     | 14     | 18     | 18     | 20     | 22     | 26     | 28     | 36     | 41     | 50     | 56     | 56     |
| code         | 365040 | 365050 | 365065 | 365080 | 365100 | 365125 | 365150 | 365200 | 365250 | 365300 | 365350 | 365400 | 365450 | 365500 | 365600 |

97/23/EC Directive N°0035 - Risk category III / module H - Between flanges PN25 up to DN200, PN10/16 above - CF8M body - PS: 16 bar up to DN300, 10 bar above - TS: -10°C/+200°C - Not suitable for pulsatory pace.

10 €/DN

### 372 - FKM gasket - CF8M plates



| DN           | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    | 450    | 500    | 600    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 54     | 54     | 57     | 64     | 70     | 76     | 95     | 108    | 143    | 184    | 191    | 203    | 213    | 222    |
| code         | 372050 | 372065 | 372080 | 372100 | 372125 | 372150 | 372200 | 372250 | 372300 | 372350 | 372400 | 372450 | 372500 | 372600 |

## On/off pneumatic actuated angle seat valves

CF8M body & actuator - PTFE-stainless steel seat - PTFE-FKM gland pack - Orientable head - Air supply connection 1/8" - Max. air supply: 10 bar - Not for gas of group 1 - PS: 16 bar - TS: -10°C/+100°C for 1436, -10°C/+180°C for 1430/1434.



### 1436 - Compact

Flow entry below the seat - For liquids

| Ø    | Kv (m³/h) | face to face (mm) | max. ΔP (bar) | min. supply (bar) | code    |
|------|-----------|-------------------|---------------|-------------------|---------|
| 3/8" | 4,7       | 74                | 6             | 5                 | 1436303 |
| 1/2" | 4,7       | 74                | 6             | 5                 | 1436304 |
| 3/4" | 5,4       | 84                | 4             | 5                 | 1436305 |

### 1430 - Standard

Flow entry above the seat - For compressible fluids

| Ø      | Kv (m³/h) | face to face (mm) | max. ΔP (bar) | min. supply (bar) | code     |
|--------|-----------|-------------------|---------------|-------------------|----------|
| 1/2"   | 4,7       | 68                | 16            | 3                 | 1430304  |
| 3/4"   | 9,5       | 75                | 16            | 4                 | 1430305  |
| 1"     | 18,1      | 90                | 16            | 5,5               | 1430306  |
| 1 1/4" | 23,1      | 116               | 11            | 5                 | 1430407A |
| 1 1/2" | 32,9      | 116               | 11            | 6                 | 1430408A |
| 2"     | 52,8      | 138               | 11            | 6,5               | 1430509A |

### 1434 - Standard

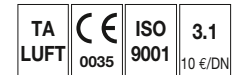
Flow entry below the seat - For liquids

| max. ΔP (bar) | min. supply (bar) | code     |
|---------------|-------------------|----------|
| 16            | 4,5               | 1434304  |
| 12            | 4,5               | 1434305  |
| 10            | 4,5               | 1434406  |
| 6             | 4,5               | 1434407A |
| 10            | 4                 | 1434508A |
| 6             | 4                 | 1434509A |

## Pneumatic actuated valves

### 715 XS - 2 piece stainless steel ball valve

CF8M body & ball - PTFE seats - Stem tightness: PTFE/FKM - Full bore - PS: 63 bar - TS: -10°C/+180°C.



| Ø      | double acting |              |
|--------|---------------|--------------|
|        | actuator      | code         |
| 1/2"   | NK52          | 272402010002 |
| 3/4"   | NK52          | 272403010002 |
| 1"     | NK52          | 272404010002 |
| 1 1/4" | NK52          | 272405010002 |
| 1 1/2" | NK63          | 272406010003 |
| 2"     | NK63          | 272407010003 |
| 2 1/2" | NK83          | 272408010005 |
| 3"     | NK83          | 272409010005 |



| Ø      | spring return |              |
|--------|---------------|--------------|
|        | actuator      | code         |
| 1/2"   | NKS52         | 272402010102 |
| 3/4"   | NKS52         | 272403010102 |
| 1"     | NKS63         | 272404010103 |
| 1 1/4" | NKS63         | 272405010105 |
| 1 1/2" | NKS83         | 272406010105 |
| 2"     | NKS83         | 272407010105 |
| 2 1/2" | NKS92         | 272408010106 |
| 3"     | NKS105        | 272409010107 |

### 746 XS - 3 piece stainless steel ball valve

CF8M body & ball - RTFE seats - Stem tightness: PTFE/FKM - Full bore - PS: 63 bar - TS: -40°C/+180°C.

| Ø      | double acting |              |
|--------|---------------|--------------|
|        | actuator      | code         |
| 1/4"   | NK52          | 272500010002 |
| 3/8"   | NK52          | 272501010002 |
| 1/2"   | NK52          | 272642010002 |
| 3/4"   | NK52          | 272643010002 |
| 1"     | NK52          | 272644010002 |
| 1 1/4" | NK52          | 272645010002 |
| 1 1/2" | NK63          | 272646010003 |
| 2"     | NK63          | 272647010003 |
| 2 1/2" | NK83          | 272648010005 |
| 3"     | NK83          | 272649010005 |
| 4"     | NK83          | 272650010005 |



| Ø      | spring return |              |
|--------|---------------|--------------|
|        | actuator      | code         |
| 1/4"   | NKS52         | 272500010102 |
| 3/8"   | NKS52         | 272501010102 |
| 1/2"   | NKS52         | 272642010102 |
| 3/4"   | NKS52         | 272643010102 |
| 1"     | NKS52         | 272644010102 |
| 1 1/4" | NKS83         | 272645010102 |
| 1 1/2" | NKS83         | 272646010105 |
| 2"     | NKS83         | 272647010105 |
| 2 1/2" | NKS83         | 272648010105 |
| 3"     | NKS92         | 272649010106 |
| 4"     | NKS92         | 272650010106 |

## Spare actuators

Valve mounting acc. to ISO 5211- Solenoid pilot valve connection acc. to NAMUR VDI/VDE 3845 - Rack and pinion actuator - 90° operating angle (±5°) - Aluminium body & caps - Aluminium piston - Position indicator - Adjustable limit screws - Environment working temperature: -20°C/+80°C - Max. air supply: 8 bar - Air supply connection 1/4".



### NKD - Double acting

| type   | avail. torque (Nm) at air supply 6 bar | ISO    | Ø  | code   |
|--------|--|--------|----|--------|
| NKD052 | 24                                     | F03/05 | 11 | 010002 |
| NKD053 | 44                                     | F05/07 | 14 | 010003 |
| NKD083 | 94                                     | F05/07 | 17 | 010005 |

### NKS - Spring return

| type   | avail. torque (Nm) at air supply 6 bar |                | ISO    | Ø  | code   |
|--------|--|----------------|--------|----|--------|
|        | air opening                            | spring closing |        |    |        |
| NKS052 | 14                                     | 10             | F03/05 | 11 | 010102 |
| NKS063 | 27                                     | 16             | F05/07 | 14 | 010103 |
| NKS083 | 56                                     | 38             | F05/07 | 17 | 010105 |
| NKS092 | 79                                     | 56             | F05/07 | 17 | 010106 |
| NKS105 | 122                                    | 76             | F07/10 | 22 | 010107 |

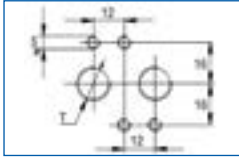
## Limit switch box

### APL 210 - Limit switch box IP67 for NK/NKS actuators

Epoxy coated aluminium housing - 3D position indicator - Without gland pack & cap - Includes stainless steel bracket - Exclusively for NK/NKS actuators.



| type    | switches                                | code     |
|---------|---|----------|
| APL 210 | 2 SPDT mechanical switches 250V AC - 3A | 0460001N |



## Namur solenoid pilot valve

Namur interface - Anodized aluminium body - NBR sealing - 3/2-5/2 ways / solenoid operated / Spring return (except ref. 4220: 5/2 ways - dual solenoids operated) - Operating pressure: 2 bar to 10 bar (except CY: 1,5 bar to 8 bar) - IP65 coil.

|       |       |    |          |
|-------|-------|----|----------|
| IP 65 | SIL 3 | CE | ISO 9001 |
|-------|-------|----|----------|



### CY - Monostable SHAKO 3/2-5/2

Flowrate: 500 l/min - Operating pressure: 1,5 to 8 bar - 1/4" inlet & outlet ports - Manual override - TS: -10°C/+50°C.

| voltage | code   |
|---------|--------|
| 230V AC | 042190 |
| 24V DC  | 042191 |

### Spare coil + connector

For CY solenoid pilot valves

| voltage | code   |
|---------|--------|
| 230V AC | 980260 |
| 24V AC  | 980263 |
| 24V DC  | 980261 |
| 12V DC  | 980262 |

## Compact electric actuated ball valves

Ball valves equipped with compact actuator - 90° operating angle - Plastic enclosure - Steel reducing gears - Position indicator - 2 thread wiring - 50 cm wire - Room temp.: -15°C/+50°C.

|       |    |          |
|-------|----|----------|
| IP 67 | CE | ISO 9001 |
|-------|----|----------|

**NEW**



### Lyva 3 - Stainless steel ball valve

CF8M body & ball - PTFE seats - Stem tightness: FKM - Full bore - PS: 10 bar - TS: 0°C/+90°C.



| Ø    | power  | code       |
|------|--------|------------|
| 1/2" | 24V DC | 89321C0232 |
| 3/4" | 24V DC | 89321C0233 |
| 1"   | 24V DC | 89321C0234 |

| Ø    | power   | code       |
|------|---------|------------|
| 1/2" | 230V AC | 89321C0252 |
| 3/4" | 230V AC | 89321C0253 |
| 1"   | 230V AC | 89321C0254 |

## Electric actuated valves

All our electric actuated ball valves are equipped with a 230V AC actuator as standard - Please consult for any other power supply - ⚠ Max. ΔP: 10 bar.

|         |    |          |         |
|---------|----|----------|---------|
| TA LUFT | CE | ISO 9001 | 3.1     |
| 0035    |    |          | 10 €/DN |

### 715 XS - 2 piece stainless steel ball valve (BSP)

Direct mounting - CF8M body & ball - PTFE seats - Stem tightness: PTFE/FKM - Full bore - PS: 63 bar - TS: -10°C/+180°C.



| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/2"  | UMA3.5   | 272402022060 |
| 3/4"  | UMA3.5   | 272403022060 |
| 1"    | UMA3.5   | 272404022060 |
| 1"1/4 | UMA3.5   | 272405022060 |
| 1"1/2 | UMA3.5   | 272406022060 |
| 2"    | UMA3.5   | 272407022060 |
| 2"1/2 | UMB7     | 272408022170 |
| 3"    | UMC10    | 272409022240 |



| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/2"  | SA03     | 272402023000 |
| 3/4"  | SA03     | 272403023000 |
| 1"    | SA03     | 272404023000 |
| 1"1/4 | SA03     | 272405023000 |
| 1"1/2 | SA05     | 272406023010 |
| 2"    | SA05     | 272407023010 |
| 2"1/2 | NA09     | 272408023120 |
| 3"    | NA09     | 272409023120 |

### 736 XS - 3 piece carbon steel ball valve (BSP)

Direct mounting - A216WCB body - CF8M ball - RTFE seats - Stem tightness: PTFE/FKM - Full bore - PS: 63 bar - TS: -25°C/+180°C.

UMA3.5

also available

|               |          |          |
|---------------|----------|----------|
| 736 XS        | 734 XS   | 735 XS   |
|               |          |          |
| code 27146... | 27148... | 27150... |

| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/2"  | UMA3.5   | 271462022060 |
| 3/4"  | UMA3.5   | 271463022060 |
| 1"    | UMA3.5   | 271464022060 |
| 1"1/4 | UMA3.5   | 271465022060 |
| 1"1/2 | UMA3.5   | 271466022060 |
| 2"    | UMA3.5   | 271467022060 |
| 2"1/2 | UMB7     | 271468022170 |
| 3"    | UMC10    | 271469022240 |
| 4"    | UMC10    | 271470022240 |



| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/2"  | SA03     | 271462023000 |
| 3/4"  | SA03     | 271463023000 |
| 1"    | SA03     | 271464023000 |
| 1"1/4 | SA05     | 271465023010 |
| 1"1/2 | SA05     | 271466023010 |
| 2"    | SA05     | 271467023010 |
| 2"1/2 | NA09     | 271468023120 |
| 3"    | NA09     | 271469023120 |
| 4"    | NA15     | 271470023130 |

### 746 XS - 3 piece stainless steel ball valve

CF8M body & ball - PTFE seats - Stem tightness: PTFE/FKM - Full bore - PS: 63 bar - TS: -40°C/+180°C.

UMA3.5

also available

|               |          |          |
|---------------|----------|----------|
| 746 XS        | 745 XS   | 743 XS   |
|               |          |          |
| code 27264... | 27266... | 27268... |

| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/4"  | UMA3.5   | 272500022060 |
| 3/8"  | UMA3.5   | 272501022060 |
| 1/2"  | UMA3.5   | 272642022060 |
| 3/4"  | UMA3.5   | 272643022060 |
| 1"    | UMA3.5   | 272644022060 |
| 1"1/4 | UMA3.5   | 272645022060 |
| 1"1/2 | UMA3.5   | 272646022060 |
| 2"    | UMA3.5   | 272647022060 |
| 2"1/2 | UMB7     | 272648022170 |
| 3"    | UMC10    | 272649022240 |
| 4"    | UMC10    | 272650022240 |



| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/4"  | SA03     | 272500023000 |
| 3/8"  | SA03     | 272501023000 |
| 1/2"  | SA03     | 272642023000 |
| 3/4"  | SA03     | 272643023000 |
| 1"    | SA05     | 272644023010 |
| 1"1/4 | SA05     | 272645023010 |
| 1"1/2 | SA05     | 272646023010 |
| 2"    | SA05     | 272647023010 |
| 2"1/2 | NA09     | 272648023120 |
| 3"    | NA09     | 272649023120 |
| 4"    | NA15     | 272650023130 |

All our electric actuated ball valves are equipped with a 230V AC actuator as standard - Please consult for any other power supply - ⚠️ **Max. ΔP: 10 bar.**

ISO 9001 3.1  
10 €/DN



UMA3.5  
780 XS 781 XS T  
code 27540... 27542...

### 780 XS L-port / 781 XS T-port - 3 way stainless steel ball valve

CF8M body & ball - PTFE seats - Stem tightness: PTFE - Reduced bore - PS: 63 bar - TS: -30°C/+180°C.

| DN    | actuator | 780 XS L code |
|-------|----------|---------------|
| 1/4"  | UMA3.5   | 275400022060  |
| 3/8"  | UMA3.5   | 275401022060  |
| 1/2"  | UMA3.5   | 275402022060  |
| 3/4"  | UMA3.5   | 275403022060  |
| 1"    | UMA3.5   | 275404022060  |
| 1"1/4 | UMA3.5   | 275405022060  |
| 1"1/2 | UMA3.5   | 275406022060  |
| 2"    | UMB7     | 275407022170  |



SA05



Zones 1 & 2 on request

| DN    | actuator | 780 XS L code |
|-------|----------|---------------|
| 1/4"  | SA05     | 275400023010  |
| 3/8"  | SA05     | 275401023010  |
| 1/2"  | SA05     | 275402023010  |
| 3/4"  | SA05     | 275403023010  |
| 1"    | SA05     | 275404023010  |
| 1"1/4 | SA05     | 275405023010  |
| 1"1/2 | SA05     | 275406023010  |
| 2"    | SA05     | 275407023010  |

### 762 - Split body carbon steel flanged ball valve

A216WCB body - CF8M ball - PTFE seats - Stem tightness: PTFE - Full bore - Flanged RF PN16 - DIN 3202 F4/F5 - PS: 40 bar up to DN50, 16 bar above - TS: -20°C/+200°C.



UMA3.5

| DN  | actuator | code         |
|-----|----------|--------------|
| 15  | UMA3.5   | 274242022060 |
| 20  | UMA3.5   | 274243022060 |
| 25  | UMA3.5   | 274244022060 |
| 32  | UMA3.5   | 274245022060 |
| 40  | UMC10    | 274246022240 |
| 50  | UMC10    | 274247022240 |
| 65  | UMC10    | 274248022240 |
| 80  | UVC15    | 274249022330 |
| 100 | UVD25    | 274250022350 |



NA09-X

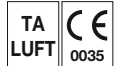


Zones 1 & 2 on request

| DN  | actuator | code         |
|-----|----------|--------------|
| 15  | SA05     | 274242023010 |
| 20  | SA05     | 274243023010 |
| 25  | SA05     | 274244023010 |
| 32  | SA05     | 274245023010 |
| 40  | SA05     | 274246023010 |
| 50  | NA06     | 274247023110 |
| 65  | NA09     | 274248023120 |
| 80  | NA15     | 274249023130 |
| 100 | NA28     | 274250023150 |
| 125 | NA28     | 274251023150 |
| 150 | NA60     | 274252023180 |

### 771 XS - Stainless steel flanged ball valve wafer type

CF8M body & ball - PTFE seats - Stem tightness: PTFE - Full bore - Wafer type PN16 - PS: 16 bar - TS: -30°C/+180°C.



UMA3.5

| DN  | actuator | code         |
|-----|----------|--------------|
| 15  | UMA3.5   | 272902022060 |
| 20  | UMA3.5   | 272903022060 |
| 25  | UMA3.5   | 272904022060 |
| 32  | UMA3.5   | 272905022060 |
| 40  | UMA3.5   | 272906022060 |
| 50  | UMC10    | 272907022240 |
| 65  | UMC10    | 272908022240 |
| 80  | UMC10    | 272909022240 |
| 100 | UMC15    | 272910022250 |



SA05

| DN  | actuator | code         |
|-----|----------|--------------|
| 15  | SA05     | 272902023010 |
| 20  | SA05     | 272903023010 |
| 25  | SA05     | 272904023010 |
| 32  | SA05     | 272905023010 |
| 40  | SA05     | 272906023010 |
| 50  | NA09     | 272907023120 |
| 65  | NA09     | 272908023120 |
| 80  | NA15     | 272909023130 |
| 100 | NA15     | 272910023130 |

### 1113 - Carbon steel double offset butterfly valve

A216WCB body - CF8M disc - Stainless steel F316 stem - PTFE-graphite seat & gland pack - Wafer type PN25 - Unidirectional use - PS: 25 bar - TS: -10°C/+210°C.



NA09



| DN  | actuator | code         |
|-----|----------|--------------|
| 50  | NA06     | 260950023110 |
| 65  | NA06     | 260951023110 |
| 80  | NA06     | 260952023110 |
| 100 | NA09     | 260953023120 |
| 125 | NA15     | 260954023130 |
| 150 | NA28     | 260955023150 |
| 200 | NA28     | 260956023150 |
| 250 | NA38     | 260957023160 |
| 300 | NA38     | 260958023160 |

also available PN25 PN16  
code 26095... 26195...

### 1114 - Stainless steel double offset butterfly valve

CF8M body & disc - Stainless steel F316 stem - PTFE-graphite seat & gland pack - Wafer type PN25 - Unidirectional use - PS: 25 bar - TS: -10°C/+210°C.



NA09



| DN  | actuator | code         |
|-----|----------|--------------|
| 50  | NA06     | 260970023110 |
| 65  | NA06     | 260971023110 |
| 80  | NA06     | 260972023110 |
| 100 | NA09     | 260973023120 |
| 125 | NA15     | 260974023130 |
| 150 | NA28     | 260975023150 |
| 200 | NA28     | 260976023150 |
| 250 | NA38     | 260977023160 |
| 300 | NA38     | 260978023160 |



## Electric quarter-turn actuators - IP67

**Specifications:** Compact type - 90° operating angle - Comply with EN 15714-2 standard - ISO 5211 pad, star connection - Epoxy coated aluminium enclosure - Steel reducing box - Room temp.: -20°C/+70°C (except SA05-X: -20°C/+55°C).

**Standard equipment:** 2 adjustable limit switches + 2 auxiliary limit switches - Thermal protection - Position indicator with led - Supplied electrical connection: gland pack M20 x 1,5 (except SA05-X).



### SA03 - Electric actuator - 30 Nm

Resistance heater 3W - Duty service: S2-15 min / S4: 50% of time - Declutchable manual override by key (included).

| type | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO 5211 |    | voltage   | code   |
|------|-------------|------------------------|----------------------|----------|----|-----------|--------|
| SA03 | 30          | 12                     | 18                   | F03/05   | 11 | 230V AC   | 023000 |
| SA03 | 30          | 9/7                    | 18                   | F03/05   | 11 | 24V AC/DC | 023001 |



### SA05 - Electric actuator - 50 Nm

Resistance heater 5W - Duty service: S2-15 min / S4: 50% of time - Manual override by key (included), except SA05-S.

| type                             | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO 5211  |    | voltage   | code   |
|----------------------------------|-------------|------------------------|----------------------|-----------|----|-----------|--------|
| SA05                             | 50          | 17                     | 6                    | F03/05/07 | 14 | 230V AC   | 023010 |
| SA05                             | 50          | 10                     | 15                   | F03/05/07 | 14 | 24V AC/DC | 023011 |
| SA05                             | 50          | 11                     | 6                    | F03/05/07 | 14 | 12V DC    | 023012 |
| special executions: slow closing |             |                        |                      |           |    |           |        |
| SA05-S                           | 50          | 100                    | 6                    | F03/05/07 | 14 | 230V AC   | 023020 |
| SA05-S                           | 50          | 100                    | 6                    | F03/05/07 | 14 | 24V AC/DC | 023021 |



### SA05-PCU - 4-20 mA / Proportional control unit electric actuator - 50 Nm

Includes control card 4-20 mA, 0-10 V, 2-10 V and potentiometer 4-20 mA.

| type     | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO 5211  |    | voltage   | code   |
|----------|-------------|------------------------|----------------------|-----------|----|-----------|--------|
| SA05-PCU | 50          | 17                     | 6                    | F03/05/07 | 14 | 230V AC   | 023050 |
| SA05-PCU | 50          | 17                     | 6                    | F03/05/07 | 14 | 24V AC/DC | 023051 |

**Specifications:** Positive safety with spring return - Compact type - 90° operating angle ±5° - ISO 5211 pad, star connection - Epoxy coated aluminium enclosure - Steel reducing box - Room temp.: -20°C/+55°C.

**Standard equipment:** 2 adjustable limit switches + 2 auxiliary limit switches - Thermal protection - Position indicator with led - Supplied electrical connection: gland pack M20 x 1,5.



### SR03 - Spring return electric actuator - 30 Nm

Resistance heater 20W - Duty service: S2-15 min - Manual override by key (included).

| type | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO 5211 |    | voltage   | code   |
|------|-------------|------------------------|----------------------|----------|----|-----------|--------|
| SR03 | 30          | 10-35                  | 4,7-10               | F03/05   | 11 | 230V AC   | 023070 |
| SR03 | 30          | 10-35                  | 4,7-10               | F03/05   | 11 | 24V AC/DC | 023071 |

**Specifications:** Compact type - 90° operating angle (±5°) - ISO 5211 pad, star connection - Epoxy coated aluminium enclosure - Steel reducing box - Room temp.: -20°C/+70°C - Torque limiter (except NA06 & NA09) - S2 duty service: 70% of time.

**Standard equipment:** 2 adjustable limit switches - 2 dry auxiliary limit switches 250V 16A - Thermal protection - Resistance heater 20W - Position indicator - Manual override by handwheel - Supplied electrical connection: gland packing M20 x 1,5.



### NA - Electric actuator

| type  | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO     |    | 230V AC | 3~400V AC | 24V AC | 24V DC |
|-------|-------------|------------------------|----------------------|---------|----|---------|-----------|--------|--------|
|       |             |                        |                      |         |    | code    | code      | code   | code   |
| NA06  | 60          | 17                     | 15                   | F07     | 17 | 023110  | 023113    | 023111 | 023114 |
| NA09  | 90          | 17                     | 25                   | F07     | 17 | 023120  | 023123    | 023121 | 023124 |
| NA15  | 150         | 20                     | 40                   | F07/F10 | 17 | 023130  | 023133    | 023131 | 023134 |
| NA28  | 280         | 24                     | 40                   | F10/F12 | 22 | 023150  | 023153    | 023151 | 023154 |
| NA38  | 380         | 24                     | 60                   | F10/F12 | 27 | 023160  | 023163    | -      | -      |
| NA60  | 600         | 29                     | 90                   | F12/F14 | 27 | 023180  | 023183    | -      | -      |
| NA100 | 1000        | 29                     | 180                  | F12/F14 | 27 | 023200  | 023203    | -      | -      |
| NA150 | 1500        | 87                     | 98                   | F14/F16 | 36 | 023210  | 023213    | -      | -      |
| NA200 | 2000        | 87                     | 180                  | F14/F16 | 36 | 023220  | 023223    | -      | -      |
| NA250 | 2500        | 87                     | 180                  | F14/F16 | 46 | 023230  | 023233    | -      | -      |

### NA-PCU - 4-20 mA / Proportional control unit electric actuator

**Specifications and equipment:** same as NA - Includes control card & potentiometer 4-20 mA.

| type     | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO     |    | 230V AC code |
|----------|-------------|------------------------|----------------------|---------|----|--------------|
| NA09-PCU | 90          | 17                     | 25                   | F07     | 17 | 023550       |
| NA15-PCU | 150         | 20                     | 40                   | F07/F10 | 17 | 023560       |



**NEW**

## Carbon steel pipe nipples & sockets

### ■ Welded pipe nipples

**Mandatory packing applies**

Excluded from 2014/68/EU Directive (art. 4, §3) - Manufacturing acc. to EN 10241 - Use: liquids & compressed air - Material: carbon steel RST 37.0 - Coating: black or galvanised - Galvanised coating for drinking water compatibility - BSP thread acc. to ISO 7-1 - PS: 16 bar - TS: -20°C/+120°C.

**ISO 9001**

#### 530AN/530AG - Welding half-nipple length 50 mm



| Ø          | 1/8"     | 1/4"     | 3/8"      | 1/2"      | 3/4"      | 1"        | 1 1/4"    | 1 1/2"    | 2"        |
|------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| pack       | 10       | 10       | 10        | 10        | 10        | 10        | 5         | 5         | 5         |
| black code | 530AN505 | 530AN508 | 530AN5012 | 530AN5015 | 530AN5020 | 530AN5026 | 530AN5033 | 530AN5040 | 530AN5050 |
| galv. code | 530AG505 | 530AG508 | 530AG5012 | 530AG5015 | 530AG5020 | 530AG5026 | 530AG5033 | 530AG5040 | 530AG5050 |

#### 530AN/530AG - Welding half-nipple length 100 mm



| Ø          | 1/4"      | 3/8"       | 1/2"       | 3/4"       | 1"         | 1 1/4"     | 1 1/2"     | 2"         | 2 1/2"     | 3"         | 4"          |
|------------|-----------|------------|------------|------------|------------|------------|------------|------------|------------|------------|-------------|
| black code | 530AN1008 | 530AN10012 | 530AN10015 | 530AN10020 | 530AN10026 | 530AN10033 | 530AN10040 | 530AN10050 | 530AN10066 | 530AN10080 | 530AN100102 |
| galv. code | 530AG1008 | 530AG10012 | 530AG10015 | 530AG10020 | 530AG10026 | 530AG10033 | 530AG10040 | 530AG10050 | 530AG10066 | 530AG10080 | 530AG100102 |

#### 530N/530G - Barrel nipple length 40 mm



| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1 1/4"   | 1 1/2"   | 2"       |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 10      | 10       | 10       | 10       | 10       | 5        | 5        | 5        |
| black code | 530N408 | 530N4012 | 530N4015 | 530N4020 | 530N4026 | 530N4033 | 530N4040 | 530N4050 |
| galv. code | 530G408 | 530G4012 | 530G4015 | 530G4020 | 530G4026 | 530G4033 | 530G4040 | 530G4050 |

#### 530N/530G - Barrel nipple length 50 mm



| Ø          | 1/2"     | 3/4"     | 1"       | 1 1/4"   | 1 1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|
| pack       | 10       | 10       | 10       | 5        | 5        | 5        |
| black code | 530N5015 | 530N5020 | 530N5026 | 530N5033 | 530N5040 | 530N5050 |
| galv. code | 530G5015 | 530G5020 | 530G5026 | 530G5033 | 530G5040 | 530G5050 |

#### 530N/530G - Barrel nipple length 60 mm



| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1 1/4"   | 1 1/2"   | 2"       |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 10      | 10       | 10       | 10       | 10       | 5        | 5        | 5        |
| black code | 530N608 | 530N6012 | 530N6015 | 530N6020 | 530N6026 | 530N6033 | 530N6040 | 530N6050 |
| galv. code | 530G608 | 530G6012 | 530G6015 | 530G6020 | 530G6026 | 530G6033 | 530G6040 | 530G6050 |

#### 530N/530G - Barrel nipple length 80 mm



| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1 1/4"   | 1 1/2"   | 2"       | 2 1/2"   | 3"       | 4"        |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10      | 10       | 10       | 10       | 10       | 5        | 5        | 5        | 5        | 1        | 1         |
| black code | 530N808 | 530N8012 | 530N8015 | 530N8020 | 530N8026 | 530N8033 | 530N8040 | 530N8050 | 530N8066 | 530N8080 | 530N80102 |
| galv. code | 530G808 | 530G8012 | 530G8015 | 530G8020 | 530G8026 | 530G8033 | 530G8040 | 530G8050 | 530G8066 | 530G8080 | 530G80102 |

#### 530N/530G - Barrel nipple length 100 mm



| Ø          | 1/8"     | 1/4"     | 3/8"      | 1/2"      | 3/4"      | 1"        | 1 1/4"    | 1 1/2"    | 2"        | 2 1/2"    | 3"        | 4"         |
|------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| pack       | 10       | 10       | 10        | 10        | 10        | 10        | 5         | 5         | 5         | 1         | 1         | 1          |
| black code | 530N1005 | 530N1008 | 530N10012 | 530N10015 | 530N10020 | 530N10026 | 530N10033 | 530N10040 | 530N10050 | 530N10066 | 530N10080 | 530N100102 |
| galv. code | 530G1005 | 530G1008 | 530G10012 | 530G10015 | 530G10020 | 530G10026 | 530G10033 | 530G10040 | 530G10050 | 530G10066 | 530G10080 | 530G100102 |

**NEW**

## 530N/530G - Barrel nipple length 120 mm

| Ø          | 1/4"     | 3/8"      | 1/2"      | 3/4"      | 1"        | 1"1/4"    | 1"1/2"    | 2"        | 2"1/2"    | 3"        | 4"         |
|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| pack       | 10       | 10        | 10        | 10        | 5         | 5         | 5         | 1         | 1         | 1         | 1          |
| black code | 530N1208 | 530N12012 | 530N12015 | 530N12020 | 530N12026 | 530N12033 | 530N12040 | 530N12050 | 530N12066 | 530N12080 | 530N120102 |
| galv. code | 530G1208 | 530G12012 | 530G12015 | 530G12020 | 530G12026 | 530G12033 | 530G12040 | 530G12050 | 530G12066 | 530G12080 | 530G120102 |

## 530N/530G - Barrel nipple length 150 mm

| Ø          | 1/8"     | 1/4"     | 3/8"      | 1/2"      | 3/4"      | 1"        | 1"1/4"    | 1"1/2"    | 2"        | 2"1/2"    | 3"        | 4"         |
|------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| pack       | 10       | 10       | 10        | 10        | 10        | 5         | 5         | 5         | 1         | 1         | 1         | 1          |
| black code | 530N1505 | 530N1508 | 530N15012 | 530N15015 | 530N15020 | 530N15026 | 530N15033 | 530N15040 | 530N15050 | 530N15066 | 530N15080 | 530N150102 |
| galv. code | 530G1505 | 530G1508 | 530G15012 | 530G15015 | 530G15020 | 530G15026 | 530G15033 | 530G15040 | 530G15050 | 530G15066 | 530G15080 | 530G150102 |

## 530N/530G - Barrel nipple length 180 mm

| Ø          | 1/4"     | 3/8"      | 1/2"      | 3/4"      | 1"        | 1"1/4"    | 1"1/2"    | 2"        | 2"1/2"    | 3"        | 4"         |
|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| pack       | 10       | 10        | 10        | 10        | 10        | 5         | 5         | 5         | 1         | 1         | 1          |
| black code | 530N1808 | 530N18012 | 530N18015 | 530N18020 | 530N18026 | 530N18033 | 530N18040 | 530N18050 | 530N18066 | 530N18080 | 530N180102 |
| galv. code | 530G1808 | 530G18012 | 530G18015 | 530G18020 | 530G18026 | 530G18033 | 530G18040 | 530G18050 | 530G18066 | 530G18080 | 530G180102 |

## 530N/530G - Nipple length 200 mm

| Ø          | 1/8"     | 1/4"     | 3/8"      | 1/2"      | 3/4"      | 1"        | 1"1/4"    | 1"1/2"    | 2"        | 2"1/2"    | 3"        | 4"         |
|------------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| pack       | 10       | 10       | 10        | 10        | 10        | 10        | 5         | 5         | 5         | 1         | 1         | 1          |
| black code | 530N2005 | 530N2008 | 530N20012 | 530N20015 | 530N20020 | 530N20026 | 530N20033 | 530N20040 | 530N20050 | 530N20066 | 530N20080 | 530N200102 |
| galv. code | 530G2005 | 530G2008 | 530G20012 | 530G20015 | 530G20020 | 530G20026 | 530G20033 | 530G20040 | 530G20050 | 530G20066 | 530G20080 | 530G200102 |

## 530N/530G - Barrel nipple length 250 mm

| Ø          | 1/4"     | 3/8"      | 1/2"      | 3/4"      | 1"        | 1"1/4"    | 1"1/2"    | 2"        | 2"1/2"    | 3"        | 4"         |
|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| pack       | 10       | 10        | 10        | 10        | 10        | 5         | 5         | 5         | 1         | 1         | 1          |
| black code | 530N2508 | 530N25012 | 530N25015 | 530N25020 | 530N25026 | 530N25033 | 530N25040 | 530N25050 | 530N25066 | 530N25080 | 530N250102 |
| galv. code | 530G2508 | 530G25012 | 530G25015 | 530G25020 | 530G25026 | 530G25033 | 530G25040 | 530G25050 | 530G25066 | 530G25080 | 530G250102 |

## 530N/530G - Barrel nipple length 300 mm

| Ø          | 1/4"     | 3/8"      | 1/2"      | 3/4"      | 1"        | 1"1/4"    | 1"1/2"    | 2"        | 2"1/2"    | 3"        | 4"         |
|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| pack       | 10       | 10        | 10        | 10        | 10        | 5         | 5         | 5         | 1         | 1         | 1          |
| black code | 530N3008 | 530N30012 | 530N30015 | 530N30020 | 530N30026 | 530N30033 | 530N30040 | 530N30050 | 530N30066 | 530N30080 | 530N300102 |
| galv. code | 530G3008 | 530G30012 | 530G30015 | 530G30020 | 530G30026 | 530G30033 | 530G30040 | 530G30050 | 530G30066 | 530G30080 | 530G300102 |

## Seamless pipe nipples

### 530AT3 - Welding half-nipple length 100 mm

| Ø          | 3/8"         | 1/2"         | 3/4"         | 1"           | 1"1/4"       | 1"1/2"       | 2"           | 2"1/2"       | 3"           |
|------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| black code | 530AT3N10012 | 530AT3N10015 | 530AT3N10020 | 530AT3N10026 | 530AT3N10033 | 530AT3N10040 | 530AT3N10050 | 530AT3N10066 | 530AT3N10080 |

### 530T3 - Barrel nipple length 100 mm

| Ø          | 3/8"        | 1/2"        | 3/4"        | 1"          | 1"1/4"      | 1"1/2"      | 2"          | 2"1/2"      | 3"          |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| black code | 530T3N10012 | 530T3N10015 | 530T3N10020 | 530T3N10026 | 530T3N10033 | 530T3N10040 | 530T3N10050 | 530T3N10066 | 530T3N10080 |

**NEW**



### 530T3 - Barrel nipple length 150 mm

| Ø          | 3/8"        | 1/2"        | 3/4"        | 1"          | 1"1/4"      | 1"1/2"      | 2"          |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| black code | 530T3N15012 | 530T3N15015 | 530T3N15020 | 530T3N15026 | 530T3N15033 | 530T3N15040 | 530T3N15050 |

### 530T3 - Barrel nipple length 200 mm

| Ø          | 3/8"        | 1/2"        | 3/4"        | 1"          | 1"1/4"      | 1"1/2"      | 2"          | 2"1/2"      | 3"          |
|------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| black code | 530T3N20012 | 530T3N20015 | 530T3N20020 | 530T3N20026 | 530T3N20033 | 530T3N20040 | 530T3N20050 | 530T3N20066 | 530T3N20080 |

### ■ Sockets

#### MADN - Half-socket

| Ø          | 1/8"  | 1/4"  | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| black code | MADN5 | MADN8 | MADN12 | MADN15 | MADN20 | MADN26 | MADN33 | MADN40 | MADN50 |

#### MAN/MAG - Socket

| Ø          | 1/8" | 1/4" | 3/8"  | 1/2"  | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"    | 2"1/2" | 3"    | 4"     |
|------------|------|------|-------|-------|-------|-------|--------|--------|-------|--------|-------|--------|
| black code | MAN5 | MAN8 | MAN12 | MAN15 | MAN20 | MAN26 | MAN33  | MAN40  | MAN50 | MAN66  | MAN80 | MAN102 |
| galv. code | MAG5 | MAG8 | MAG12 | MAG15 | MAG20 | MAG26 | MAG33  | MAG40  | MAG50 | MAG66  | MAG80 | MAG102 |

#### MALN - Socket length 60 mm

| Ø          | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|----------|
| black code | MALN6012 | MALN6015 | MALN6020 | MALN6026 | MALN6033 | MALN6040 | MALN6050 |

## Stainless steel pipe nipples

### ■ Forged stainless steel nipples - 150 lbs



**Mandatory packing applies**

Excluded from 2017/68/EC Directive (art. 4, 3) - For all common fluids - Material: F316L body - BSP thread acc. to ISO 7.1 - PS: 20 bar - TS: -25°C/+180°C.

**ISO 9001**

#### 2039 - Standard welding nipple

| Ø           | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 22      | 23      | 27      | 33      | 35      | 36      | 41      | 46      | 55      | 70      | 80      |
| pack        | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       | 1       | 1       | 1       |
| code        | 2039002 | 2039003 | 2039004 | 2039005 | 2039006 | 2039007 | 2039008 | 2039009 | 2039010 | 2039011 | 2039012 |



#### 2034 - Welding nipple - Length = 50 mm

| Ø    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2034002 | 2034003 | 2034004 | 2034005 | 2034006 | 2034007 | 2034008 | 2034009 |



#### 2042 - Welding nipple - Length = 100 mm

| Ø    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2042002 | 2042003 | 2042004 | 2042005 | 2042006 | 2042007 | 2042008 | 2042009 |



#### 2040 - Standard barrel nipple

| Ø           | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 40      | 40      | 60      | 60      | 60      | 80      | 80      | 100     | 100     | 120     | 120     |
| pack        | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       | 1       | 1       | 1       |
| code        | 2040002 | 2040003 | 2040004 | 2040005 | 2040006 | 2040007 | 2040008 | 2040009 | 2040010 | 2040011 | 2040012 |



## 2038 - Barrel nipple length 100 mm



| Ø    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2038002 | 2038003 | 2038004 | 2038005 | 2038006 | 2038007 | 2038008 | 2038009 |

## 2041 - Barrel nipple length 200 mm



| Ø    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2041002 | 2041003 | 2041004 | 2041005 | 2041006 | 2041007 | 2041008 | 2041009 |



## ■ Forged stainless steel nipples - 150 lbs



Individual packing

Excluded from 2017/68/EC Directive (art. 4, 3) - For all common fluids - Material: F316L body - NPT thread acc. to ANSI B1.20.1 - PS: 20 bar.

ISO 9001

## EM - Welding half-nipple



| Ø      | 1/8" | 1/4" | 3/8"  | 1/2"  | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"    | 2"1/2" | 3"    | 4"     |
|--------|------|------|-------|-------|-------|-------|--------|--------|-------|--------|-------|--------|
| length | 22   | 22   | 23    | 27    | 33    | 35    | 36     | 41     | 46    | 55     | 60    | 80     |
| code   | EM5B | EM8B | EM12B | EM15B | EM20B | EM25B | EM32B  | EM40B  | EM50B | EM65B  | EM80B | EM100B |

## EML - Welding half-nipple length 100 mm



| Ø    | 1/8"  | 1/4"  | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"      |
|------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| code | EML5B | EML8B | EML12B | EML15B | EML20B | EML25B | EML32B | EML40B | EML50B | EML65B | EML80B | EML100B |

## EML15 - Welding half-nipple length 150 mm



| Ø    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   |
|------|---------|----------|----------|----------|----------|----------|----------|----------|----------|
| code | EML158B | EML1512B | EML1515B | EML1520B | EML1525B | EML1532B | EML1540B | EML1550B | EML1565B |

## EML20 - Welding half-nipple length 200 mm



| Ø    | 1/4"    | 3/8"     | 1/2"     | 3/4" | 1" | 1"1/4" | 1"1/2"   | 2" | 2"1/2" | 3" | 4"        |
|------|---------|----------|----------|------|----|--------|----------|----|--------|----|-----------|
| code | EML208B | EML2012B | EML2015B | -    | -  | -      | EML2040B | -  | -      | -  | EML20100B |

## MC - Barrel nipple



| Ø      | 1/8" | 1/4" | 3/8"  | 1/2"  | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"    | 2"1/2" | 3"    | 4"     |
|--------|------|------|-------|-------|-------|-------|--------|--------|-------|--------|-------|--------|
| length | 31   | 36   | 39    | 42    | 50    | 56    | 58     | 62     | 74    | 80     | 100   | 120    |
| code   | MC5B | MC8B | MC12B | MC15B | MC20B | MC25B | MC32B  | MC40B  | MC50B | MC65B  | MC80B | MC100B |

## MCL - Barrel nipple length 100 mm



| Ø    | 1/8"  | 1/4"  | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"    |
|------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|-------|
| code | MCL5B | MCL8B | MCL12B | MCL15B | MCL20B | MCL25B | MCL32B | MCL40B | MCL50B | MCL65B | MC80B |

## MCL15 - Barrel nipple length 150 mm



| Ø    | 1/8"    | 1/4"    | 3/8" | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2" | 2"1/2" | 3" | 4"        |
|------|---------|---------|------|----------|----------|----------|----------|----------|----|--------|----|-----------|
| code | MCL155B | MCL158B | -    | MCL1515B | MCL1520B | MCL1525B | MCL1532B | MCL1540B | -  | -      | -  | MCL15100B |

## MCL20 - Barrel nipple length 200 mm



| Ø    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2" | 3"       | 4"        |
|------|---------|----------|----------|----------|----------|----------|----------|----------|--------|----------|-----------|
| code | MCL208B | MCL2012B | MCL2015B | MCL2020B | MCL2025B | MCL2032B | MCL2040B | MCL2050B | -      | MCL2080B | MCL20100B |

## Stainless steel threaded fittings - S-first

### ■ Cast threaded fittings - 150 lbs (BSP)



Excluded from 2014/68/EU Directive (art. 4, §3) - For all common fluids - Material: CF8M body - BSP thread acc. to ISO 7.1 - PS: 20 bar - TS: -25°C/+180°C.

ISO 9001

#### 2070 - 90° equal elbow female/female



| Ø    | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2070001 | 2070002 | 2070003 | 2070004 | 2070005 | 2070006 | 2070007 | 2070008 | 2070009 |

#### 2072 - 90° equal street elbow male/female



| Ø           | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 26      | 28      | 30      | 34      | 38,5    | 45      | 52,5    | 56      | 68,5    |
| pack        | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code        | 2072001 | 2072002 | 2072003 | 2072004 | 2072005 | 2072006 | 2072007 | 2072008 | 2072009 |

#### 2071 - Equal tee female



| Ø           | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 34      | 38      | 46      | 50      | 55      | 66      | 80      | 86      | 104     |
| pack        | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code        | 2071001 | 2071002 | 2071003 | 2071004 | 2071005 | 2071006 | 2071007 | 2071008 | 2071009 |

#### 2073 - Reducing socket female/female



| Ø           | 1/4"-1/8" | 3/8"-1/4" | 1/2"-3/8" | 3/4"-1/2" | 1"-3/4" | 1"1/4"-1" | 1"1/2"-1"1/4" | 2"-1"1/2" |
|-------------|-----------|-----------|-----------|-----------|---------|-----------|---------------|-----------|
| length (mm) | 25,5      | 29        | 31        | 33,5      | 38      | 41        | 45,5          | 49        |
| pack        | 10        | 10        | 10        | 10        | 10      | 5         | 5             | 5         |
| code        | 2073002   | 2073003   | 2073004   | 2073005   | 2073006 | 2073007   | 2073008       | 2073009   |

#### 2074 - Double reducing socket female/female



| Ø           | 3/8"-1/8" | 1/2"-1/4" | 3/4"-3/8" | 1"-1/2" | 1"1/4"-3/4" | 1"1/2"-1" | 2"-1"1/4" |
|-------------|-----------|-----------|-----------|---------|-------------|-----------|-----------|
| length (mm) | 29        | 31        | 33,5      | 38      | 41          | 45,5      | 49        |
| pack        | 10        | 10        | 10        | 5       | 5           | 5         | 5         |
| code        | 2074003   | 2074004   | 2074005   | 2074006 | 2074007     | 2074008   | 2074009   |

#### 2075 - Reducing bush



| Ø           | 1/4"-1/8" | 3/8"-1/4" | 1/2"-3/8" | 3/4"-1/2" | 1"-3/4" | 1"1/4"-1" | 1"1/2"-1"1/4" | 2"-1"1/2" |
|-------------|-----------|-----------|-----------|-----------|---------|-----------|---------------|-----------|
| length (mm) | 16        | 16,5      | 19,5      | 21        | 24      | 27,5      | 28,5          | 32        |
| pack        | 10        | 10        | 10        | 10        | 5       | 5         | 5             | 5         |
| code        | 2075002   | 2075003   | 2075004   | 2075005   | 2075006 | 2075007   | 2075008       | 2075009   |

#### 2078 - Double reducing bush



| Ø           | 3/8"-1/8" | 1/2"-1/4" | 3/4"-3/8" | 1"-1/2" | 1"1/4"-3/4" | 1"1/2"-1" | 2"-1"1/4" |
|-------------|-----------|-----------|-----------|---------|-------------|-----------|-----------|
| length (mm) | 16,5      | 19,5      | 21        | 24      | 27,5        | 28,5      | 32        |
| pack        | 10        | 10        | 10        | 5       | 5           | 5         | 5         |
| code        | 2078003   | 2078004   | 2078005   | 2078006 | 2078007     | 2078008   | 2078009   |

#### 2085 - Reducing hexagonal nipple



| Ø           | 1/4"-1/8" | 3/8"-1/4" | 1/2"-3/8" | 3/4"-1/2" | 1"-3/4" | 1"1/4"-1" | 1"1/2"-1"1/4" | 2"-1"1/2" |
|-------------|-----------|-----------|-----------|-----------|---------|-----------|---------------|-----------|
| length (mm) | 22,5      | 24        | 30,5      | 35,5      | 39,5    | 45        | 47,5          | 52,5      |
| pack        | 10        | 10        | 10        | 10        | 5       | 5         | 5             | 5         |
| code        | 2085002   | 2085003   | 2085004   | 2085005   | 2085006 | 2085007   | 2085008       | 2085009   |



### 2086 - Double reducing hexagonal nipple

| Ø           | 3/8"-1/8" | 1/2"-1/4" | 3/4"-3/8" | 1"-1/2" | 1"1/4-3/4" | 1"1/2-1" | 2"-1"1/4 |
|-------------|-----------|-----------|-----------|---------|------------|----------|----------|
| length (mm) | 24        | 29,5      | 32        | 38,5    | 42,5       | 45       | 52,5     |
| pack        | 10        | 10        | 10        | 5       | 5          | 5        | 5        |
| code        | 2086003   | 2086004   | 2086005   | 2086006 | 2086007    | 2086008  | 2086009  |



### 2087 - Reducing socket female/male

| Ø           | 1/4"-1/8" | 3/8"-1/4" | 1/2"-3/8" | 3/4"-1/2" | 1"-3/4" | 1"1/4-1" | 1"1/2-1"1/4 | 2"-1"1/2 |
|-------------|-----------|-----------|-----------|-----------|---------|----------|-------------|----------|
| length (mm) | 25        | 28        | 32        | 37        | 41,5    | 47       | 49,5        | 54       |
| pack        | 10        | 10        | 10        | 10        | 10      | 5        | 5           | 5        |
| code        | 2087002   | 2087003   | 2087004   | 2087005   | 2087006 | 2087007  | 2087008     | 2087009  |



### 2084 - Equal hexagonal nipple

| Ø           | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 20      | 25      | 27      | 34      | 36,5    | 42      | 47,5    | 47,5    | 57      |
| pack        | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code        | 2084001 | 2084002 | 2084003 | 2084004 | 2084005 | 2084006 | 2084007 | 2084008 | 2084009 |



### 2088 - Hose nozzle male

| Ø           | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ø hose      | 8       | 10      | 13      | 20      | 25      | 32      | 40      | 52      |
| length (mm) | 34,5    | 41      | 48,5    | 58      | 67      | 70      | 74      | 83      |
| pack        | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code        | 2088002 | 2088003 | 2088004 | 2088005 | 2088006 | 2088007 | 2088008 | 2088009 |



### 2076 - Hexagonal plug

| Ø           | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|
| length (mm) | 19,5    | 21      | 24      | 27      | 27      | 32      |
| pack        | 10      | 10      | 5       | 5       | 5       | 5       |
| code        | 2076004 | 2076005 | 2076006 | 2076007 | 2076008 | 2076009 |



### 2077 - Plain hexagonal plug

| Ø           | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Height (mm) | 12      | 14,5    | 16      | 19,5    | 21      | 24      | 27      | 27      | 32      |
| pack        | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code        | 2077001 | 2077002 | 2077003 | 2077004 | 2077005 | 2077006 | 2077007 | 2077008 | 2077009 |



### 2090 - Hexagonal cap

| Ø           | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 14      | 14,5    | 18,5    | 19      | 22      | 25      | 25      | 30      |
| pack        | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code        | 2090002 | 2090003 | 2090004 | 2090005 | 2090006 | 2090007 | 2090008 | 2090009 |



### 2089 - Hexagonal backnut

| Ø           | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 5       | 6       | 6       | 7       | 7       | 9       | 11      | 11      | 13      |
| pack        | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code        | 2089001 | 2089002 | 2089003 | 2089004 | 2089005 | 2089006 | 2089007 | 2089008 | 2089009 |

## Stainless steel threaded fittings

### ■ Cast threaded fittings - 150 lbs (BSP)



**Mandatory packing applies**

Excluded from 2014/68/EU Directive (art. 4, §3) - For all common fluids from Group 2 & liquids from Group 1 - Material: CF8M body - BSP thread acc. to ISO 7.1 - PS: 20 bar - TS: -25°C/+180°C.

**ISO 9001**

#### 2017 - Half socket



| Ø           | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 10      | 11      | 13      | 16      | 18      | 20      | 22      | 23      | 27      |
| pack        | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code        | 2017001 | 2017002 | 2017003 | 2017004 | 2017005 | 2017006 | 2017007 | 2017008 | 2017009 |

#### 2015 - Equal socket



| Ø           | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 17      | 25      | 26,5    | 34      | 36      | 43      | 48      | 48      | 56      | 65      | 71      | 83      |
| pack        | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       | 1       | 1       | 1       |
| code        | 2015001 | 2015002 | 2015003 | 2015004 | 2015005 | 2015006 | 2015007 | 2015008 | 2015009 | 2015010 | 2015011 | 2015012 |

#### 2001 - 90° equal elbow female/female



| Ø    | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       | 1       | 1       | 1       |
| code | 2001001 | 2001002 | 2001003 | 2001004 | 2001005 | 2001006 | 2001007 | 2001008 | 2001009 | 2001010 | 2001011 | 2001012 |

#### 2010 - 90° equal street elbow male/female



| Ø    | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       | 1       | 1       |
| code | 2010001 | 2010002 | 2010003 | 2010004 | 2010005 | 2010006 | 2010007 | 2010008 | 2010009 | 2010010 | 2010011 |

#### 2003 - Equal tee female



| Ø    | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       | 1       | 1       | 1       |
| code | 2003001 | 2003002 | 2003003 | 2003004 | 2003005 | 2003006 | 2003007 | 2003008 | 2003009 | 2003010 | 2003011 | 2003012 |

#### 2002 - Equal cross female



| Ø    | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       |
| code | 2002001 | 2002002 | 2002003 | 2002004 | 2002005 | 2002006 | 2002007 | 2002008 | 2002009 |

#### 2013 - Reducing socket female/female



| Ø    | 1/4"-1/8" | 3/8"-1/4" | 1/2"-3/8" | 3/4"-1/2" | 1"-3/4" | 1"1/4"-1" | 1"1/2"-1"1/4" | 2"-1"1/2" |
|------|-----------|-----------|-----------|-----------|---------|-----------|---------------|-----------|
| pack | 10        | 10        | 10        | 10        | 10      | 5         | 5             | 5         |
| code | 2013002   | 2013003   | 2013004   | 2013005   | 2013006 | 2013007   | 2013008       | 2013009   |

#### 2014 - Double reducing socket female/female



| Ø    | 3/8"-1/8" | 1/2"-1/4" | 3/4"-3/8" | 1"-1/2" | 1"1/4"-3/4" | 1"1/2"-1" | 2"-1"1/4" |
|------|-----------|-----------|-----------|---------|-------------|-----------|-----------|
| pack | 10        | 10        | 10        | 5       | 5           | 5         | 5         |
| code | 2014003   | 2014004   | 2014005   | 2014006 | 2014007     | 2014008   | 2014009   |

#### 2021 - Reducing bush



| Ø    | 1/4"-1/8" | 3/8"-1/4" | 1/2"-3/8" | 3/4"-1/2" | 1"-3/4" | 1"1/4"-1" | 1"1/2"-1"1/4" | 2"-1"1/2" |
|------|-----------|-----------|-----------|-----------|---------|-----------|---------------|-----------|
| pack | 10        | 10        | 10        | 10        | 5       | 5         | 5             | 5         |
| code | 2021002   | 2021003   | 2021004   | 2021005   | 2021006 | 2021007   | 2021008       | 2021009   |





### 2024 - Double reducing bush

| Ø    | 3/8"-1/8" | 1/2"-1/4" | 3/4"-3/8" | 1"-1/2" | 1"1/4-3/4" | 1"1/2-1" | 2"-1"1/4 |
|------|-----------|-----------|-----------|---------|------------|----------|----------|
| pack | 10        | 10        | 10        | 5       | 5          | 5        | 5        |
| code | 2024003   | 2024004   | 2024005   | 2024006 | 2024007    | 2024008  | 2024009  |



### 2031 - Reducing hexagonal nipple

| Ø    | 1/4"-1/8" | 3/8"-1/4" | 1/2"-3/8" | 3/4"-1/2" | 1"-3/4" | 1"1/4-1" | 1"1/2-1"1/4 | 2"-1"1/2 |
|------|-----------|-----------|-----------|-----------|---------|----------|-------------|----------|
| pack | 10        | 10        | 10        | 10        | 5       | 5        | 5           | 5        |
| code | 2031002   | 2031003   | 2031004   | 2031005   | 2031006 | 2031007  | 2031008     | 2031009  |



### 2032 - Double reducing hexagonal nipple

| Ø    | 3/8"-1/8" | 1/2"-1/4" | 3/4"-3/8" | 1"-1/2" | 1"1/4-3/4" | 1"1/2-1" | 2"-1"1/4 |
|------|-----------|-----------|-----------|---------|------------|----------|----------|
| pack | 10        | 10        | 10        | 5       | 5          | 5        | 5        |
| code | 2032003   | 2032004   | 2032005   | 2032006 | 2032007    | 2032008  | 2032009  |



### 2033 - Reducing socket female > male

| Ø    | 1/4"-1/8" | 3/8"-1/4" | 1/2"-3/8" | 3/4"-1/2" | 1"-3/4" | 1"1/4-1" | 1"1/2-1"1/4 | 2"-1"1/2 |
|------|-----------|-----------|-----------|-----------|---------|----------|-------------|----------|
| pack | 10        | 10        | 10        | 10        | 10      | 5        | 5           | 5        |
| code | 2033002   | 2033003   | 2033004   | 2033005   | 2033006 | 2033007  | 2033008     | 2033009  |



### 2030 - Equal hexagonal nipple

| Ø    | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2030001 | 2030002 | 2030003 | 2030004 | 2030005 | 2030006 | 2030007 | 2030008 | 2030009 |



### 2035 - Hose nozzle male

| Ø    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| hose | 8       | 10      | 13      | 20      | 25      | 32      | 40      | 52      |
| pack | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2035002 | 2035003 | 2035004 | 2035005 | 2035006 | 2035007 | 2035008 | 2035009 |



### 2022 - Hexagonal plug

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2022004 | 2022005 | 2022006 | 2022007 | 2022008 | 2022009 |



### 2023 - Plain hexagonal plug

| Ø    | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2023001 | 2023002 | 2023003 | 2023004 | 2023005 | 2023006 | 2023007 | 2023008 | 2023009 |



### 2020 - Square head plain plug

| Ø    | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       |
| code | 2020001 | 2020002 | 2020003 | 2020004 | 2020005 | 2020006 | 2020007 | 2020008 | 2020009 |



### 2037 - Hexagonal cap

| Ø    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 5       | 5       | 5       | 5       |
| code | 2037002 | 2037003 | 2037004 | 2037005 | 2037006 | 2037007 | 2037008 | 2037009 |



### 2036 - Hexagonal backnut

| Ø    | 1/8"    | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 10      | 10      | 10      | 5       | 5       | 5       |
| code | 2036001 | 2036002 | 2036003 | 2036004 | 2036005 | 2036006 | 2036007 | 2036008 | 2036009 |

### ■ Cast 3 piece unions - 150 lbs /



**Individual packing**

Excluded from 2014/68/EU Directive (art. 4, §3) - For all common fluids from Group 2 & liquids from Group 1 - Material: CF8M body - BSP thread acc. to ISO 7.1 - Conical bearing - PS: 20 bar - TS: -25°C/+180°C.

**ISO 9001**



### 2029 - Equal union butt welding/butt welding

| Ø           | 8       | 10      | 15      | 20      | 25      | 32      | 40      | 50      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 34,5    | 38,5    | 40      | 47,5    | 49,6    | 54,8    | 55      | 57,4    |
| code        | 2029008 | 2029010 | 2029015 | 2029020 | 2029025 | 2029032 | 2029040 | 2029050 |



### 2027 - Equal union male/butt welding

| Ø           | 1/4"-8  | 3/8"-10 | 1/2"-15 | 3/4"-20 | 1"-25   | 1"1/4-32 | 1"1/2-40 | 2"-50   |
|-------------|---------|---------|---------|---------|---------|----------|----------|---------|
| length (mm) | 46,4    | 47,7    | 53      | 60      | 66      | 72       | 73       | 77,6    |
| code        | 2027208 | 2027310 | 2027415 | 2027520 | 2027625 | 2027732  | 2027840  | 2027950 |



### 2028 - Equal union female/butt welding

| Ø           | 1/4"-8  | 3/8"-10 | 1/2"-15 | 3/4"-20 | 1"-25   | 1"1/4-32 | 1"1/2-40 | 2"-50   |
|-------------|---------|---------|---------|---------|---------|----------|----------|---------|
| length (mm) | 35      | 38      | 40      | 45,7    | 50      | 56       | 57       | 58,6    |
| code        | 2028208 | 2028310 | 2028415 | 2028520 | 2028625 | 2028732  | 2028840  | 2028950 |



### 2062 - Equal union male/male

| Ø           | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 56      | 57,5    | 66,5    | 73,4    | 81      | 89,5    | 89,3    | 99      |
| code        | 2062002 | 2062003 | 2062004 | 2062005 | 2062006 | 2062007 | 2062008 | 2062009 |



### 2026 - Equal union male/female

| Ø           | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 46      | 48      | 52,8    | 58,6    | 66,5    | 73,5    | 74,5    | 80,5    |
| code        | 2026002 | 2026003 | 2026004 | 2026005 | 2026006 | 2026007 | 2026008 | 2026009 |



### 2025 - Equal union female/female

| Ø           | 1/4"    | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 34,5    | 37,6    | 38,6    | 44      | 51      | 58      | 59      | 61,5    |
| code        | 2025002 | 2025003 | 2025004 | 2025005 | 2025006 | 2025007 | 2025008 | 2025009 |

**NEW**

## Aluminium flanges



Dimensions acc. to DIN 2642 - Material: aluminium AS13 - PS: 10 bar.

ISO  
9001

### Aluminium AS13



#### ABT - Lap joint flange - Type A (metric) - PN10

| DN   | 40    | 50    | 65    | 80    | 100    | 125    | 150    | 200    | 250    | 300    | 350    |
|------|-------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|
| code | ABT44 | ABT54 | ABT70 | ABT84 | ABT104 | ABT129 | ABT154 | ABT204 | ABT254 | ABT304 | ABT354 |

#### ABT - Lap joint flange - Type C (ISO) - PN10



| DN   | 10      | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    |
|------|---------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | ABT10FG | ABT15  | ABT20  | ABT25  | ABT32  | ABT40  | ABT50  | ABT65  | ABT80  | ABT100 | ABT125 |
| DN   | 150     | 200    | 250    | 300    | 350    | 400    | 450    | 500    | 600    | 700    |        |
| code | ABT150  | ABT200 | ABT250 | ABT300 | ABT350 | ABT400 | ABT450 | ABT500 | ABT600 | ABT700 |        |

**NEW**

## Carbon steel flanges



Material: bichromated carbon steel - Dimensions acc. to DIN 2642 - PS: 10 bar - TS: -10°C/+180°C.

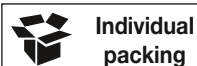
3.1  
10 €/DN  
ISO  
9001

### Bichromated carbon steel



#### ABE - Pressed lap joint flanges - PN10

| DN   | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80    | 100    | 125    | 150    |
|------|--------|--------|--------|--------|--------|--------|--------|-------|--------|--------|--------|
| code | ABE15  | ABE20  | ABE25  | ABE32  | ABE40  | ABE50  | ABE65  | ABE80 | ABE100 | ABE125 | ABE150 |
| DN   | 200    | 250    | 300    | 350    | 400    | 450    | 500    |       |        |        |        |
| code | ABE200 | ABE250 | ABE300 | ABE350 | ABE400 | ABE450 | ABE500 |       |        |        |        |



Dimensions acc. to EN 1092-1 - Individual marking - Material: forged carbon steel P245GH or P235GH - When apply, galvanised coating for drinking water compatibility - PS: acc. to standard: 6 bar for PN6 flanges, 10 bar for PN10 flanges, etc. - TS: -10°C/+200°C.

3.1  
10 €/DN  
ISO  
9001

### Forged carbon steel PN6 to PN16 - S-First



#### 2121 - Plate flange for welding - Type 01/A - FF PN10/16

| DN   | 15       | 20      | 25       | 32      | 40      | 50      | 65      | 80      | 100/108* | 100/114 |
|------|----------|---------|----------|---------|---------|---------|---------|---------|----------|---------|
| PN   | 10/40    | 10/40   | 10/40    | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16    | 10/16   |
| code | 2121015  | 2121020 | 2121025  | 2121032 | 2121040 | 2121050 | 2121065 | 2121080 | 2121100  | 2121101 |
| DN   | 125/133* | 125/139 | 150/159* | 150/168 | 250     | 250     | 300     | 300     |          |         |
| PN   | 10/16    | 10/16   | 10/16    | 10/16   | 10      | 16      | 10      | 16      |          |         |
| code | 2121125  | 2121126 | 2121150  | 2121151 | 2121250 | 2121251 | 2121300 | 2121301 |          |         |

\* not included in EN 1092-1



#### 2120 - Plate flange for welding - Type 01/A - FF PN10A (acc. to former NF29223)

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 | 125/139 | 150/168 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10A     | 10A     | 10A     | 10A     | 10A     | 10A     | 10A     | 10A     | 10A     | 10A     | 10A     |
| code | 2120015 | 2120020 | 2120025 | 2120032 | 2120040 | 2120050 | 2120065 | 2120080 | 2120101 | 2120126 | 2120151 |

**NEW**



### 2124 - Weld-neck flange - Type 11/B1 - RF PN6

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100     | 125/139 | 150/168 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 6       | 6       | 6       | 6       | 6       | 6       | 6       | 6       | 6       | 6       | 6       |
| code | 2151015 | 2151020 | 2151025 | 2151032 | 2124040 | 2124050 | 2124065 | 2124080 | 2124100 | 2124125 | 2124150 |



### 2100/2101 - Weld-neck flange - Type 11/B1 - RF PN10/16

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 200     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10      | 16      |
| code | 2100015 | 2100020 | 2100025 | 2100032 | 2100040 | 2100050 | 2100065 | 2100080 | 2100100 | 2100125 | 2100150 | 2101200 | 2100200 |
| DN   | 250     | 250     | 300     | 300     |         |         |         |         |         |         |         |         |         |
| PN   | 10      | 16      | 10      | 16      |         |         |         |         |         |         |         |         |         |
| code | 2101200 | 2100200 | 2101300 | 2100300 |         |         |         |         |         |         |         |         |         |



### 2123 - Hubbed threaded flange - Type 13/B1 - RF PN10/16

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16   |
| code | 2123015 | 2123020 | 2123025 | 2123032 | 2123040 | 2123050 | 2123065 | 2123080 | 2123100 |



### 2122 - Blind flange - Type 05/A - FF PN10/16

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 200     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10      | 16      |
| code | 2122015 | 2122020 | 2122025 | 2122032 | 2122040 | 2122050 | 2122065 | 2122080 | 2122100 | 2122125 | 2122150 | 2122200 | 2122201 |

## ■ Forged carbon steel PN6 to PN40



### 2160 - Flat flange 01/A PN10/16 (EN 1092-1, feb. 2013)

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 | 125/139 | 150/168 | 200     | 200     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10      | 16      |
| code | 2160015 | 2160020 | 2160025 | 2160032 | 2160040 | 2160050 | 2160065 | 2160080 | 2160100 | 2160125 | 2160150 | 2160200 | 2160201 |
| DN   | 250     | 250     | 300     | 300     | 350     | 350     | 400     | 400     |         |         |         |         |         |
| PN   | 10      | 16      | 10      | 16      | 10      | 16      | 10      | 16      |         |         |         |         |         |
| code | 2160250 | 2160251 | 2160300 | 2160301 | 2160350 | 2160351 | 2160400 | 2160401 |         |         |         |         |         |



### 2151 - Weld-neck flange - Type 11/B1 - RF PN6

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 | 125/139 | 150/168 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 6       | 6       | 6       | 6       | 6       | 6       | 6       | 6       | 6       | 6       | 6       |
| code | 2151015 | 2151020 | 2151025 | 2151032 | 2151040 | 2151050 | 2151065 | 2151080 | 2151100 | 2151125 | 2151150 |



### 2152 - BW welding neck flange 11/B1 PN10/16

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 | 125/139 | 150/168 | 200     | 200     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | PN10    | PN16    |
| code | 2152015 | 2152020 | 2152025 | 2152032 | 2152040 | 2152050 | 2152065 | 2152080 | 2152100 | 2152125 | 2152150 | 2152200 | 2152201 |
| DN   | 250     | 250     | 300     | 300     | 350     | 350     | 400     | 400     |         |         |         |         |         |
| PN   | PN10    | PN16    | PN10    | PN16    | PN10    | PN16    | PN10    | PN16    |         |         |         |         |         |
| code | 2152250 | 2152251 | 2152300 | 2152301 | 2152350 | 2152351 | 2152400 | 2152401 |         |         |         |         |         |

**NEW**



### 2153 - Galvanised weld-neck flange - Type 11/B1 - RF PN10/16

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 | 125/139 | 150/168 | 200     | 200     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | PN10    | PN16    |
| code | 2153015 | 2153020 | 2153025 | 2153032 | 2153040 | 2153050 | 2153065 | 2153080 | 2153100 | 2153125 | 2153150 | 2153200 | 2153201 |
| DN   | 250     | 250     | 300     | 300     | 350     | 350     | 400     | 400     |         |         |         |         |         |
| PN   | PN10    | PN16    | PN10    | PN16    | PN10    | PN16    | PN10    | PN16    |         |         |         |         |         |
| code | 2153250 | 2153251 | 2153300 | 2153301 | 2153350 | 2153351 | 2153400 | 2153401 |         |         |         |         |         |



### 2105 - Weld-neck flange - Type 11/B1 - RF PN25/40

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 | 125/139 | 150/168 | 200     | 200     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 25/40   | 25/40   | 25/40   | 25/40   | 25/40   | 25/40   | 25      | 40      |
| code | 2105015 | 2105020 | 2105025 | 2105032 | 2105040 | 2105050 | 2105065 | 2105080 | 2105100 | 2105125 | 2105150 | 2105200 | 2105201 |



### 2155 - Weld-neck flange - Type 11/E - Spigot PN25/40

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 | 125/139 | 150/168 | 200     | 200     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 25/40   | 25/40   | 25/40   | 25/40   | 25/40   | 25/40   | 25      | 40      |
| code | 2155015 | 2155020 | 2155025 | 2155032 | 2155040 | 2155050 | 2155065 | 2155080 | 2155100 | 2155125 | 2155150 | 2155200 | 2155201 |



### 2156 - Weld-neck flange - Type 11/F - Recess PN25/40

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 | 125/139 | 150/168 | 200     | 200     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 25/40   | 25/40   | 25/40   | 25/40   | 25/40   | 25/40   | 25      | 40      |
| code | 2156015 | 2156020 | 2156025 | 2156032 | 2156040 | 2156050 | 2156065 | 2156080 | 2156100 | 2156125 | 2156150 | 2156200 | 2156201 |



### 2157 - Hubbed threaded flange - Type 13/B1 - RF PN10/16

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16   |
| code | 2157015 | 2157020 | 2157025 | 2157032 | 2157040 | 2157050 | 2157065 | 2157080 | 2157100 |



### 2158 - Galvanised hubbed threaded flange - Type 13/B1 - RF PN10/16

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16   |
| code | 2158015 | 2158020 | 2158025 | 2158032 | 2158040 | 2158050 | 2158065 | 2158080 | 2158100 |



### 2161 - Blind flange 05/A PN10/16

| DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100/114 | 125/139 | 150/168 | 200     | 200     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10      | 16      |
| code | 2161015 | 2161020 | 2161025 | 2161032 | 2161040 | 2161050 | 2161065 | 2161080 | 2161100 | 2161125 | 2161150 | 2161200 | 2161201 |
| DN   | 250     | 250     | 300     | 300     | 350     | 350     | 400     | 400     |         |         |         |         |         |
| PN   | 10      | 16      | 10      | 16      | 10      | 16      | 10      | 16      |         |         |         |         |         |
| code | 2161250 | 2161251 | 2161300 | 2161301 | 2161350 | 2161351 | 2161400 | 2161401 |         |         |         |         |         |

**NEW**

## Stainless steel flanges



Individual packing

Materials: stainless steel F304, F304L, F316 or F316L - PS: acc. to standard: 10 bar for PN10 flanges, 16 bar for PN16 flanges, etc.

3.1  
10 €/DN  
ISO  
9001

### ■ Forged stainless steel PN10 to PN40

#### 2BE/4BE - Pressed lap joint flanges - PN10 (DIN 2642)



| DN        | 15     | 20     | 25     | 32     | 40     | 50     | 65    | 80    | 100    | 125    | 150    | 200    |
|-----------|--------|--------|--------|--------|--------|--------|-------|-------|--------|--------|--------|--------|
| 304L code | 2BE15  | 2BE20  | 2BE25  | 2BE32  | 2BE40  | 2BE50  | 2BE65 | 2BE80 | 2BE100 | 2BE125 | 2BE150 | 2BE200 |
| 316L code | 4BE15  | 4BE20  | 4BE25  | 4BE32  | 4BE40  | 4BE50  | 4BE65 | 4BE80 | 4BE100 | 4BE125 | 4BE150 | 4BE200 |
| DN        | 250    | 300    | 350    | 400    | 450    | 500    |       |       |        |        |        |        |
| 304L code | 2BE250 | 2BE300 | 2BE350 | 2BE400 | 2BE450 | 2BE500 |       |       |        |        |        |        |
| 316L code | 4BE250 | 4BE300 | 4BE350 | 4BE400 | 4BE450 | 4BE500 |       |       |        |        |        |        |

#### 2PAS/4PAS - Plate flange for welding - Type 01/A - FF PN10/40



| DN        | 10      | 15        | 20      | 25        | 32      | 40        | 50      | 65      | 80        | 100     | 125     | 150       |
|-----------|---------|-----------|---------|-----------|---------|-----------|---------|---------|-----------|---------|---------|-----------|
| PN        | 10/40   | 10/40     | 10/40   | 10/40     | 10/40   | 10/40     | 10/16   | 10/16   | 10/16     | 10/16   | 10/16   | 10/16     |
| 304L code | 2PAS10  | 2PAS15    | 2PAS20  | 2PAS25    | 2PAS32  | 2PAS40    | 2PAS50  | 2PAS65  | 2PAS80    | 2PAS100 | 2PAS125 | 2PAS150   |
| 316L code | 4PAS10  | 4PAS15    | 4PAS20  | 4PAS25    | 4PAS32  | 4PAS40    | 4PAS50  | 4PAS65  | 4PAS80    | 4PAS100 | 4PAS125 | 4PAS150   |
| DN        | 200     | 200       | 250     | 250       | 300     | 300       | 350     | 400     | 400       | 450     | 500     | 500       |
| PN        | 10      | 16        | 10      | 16        | 10      | 16        | 10      | 10      | 16        | 10      | 10      | 16        |
| 304L code | 2PAS200 | 2PAS16200 | 2PAS250 | 2PAS16250 | 2PAS300 | 2PAS16300 | 2PAS350 | 2PAS400 | 2PAS16400 | 2PAS450 | 2PAS500 | 2PAS16500 |
| 316L code | 4PAS200 | 4PAS16200 | 4PAS250 | 4PAS16250 | 4PAS300 | 4PAS16300 | 4PAS350 | 4PAS400 | 4PAS16400 | 4PAS450 | 4PAS500 | 4PAS16500 |
| DN        | 600     | 600       | 700     |           |         |           |         |         |           |         |         |           |
| PN        | 10      | 16        | 10      |           |         |           |         |         |           |         |         |           |
| 304L code | 2PAS600 | 2PAS16600 | 2PAS700 |           |         |           |         |         |           |         |         |           |
| 316L code | 4PAS600 | 4PAS16600 | 4PAS700 |           |         |           |         |         |           |         |         |           |

#### 2PAS/4PAS - Plate flange for welding - Type 01/A - FF PN10

Thin version, approx. 30% vs standard.



| DN        | 200      | 250      | 300      | 350      | 400      | 450      | 500      | 600      | 700      | 800      | 900      | 1000      |
|-----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| PN        | 10       | 10       | 10       | 10       | 10       | 10       | 10       | 10       | 10       | 10       | 10       | 10        |
| 304L code | 2PAS200A | 2PAS250A | 2PAS300A | 2PAS350A | 2PAS400A | 2PAS450A | 2PAS500A | 2PAS600A | 2PAS700A | 2PAS800A | 2PAS900A | 2PAS1000A |
| 316L code | 4PAS200A | 4PAS250A | 4PAS300A | 4PAS350A | 4PAS400A | 4PAS450A | 4PAS500A | 4PAS600A | 4PAS700A | 4PAS800A | 4PAS900A | 4PAS1000A |

#### 2PAS/4PAS - Plate flange for welding - Type 01/A - FF PN25/40



| DN        | 50       | 65       | 80       | 100       | 125       | 150       | 200       | 200       | 250       | 250       | 300       | 300       |
|-----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| PN        | 25/40    | 25/40    | 25/40    | 25/40     | 25/40     | 25/40     | 25        | 40        | 25        | 40        | 25        | 40        |
| 304L code | 2PAS4050 | 2PAS4065 | 2PAS4080 | 2PAS40100 | 2PAS40125 | 2PAS40150 | 2PAS25200 | 2PAS40200 | 2PAS25250 | 2PAS40250 | 2PAS25300 | 2PAS40300 |
| 316L code | 4PAS4050 | 4PAS4065 | 4PAS4080 | 4PAS40100 | 4PAS40125 | 4PAS40150 | 4PAS25200 | 4PAS40200 | 4PAS25250 | 4PAS40250 | 4PAS25300 | 4PAS40300 |

**NEW**



### 2PASB/4PASB - Plate flange for welding - Type 01/B - RF PN10/40

| DN        | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100      | 125      | 150      | 200      |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|----------|----------|----------|----------|
| PN        | 10/40   | 10/40   | 10/40   | 10/40   | 10/40   | 10/16   | 10/16   | 10/16   | 10/16    | 10/16    | 10/16    | 10       |
| 304L code | 2PASB15 | 2PASB20 | 2PASB25 | 2PASB32 | 2PASB40 | 2PASB50 | 2PASB65 | 2PASB80 | 2PASB100 | 2PASB125 | 2PASB150 | 2PASB200 |
| 316L code | 4PASB15 | 4PASB20 | 4PASB25 | 4PASB32 | 4PASB40 | 4PASB50 | 4PASB65 | 4PASB80 | 4PASB100 | 4PASB125 | 4PASB150 | 4PASB200 |



### 2COL/4COL - Weld-neck flange - Type 11/B - RF PN10/40

| DN        | 15      | 20        | 25      | 32        | 40     | 50     | 65     | 80     | 100     | 125     | 150     | 200     | 200       |
|-----------|---------|-----------|---------|-----------|--------|--------|--------|--------|---------|---------|---------|---------|-----------|
| PN        | 10/40   | 10/40     | 10/40   | 10/40     | 10/40  | 10/16  | 10/16  | 10/16  | 10/16   | 10/16   | 10/16   | 10      | 16        |
| 304L code | 2COL15  | 2COL20    | 2COL25  | 2COL32    | 2COL40 | 2COL50 | 2COL65 | 2COL80 | 2COL100 | 2COL125 | 2COL150 | 2COL200 | 2COL16200 |
| 316L code | 4COL15  | 4COL20    | 4COL25  | 4COL32    | 4COL40 | 4COL50 | 4COL65 | 4COL80 | 4COL100 | 4COL125 | 4COL150 | 4COL200 | 4COL16200 |
| DN        | 250     | 250       | 300     | 300       |        |        |        |        |         |         |         |         |           |
| PN        | 10      | 16        | 10      | 16        |        |        |        |        |         |         |         |         |           |
| 304L code | 2COL250 | 2COL16250 | 2COL300 | 2COL16300 |        |        |        |        |         |         |         |         |           |
| 316L code | 4COL250 | 4COL16250 | 4COL300 | 4COL16300 |        |        |        |        |         |         |         |         |           |



### 2COL/4COL - Weld-neck flange - Type 11/B - RF PN25/40

| DN        | 50       | 65       | 80       | 100       | 125       | 150       | 200       | 200       | 250       | 250       | 300       | 300       |
|-----------|----------|----------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| PN        | 25/40    | 25/40    | 25/40    | 25/40     | 25/40     | 25/40     | 25        | 40        | 25        | 40        | 25        | 40        |
| 304L code | 2COL4050 | 2COL4065 | 2COL4080 | 2COL40100 | 2COL40125 | 2COL40150 | 2COL25200 | 2COL40200 | 2COL25250 | 2COL40250 | 2COL25300 | 2COL40300 |
| 316L code | 4COL4050 | 4COL4065 | 4COL4080 | 4COL40100 | 4COL40125 | 4COL40150 | 4COL25200 | 4COL40200 | 4COL25250 | 4COL40250 | 4COL25300 | 4COL40300 |



### 2BT/4BT - Loose plate flange - Type 02/A - FF PN10/40

| DN        | 10       | 15     | 20       | 25     | 32       | 40     | 50    | 65    | 80    | 100    | 125    | 150    | 200    |
|-----------|----------|--------|----------|--------|----------|--------|-------|-------|-------|--------|--------|--------|--------|
| PN        | 10/40    | 10/40  | 10/40    | 10/40  | 10/40    | 10/40  | 10/16 | 10/16 | 10/16 | 10/16  | 10/16  | 10/16  | 10     |
| 304L code | 2BT10    | 2BT15  | 2BT20    | 2BT25  | 2BT32    | 2BT40  | 2BT50 | 2BT65 | 2BT80 | 2BT100 | 2BT125 | 2BT150 | 2BT200 |
| 316L code | 4BT10    | 4BT15  | 4BT20    | 4BT25  | 4BT32    | 4BT40  | 4BT50 | 4BT65 | 4BT80 | 4BT100 | 4BT125 | 4BT150 | 4BT200 |
| DN        | 200      | 250    | 250      | 300    | 300      | 400    |       |       |       |        |        |        |        |
| PN        | 16       | 10     | 16       | 10     | 16       | 10     |       |       |       |        |        |        |        |
| 304L code | 2BT16200 | 2BT250 | 2BT16250 | 2BT300 | 2BT16300 | 2BT400 |       |       |       |        |        |        |        |
| 316L code | 4BT16200 | 4BT250 | 4BT16250 | 4BT300 | 4BT16300 | 4BT400 |       |       |       |        |        |        |        |



### 2PT/4PT - Threaded flat flange - FF PN10/16

| DN        | 10    | 15    | 20    | 25    | 32    | 40    | 50    | 65    | 80    | 100    |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| PN        | 10/16 | 10/16 | 10/16 | 10/16 | 10/16 | 10/16 | 10/16 | 10/16 | 10/16 | 10/16  |
| 304L code | 2PT10 | 2PT15 | 2PT20 | 2PT25 | 2PT32 | 2PT40 | 2PT50 | 2PT65 | 2PT80 | 2PT100 |
| 316L code | 4PT10 | 4PT15 | 4PT20 | 4PT25 | 4PT32 | 4PT40 | 4PT50 | 4PT65 | 4PT80 | 4PT100 |

**NEW**



### 2TP/4TP - Blind flange - Type 05/A - FF PN10/40

| DN        | 10    | 15    | 20    | 25    | 32    | 40    | 50    | 65    | 80    | 100    | 125    | 150    |
|-----------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|--------|
| PN        | 10/40 | 10/40 | 10/40 | 10/40 | 10/40 | 10/40 | 10/16 | 10/16 | 10/16 | 10/16  | 10/16  | 10/16  |
| 304L code | 2TP10 | 2TP15 | 2TP20 | 2TP25 | 2TP32 | 2TP40 | 2TP50 | 2TP65 | 2TP80 | 2TP100 | 2TP125 | 2TP150 |
| 316L code | 4TP10 | 4TP15 | 4TP20 | 4TP25 | 4TP32 | 4TP40 | 4TP50 | 4TP65 | 4TP80 | 4TP100 | 4TP125 | 4TP150 |

| DN        | 200    | 200      | 250    | 250      | 300    | 300      | 350    | 400    | 500    | 600    | 700    |
|-----------|--------|----------|--------|----------|--------|----------|--------|--------|--------|--------|--------|
| PN        | 10     | 16       | 10     | 16       | 10     | 16       | 10     | 10     | 10     | 10     | 10     |
| 304L code | 2TP200 | 2TP16200 | 2TP250 | 2TP16250 | 2TP300 | 2TP16300 | 2TP350 | 2TP400 | 2TP500 | 2TP600 | -      |
| 316L code | 4TP200 | 4TP16200 | 4TP250 | 4TP16250 | 4TP300 | 4TP16300 | 4TP350 | 4TP400 | 4TP500 | 4TP600 | 4TP700 |

### 2TP/4TP - Blind flange - Type 05/A - FF PN10

\* Thin version, approx. 30% thinner vs standard.



| DN        | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN        | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      |
| 304L code | 2TP200A | 2TP250A | 2TP300A | 2TP350A | 2TP400A | 2TP450A | 2TP500A | 2TP600A |
| 316L code | 4TP200A | 4TP250A | 4TP300A | 4TP350A | 4TP400A | 4TP450A | 4TP500A | 4TP600A |

### 2TP/4TP - Blind flange - Type 05/A - FF PN25/40



| DN        | 50      | 65      | 80      | 100      | 125      | 150      | 200      | 200      | 250      | 250      | 300      | 300      |
|-----------|---------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| PN        | 25/40   | 25/40   | 25/40   | 25/40    | 25/40    | 25/40    | 25       | 40       | 25       | 40       | 25       | 40       |
| 304L code | 2TP4050 | 2TP4065 | 2TP4080 | 2TP40100 | 2TP40125 | 2TP40150 | 2TP25200 | 2TP40200 | 2TP25250 | 2TP40250 | 2TP25300 | 2TP40300 |
| 316L code | 4TP4050 | 4TP4065 | 4TP4080 | 4TP40100 | 4TP40125 | 4TP40150 | 4TP25200 | 4TP40200 | 4TP25250 | 4TP40250 | 4TP25300 | 4TP40300 |

### 2TPB/4TPB - Blind flange - Type 05/B - RF PN10/40



| DN        | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100     | 125     | 150     | 200     |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|
| PN        | 10/40  | 10/40  | 10/40  | 10/40  | 10/40  | 10/16  | 10/16  | 10/16  | 10/16   | 10/16   | 10/16   | 10      |
| 304L code | 2TPB15 | 2TPB20 | 2TPB25 | 2TPB32 | 2TPB40 | 2TPB50 | 2TPB65 | 2TPB80 | 2TPB100 | 2TPB125 | 2TPB150 | 2TPB200 |
| 316L code | 4TPB15 | 4TPB20 | 4TPB25 | 4TPB32 | 4TPB40 | 4TPB50 | 4TPB65 | 4TPB80 | 4TPB100 | 4TPB125 | 4TPB150 | 4TPB200 |



## Flange sets & accessories

### Flange sets

Includes: 2100/2101 series flanges, gaskets (when applies), bolts or screws.

| ref. | valve type                            | DN   | 15      | 20      | 25      | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------------------------------------|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2130 | 2 way PN16 valve                      | code | 2130015 | 2130020 | 2130025 | 2130032 | 2130040 | 2130050 | 2130065 | 2130080 | 2130100 | 2130125 | 2130150 | 2130200 | -       | -       |
| 2130 | 2 way PN10 valve                      | code | 2130015 | 2130020 | 2130025 | 2130032 | 2130040 | 2130050 | 2130065 | 2130080 | 2130100 | 2130125 | 2130150 | 2131200 | -       | -       |
| 2132 | 3 way PN16 valve                      | code | -       | -       | -       | -       | -       | 2132050 | 2132065 | 2132080 | 2132100 | 2132125 | 2132150 | 2132200 | -       | -       |
| 2150 | expansion joint                       | code | -       | -       | -       | 2150032 | 2150040 | 2150050 | 2150065 | 2150080 | 2150100 | 2150125 | 2150150 | 2150200 | 2150250 | 2150300 |
| 2104 | check valve 364 type EN 558 series 97 | code | -       | -       | -       | -       | 2104040 | 2104050 | 2104065 | 2104080 | 2104100 | 2104125 | 2104150 | 2104200 | 2104250 | 2104300 |
| 2102 | check valve 370 type EN 558 series 50 | code | -       | -       | -       | -       | -       | 2102050 | 2102065 | 2102080 | 2102100 | 2102125 | 2102150 | 2102200 | 2102250 | 2102300 |
| 2112 | wafer butterfly valve                 | code | -       | -       | -       | -       | 2112040 | 2112050 | 2112065 | 2112080 | 2112100 | 2112125 | 2112150 | 2112200 | 2112250 | 2112300 |
| 2113 | lug butterfly valve                   | code | -       | -       | -       | 2113032 | 2113040 | 2113050 | 2113065 | 2113080 | 2113100 | 2113125 | 2113150 | 2113200 | 2113250 | 2113300 |
| 2134 | knife gate valve                      | code | -       | -       | -       | -       | -       | 2134050 | 2134065 | 2134080 | 2134100 | 2134125 | 2134150 | 2134200 | 2134250 | 2134300 |



**NEW**

## Flange gaskets

**Universal:** water, oil, steam, gas / TS: 150°C - **CSA 50:** air, water, steam < 150°C / TS: 190°C - **CSA 25:** air, hot water / TS: 150°C - **CSA 120:** steam / TS: 250°C - **PTFE:** hydrocarbons / TS: 180°C - **Graphoil:** high temperature & high pressure / TS: 450°C / PS: 120 bar.



| DN             | 10          | 15         | 20         | 25         | 32      | 40      | 50      | 65      | 80      | 100      | 125      | 150      | 200      | 250      | 300      |
|----------------|-------------|------------|------------|------------|---------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|
| universal code | -           | 9802104    | 9802105    | 9802106    | 9802107 | 9802108 | 9802109 | 9802110 | 9802111 | 9802112  | 9802113  | 9802114  | 9802115  | 9802116  | 9802117  |
| CSA 50 code    | JCSA10      | JCSA15     | JCSA20     | JCSA25     | JCSA32  | JCSA40  | JCSA50  | JCSA65  | JCSA80  | JCSA100  | JCSA125  | JCSA150  | JCSA200  | -        | JCSA300  |
| CSA 25 code    | JB10        | JB15       | JB20       | JB25       | JB32    | JB40    | JB50    | JB65    | JB80    | JB100    | JB125    | JB150    | JB200    | JB250    | JB300    |
| CSA 120 code   | JCSC10      | JCSC15     | JCSC20     | JCSC25     | JCSC32  | JCSC40  | JCSC50  | JCSC65  | JCSC80  | JCSC100  | JCSC125  | JCSC150  | JCSC200  | JCSC250  | JCSC300  |
| PTFE code      | JPTFE10     | JPTFE15    | JPTFE20    | JPTFE25    | JPTFE32 | JPTFE40 | JPTFE50 | JPTFE65 | JPTFE80 | JPTFE100 | JPTFE125 | JPTFE150 | JPTFE200 | JPTFE250 | JPTFE300 |
| graphoil code  | JGRAF10     | JGRAF15    | JGRAF20    | JGRAF25    | JGRAF32 | JGRAF40 | JGRAF50 | JGRAF65 | JGRAF80 | JGRAF100 | JGRAF125 | JGRAF150 | JGRAF200 | -        | -        |
|                | <b>DN</b>   | <b>350</b> | <b>400</b> | <b>500</b> |         |         |         |         |         |          |          |          |          |          |          |
|                | CSA 25 code | JB350      | JB400      | JB500      |         |         |         |         |         |          |          |          |          |          |          |



## Carbon steel bolt sets

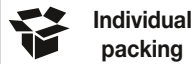
| ref. | valve type            | DN              | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|-----------------------|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| 2103 | PN16 valve            | number of bolts | 8       | 8       | 8       | 16      | 16      | 16      | 16      | 24      |         |         |
|      |                       | Ø x L (mm)      | 16x50   | 16x50   | 16x60   | 16x60   | 16x60   | 16x70   | 20x70   | 20x70   |         |         |
|      |                       | code            | 2103040 | 2103050 | 2103065 | 2103080 | 2103100 | 2103125 | 2103150 | 2103200 | -       | -       |
| 2110 | wafer butterfly valve | number of bolts | 4       | 4       | 4       | 8       | 8       | 8       | 8       | 8       | 12      | 12      |
|      |                       | Ø x L (mm)      | 16x90   | 16x100  | 16x110  | 16x110  | 16x120  | 16x130  | 20x140  | 20x140  | 20x160  | 20x160  |
|      |                       | code            | 2110040 | 2110050 | 2110065 | 2110080 | 2110100 | 2110125 | 2110150 | 2110200 | 2110250 | 2110300 |
| 2111 | lug butterfly valve   | number of bolts | 8       | 8       | 8       | 16      | 16      | 16      | 16      | 16      | 24      | 24      |
|      |                       | Ø x L (mm)      | 16x30   | 16x35   | 16x35   | 16x40   | 16x40   | 16x45   | 20x45   | 20x45   | 20x50   | 20x60   |
|      |                       | code            | 2111040 | 2111050 | 2111065 | 2111080 | 2111100 | 2111125 | 2111150 | 2111200 | 2111250 | 2111300 |



## Stainless steel bolt sets

| ref. | flange type      | DN              | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |     |
|------|------------------|-----------------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|-----|
| KB10 | for PN10 flanges | number of bolts | 4      | 4      | 4      | 4      | 4      | 4      | 8      | 8      | 8       | 8       | 8       | 8       | 12      | 12      | 16      | 16      |     |
|      |                  | diameter        | M12    | M12    | M12    | M16    | M16    | M16    | M16    | M16    | M16     | M16     | M16     | M20     | M20     | M20     | M20     | M20     | M24 |
|      |                  | L (mm)          | 45     | 50     | 50     | 50     | 50     | 50     | 50     | 60     | 60      | 60      | 70      | 80      | 80      | 80      | 80      | 90      | 100 |
|      |                  | code            | KB1015 | KB1020 | KB1025 | KB1032 | KB1040 | KB1050 | KB1065 | KB1080 | KB10100 | KB10125 | KB10150 | KB10200 | KB10250 | KB10300 | KB10350 | KB10400 |     |
| KB16 | for PN16 flanges | number of bolts | 4      | 4      | 4      | 4      | 4      | 4      | 8      | 8      | 8       | 8       | 8       | 12      | 12      | 12      | 16      | 16      |     |
|      |                  | diameter        | M12    | M12    | M12    | M16    | M16    | M16    | M16    | M16    | M16     | M16     | M20     | M20     | M24     | M24     | M24     | M24     | M27 |
|      |                  | L (mm)          | 45     | 50     | 50     | 50     | 50     | 50     | 50     | 60     | 60      | 60      | 70      | 80      | 80      | 90      | 90      | 100     | 100 |
|      |                  | code            | KB1015 | KB1020 | KB1025 | KB1032 | KB1040 | KB1050 | KB1065 | KB1080 | KB10100 | KB10125 | KB10150 | KB10200 | KB10250 | KB10300 | KB10350 | KB10400 |     |
| KB40 | for PN40 flanges | number of bolts | 4      | 4      | 4      | 4      | 4      | 4      | 4      | 8      | 8       | 8       | 8       | 8       | 12      | 12      | 16      | 16      |     |
|      |                  | diameter        | M12    | M12    | M12    | M16    | M16    | M16    | M16    | M16    | M20     | M24     | M24     | M27     | M30     | M30     | M33     | M36     |     |
|      |                  | L (mm)          | 50     | 55     | 55     | 60     | 60     | 60     | 60     | 70     | 70      | 80      | 90      | 90      | 90      | 100     | 100     | 120     | 140 |
|      |                  | code            | KB4015 | KB4020 | KB4025 | KB4032 | KB4040 | KB4050 | KB4065 | KB4080 | KB40100 | KB40125 | KB40150 | KB40200 | KB40250 | KB40300 | KB40350 | KB40400 |     |

## ■ Stainless steel CF8M (BSP)



Excluded from 2014/68/EU Directive (art. 4, §3) - MIL-C-27487 & A-A-59326 - For all common fluids - Stainless steel CF8M body & cams - NBR gasket (for coupling) - PS: see table below - TS: -10°C/+60°C.

ISO 9001

Max. allowable pressure

| Ø   | 1/2" | 3/4" | 1" | 1"1/4 | 1"1/2 | 2" | 2"1/2 | 3" | 4" |
|-----|------|------|----|-------|-------|----|-------|----|----|
| bar | 11   | 18   | 18 | 18    | 18    | 18 | 16    | 14 | 14 |

### 2241 - Female adaptor A

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 2241004 | 2241005 | 2241006 | 2241007 | 2241008 | 2241009 | 2241010 | 2241011 | 2241012 |



### 2242 - Male coupling B

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 2242004 | 2242005 | 2242006 | 2242007 | 2242008 | 2242009 | 2242010 | 2242011 | 2242012 |



### 2243 - Hose coupling C

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 2243004 | 2243005 | 2243006 | 2243007 | 2243008 | 2243009 | 2243010 | 2243011 | 2243012 |



### 2244 - Female coupling D

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 2244004 | 2244005 | 2244006 | 2244007 | 2244008 | 2244009 | 2244010 | 2244011 | 2244012 |



### 2245 - Hose adaptor E

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 2245004 | 2245005 | 2245006 | 2245007 | 2245008 | 2245009 | 2245010 | 2245011 | 2245012 |



### 2246 - Male adaptor F

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 2246004 | 2246005 | 2246006 | 2246007 | 2246008 | 2246009 | 2246010 | 2246011 | 2246012 |



### 2247 - Cap coupling DC

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 2247004 | 2247005 | 2247006 | 2247007 | 2247008 | 2247009 | 2247010 | 2247011 | 2247012 |



### 2248 - Cap adaptor DP

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 2248004 | 2248005 | 2248006 | 2248007 | 2248008 | 2248009 | 2248010 | 2248011 | 2248012 |



## ■ Spare gaskets for cam-lock couplings B, C, D & DC

(brass, aluminium or stainless steel)

| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      | 4"      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 9830850 | 9830851 | 9830852 | 9830853 | 9830854 | 9830855 | 9830856 | 9830857 | 9830858 |
| code | 9830860 | 9830861 | 9830862 | 9830863 | 9830864 | 9830865 | 9830866 | 9830867 | 9830868 |
| code | 9830870 | 9830871 | 9830872 | 9830873 | 9830874 | 9830875 | 9830876 | 9830877 | 9830878 |
| code | 9830880 | 9830881 | 9830882 | 9830883 | 9830884 | 9830885 | 9830886 | 9830887 | 9830888 |

EPDM

NBR

FKM

PTFE + FKM



# Valves for HVAC

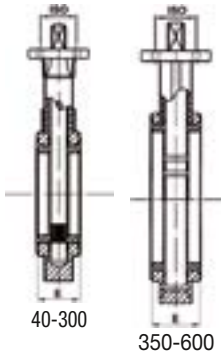
- **Concentric butterfly valves**
  - Cast iron ..... pages 42 to 43
  - Ductile iron - GGG40 ..... page 44
  - Ductile iron - GGG50 ..... pages 45 to 46
  - Accessories & spare parts for TTV butterfly valves ..... page 47
- **Cast iron ball valves** ..... page 47
- **Gate valves** ..... page 48
- **Globe valves** ..... page 49
- **Check valves** ..... pages 49 to 50
- **Y-strainers** ..... page 50
- **Expansion joints**
  - Rubber expansion joints ..... pages 51 to 52
  - Metal expansion joints ..... page 52
- **Rubber-metal pipe connector** ..... page 52
- **Actuation**
  - Solenoid valves ..... pages 53 to 54
  - Accessories & spare parts for Ceme solenoid valves ..... page 54
  - Solenoid valves for fuel burners ..... page 54
  - Electric actuated valves ..... pages 55 to 58
  - Electric quarter-turn actuators - IP65 ..... page 59
- **Safety valves** ..... page 60
- **Overflow valves** ..... page 61
- **Gas equipment**
  - Automatic solenoid valves ..... pages 61 to 62
  - Solenoid valves with manual resetting ..... page 62
  - Pressure reducing valves with built-in filter ..... page 63
  - Filters ..... page 63
  - Accessories ..... page 63
- **Steam equipment**
  - Steam traps ..... pages 64 to 65
  - Pressure reducing valves ..... page 66
  - Separators ..... page 66
  - Vacuum breakers ..... page 66
  - Air vents ..... page 66
- **Instrumentation**
  - Thermometers ..... page 67
  - Pressure switches ..... page 68
  - Pressure gauges ..... pages 68 to 70
  - Accessories for pressure gauges (BSP) ..... page 70
  - Level gauges ..... page 71
  - Sight glasses ..... page 71
- **Malleable cast iron fittings** ..... pages 72 to 82

All our pneumatic actuated valves are designed for a compressed air supply of 6 bar - Please consult for any other air supply pressure - Spring return: normally closed.  
 All our electric actuated valves are equipped with a 230V AC actuator as standard - Please consult for any other power supply.

⚠ **Max. ΔP: 10 bar.**

## Cast iron

97/23/EC Directive N°0035 - Risk category III / module H up to DN600, risk category I above - Lloyd's Register Type Approval for marine applications - GG25 body up to DN600, GGG40 above - Epoxy coated - ISO pad - PS: 16 bar up to DN300, 10 bar above - TS with EPDM seat: -10°C/+110°C (temporarily +130°C).



Face to face according to EN 558 series 20 / ISO pad according to ISO 5211

| DN               | 32/40 | 50  | 65  | 80  | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 | 700     | 800     | 900  | 1000 |
|------------------|-------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|---------|---------|------|------|
| face to face "E" | 33    | 43  | 46  | 46  | 52  | 56  | 56  | 60  | 68  | 78  | 78  | 102 | 114 | 127 | 154 | 163     | 188     | 203  | 216  |
| ISO pad          | F05   | F05 | F05 | F05 | F05 | F07 | F07 | F10 | F12 | F12 | F12 | F12 | F16 | F16 | F16 | F25     | F25     | F25  | F25  |
| square drive     | 9     | 9   | 9   | 9   | 11  | 14  | 14  | 17  | 22  | 27  | 27  | 27  | 30  | 36  | 40  | Ø 63,35 | Ø 63,35 | Ø 75 | Ø 85 |

### ■ Wafer - Between flanges PN10/16, ANSI 150 (up to DN600) & JIS 10k (up to DN300)



#### 1125 - Lever - Disc GGG40 nickel plated / Seat EPDM

| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      |
| code     | 1125040 | 1125050 | 1125065 | 1125080 | 1125100 | 1125125 | 1125150 | 1125200 | 1125250 | 1125300 |



#### 1125 - Gearbox - Disc GGG40 nickel plated / Seat EPDM

| DN       | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     | 700     | 800     | 900     | 1000    |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      |
| code     | 1125102 | 1125127 | 1125152 | 1125202 | 1125252 | 1125302 | 1125350 | 1125400 | 1125450 | 1125500 | 1125600 | 1125700 | 1125800 | 1125900 | 1125990 |



#### 1123 - Lever - Disc CF8M / Seat EPDM

| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      |
| code     | 1123040 | 1123050 | 1123065 | 1123080 | 1123100 | 1123125 | 1123150 | 1123200 | 1123250 | 1123300 |



#### 1123 - Gearbox - Disc CF8M / Seat EPDM

| DN       | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     | 700     | 800     | 900     | 1000    |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      |
| code     | 1123102 | 1123127 | 1123152 | 1123202 | 1123252 | 1123302 | 1123350 | 1123400 | 1123450 | 1123500 | 1123600 | 1123700 | 1123800 | 1123900 | 1123990 |



#### 1121 - Lever - Disc CF8M / Seat NBR - TS: -10°C/+80°C.

| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      |
| code     | 1121040 | 1121050 | 1121065 | 1121080 | 1121100 | 1121125 | 1121150 | 1121200 | 1121250 | 1121300 |

## ■ Lug - Between flanges PN10/16



**1135 - Lever** - Disc **GGG40 nickel plated** / Seat **EPDM**

| DN       | .../10: flanges PN10 |         |         |         |         |         |         | .../16: flanges PN16 |         |         |         |         |         |
|----------|----------------------|---------|---------|---------|---------|---------|---------|----------------------|---------|---------|---------|---------|---------|
|          | 40                   | 50      | 65      | 80      | 100     | 125     | 150     | 200/10               | 200/16  | 250/10  | 250/16  | 300/10  | 300/16  |
| PS (bar) | 16                   | 16      | 16      | 16      | 16      | 16      | 16      | 10                   | 16      | 10      | 16      | 10      | 16      |
| code     | 1135040              | 1135050 | 1135065 | 1135080 | 1135100 | 1135125 | 1135150 | 1135200              | 1135201 | 1135250 | 1135251 | 1135300 | 1135301 |



**1135 - Gearbox** - Disc **GGG40 nickel plated** / Seat **EPDM**

| DN        | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)  | 16      | 16      | 16      | 10/16*  | 10/16*  | 10/16*  | 10      | 10      | 10      | 10      | 10      |
| PN10 code | -       | -       | -       | 1135202 | 1135252 | 1135302 | 1135350 | 1135400 | 1135450 | 1135500 | 1135600 |
| PN16 code | 1135102 | 1135127 | 1135152 | 1135203 | 1135253 | 1135303 | 1135351 | 1135401 | 1135451 | 1135501 | 1135601 |

\* PS: 10 bar for PN10 valves, 16 bar for PN16 valves.



**1133 - Lever** - Disc **CF8M** / Seat **EPDM**

| DN       | .../10: flanges PN10 |         |         |         |         |         |         | .../16: flanges PN16 |         |         |         |         |         |
|----------|----------------------|---------|---------|---------|---------|---------|---------|----------------------|---------|---------|---------|---------|---------|
|          | 40                   | 50      | 65      | 80      | 100     | 125     | 150     | 200/10               | 200/16  | 250/10  | 250/16  | 300/10  | 300/16  |
| PS (bar) | 16                   | 16      | 16      | 16      | 16      | 16      | 16      | 10                   | 16      | 10      | 16      | 10      | 16      |
| code     | 1133040              | 1133050 | 1133065 | 1133080 | 1133100 | 1133125 | 1133150 | 1133200              | 1133201 | 1133250 | 1133251 | 1133300 | 1133301 |



**1133 - Gearbox** - Disc **CF8M** / Seat **EPDM**

| DN        | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)  | 16      | 16      | 16      | 10/16*  | 10/16*  | 10/16*  | 10      | 10      | 10      | 10      | 10      |
| PN10 code | -       | -       | -       | 1133202 | 1133252 | 1133302 | 1133350 | 1133400 | 1133450 | 1133500 | 1133600 |
| PN16 code | 1133102 | 1133127 | 1133152 | 1133203 | 1133253 | 1133303 | 1133351 | 1133401 | 1133451 | 1133501 | 1133601 |

\* PS: 10 bar for PN10 valves, 16 bar for PN16 valves.

## ■ Options & spare parts



12 €/pc

**1198 - Spare gearbox** (only for butterfly valves 1125, 1123, 1121, 1135 & 1133)

| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 1198001 | 1198001 | 1198001 | 1198001 | 1198002 | 1198003 | 1198003 | 1198004 | 1198005 | 1198006 |

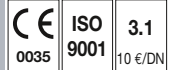


**Spare lever** (only for butterfly valves 1125, 1123, 1121, 1135 & 1133)

| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 9831244 | 9831244 | 9831244 | 9831244 | 9831249 | 9831245 | 9831245 | 9831246 | 9831247 | 9831248 |

## Ductile iron - GGG40

97/23/EC Directive N°0035 - Risk category III / module H - GGG40 body - Epoxy coated - ISO pad - PS: 16 bar up to DN300, 10 bar above - Supplied with gearbox above DN300.



Face to face according to EN 558 series 20 / ISO pad according to ISO 5211

| DN               | 40  | 50  | 65  | 80  | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| face to face "E" | 33  | 43  | 46  | 46  | 52  | 56  | 56  | 60  | 68  | 78  | 78  | 102 | 114 | 127 | 154 |
| ISO pad          | F07 | F07 | F07 | F07 | F07 | F07 | F07 | F10 | F10 | F10 | F10 | F14 | F14 | F14 | F16 |
| square drive     | 9   | 9   | 9   | 9   | 11  | 14  | 14  | 17  | 22  | 22  | 22  | 27  | 27  | 36  | 36  |

### ■ Wafer - Between flanges PN10/16 & ANSI 150

**1170** - Disc **GGG40 epoxy coated** / Seat **EPDM**

TS: -10°C/+110°C.



| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      |
| code     | 1170040 | 1170050 | 1170065 | 1170080 | 1170100 | 1170125 | 1170150 | 1170200 | 1170250 | 1170300 | 1170350 | 1170400 | 1170450 | 1170500 | 1170600 |

**1173** - Disc **CF8M** / Seat **High temperature EPDM**

TS: -10°C/+130°C.

| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      |
| code     | 1173040 | 1173050 | 1173065 | 1173080 | 1173100 | 1173125 | 1173150 | 1173200 | 1173250 | 1173300 | 1173350 | 1173400 | 1173450 | 1173500 |

not on stock, on request.

**1174** - Disc **Aluminium bronze** / Seat **NBR**

TS: -10°C/+90°C.

| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      |
| code     | 1174040 | 1174050 | 1174065 | 1174080 | 1174100 | 1174125 | 1174150 | 1174200 | 1174250 | 1174300 |

not on stock, on request.

### ■ Lug - Between flanges PN10/16

**1175** - Disc **GGG40 epoxy coated** / Seat **EPDM**

TS: -10°C/+110°C.



| DN        | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)  | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10/16*  | 10/16*  | 10/16*  | 10/16*  | 10/16*  |
| PN10 code | -       | -       | -       | -       | -       | -       | -       | 1175200 | 1175250 | 1175300 | 1175350 | 1175400 |
| PN16 code | 1175040 | 1175050 | 1175065 | 1175080 | 1175100 | 1175125 | 1175150 | 1175201 | 1175251 | 1175301 | 1175351 | 1175401 |

\* PS: 10 bar for PN10 valves, 16 bar for PN16 valves.

**1176** - Disc **CF8M** / Seat **High temperature EPDM**

TS: -10°C/+130°C.

| DN        | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)  | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10/16*  | 10/16*  | 10/16*  |
| PN10 code | -       | -       | -       | -       | -       | -       | -       | 1176200 | 1176250 | 1176300 |
| PN16 code | 1176040 | 1176050 | 1176065 | 1176080 | 1176100 | 1176125 | 1176150 | 1176201 | 1176251 | 1176301 |

\* PS: 10 bar for PN10 valves, 16 bar for PN16 valves.

not on stock, on request.

### ■ Options & spare parts

**1192** - Spare gearbox (only for butterfly valves 1170, 1173, 1174, 1175 & 1176)

| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 1192001 | 1192001 | 1192001 | 1192001 | 1192002 | 1192003 | 1192003 | 1192004 | 1192005 | 1192006 |

Spare lever (only for butterfly valves 1170, 1173, 1174, 1175 & 1176)

| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 9831150 | 9831150 | 9831150 | 9831150 | 9831151 | 9831152 | 9831152 | 9831153 | 9831154 | 9831154 |

#### Spare seat

Spare EPDM & NBR seats available on request, please consult



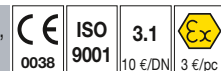
MOUNTING  
12 €/pc





## Ductile iron - GGG50

2014/68/EU Directive N°0038 - Risk category III / module H - GGG50 body - Rilsan coated - ISO pad - PS: 16 bar up to DN300, 10 bar above - Gearbox recommended above DN200 - Supplied bare shaft above DN300 or with gearbox on specific reference.



| General certifications & approvals on TTV valves |     |        |     |      |            |      |
|--|-----|--------|-----|------|------------|------|
| PED  | ISO | MARINE | GAS | ATEX | VOLKSWAGEN | NATO |
|  |     |        |     |      |            |      |



Face to face according to EN 558 series 20 / ISO pad according to ISO 5211

| DN               | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450   | 500   | 600   |
|------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|
| face to face "E" | 33 | 43 | 46 | 46 | 52  | 56  | 56  | 60  | 68  | 78  | 78  | 102 | 114   | 127   | 154   |
| ISO pad          | F7 | F7 | F7 | F7 | F7  | F7  | F7  | F7  | F10 | F10 | F14 | F14 | F14   | F14   | F16   |
| square drive     | 8  | 8  | 9  | 11 | 11  | 14  | 14  | 17  | 19  | 22  | 22  | 27  | Ø 50* | Ø 50* | Ø 60* |

\* splined shaft.

### ■ Wafer - Between flanges PN10/16 - ANSI 150 (up to DN400 / PN10 above)

**1150** - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** from DN125 to DN300, Disc **GGG50 rilsan coated** above / Seat **EPDM**

TS: -10°C/+110°C.



| DN           | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)     | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      | 10      |
| lever code   | 1150040 | 1150050 | 1150065 | 1150080 | 1150100 | 1150125 | 1150150 | 1150200 | 1150250 | 1150300 | 1150350 | 1150400 | 1150450 | 1150500 | 1150600 |
| gearbox code | -       | -       | -       | -       | -       | -       | -       | -       | -       | -       | 1150352 | 1150402 | 1150452 | 1150502 | 1150602 |

not on stock, on request.

### 1153 - Disc **CF8M** / Seat **EPDM**

TS: -10°C/+110°C.



| DN           | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)     | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      |
| lever code   | 1153040 | 1153050 | 1153065 | 1153080 | 1153100 | 1153125 | 1153150 | 1153200 | 1153250 | 1153300 | 1153350 | 1153400 | 1153450 | 1153500 |
| gearbox code | -       | -       | -       | -       | -       | -       | 1153152 | 1153202 | 1153252 | 1153302 | 1153352 | 1153402 | 1153452 | 1153502 |

not on stock, on request.

### 1149 - Disc **CF8M** / Seat **High temperature EPDM**

TS: -10°C/+130°C.

| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      |
| code     | 1149040 | 1149050 | 1149065 | 1149080 | 1149100 | 1149125 | 1149150 | 1149200 | 1149250 | 1149300 | 1149350 | 1149400 | 1149450 | 1149500 |

not on stock, on request.

### 1152 - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** from DN125 to DN300,

Disc **GGG50 rilsan coated** above / Seat **NBR**

TS: -10°C/+90°C.

| DN           | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)     | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      |
| lever code   | 1152040 | 1152050 | 1152065 | 1152080 | 1152100 | 1152125 | 1152150 | 1152200 | 1152250 | 1152300 | 1152350 | 1152400 | 1152450 | 1152500 |
| gearbox code | -       | -       | -       | -       | -       | -       | -       | -       | -       | -       | 1152352 | 1152402 | 1152452 | 1152502 |

not on stock, on request.

### 1151 - Disc **CF8M** / Seat **NBR**

TS: -10°C/+90°C.

| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      |
| code     | 1151040 | 1151050 | 1151065 | 1151080 | 1151100 | 1151125 | 1151150 | 1151200 | 1151250 | 1151300 |





**1141** - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** above / Seat **NBR**  
For gas - PS: 5 bar (class MOP5) - TS: -20°C/+60°C.

| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 5       | 5       | 5       | 5       | 5       | 5       | 5       | 5       |
| code     | 1141040 | 1141050 | 1141065 | 1141080 | 1141100 | 1141125 | 1141150 | 1141200 |



**1144** - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** above / Seat **EPDM**  
For fire network - FM approved - With gearbox & limit switches - TS: -10°C/+110°C.

| DN       | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      |
| code     | 1144050 | 1144065 | 1144080 | 1144100 | 1144125 | 1144150 | 1144200 | 1144250 | 1144300 |



**1142/1148** - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** above / Seat **EPDM**  
For fire network - Acc. to APSAD R1 - With gearbox (& limit switches for 1148) - TS: -10°C/+110°C.

| DN        | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)  | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      |
| 1142 code | 1142050 | 1142065 | 1142080 | 1142100 | 1142125 | 1142150 | 1142200 | 1142250 | 1142300 |
| 1148 code | 1148050 | 1148065 | 1148080 | 1148100 | 1148125 | 1148150 | 1148200 | 1148250 | 1148300 |



## ■ Lug - Between flanges PN10/16



**1160** - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** from DN125 to DN300,  
Disc **GGG50 rilsan coated** above / Seat **EPDM**  
TS: -10°C/+110°C.



| DN           | .../10: flanges PN10 |         |         |         |         |         |         |         | .../16: flanges PN16 |         |         |         |         |         |         |    |
|--------------|----------------------|---------|---------|---------|---------|---------|---------|---------|----------------------|---------|---------|---------|---------|---------|---------|----|
|              | 32                   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200/10               | 200/16  | 250/10  | 250/16  | 300/10  | 350/10  | 400/10  |    |
| PS (bar)     | 16                   | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16                   | 16      | 10      | 16      | 10      | 16      | 10      | 10 |
| lever code   | 1160032              | 1160040 | 1160050 | 1160065 | 1160080 | 1160100 | 1160125 | 1160150 | 1160200              | 1160201 | 1160250 | 1160251 | 1160300 | 1160350 | 1160400 |    |
| gearbox code | -                    | -       | -       | -       | -       | -       | -       | -       | -                    | -       | -       | -       | -       | 1160352 | 1160402 |    |



**1163** - Disc **CF8M** / Seat **EPDM**  
TS: -10°C/+110°C.



| DN       | .../10: flanges PN10 |         |         |         |         |         |         |         | .../16: flanges PN16 |         |         |         |         |         |         |
|----------|----------------------|---------|---------|---------|---------|---------|---------|---------|----------------------|---------|---------|---------|---------|---------|---------|
|          | 40                   | 50      | 65      | 80      | 100     | 125     | 150     | 200/10  | 200/16               | 250/10  | 250/16  | 300/10  | 300/16  | 350/10  | 400/10  |
| PS (bar) | 16                   | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 16                   | 10      | 16      | 10      | 16      | 10      | 10      |
| code     | 1163040              | 1163050 | 1163065 | 1163080 | 1163100 | 1163125 | 1163150 | 1163200 | 1163201              | 1163250 | 1163251 | 1163300 | 1163301 | 1163350 | 1163400 |



**1162** - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** above / Seat **NBR**  
TS: -10°C/+90°C.

| DN       | Flanges PN10 |         |         |         |         |         |         |         |         |
|----------|--------------|---------|---------|---------|---------|---------|---------|---------|---------|
|          | 40           | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     |
| PS (bar) | 16           | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      |
| code     | 1162040      | 1162050 | 1162065 | 1162080 | 1162100 | 1162125 | 1162150 | 1162200 | 1162250 |



**1181** - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** above / Seat **NBR**  
For gas - PS: 5 bar (class MOP5) - TS: -20°C/+60°C.

| DN       | Flanges PN10 |         |         |         |         |         |         |         |
|----------|--------------|---------|---------|---------|---------|---------|---------|---------|
|          | 40           | 50      | 65      | 80      | 100     | 125     | 150     | 200     |
| PS (bar) | 5            | 5       | 5       | 5       | 5       | 5       | 5       | 5       |
| code     | 1181040      | 1181050 | 1181065 | 1181080 | 1181100 | 1181125 | 1181150 | 1181200 |



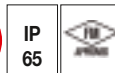




## 1182 - Disc CF8M up to DN100, Disc GGG50 epoxy coated above / Seat EPDM

For fire network - FM approved - With gearbox & limit switches - TS: -10°C/+110°C.

Flanges PN16



| DN       | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      |
| code     | 1182050 | 1182065 | 1182080 | 1182100 | 1182125 | 1182150 | 1182200 | 1182250 | 1182300 |

## Accessories & spare parts for TTV butterfly valves



### 1197 - Spare gearbox with position indicator

| DN   | 50      | 65      | 80-100  | 125-150 | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 1197050 | 1197065 | 1197100 | 1197150 | 1197200 | 1197250 | 1197300 | 1197350 | 1197400 | 1197451 | 1197501 | 1197601 |



### 1196 - Cast iron sleeve - To fit in EN 558 series 14 spacing (without flange & bolts)

| DN               | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     |
|------------------|---------|---------|---------|---------|---------|---------|---------|---------|
| length           | 107     | 107     | 124     | 134     | 136     | 144     | 154     | 170     |
| DIN total length | 140     | 150     | 170     | 180     | 190     | 200     | 210     | 230     |
| code             | 1196040 | 1196050 | 1196065 | 1196080 | 1196100 | 1196125 | 1196150 | 1196200 |



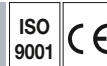
### 983120 - Spare aluminium lever

| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 9831201 | 9831201 | 9831202 | 9831203 | 9831203 | 9831204 | 9831204 | 9831205 | 9831206 | 9831207 |

# Cast iron ball valves

2014/68/EU Directive - Risk category I / module A - Flanged RF PN16 - GG25 body - Stainless steel ball - PTFE seat - FKM o-ring - Full bore - Anti-blowout stem - ISO pad - PS: 16 bar - TS: -10°C/+200°C -

⚠ Not suitable for steam & compressed air - Only for fluids from group 2.



### 507 - EN 558 series 14 up to DN150 & series 15 from DN125

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125/S14 | 125/S15 | 150/S14 | 150/S15 | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|---------|---------|---------|--------|
| face to face | 115    | 120    | 125    | 130    | 140    | 150    | 170    | 180    | 190    | 200     | 325     | 210     | 350     | 400    |
| code         | 507015 | 507020 | 507025 | 507032 | 507040 | 507050 | 507065 | 507080 | 507100 | 507125  | 507126  | 507150  | 507151  | 507200 |



### 505 - NF 29323

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 136    | 142    | 154    | 160    | 172    | 186    | 200    |
| code         | 505040 | 505050 | 505065 | 505080 | 505100 | 505125 | 505150 |

HEATING



## ■ Flanged RF PN16

97/23/EC Directive N°0038 - Risk category III / module H - Flanged RF PN16 - EN 558 series 1 - GG25 body & globe - Stainless steel stem & seat - Rising stem - PS: 16 bar - TS: -10°C/+120°C - ⚠️ **Not suitable for steam.**

CE 0038 ISO 3.1 10 €/DN

### 470 - Cast iron

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    |
| code         | 470015 | 470020 | 470025 | 470032 | 470040 | 470050 | 470065 | 470080 | 470100 | 470125 | 470150 | 470200 |

STEAM



2014/68/EU Directive N°0062 - Risk category III / module H - Flanged RF PN16 - EN 558 series 1 - GG25 body - Stainless steel stem, globe & seat - Rising stem - PS: 16 bar - TS: -10°C/+300°C - ⚠️ **Steam up to 10 bar max.**

CE 0062 ISO 9001 3.1 10 €/DN

### 479 - Cast iron

ZITKAMA

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    |
| code         | 479015 | 479020 | 479025 | 479032 | 479040 | 479050 | 479065 | 479080 | 479100 | 479125 | 479150 | 479200 |

STEAM



97/23/EC Directive N°0035 - Risk category III / module H - Flanged RF PN25/16 - EN 558 series 1 - GGG40 body - Stainless steel stem, globe & seat - Bolted bonnet & gland pack - Non rising stem - PS: 25 bar up to DN50, 16 bar above - TS: -10°C/+350°C - ⚠️ **Steam up to 10 bar max.**

CE 0035 ISO 9001 3.1 10 €/DN

### 476 - Ductile iron - With stainless steel bellow

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    |
| code         | 476015 | 476020 | 476025 | 476032 | 476040 | 476050 | 476065 | 476080 | 476100 | 476125 | 476150 | 476200 |

STEAM



## ■ Flanged RF PN40

97/23/EC Directive N°0035 - Risk category III / module H - Flanged RF PN40 - EN 558 series 1 - A216WCB body - Stainless steel stem, globe & seat - Bolted bonnet & gland pack - Non rising stem - PS: 40 bar - TS: -20°C/+400°C.

CE 0035 ISO 9001 3.1 10 €/DN

### 471 - Carbon steel

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    |
| code         | 471015 | 471020 | 471025 | 471032 | 471040 | 471050 | 471065 | 471080 | 471100 | 471125 | 471150 | 471200 |



### 475 - Carbon steel - With stainless steel bellow

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    |
| code         | 475015 | 475020 | 475025 | 475032 | 475040 | 475050 | 475065 | 475080 | 475100 | 475125 | 475150 | 475200 |

## ■ Accessories for steam globe valves

### MIRS - Globe valve insulation jacket

Pyrogel XT Aspen Aerogels® hydrophobic insulation - Fiber glass fabric with silicone cover - Fabrics sewing by Kevlar® and stainless steel wires - Braided fiber glass ropes - TS: up to 250°C.



| DN   | 15       | 20       | 25       | 32       | 40       | 50       | 65       | 80       | 100      | 125      | 150      |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| code | 181015SE | 181020SE | 181025SE | 181032SE | 181040SE | 181050SE | 181065SE | 181080SE | 181081SE | 181082SE | 181083SE |

## ■ Flanged



97/23/EC Directive N°0038 - Risk category III / module H - Flanged RF PN10 - EN 558 series 14 - GG25 body & gate - Brass seats - Non rising stem & handwheel - PS: 10 bar - TS: -10°C/+90°C.

⚠ **Leakage rate B according to EN 12266-1.** Please consult specific values on the datasheet.



### 150 - Cast iron

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 140    | 150    | 170    | 180    | 190    | 200    | 210    | 230    | 250    | 270    |
| code         | 150040 | 150050 | 150065 | 150080 | 150100 | 150125 | 150150 | 150200 | 150250 | 150300 |

2014/68/EU Directive N°0038 - Risk category III / module H - Flanged RF PN16 (PN10/16 for 158) - GGG50 body & gate - Rising stem - Non rising handwheel - PS: 10 bar for PN10 valves, 16 bar for PN16 valves.

⚠ **Leakage rate B according to EN 12266-1.** Please consult specific values on the datasheet.



### 156 - Ductile iron - Brass seats

EN 558 series 14 (DIN 3202 F4) - TS: -10°C/+120°C.

| DN           | 40       | 50       | 65     | 80     | 100      | 125      | 150      | 200    | 250      | 300      |
|--------------|----------|----------|--------|--------|----------|----------|----------|--------|----------|----------|
| face to face | 140      | 150      | 170    | 180    | 190      | 200      | 210      | 230    | 250      | 270      |
| code         | 156040SF | 156050SF | 156065 | 156080 | 156100SF | 156125SF | 156150SF | 156200 | 156250SF | 156300SF |



### 159 - Ductile iron - Stainless steel seats - DIN

EN 558 series 14 (DIN 3202 F4) - TS: -10°C/+180°C.

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 140    | 150    | 170    | 180    | 190    | 200    | 210    | 230    | 250    | 270    |
| code         | 159040 | 159050 | 159065 | 159080 | 159100 | 159125 | 159150 | 159200 | 159250 | 159300 |



### 158 - Ductile iron - Stainless steel seats - NF

EN 558 series 29 (NF 29323) - TS: -10°C/+180°C.

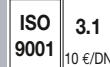
| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300      | 350    | 400    | 500    | 600    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|----------|--------|--------|--------|--------|
| face to face | 136    | 142    | 154    | 160    | 172    | 186    | 200    | 228    | 255    | 285      | 315    | 340    | 380    | 425    |
| PN10 code    | -      | -      | -      | -      | -      | -      | -      | 158201 | 158251 | 158301SF | 158351 | 158401 | 158501 | 158601 |
| PN16 code    | 158040 | 158050 | 158065 | 158080 | 158100 | 158125 | 158150 | 158200 | 158250 | 158300   | 158350 | 158400 | 158500 | 158600 |



# Check valves

Excluded from 2014/68/EU Directive (article 4, §3) - GG25 body & plate - Flanged RF PN16 - DIN 3202 F6 - PS: 16 bar -

⚠ **Not suitable for pulsatory pace - Max. speed 3m/sec.**



### 360 - Cast iron - Metal seat

TS: -10°C/+120°C.

### 362 - Cast iron - EPDM seat

TS: -10°C/+80°C.

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 180    | 200    | 240    | 260    | 300    | 350    | 400    | 500    |
| 360 code     | 360040 | 360050 | 360065 | 360080 | 360100 | 360125 | 360150 | 360200 |
| 362 code     | 362040 | 362050 | 362065 | 362080 | 362100 | 362125 | 362150 | 362200 |



Excluded from 2014/68/EU Directive (article 4, §3) - Between flanges PN16 - PS: 16 bar up to DN200, 10 bar above -  
 ⚠ **Not suitable for pulsatory pace - Max. speed 3m/sec.**

ISO 9001 3.1  
10 €/DN



### 364 - Carbon steel - EPDM gasket

TS: -10°C/+110°C.

### 351 - Carbon steel - NBR gasket

TS: -10°C/+80°C.

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    | 450    | 500    | 600    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 14     | 14     | 14     | 14     | 18     | 18     | 20     | 22     | 26     | 28     | 36     | 41     | 50     | 56     | 56     |
| 364 code     | 364040 | 364050 | 364065 | 364080 | 364100 | 364125 | 364150 | 364200 | 364250 | 364300 | 364350 | 364400 | 364450 | 364500 | 364600 |
| 351 code     | 351040 | 351050 | 351065 | 351080 | 351100 | 351125 | 351150 | 351200 | 351250 | 351300 | -      | -      | -      | -      | -      |

97/23/EC Directive N°0035 - Risk category III / module H - Lloyd's Register Type Approval for marine applications - Between flanges PN10/16 - GG25 body - PS: 16 bar up to DN300, 10 bar above - ⚠ **Not suitable for pulsatory pace.**

ISO 9001 3.1  
10 €/DN



### 370 - NBR gasket - GGG40 plates

TS: -10°C/+90°C.

### 371 - EPDM gasket - CF8M plates

TS: -10°C/+110°C.

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    | 450    | 500    | 600    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 43     | 54     | 54     | 57     | 64     | 70     | 76     | 95     | 108    | 143    | 184    | 191    | 203    | 213    | 222    |
| 370 code     | 370040 | 370050 | 370065 | 370080 | 370100 | 370125 | 370150 | 370200 | 370250 | 370300 | 370350 | 370400 | 370450 | 370500 | 370600 |
| 371 code     | -      | 371050 | 371065 | 371080 | 371100 | 371125 | 371150 | 371200 | 371250 | 371300 | 371350 | 371400 | 371450 | 371500 | 371600 |

# Y-strainers

Excluded from 2014/68/EU Directive (article 1, §2.b) - Flanged RF PN10/16 up to DN150, PN10 or PN16 above - EN 558 series 1 - GG25 body - Stainless steel screen - With draining cap - PS: 10 bar for PN10 strainers, 16 bar for PN16 strainers.

ISO 9001 3.1  
10 €/DN



### 220 - Cast iron

F304 screen - Grey epoxy paint - TS: -10°C/+120°C.

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| mesh (mm)    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,5    | 1,5    | 1,5    | 1,5    | 3      | 3      |
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    | 730    | 850    | 980    | 1100   |
| PN10 code    | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | 220201 | 220250 | 220300 | 220350 | 220400 |
| PN16 code    | 220015 | 220020 | 220025 | 220032 | 220040 | 220050 | 220065 | 220080 | 220100 | 220125 | 220150 | 220200 | 220251 | 220301 | -      | -      |

STEAM



97/23/EC Directive N°0062 - Risk category III / module H - Flanged PN16 - DIN 3202 F1 - GG25 body - F304 screen - With draining cap - PS: 16 bar - TS: -10°C/+300°C - ⚠ **Steam up to 10 bar max.**

ISO 9001 3.1  
10 €/DN

### 236 - Cast iron - High temperature

ZITKAMA

| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| mesh (mm)    | 1      | 1      | 1      | 1      | 1      | 1      | 1,25   | 1,25   | 1,6    | 1,6    | 1,6    | 1,6    |
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    |
| code         | 236015 | 236020 | 236025 | 236032 | 236040 | 236050 | 236065 | 236080 | 236100 | 236125 | 236150 | 236200 |

NEW



97/23/EC Directive N°0062 - Risk category III - Flanged RF PN16 - EN 558 series 1 - Carbon steel P265 GH body - F304 screen - PS: 16 bar - TS: -20°C/+400°C.

ISO 9001 3.1  
10 €/DN

### 861 - Carbon steel - Gas service

ZITKAMA

| DN           | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| mesh (mm)    | 1,5    | 1,5    | 1,5    | 1,5    | 1,5    | 1,5    | 1,5    |
| face to face | 230    | 290    | 310    | 350    | 400    | 480    | 600    |
| code         | 418307 | 418308 | 418309 | 418310 | 418311 | 418312 | 418313 |

## Rubber expansion joints

### ■ Threaded

Excluded from 2014/68/EU Directive (article 4, §3) - Lloyd's Register Type Approval for marine applications - Galvanized cast iron union fittings - Nylon reinforced liner - PS: 16 bar - TS: -10°C/+100°C.



#### 1504 - EPDM double wave



| Ø           | 1/2"    | 3/4"    | 1"      | 1 1/4"  | 1 1/2"  | 2"      | 2 1/2"  | 3"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 200     | 200     | 200     | 200     | 200     | 200     | 240     | 240     |
| code        | 1504004 | 1504005 | 1504006 | 1504007 | 1504008 | 1504009 | 1504010 | 1504011 |

### ■ Flanged

Excluded from 2014/68/EU Directive (article 4, §3) - Lloyd's Register Type Approval for marine applications - Swiveling flanges - Galvanized steel flanges - Nylon reinforced liner - PS: 16 bar for PN16 expansion joints, 10 bar for PN10 expansion joints - TS: -10°C/+100°C.



#### 1501 - EPDM - Flanged PN10/16 up to DN150, PN10 above

#### 1502 - EPDM - Flanged PN16



| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 95      | 95      | 105     | 115     | 130     | 135     | 170     | 180     | 205     | 240     | 260     | 266     | 266     | 200     | 200     | 250     |
| 1501 code   | 1501032 | 1501040 | 1501050 | 1501065 | 1501080 | 1501100 | 1501125 | 1501150 | 1501200 | 1501250 | 1501300 | 1501350 | 1501400 | 1501450 | 1501500 | 1501600 |
| 1502 code   | -       | -       | -       | -       | -       | -       | -       | -       | 1502200 | 1502250 | 1502300 | -       | -       | -       | -       | -       |

#### 1505 - EPDM - Flanged PN10/16 up to DN150, PN10 above

Length 130 mm.



| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     |
| code        | 1505032 | 1505040 | 1505050 | 1505065 | 1505080 | 1505100 | 1505125 | 1505150 | 1505200 | 1505250 | 1505300 |

Excluded from 2014/68/EU Directive (article 4, §3) - Lloyd's Register Type Approval for marine applications - Swiveling flanges - Galvanized steel flanges - Nylon reinforced liner - PS: 16 bar for PN16 expansion joints, 10 bar for PN10 expansion joints - TS: -10°C/+80°C.



#### 1503 - NBR - Flanged PN10/16 up to DN150, PN10 above



| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 95      | 95      | 105     | 115     | 130     | 135     | 170     | 180     | 205     |
| code        | 1503032 | 1503040 | 1503050 | 1503065 | 1503080 | 1503100 | 1503125 | 1503150 | 1503200 |

#### 1506 - NBR - Flanged PN10/16 up to DN150, PN10 above

Length 130 mm.



| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     |
| code        | 1506032 | 1506040 | 1506050 | 1506065 | 1506080 | 1506100 | 1506125 | 1506150 | 1506200 |

### ■ Flanged - Teguflex®



97/23/EC Directive N°0056 - Risk category III / module H - ABS, DNV or GL Type Approval for marine applications available depending on figure - Swiveling flanges - Dichromate zinc plated steel flanges (except 1560 & 1565: see description) - Integrated sealing surface with steel wire core - Synthetic fiber reinforcement - Standard length: 130 mm - Axial allowable movement: -30mm/+20mm - Lateral allowable movement: -/+20mm - PS: 16 bar up to DN50; 10 bar above.



#### 1562 - High temperature EPDM liner

EPDM external cover - TS: -35°C/+130°C.

Main applications: **Steam** / Steam and hot air up to 130°C, hot water, cooling/heating water.



| DN   | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 1562032 | 1562040 | 1562050 | 1562065 | 1562080 | 1562100 | 1562125 | 1562150 | 1562200 | 1562250 | 1562300 |

not on stock, on request. Approx. 3 weeks delivery time.

## ■ Steel expansion limiters - Flanged PN10 & PN16

### For 1501, 1502 & 1503

Supplied with 2 tie rods & 4 plates up to DN300 or 4 tie rods & 8 plates above.

⚠ Expansion joint & flanges not included.



| DN        | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN10 code | 9860407 | 9860408 | 9860409 | 9860410 | 9860411 | 9860412 | 9860413 | 9860414 | 9860415 | 9860416 | 9860417 | 9860418 | 9860419 | 9860420 | 9860421 | 9860422 |
| PN16 code | 9860407 | 9860408 | 9860409 | 9860410 | 9860411 | 9860412 | 9860413 | 9860414 | 9860315 | 9860316 | 9860317 | -       | -       | -       | -       | -       |

### For 1505, 1506 & 1562

Supplied with 2 tie rods & 4 plates.

⚠ Expansion joint & flanges not included.

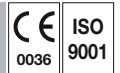


| DN        | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN10 code | 9860607 | 9860608 | 9860609 | 9860610 | 9860611 | 9860612 | 9860613 | 9860614 | 9860615 | 9860616 | 9860617 |

## Metal expansion joints



97/23/EC Directive N°0036 - Risk category II / module A1 - PS: 16 bar - TS: -20°C/+300°C.



### 1551 - Threaded - With external & internal liner

Aluminium external liner - Steel internal liner - Stainless steel 316 bellow.



| Ø           | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
|-------------|---------|---------|---------|---------|---------|---------|
| length (mm) | 255     | 240     | 265     | 300     | 300     | 300     |
| code        | 1551004 | 1551005 | 1551006 | 1551007 | 1551008 | 1551009 |

### 1511 - Welding

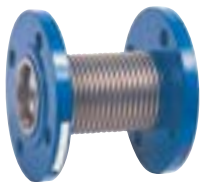
Steel welding ends - Stainless steel 321 bellow & internal liner.



| DN          | 25      | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 185     | 185     | 200     | 270     | 260     | 275     | 310     | 310     | 350     | 330     | 360     |
| code        | 1511025 | 1511032 | 1511040 | 1511050 | 1511065 | 1511080 | 1511100 | 1511125 | 1511150 | 1511200 | 1511250 |

### 1521 - Flanged RF PN16

Steel flanges - Stainless steel 321 bellow & internal liner.



| DN           | 25      | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| face to face | 105     | 105     | 120     | 150     | 140     | 155     | 220     | 190     | 270     | 275     | 285     |
| code         | 1521025 | 1521032 | 1521040 | 1521050 | 1521065 | 1521080 | 1521100 | 1521125 | 1521150 | 1521200 | 1521250 |

## Rubber-metal pipe connector



Excluded from 2014/68/EU Directive (article 4, §3) - Plain EPDM body - Steel insert flanges - Supplied with screws - PS: 10 bar - TS: -10°C/+100°C.



### 1509 - EPDM - Between flanges PN10



| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 71      | 71      | 71      | 71      | 71      | 71      | 71      | 71      | 71      |
| code        | 1509032 | 1509040 | 1509050 | 1509065 | 1509080 | 1509100 | 1509125 | 1509150 | 1509200 |

## Solenoid valves

97/23/EC Directive - Risk category I - 2006/95/EC Directive - CW617N brass body - Stainless steel inner parts - NBR membrane / EPDM KTW for ACS valves - Coil insulation class F - T30 connector (except ESM85) - Max. room temp.: +60°C (except VSO 84: +80°C) - PS: 10 bar - TS: +80°C (+90°C for ACS valves).



### ESM 85 - Servo-assisted

Normally closed (opening under tension) - T22 connector - Min. ΔP: 0,3 bar.

| Ø    | bore (mm) | Kv (m <sup>3</sup> /h) | 230V 50Hz | 24V 50Hz |
|------|-----------|------------------------|-----------|----------|
|      |           |                        | code      | code     |
| 3/8" | 10        | 1,86                   | 085001    | 085011   |
| 1/2" | 12        | 2,2                    | 085002    | 085012   |
| 3/4" | 20        | 5,7                    | 085003    | 085013   |
| 1"   | 25        | 9,6                    | 085004    | 085014   |

### ESM 86 - Servo-assisted

Normally closed (opening under tension) - Min. ΔP: 0,3 bar.

| Ø     | bore (mm) | Kv (m <sup>3</sup> /h) | 230V 50Hz | 24V 50Hz | 48V 50Hz | 12V DC | 24V DC | ACS certified |        |
|-------|-----------|------------------------|-----------|----------|----------|--------|--------|---------------|--------|
|       |           |                        | code      | code     | code     | code   | code   | code          | code   |
| 3/8"  | 10        | 1,86                   | 086001    | 086011   | 086031   | 086041 | 086051 | -             | -      |
| 1/2"  | 12        | 2,1                    | 086002    | 086012   | 086032   | 086042 | 086052 | 086502        | 086512 |
| 3/4"  | 20        | 5,7                    | 086003    | 086013   | 086033   | 086043 | 086053 | 086503        | 086513 |
| 1"    | 25        | 9,6                    | 086004    | 086014   | 086034   | 086044 | 086054 | 086504        | 086514 |
| 1"1/4 | 32        | 22                     | 086005    | 086015   | 086035   | 086045 | 086055 | -             | -      |
| 1"1/2 | 39        | 27                     | 086006    | 086016   | 086036   | 086046 | 086056 | -             | -      |
| 2"    | 51        | 35                     | 086007    | 086017   | 086037   | 086047 | 086057 | -             | -      |
| 2"1/2 | 65        | 63                     | 086008    | 086018   | 086038   | 086048 | 086058 | -             | -      |
| 3"    | 75        | 83                     | 086009    | 086019   | 086039   | 086049 | 086059 | -             | -      |



### ESM 87 - Servo-assisted

Normally open (closing under tension) - Min. ΔP: 0,3 bar.

| Ø     | bore (mm) | Kv (m <sup>3</sup> /h) | 230V 50Hz | 24V 50Hz | 48V 50Hz | 12V DC | 24V DC | ACS certified |        |
|-------|-----------|------------------------|-----------|----------|----------|--------|--------|---------------|--------|
|       |           |                        | code      | code     | code     | code   | code   | code          | code   |
| 3/8"  | 10        | 1,86                   | 087001    | 087011   | 087031   | 087041 | 087051 | -             | -      |
| 1/2"  | 12        | 2,1                    | 087002    | 087012   | 087032   | 087042 | 087052 | 087502        | 087512 |
| 3/4"  | 20        | 5,7                    | 087003    | 087013   | 087033   | 087043 | 087053 | 087503        | 087513 |
| 1"    | 25        | 9,6                    | 087004    | 087014   | 087034   | 087044 | 087054 | 087504        | 087514 |
| 1"1/4 | 32        | 22                     | 087005    | 087015   | 087035   | 087045 | 087055 | -             | -      |
| 1"1/2 | 39        | 27                     | 087006    | 087016   | 087036   | 087046 | 087056 | -             | -      |
| 2"    | 51        | 35                     | 087007    | 087017   | 087037   | 087047 | 087057 | -             | -      |
| 2"1/2 | 65        | 63                     | 087008    | 087018   | 087038   | 087048 | 087058 | -             | -      |
| 3"    | 75        | 83                     | 087009    | 087019   | 087039   | 087049 | 087059 | -             | -      |



### VSO 84 - Direct acting

Normally closed (opening under tension) - No ΔP required - Horizontal mounting, coil on the top.

| Ø     | bore (mm) | Kv (m <sup>3</sup> /h) | 230V 50Hz | 24V 50Hz | 48V 50Hz | 12V DC | 24V DC | ACS certified |        |
|-------|-----------|------------------------|-----------|----------|----------|--------|--------|---------------|--------|
|       |           |                        | code      | code     | code     | code   | code   | code          | code   |
| 3/8"  | 10        | 2,2                    | 084001    | 084011   | 084031   | 084041 | 084051 | -             | -      |
| 1/2"  | 12        | 2,2                    | 084002    | 084012   | 084032   | 084042 | 084052 | -             | -      |
| 3/4"  | 20        | 5,5                    | 084003    | 084013   | 084033   | 084043 | 084053 | 084503        | 084513 |
| 1"    | 25        | 7,5                    | 084004    | 084014   | 084034   | 084044 | 084054 | 084504        | 084514 |
| 1"1/4 | 32        | 17,5                   | 084005    | 084015   | 084035   | 084045 | 084055 | -             | -      |
| 1"1/2 | 39        | 19,0                   | 084006    | 084016   | 084036   | 084046 | 084056 | -             | -      |
| 2"    | 51        | 32,4                   | 084007    | 084017   | 084037   | 084047 | 084057 | -             | -      |

⚠ Please check max. ΔP on datasheet.



97/23/EC Directive - Risk category I - 2006/95/EC Directive - Nickel-plated CW617N brass body - Stainless steel inner parts - PTFE plug - Coil insulation class F - T30 connector - Max. room temp.: +60°C - PS: 10 bar with AC coils, 5 bar with DC coils - TS: +180°C.



### ESV 90 Servo-assisted

Normally closed (opening under tension) - Min. ΔP: 1 bar - Horizontal mounting, coil on the top above 1" - TS: +180°C.

| Ø     | bore (mm) | Kv (m <sup>3</sup> /h) | 230V 50Hz | 24V 50Hz | 48V 50Hz | 24V DC |
|-------|-----------|------------------------|-----------|----------|----------|--------|
|       |           |                        | code      | code     | code     | code   |
| 1/2"  | 8         | 1,1                    | 088002    | 088012   | 088032   | 088052 |
| 3/4"  | 21        | 6,3                    | 088003    | 088013   | 088033   | 088053 |
| 1"    | 21        | 6,3                    | 088004    | 088014   | 088034   | 088054 |
| 1"1/4 | 38        | 20,4                   | 088005    | 088015   | 088035   | 088055 |
| 1"1/2 | 38        | 20,4                   | 088006    | 088016   | 088036   | 088056 |
| 2"    | 50        | 34,8                   | 088007    | 088017   | 088037   | 088057 |

STEAM



COMPRESSED AIR



2006/95/EC Directive - CW617N brass body - Stainless steel inner parts - FKM membrane - Coil insulation class F - T30 connector - Max. room temp.: +60°C for 83-20; +80°C for EST93 - TS: +150°C -

IP 65 ISO 9001

### 83-20

Normally closed (opening under tension) - Min. ΔP: 0,1 bar - PS: 20 bar.

| Ø    | bore (mm) | Kv (m³/h) | 230V 50Hz |        | 24V 50Hz |        | 110V 50Hz |        | 48V 50Hz |      | 12V DC |  | 24V DC |  |
|------|-----------|-----------|-----------|--------|----------|--------|-----------|--------|----------|------|--------|--|--------|--|
|      |           |           | code      | code   | code     | code   | code      | code   | code     | code |        |  |        |  |
| 1/4" | 11        | 1,4       | 083000    | 083010 | 083020   | 083030 | 083040    | 083050 |          |      |        |  |        |  |
| 3/8" | 11        | 1,5       | 083001    | 083011 | 083021   | 083031 | 083041    | 083051 |          |      |        |  |        |  |
| 1/2" | 11        | 1,6       | 083002    | 083012 | 083022   | 083032 | 083042    | 083052 |          |      |        |  |        |  |

FUEL



### EST 93

Normally closed (opening under tension) - No ΔP required.

| Ø    | bore (mm) | Kv (m³/h) | PS (bar) | 230V 50Hz |        | 24V 50Hz |        | PS (bar) | 110V 50Hz |        | 48V 50Hz |      | 12V DC |      | 24V DC |  |
|------|-----------|-----------|----------|-----------|--------|----------|--------|----------|-----------|--------|----------|------|--------|------|--------|--|
|      |           |           |          | code      | code   | code     | code   |          | code      | code   | code     | code | code   | code |        |  |
| 1/4" | 3,5       | 0,27      | 15       | 088100    | 088110 | 7        | 088120 | 088130   | 088140    | 088150 |          |      |        |      |        |  |
| 3/8" | 3,5       | 0,30      | 15       | 088101    | 088111 | 7        | 088121 | 088131   | 088141    | 088151 |          |      |        |      |        |  |
| 1/2" | 5         | 0,48      | 5        | 088102    | 088112 | 3        | 088122 | 088132   | 088142    | 088152 |          |      |        |      |        |  |

## Accessories & spare parts for Ceme solenoid valves

### Electronic timer

Under tension timing control: 0,5-10 sec - Frequency control: 0,5-45 mn - Installation between coil & T30 connector - Not suitable for ESM 85 or NAMUR solenoid valves - Tensions: 24V to 230V AC/DC.



| type | power (W) | solenoid valves              | code   |
|------|-----------|------------------------------|--------|
| T U  | 12        | ESM, EST, ESV - VSO up to 1" | 980692 |
| T 60 | 60        | VSO 1"1/4 to 2"              | 980693 |

### Spare coils & connectors for CEME solenoid valves

| type | solenoid valve                                 | code   | 230V 50Hz |        | 24V 50Hz |        | 48V 50Hz |      | 110V 50Hz |      | 12V DC |      | 24V DC |   |
|------|--|--------|-----------|--------|----------|--------|----------|------|-----------|------|--------|------|--------|---|
|      |  |        | code      | code   | code     | code   | code     | code | code      | code | code   | code |        |   |
| B4   | ESM 85   | 980300 | 980301    | -      | -        | -      | -        | -    | -         | -    | -      | -    | -      | - |
| B6   | ESM 86 - EV 66 - EVB 82                        | 980310 | 980311    | 980313 | 980314   | 980315 | 980316   |      |           |      |        |      |        |   |
| B6S  | ESM 87   | 980330 | 980331    | 980333 | 980334   | 980335 | 980336   |      |           |      |        |      |        |   |
| B12  | VSO 84 (3/8" to 1")<br>ESV 90 - EST 93 - 83-20 | 980410 | 980411    | 980413 | 980414   | 980415 | 980416   |      |           |      |        |      |        |   |
| B60  | VSO 84 (1"1/4 to 2")                           | 980510 | 980511    | 980513 | 980514   | 980515 | 980516   |      |           |      |        |      |        |   |

### Spare connectors

| type | code   |
|------|--------|
| T 22 | 980232 |
| T 30 | 980696 |
| T 30 | 980696 |
| T 30 | 980696 |
| T 30 | 980696 |

### Spare membranes for ESM 86 & ESM 87

| Ø           | membrane (mm) | NBR / 80°C |      | EPDM / 110°C |      | ACS EPDM/ 90°C |      | FKM / 150°C |      |
|-------------|---------------|------------|------|--------------|------|----------------|------|-------------|------|
|             |               | code       | code | code         | code | code           | code | code        | code |
| 3/8" - 1/2" | 34            | 980604     |      | 980614       |      | 980661         |      | 980624      |      |
| 3/4"        | 50            | 980632     |      | 980642       |      | 980662         |      | 980652      |      |
| 1"          | 60            | 980605     |      | 980615       |      | 980663         |      | 980625      |      |
| 1"1/4       | 80            | 980634     |      | 980644       |      | -              |      | 980654      |      |
| 1"1/2       | 90            | 980606     |      | 980616       |      | -              |      | 980626      |      |
| 2"          | 112           | 980607     |      | 980617       |      | -              |      | 980627      |      |
| 2"1/2 - 3"  | 149           | 980608     |      | -            |      | -              |      | -           |      |

### Spare spring

| code   |
|--------|
| 980670 |
| 980671 |
| 980672 |
| 980673 |
| 980674 |
| 980675 |
| 980676 |

### Spare membranes for VSO 84

| Ø             | membrane (mm) | NBR / 80°C |      | EPDM / 110°C |      | ACS EPDM/ 90°C |      | FKM / 150°C |      |
|---------------|---------------|------------|------|--------------|------|----------------|------|-------------|------|
|               |               | code       | code | code         | code | code           | code | code        | code |
| 3/8" - 1/2"   | 33            | 980600     |      | 980610       |      | -              |      | 980620      |      |
| 3/4" - 1"     | 60            | 980601     |      | 980611       |      | 980660         |      | 980621      |      |
| 1"1/4 - 1"1/2 | 90            | 980602     |      | 980612       |      | -              |      | 980622      |      |
| 2"1/2 - 3"    | 110           | 980603     |      | 980613       |      | -              |      | 980623      |      |

### Spare spring

| code   |
|--------|
| 980677 |
| 980678 |
| 980679 |
| 980679 |

## Solenoid valves for fuel burners

2006/95/EC Directive - According to EN 264 - For fuel burners automatic shut off - Brass & stainless steel inner parts - NBR membrane - Normally closed (opening under tension) - Max. viscosity: 8°E - TS: -5°C/+60°C.

IP 65 ISO 9001

FUEL



### MN 28

Aluminium body - PS: 8 bar.

| Ø     | bore (mm) | 230V AC |        | 24V AC |      |
|-------|-----------|---------|--------|--------|------|
|       |           | code    | code   | code   | code |
| 3/4"  | 24        | 088203  | 088213 |        |      |
| 1"    | 24        | 088204  | 088214 |        |      |
| 1"1/4 | 32        | 088205  | 088215 |        |      |
| 1"1/2 | 37        | 088206  | 088216 |        |      |
| 2"    | 42        | 088207  | 088217 |        |      |

FUEL



### MN 15

Brass body - PS: 4 bar.

| Ø    | bore (mm) | 230V AC |        | 24V AC |      |
|------|-----------|---------|--------|--------|------|
|      |           | code    | code   | code   | code |
| 3/8" | 5,6       | 088190  | 088192 |        |      |
| 1/2" | 5,6       | 088191  | 088193 |        |      |



## Electric actuated valves

All our electric actuated ball valves are equipped with a 230V AC actuator as standard - Please consult for any other power supply - ⚠ **Max. ΔP: 10 bar.**



### 502 - Brass ball valve

Direct mounting - CW617N body & ball - PTFE seats - Stem tightness: NBR - Full bore - PS: 16 bar - TS: -10°C/+100°C.



| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/4"  | UM1.5    | 270090022000 |
| 3/8"  | UM1.5    | 270091022000 |
| 1/2"  | UM1.5    | 270002022000 |
| 3/4"  | UM1.5    | 270003022000 |
| 1"    | UM1.5    | 270004022000 |
| 1"1/4 | UMA3.5   | 270005022060 |
| 1"1/2 | UMA3.5   | 270006022060 |
| 2"    | UMA3.5   | 270007022060 |
| 2"1/2 | UMB7     | 270038022170 |
| 3"    | UMC10    | 270039022240 |
| 4"    | UMC15    | 270040022250 |



| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/4"  | SA03     | 270090023000 |
| 3/8"  | SA03     | 270091023000 |
| 1/2"  | SA03     | 270002023000 |
| 3/4"  | SA03     | 270003023000 |
| 1"    | SA03     | 270004023000 |
| 1"1/4 | SA05     | 270005023010 |
| 1"1/2 | SA05     | 270006023010 |
| 2"    | SA05     | 270007023010 |
| 2"1/2 | NA06     | 270038023110 |
| 3"    | NA06     | 270039023110 |
| 4"    | NA09     | 270040023120 |

### 500 HC - Brass ball valve

Direct mounting - CW617N body & ball - PTFE seats - Stem tightness: FKM - Full bore - PS: 16 bar - TS: -10°C/+150°C.



| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/2"  | UM1.5    | 270102022000 |
| 3/4"  | UM1.5    | 270103022000 |
| 1"    | UM1.5    | 270104022000 |
| 1"1/4 | UM1.5    | 270105022000 |
| 1"1/2 | UMA3.5   | 270106022060 |
| 2"    | UMA3.5   | 270107022060 |



| Ø     | actuator | code         |
|-------|----------|--------------|
| 1/2"  | SA03     | 270102023000 |
| 3/4"  | SA03     | 270103023000 |
| 1"    | SA03     | 270104023000 |
| 1"1/4 | SA03     | 270105023000 |
| 1"1/2 | SA03     | 270106023000 |
| 2"    | SA03     | 270107023000 |

### 513 L-port / 514-T port - 3 way brass ball valve

Direct mounting - CW617N body & ball - PTFE seats - Stem tightness: FKM - Reduced bore - PS: 16 bar - TS: -10°C/+100°C.

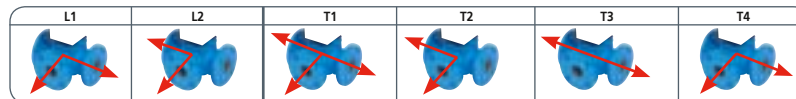


| Ø     | actuator | 513L code    |
|-------|----------|--------------|
| 1/4"  | UMA3.5   | 275010022060 |
| 3/8"  | UMA3.5   | 275011022060 |
| 1/2"  | UMA3.5   | 275012022060 |
| 3/4"  | UMA3.5   | 275013022060 |
| 1"    | UMA3.5   | 275014022060 |
| 1"1/4 | UMA3.5   | 275015022060 |
| 1"1/2 | UMA3.5   | 275016022060 |
| 2"    | UMA3.5   | 275017022060 |



| Ø     | actuator | 513L code    |
|-------|----------|--------------|
| 1/4"  | SA03     | 275010023000 |
| 3/8"  | SA03     | 275011023000 |
| 1/2"  | SA03     | 275012023000 |
| 3/4"  | SA03     | 275013023000 |
| 1"    | SA03     | 275014023000 |
| 1"1/4 | SA05     | 275015023010 |
| 1"1/2 | SA05     | 275016023010 |
| 2"    | SA05     | 275017023010 |

|               |          |
|---------------|----------|
| 513 L         | 514 T    |
| code 27501... | 27503... |



T-port: mention 2 consecutive positions (example: T3/T4).

### 507 - Cast iron flanged ball valve type

GG25 body - Stainless steel ball - PTFE seats - Stem tightness: PTFE - Full bore - Flanged RF PN10/16 - DIN 3202 F4/F5 - PS: 16 bar - TS: -10°C/+200°C - ⚠ **Not suitable for steam & compressed air.**

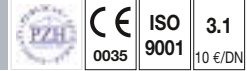


| DN  | actuator | code         |
|-----|----------|--------------|
| 15  | UMA3.5   | 270222022060 |
| 20  | UMA3.5   | 270223022060 |
| 25  | UMA3.5   | 270224022060 |
| 32  | UMA3.5   | 270225022060 |
| 40  | UMA3.5   | 270226022060 |
| 50  | UMB7     | 270227022170 |
| 65  | UMC10    | 270228022240 |
| 80  | UMC10    | 270229022240 |
| 100 | UVD25    | 270230022350 |
| 125 | UVD25    | 270231022350 |
| 150 | UVF50    | 270232022400 |
| 200 | UVG60    | 270233022450 |



| DN  | actuator | code         |
|-----|----------|--------------|
| 15  | SA05     | 270222023010 |
| 20  | SA05     | 270223023010 |
| 25  | SA05     | 270224023010 |
| 32  | SA05     | 270225023010 |
| 40  | SA05     | 270226023010 |
| 50  | NA06     | 270227023110 |
| 65  | NA09     | 270228023120 |
| 80  | NA15     | 270229023130 |
| 100 | NA28     | 270230023150 |
| 125 | NA28     | 270231023150 |
| 150 | NA38     | 270232023160 |
| 200 | NA60     | 270233023180 |

All our electric actuated ball valves are equipped with a 230V AC actuator as standard - Please consult for any other power supply - ⚠ **Max. ΔP: 10 bar.**



### 1125 - Cast iron butterfly valve

GG25 body - Nickel plated GGG40 disc - **EPDM seat** - Wafer type PN10/16 & ANSI 150 - PS: 16 bar up to DN300, 10 bar above - TS: -10°C/+110°C.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | UMA3.5   | 262003022060 |
| 50    | UMA3.5   | 262004022060 |
| 65    | UMA3.5   | 262005022060 |
| 80    | UMA3.5   | 262006022060 |
| 100   | UMB7     | 262007022170 |
| 125   | UMC10    | 262008022240 |
| 150   | UVC15    | 262009022330 |
| 200   | UVD25    | 262010022350 |
| 250   | UVF50    | 262011022400 |
| 300   | UVG60    | 262012022450 |



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 262003023010 |
| 50    | SA05     | 262004023010 |
| 65    | SA05     | 262005023010 |
| 80    | SA05     | 262006023010 |
| 100   | SA05     | 262007023010 |
| 125   | NA09     | 262008023120 |
| 150   | NA15     | 262009023130 |
| 200   | NA15     | 262010023130 |
| 250   | NA28     | 262011023150 |
| 300   | NA60     | 262012023180 |

Up to DN 600 on request.

### 1123 - Cast iron butterfly valve

GG25 body - CF8M disc - **EPDM seat** - Wafer type PN10/16 & ANSI 150 - PS: 16 bar - TS: -10°C/+110°C.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | UMA3.5   | 262103022060 |
| 50    | UMA3.5   | 262104022060 |
| 65    | UMA3.5   | 262105022060 |
| 80    | UMA3.5   | 262106022060 |
| 100   | UMB7     | 262107022170 |
| 125   | UMC10    | 262108022240 |
| 150   | UVC15    | 262109022330 |
| 200   | UVD25    | 262110022350 |
| 250   | UVF50    | 262111022400 |
| 300   | UVG60    | 262112022450 |



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 262103023010 |
| 50    | SA05     | 262104023010 |
| 65    | SA05     | 262105023010 |
| 80    | SA05     | 262106023010 |
| 100   | SA05     | 262107023010 |
| 125   | NA09     | 262108023120 |
| 150   | NA15     | 262109023130 |
| 200   | NA15     | 262110023130 |
| 250   | NA28     | 262111023150 |
| 300   | NA60     | 262112023180 |

Up to DN 500 on request.

### 1121 - Cast iron butterfly valve

GG25 body - CF8M disc - **NBR seat** - Wafer type PN10/16 & ANSI 150 - PS: 16 bar - TS: -10°C/+90°C.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | UMA3.5   | 262203022060 |
| 50    | UMA3.5   | 262204022060 |
| 65    | UMA3.5   | 262205022060 |
| 80    | UMA3.5   | 262206022060 |
| 100   | UMB7     | 262207022170 |
| 125   | UMC10    | 262208022240 |
| 150   | UVC15    | 262209022330 |
| 200   | UVD25    | 262210022350 |
| 250   | UVF50    | 262211022400 |
| 300   | UVG60    | 262212022450 |



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 262203023010 |
| 50    | SA05     | 262204023010 |
| 65    | SA05     | 262205023010 |
| 80    | SA05     | 262206023010 |
| 100   | SA05     | 262207023010 |
| 125   | NA09     | 262208023120 |
| 150   | NA15     | 262209023130 |
| 200   | NA15     | 262210023130 |
| 250   | NA28     | 262211023150 |
| 300   | NA60     | 262212023180 |

### 1135 - Cast iron butterfly valve

GG25 body - Nickel plated GGG40 disc - **EPDM seat** - Lug type PN10/16 up to DN150, PN10 above - PS: 16 bar, up to DN150, 10 bar above - TS: -10°C/+110°C.



| DN   | actuator | code         |
|------|----------|--------------|
| 50   | UMA3.5   | 262504022060 |
| 65   | UMA3.5   | 262505022060 |
| 80   | UMA3.5   | 262506022060 |
| 100  | UMB7     | 262507022170 |
| 125  | UMC10    | 262508022240 |
| 150  | UVC15    | 262509022330 |
| 200* | UVD25    | 262510022350 |
| 250* | UVF50    | 262511022400 |
| 300* | UVG60    | 262512022450 |



| DN   | actuator | code         |
|------|----------|--------------|
| 50   | SA05     | 262504023010 |
| 65   | SA05     | 262505023010 |
| 80   | SA05     | 262506023010 |
| 100  | SA05     | 262507023010 |
| 125  | NA09     | 262508023120 |
| 150  | NA15     | 262509023130 |
| 200* | NA15     | 262510023130 |
| 250* | NA28     | 262511023150 |
| 300* | NA60     | 262512023180 |

\* PN16 execution available, please consult.

\* PN16 execution available, please consult.

### 1133 - Cast iron butterfly valve

GG25 body - CF8M disc - **EPDM seat** - Lug type PN10/16 up to DN150, PN10 above - PS: 16 bar up to DN150, 10 bar above - TS: -10°C/+110°C.



| DN   | actuator | code         |
|------|----------|--------------|
| 50   | UMA3.5   | 262604022060 |
| 65   | UMA3.5   | 262605022060 |
| 80   | UMA3.5   | 262606022060 |
| 100  | UMC10    | 262607022240 |
| 125  | UMC10    | 262608022240 |
| 150  | UVC15    | 262609022330 |
| 200* | UVD25    | 262610022350 |
| 250* | UVF50    | 262611022400 |
| 300* | UVG60    | 262612022450 |



| DN   | actuator | code         |
|------|----------|--------------|
| 50   | SA05     | 262604023010 |
| 65   | SA05     | 262605023010 |
| 80   | SA05     | 262606023010 |
| 100  | SA05     | 262607023010 |
| 125  | NA09     | 262608023120 |
| 150  | NA15     | 262609023130 |
| 200* | NA15     | 262610023130 |
| 250* | NA28     | 262611023150 |
| 300* | NA60     | 262612023180 |

\* PN16 execution available, please consult.

\* PN16 execution available, please consult.

All our electric actuated ball valves are equipped with a 230V AC actuator as standard - Please consult for any other power supply - ⚠ Max. ΔP: 10 bar.

CE 0038 ISO 9001 3.1 10 €/DN



### 1150 - Ductile iron butterfly valve

GGG50 body - GGG50 disc (CF8M disc up to DN100) - EPDM seat - Wafer type PN10/16 & ANSI 150 up to DN400, PN10 above - PS: 16 bar up to DN300, 10 bar above - TS: -10°C/+90°C - ⚠ 230V actuator up to DN350, 3-400V above.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | UMA3.5   | 260303022060 |
| 50    | UMA3.5   | 260304022060 |
| 65    | UMA3.5   | 260305022060 |
| 80    | UMA3.5   | 260306022060 |
| 100   | UMB7     | 260307022170 |
| 125   | UMC10    | 260308022240 |
| 150   | UVC15    | 260309022330 |
| 200   | UVC15    | 260310022330 |
| 250   | UVD25    | 260311022350 |
| 300   | UVF50    | 260312022400 |
| 350   | UVG60    | 260313022450 |



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 260303023010 |
| 50    | SA05     | 260304023010 |
| 65    | SA05     | 260305023010 |
| 80    | SA05     | 260306023010 |
| 100   | SA05     | 260307023010 |
| 125   | NA09     | 260308023120 |
| 150   | NA15     | 260309023130 |
| 200   | NA15     | 260310023130 |
| 250   | NA28     | 260311023150 |
| 300   | NA38     | 260312023160 |
| 350   | NA60     | 260313023180 |
| 400   | NA100    | 260314023203 |
| 450   | NA200    | 260315023223 |
| 500   | NA250    | 260316023233 |



### 1153 - Ductile iron butterfly valve

GGG50 body - CF8M disc - EPDM seat - Wafer type PN10/16 & ANSI 150 - PS: 16 bar up to DN300, 10 bar above - TS: -10°C/+90°C.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | UMA3.5   | 260363022060 |
| 50    | UMA3.5   | 260364022060 |
| 65    | UMA3.5   | 260365022060 |
| 80    | UMA3.5   | 260366022060 |
| 100   | UMB7     | 260367022170 |
| 125   | UMC10    | 260368022240 |
| 150   | UVC15    | 260369022330 |
| 200   | UVC15    | 260370022330 |
| 250   | UVD25    | 260371022350 |
| 300   | UVF50    | 260372022400 |
| 350   | UVG60    | 260373022450 |



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 260363023010 |
| 50    | SA05     | 260364023010 |
| 65    | SA05     | 260365023010 |
| 80    | SA05     | 260366023010 |
| 100   | SA05     | 260367023010 |
| 125   | NA09     | 260368023120 |
| 150   | NA15     | 260369023130 |
| 200   | NA15     | 260370023130 |
| 250   | NA28     | 260371023150 |
| 300   | NA38     | 260372023160 |
| 350   | NA60     | 260373023180 |

### 1152 - Ductile iron butterfly valve

GGG50 body - GGG50 disc (CF8M disc up to DN100) - NBR seat - Wafer type PN10/16 & ANSI 150 - PS: 16 bar up to DN300, 10 bar above - TS: -10°C/+80°C.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | UMA3.5   | 260333022060 |
| 50    | UMA3.5   | 260334022060 |
| 65    | UMA3.5   | 260335022060 |
| 80    | UMA3.5   | 260336022060 |
| 100   | UMB7     | 260337022170 |
| 125   | UMC10    | 260338022240 |
| 150   | UVC15    | 260339022330 |
| 200   | UVC15    | 260340022330 |
| 250   | UVD25    | 260341022350 |
| 300   | UVF50    | 260342022400 |
| 350   | UVG60    | 260343022450 |



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 260333023010 |
| 50    | SA05     | 260334023010 |
| 65    | SA05     | 260335023010 |
| 80    | SA05     | 260336023010 |
| 100   | SA05     | 260337023010 |
| 125   | NA09     | 260338023120 |
| 150   | NA15     | 260339023130 |
| 200   | NA15     | 260340023130 |
| 250   | NA28     | 260341023150 |
| 300   | NA38     | 260342023160 |
| 350   | NA60     | 260343023180 |
| 400   | NA100    | 260344023200 |

### 1151 - Ductile iron butterfly valve

GGG50 body - CF8M disc - NBR seat - Wafer type PN10/16 & ANSI - PS: 16 bar up to DN300, 10 bar above - TS: -10°C/+80°C.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | UMA3.5   | 260440022060 |
| 50    | UMA3.5   | 260441022060 |
| 65    | UMA3.5   | 260442022060 |
| 80    | UMA3.5   | 260443022060 |
| 100   | UMB7     | 260444022170 |
| 125   | UMC10    | 260445022240 |
| 150   | UVC15    | 260446022330 |
| 200   | UVC15    | 260447022330 |
| 250   | UVD25    | 260448022350 |
| 300   | UVF50    | 260449022400 |



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 260440023010 |
| 50    | SA05     | 260441023010 |
| 65    | SA05     | 260442023010 |
| 80    | SA05     | 260443023010 |
| 100   | SA05     | 260444023010 |
| 125   | NA09     | 260445023120 |
| 150   | NA15     | 260446023130 |
| 200   | NA15     | 260447023130 |
| 250   | NA28     | 260448023150 |
| 300   | NA38     | 260449023160 |

All our electric actuated ball valves are equipped with a 230V AC actuator as standard - Please consult for any other power supply - ⚠️ **Max. ΔP: 10 bar.**

CE 0038 ISO 9001 3.1 10 €/DN

### 1141 - Ductile iron butterfly valve for "gas"

GGG50 body - GGG50 disc (CF8M disc up to DN100) - **NBR seat** - Wafer type PN10/16 ANSI 150 - PS: 16 bar - TS: -10°C/+60°C - MOP5 class - Certificate NF ROB GAZ 064-R3 up to 5 bar.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 260593023010 |
| 50    | SA05     | 260594023010 |
| 65    | SA05     | 260595023010 |
| 80    | SA05     | 260596023010 |
| 100   | SA05     | 260597023010 |
| 125   | NA09     | 260598023120 |
| 150   | NA15     | 260599023130 |
| 200   | NA15     | 260600023130 |



| DN    | actuator | ATEX code    |
|-------|----------|--------------|
| 32-40 | SA05-X   | 260593023310 |
| 50    | SA05-X   | 260594023310 |
| 65    | SA05-X   | 260595023310 |
| 80    | SA05-X   | 260596023310 |
| 100   | SA05-X   | 260597023310 |
| 125   | NA09-X   | 260598023330 |
| 150   | NA15-X   | 260599023340 |
| 200   | NA15-X   | 260600023340 |

### 1160 - Ductile iron butterfly valve

GGG50 body - GGG50 disc (CF8M disc up to DN100) - **EPDM seat** - Lug type PN10/16 up to DN150, PN10 above - PS: 16 bar up to DN150, 10 bar above - TS: -10°C/+90°C.



| DN   | actuator | code         |
|------|----------|--------------|
| 40   | UMA3.5   | 261303022060 |
| 50   | UMA3.5   | 261304022060 |
| 65   | UMA3.5   | 261305022060 |
| 80   | UMA3.5   | 261306022060 |
| 100  | UMC10    | 261307022240 |
| 125  | UMC10    | 261308022240 |
| 150  | UVC15    | 261309022330 |
| 200* | UVC15    | 261310022330 |
| 250* | UVD25    | 261311022350 |
| 300* | UVF50    | 261312022400 |



| DN   | actuator | code         |
|------|----------|--------------|
| 40   | SA05     | 261303023010 |
| 50   | SA05     | 261304023010 |
| 65   | SA05     | 261305023010 |
| 80   | SA05     | 261306023010 |
| 100  | SA05     | 261307023010 |
| 125  | NA09     | 261308023120 |
| 150  | NA15     | 261309023130 |
| 200* | NA15     | 261310023130 |
| 250* | NA28     | 261311023150 |
| 300* | NA38     | 261312023160 |

\* PN16 execution available, please consult.

\* PN16 execution available, please consult.

### 1163 - Ductile iron butterfly valve

GGG50 body - CF8M disc - **EPDM seat** - Lug type PN10/16 up to DN150, PN10 above - PS: 16 bar up to DN150, 10 bar above - TS: -10°C/+90°C.



| DN   | actuator | code         |
|------|----------|--------------|
| 40   | UMA3.5   | 261393022060 |
| 50   | UMA3.5   | 261394022060 |
| 65   | UMA3.5   | 261395022060 |
| 80   | UMA3.5   | 261396022060 |
| 100  | UMC10    | 261397022240 |
| 125  | UMC10    | 261398022240 |
| 150  | UVC15    | 261399022330 |
| 200* | UVC15    | 261400022330 |
| 250* | UVD25    | 261401022350 |
| 300* | UVF50    | 261402022400 |



| DN   | actuator | code         |
|------|----------|--------------|
| 40   | SA05     | 261393023010 |
| 50   | SA05     | 261394023010 |
| 65   | SA05     | 261395023010 |
| 80   | SA05     | 261396023010 |
| 100  | SA05     | 261397023010 |
| 125  | NA09     | 261398023120 |
| 150  | NA15     | 261399023130 |
| 200* | NA15     | 261400023130 |
| 250* | NA28     | 261401023150 |
| 300* | NA38     | 261402023160 |

\* PN16 execution available, please consult.

\* PN16 execution available, please consult.

### 1181 - Ductile iron butterfly valve for "gas"

GGG50 body - GGG50 disc (CF8M disc up to DN100) - **NBR seat** - Lug type PN10/16 up to DN150, PN10 above - PS: 16 bar - TS: -10°C/+60°C - MOP5 class - Certificate NF ROB GAZ 064-R3 up to 5 bar.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 261593023010 |
| 50    | SA05     | 261594023010 |
| 65    | SA05     | 261595023010 |
| 80    | SA05     | 261596023010 |
| 100   | SA05     | 261597023010 |
| 125   | NA09     | 261598023120 |
| 150   | NA15     | 261599023130 |
| 200   | NA15     | 261600023130 |

## Electric quarter-turn actuators - IP65

**Specifications:** Compact type - 90° operating angle - ISO 5211 pad, star connection - Plastic enclosure - Steel reducing box - Room temp.: -10°C/+60°C - S4 duty service: 30% of time / 10 starts/hour.

**Standard equipment:** 2 adjustable limit switches + 2 auxiliary limit switches - Thermal protection - Position indicator - Gland packing electrical connection.



### UM 1.5 - Electric actuator - 15 Nm

3 m cable.

| type  | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO 5211 | ISO 5211 symbol | 230V AC code | 24V AC code |
|-------|-------------|------------------------|----------------------|----------|-----------------|--------------|-------------|
| UM1.5 | 15          | 28                     | 4                    | F03/F05  | 14              | 022000       | 022001      |



### UMA 3.5 - Electric actuator - 35 Nm

Declutchable manual override by key (not supplied), except UMA3.5-L.

| type                                   | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO 5211 | ISO 5211 symbol | voltage                   | code   |
|--|-------------|------------------------|----------------------|----------|-----------------|---------------------------|--------|
| UMA3.5                                 | 35          | 10                     | 10                   | F03/F05  | 14              | 230V AC                   | 022060 |
| UMA3.5*                                | 35          | 16                     | 3                    | F03/F05  | 14              | 100-230V AC - 100-350V DC | 022062 |
| UMA3.5                                 | 35          | 15                     | 10                   | F03/F05  | 14              | 24V AC/DC                 | 022064 |
| UMA3.5*                                | 35          | 16                     | 3                    | F03/F05  | 14              | 15-30V AC - 12-48V DC     | 022065 |
| special executions: slow/quick closing |             |                        |                      |          |                 |                           |        |
| UMA3.5-L                               | 35          | 40                     | 10                   | F03/F05  | 14              | 230V AC                   | 022080 |
| UFAST2.0                               | 20          | 1,2                    | 18                   | F03/F05  | 14              | 230V AC                   | 022090 |

\*Suitable for parallel circuit mounting.

### UMB 7 - Electric actuator - 70 Nm

Declutchable manual override by key (not supplied), except UMA 3,5 L.

| type  | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO 5211 | ISO 5211 symbol | voltage                   | code   |
|-------|-------------|------------------------|----------------------|----------|-----------------|---------------------------|--------|
| UMB7  | 70          | 10                     | 18                   | F05/F07  | 14              | 230V AC                   | 022170 |
| UMB7* | 70          | 18                     | 3                    | F03/F05  | 14              | 100-230V AC - 100-350V DC | 022172 |
| UMB7* | 70          | 19                     | 3                    | F05/F07  | 14              | 24V AC - 12-48V DC        | 022171 |
| UMB7* | 70          | 18                     | 3                    | F03/F05  | 14              | 15-30V AC - 12-48V DC     | 022175 |

\*Suitable for parallel circuit mounting.

### UMC - Electric actuator - 100 & 150 Nm

Manual override by key (not supplied), except UMC15-L.

| type                                   | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO 5211 | ISO 5211 symbol | 230V AC code | 24V AC code | 24V DC code |
|--|-------------|------------------------|----------------------|----------|-----------------|--------------|-------------|-------------|
| UMC10                                  | 100         | 8                      | 25                   | F07      | 17              | 022240       | -           | -           |
| UMC15                                  | 150         | 8                      | 25                   | F07      | 17              | 022250       | 022251      | 022253      |
| special executions: slow/quick closing |             |                        |                      |          |                 |              |             |             |
| UMC15-L                                | 150         | 45                     | 25                   | F07      | 17              | 022280       | -           | -           |
| UFAST4.0                               | 40          | 1                      | 40                   | F07      | 17              | 022290       | -           | -           |

### UV - Electric actuator - 150 to 600 Nm

Manual override by handwheel.

| type  | torque (Nm) | operating time 90° (s) | electrical power (W) | ISO 5211 | ISO 5211 symbol | 230V AC code | 24V AC code | 24V DC code |
|-------|-------------|------------------------|----------------------|----------|-----------------|--------------|-------------|-------------|
| UVC15 | 150         | 8                      | 25                   | F07      | 17              | 022330       | 022331      | -           |
| UVD25 | 250         | 20                     | 25                   | F07/F10  | 22              | 022350       | 022351      | 022353      |
| UVF50 | 490         | 30                     | 40                   | F10/F12  | 27              | 022400       | -           | -           |
| UVG60 | 600         | 30                     | 60                   | F10/F12  | 27              | 022450       | -           | -           |

**Spare resistance heater** (mounted when ordered along with the actuator or the actuated valve)

| voltage   | code   |
|-----------|--------|
| 230V AC   | 121115 |
| 24V AC/DC | 121116 |

### INV - Reverse box

For UM, UV, SA or NA actuator operation - 3 positions switch - Switch-off 240V-3A - IP66.

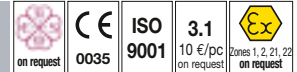
| code    |
|---------|
| 043800N |

IP 66



## ■ Threaded

97/23/EC Directive N°0035 - Risk category IV / module H1 - Testing device - D type: all common fluids / F type: compressed air / G type: gas & liquids - Min. setting pressure: 0,3 bar - Standard settings 0,5 to 12 bar (every 0,5 bar): on stock - Mandatory certificate 5 €/pc included in price.



⚠ For settings above 12 bar please consult for price & delivery time.

### 2800 - Brass - Free outlet **(BSP)**

CW614N body (stainless steel on request) - FKM seat - TS: -20°C/+200°C.

COMPRESSED AIR



| inlet Ø | ref. | max. setting pressure (bar) | code  |
|---------|------|-----------------------------|-------|
| 1/4"    | D7   | 60                          | 28000 |
| 3/8"    | D10  | 60                          | 28001 |
| 1/2"    | D10  | 60                          | 28002 |
| 3/4"    | D14  | 30                          | 28003 |
| 1"      | F18  | 21                          | 28004 |
| 1"1/4   | F25  | 30                          | 28005 |
| 1"1/2   | F32  | 14                          | 28006 |
| 2"      | F40  | 30                          | 28007 |

### 2871 - Brass - Pipe outlet **(BSP)**

CW614N body - FKM seat - TS: -20°C/+200°C.

LIQUIDS



| inlet Ø | outlet Ø | ref.  | max. setting pressure (bar) | code  |
|---------|----------|-------|-----------------------------|-------|
| 1/4"    | 1/2"     | D7/C  | 60                          | 28710 |
| 3/8"    | 3/4"     | D10/C | 60                          | 28711 |
| 1/2"    | 3/4"     | D10/C | 60                          | 28712 |
| 3/4"    | 1"       | G14   | 60                          | 28713 |
| 1"      | 1"       | G14   | 60                          | 28714 |
| 1"1/4   | 1"1/4    | G20   | 60                          | 28715 |
| 1"1/2   | 1"1/2    | G25   | 60                          | 28716 |
| 2"      | 1"1/2    | G32   | 14                          | 28717 |

### 2851 / 2858 - Brass - Pipe outlet & lever **(BSP)**

CW614N body (stainless steel on request) - Standard settings 0,5 to 15 bar (every 0,5 bar): on stock.

STEAM



| inlet Ø | outlet Ø | ref.  | max. setting pressure (bar) | up to 6 bar |       |
|---------|----------|-------|-----------------------------|-------------|-------|
|         |          |       |                             | code        | code  |
| 1/2"    | 1"       | G10/L | 30                          | 28512       | 28582 |
| 3/4"    | 1"       | G14/L | 60                          | 28513       | 28583 |
| 1"      | 1"1/4    | G20/L | 60                          | 28514       | 28584 |
| 1"1/4   | 1"1/4    | G20/L | 60                          | 28515       | 28585 |
| 1"1/2   | 1"1/2    | G25/L | 60                          | 28516       | 28586 |
| 2"      | 2"       | G40/L | 14                          | 28517       | 28587 |

FKM + PTFE seat 165°C saturated steam      KALREZ seat 200°C saturated steam

### 2885 - Stainless steel - Pipe outlet **(BSP)**

F316 body - PTFE seat (other seats on request) - TS: -196°C/+250°C.

PROCESS

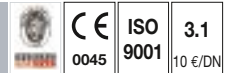


| inlet Ø | outlet Ø | ref.  | max. setting pressure (bar) | code  |
|---------|----------|-------|-----------------------------|-------|
| 3/8"    | 3/4"     | D10/C | 60                          | 28851 |
| 1/2"    | 3/4"     | D10/C | 60                          | 28852 |
| 3/4"    | 1"       | G14   | 30                          | 28853 |
| 1"      | 1"       | G14   | 60                          | 28854 |
| 1"1/4   | 1"1/4    | G20   | 60                          | 28855 |
| 1"1/2   | 1"1/2    | G25   | 60                          | 28856 |
| 2"      | 1"1/2    | G32   | 14                          | 28857 |

not on stock, on request.

## ■ Flanged

97/23/EC Directive - Risk category IV / module B+D - Bureau Veritas marine & offshore approval - Full lift - Stainless steel trim - Hardened seat & superfinished disc - Closed bonnet - Watertight cap - Testing lever - For steam, gas & liquids - Min. setting pressure: 0,5 bar - Mandatory certificate 14 €/pc included in price. ⚠ Additional delivery time for setting.



### 6301 - Cast iron - Flanged PN16

TÜV SV 96.894 approval - Flange connections: inlet RF PN16 / outlet RF PN10/16 - GG25 body - TS: -10°C/+200°C.



| inlet DN | outlet DN | max. setting pressure (bar) | code   |
|----------|-----------|-----------------------------|--------|
| 20       | 32        | 16                          | 250120 |
| 25       | 40        | 16                          | 250125 |
| 32       | 50        | 16                          | 250132 |
| 40       | 65        | 16                          | 250140 |
| 50       | 80        | 16                          | 250150 |
| 65*      | 100       | 16                          | 250165 |
| 80       | 125       | 16                          | 250180 |
| 100      | 150       | 16                          | 250190 |
| 125      | 200       | 12,5                        | 250191 |
| 150      | 250       | 10                          | 250192 |

\* 4 hole flanges.

### 6301 S - Ductile iron - Flanged PN40

UDT certification - Flange connections: inlet RF PN40 / outlet PN10/16 - GGG40 body - TS: -10°C/+350°C.



| inlet DN | outlet DN | max. setting pressure (bar) | code   |
|----------|-----------|-----------------------------|--------|
| 20       | 32        | 40                          | 250220 |
| 25       | 40        | 40                          | 250225 |
| 32       | 50        | 40                          | 250232 |
| 40       | 65        | 32                          | 250240 |
| 50       | 80        | 32                          | 250250 |
| 65       | 100       | 32                          | 250265 |
| 80       | 125       | 25                          | 250280 |
| 100      | 150       | 20                          | 250290 |

### 6301 W - Cast iron - Flanged PN16

Same as 6301, except: EPDM tightness & TS: -10°C/+120°C.

WATER



| inlet DN | outlet DN | max. setting pressure (bar) | code   |
|----------|-----------|-----------------------------|--------|
| 20       | 32        | 10                          | 250420 |
| 25       | 40        | 10                          | 250425 |
| 32       | 50        | 10                          | 250432 |
| 40       | 65        | 10                          | 250440 |
| 50       | 80        | 10                          | 250450 |
| 65       | 100       | 10                          | 250465 |
| 80       | 125       | 10                          | 250480 |
| 100      | 150       | 10                          | 250490 |
| 125      | 200       | 10                          | 250491 |
| 150      | 250       | 10                          | 250492 |

### 6302 - Carbon steel - Flanged PN40

TÜV SV 96.894 approval - Flange connections: inlet RF PN40 / outlet PN10/16 - 1.0619 carbon steel body - TS: -10°C/+300°C.



| inlet DN | outlet DN | max. setting pressure (bar) | code   |
|----------|-----------|-----------------------------|--------|
| 20       | 32        | 40                          | 250520 |
| 25       | 40        | 40                          | 250525 |
| 32       | 50        | 40                          | 250532 |
| 40       | 65        | 32                          | 250540 |
| 50       | 80        | 32                          | 250550 |
| 65       | 100       | 32                          | 250565 |
| 80       | 125       | 25                          | 250580 |
| 100      | 150       | 20                          | 250590 |
| 125      | 200       | 12,5                        | 250591 |
| 150      | 250       | 10                          | 250592 |

not on stock, on request.

Products excluded from 97/23/EC Directive risk category IV (not a safety device) - Pre-set pressure: 10 €/pc - Proportional opening - Adjustable pressure setting - Tight setting screw - PS: 20 bar.



### 617 N - Bronze - NBR seat

CC499K body - TS: -30°C/+130°C.



| inlet Ø | Upstream pressure |            |
|---------|-------------------|------------|
|         | 0,5 - 2,5 bar     | 2 - 12 bar |
|         | code              | code       |
| 3/8"    | 289201            | 289211     |
| 1/2"    | 289202            | 289212     |
| 3/4"    | 289203            | 289213     |
| 1"      | 289204            | 289214     |
| 1"1/4   | 289205            | 289215     |
| 1"1/2   | 289206            | 289216     |
| 2"      | 289207            | 289217     |

### 617 P - Bronze - PTFE seat

CC499K body - TS: -60°C/+225°C.

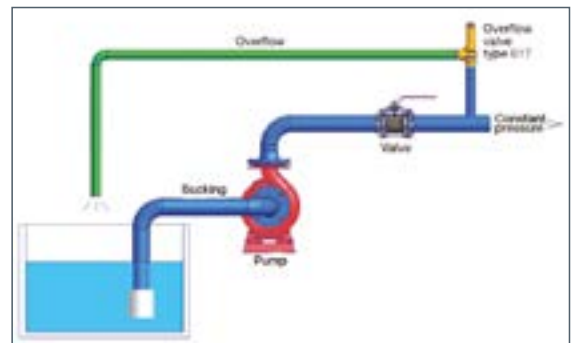
| inlet Ø | Upstream pressure |            |             |
|---------|-------------------|------------|-------------|
|         | 0,5 - 2,5 bar     | 2 - 12 bar | 12 - 20 bar |
|         | code              | code       | code        |
| 3/8"    | 289251            | 289261     | 289271      |
| 1/2"    | 289252            | 289262     | 289272      |
| 3/4"    | 289253            | 289263     | 289273      |
| 1"      | 289254            | 289264     | 289274      |
| 1"1/4   | 289255            | 289265     | 289275      |
| 1"1/2   | 289256            | 289266     | 289276      |
| 2"      | 289257            | 289267     | 289277      |

### 417 F - Stainless steel - FKM seat

CF8M body (PTFE seat on request) - TS: -20°C/+200°C.



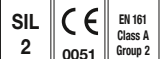
| Ø     | Upstream pressure |            |
|-------|-------------------|------------|
|       | 0,5 - 2,5 bar     | 2 - 12 bar |
|       | code              | code       |
| 3/8"  | 289301            | 289311     |
| 1/2"  | 289302            | 289312     |
| 3/4"  | 289303            | 289313     |
| 1"    | 289304            | 289314     |
| 1"1/4 | 289305            | 289315     |
| 1"1/2 | 289306            | 289316     |
| 2"    | 289307            | 289317     |



# Gas equipment

## Automatic solenoid valves

Excluded from 97/23/EC Directive (art. 1,§1) - For natural gas & lpg - Normally closed - Aluminium body - Closing time < 1 s - IP65 coil - PS: 360 mbar - TS: -20°C/+60°C.



### EVP - 360 mbar

Built-in filter cartridge 50 µm for DN65 to 100.

| DN              | face to face (mm) | 230V AC  |         | 24V AC   |         |
|-----------------|-------------------|----------|---------|----------|---------|
|                 |                   | power VA | code    | power VA | code    |
|                 |                   |          |         |          |         |
| 1/2"            | 70                | 30/9     | 092402M | 27/7     | 092412M |
| 3/4"            | 70                | 30/9     | 092403M | 27/7     | 092413M |
| 1"              | 70                | 55/16    | 092404B | 45/11    | 092414B |
| 1"1/4           | 160               | 55/16    | 092405B | 47/13    | 092415B |
| 1"1/2           | 160               | 55/16    | 092406B | 47/13    | 092416B |
| 2"              | 160               | 55/16    | 092407B | 47/13    | 092417B |
| Flanged RF PN16 |                   |          |         |          |         |
| 50              | 230               | 55/16    | 092302M | 47/13    | 092312M |
| 65*             | 290               | 290/75   | 092303M | 185/50   | 092313M |
| 80              | 310               | 290/75   | 092304M | 185/50   | 092314M |
| 100             | 350               | 270/70   | 092305M | 130/40   | 092315M |

\* 4 hole flanges.

### EVPT - 360 mbar - Slow opening

Adjustable opening time: 0,5 to 30 s.

| DN   | face to face (mm) | 230V AC  |         |
|------|-------------------|----------|---------|
|      |                   | power VA | code    |
|      |                   |          |         |
| 1/2" | 70                | 54/18    | 092602M |
| 3/4" | 70                | 54/18    | 092603M |
| 1"   | 70                | 54/18    | 092604B |

### Spare cartridges for flanged EVP solenoid valves

| DN    | code    |
|-------|---------|
| 65-80 | 980918M |
| 100   | 980919M |

### Spare connectors for EVP solenoid valves

| power   | code    |           |
|---------|---------|-----------|
|         | 1/2"-1" | 1"1/4-100 |
| 230V AC | 980992  | 980911    |
| 24V AC  | 980997  | 980994    |
| 24/12V  | 980996  | 980998    |

### Spare coils for EVP solenoid valves

| DN        | 230V AC code | 24V AC code | 24V DC code |
|-----------|--------------|-------------|-------------|
| 1/2"-3/4" | 980967M      | 980968M     | 980970M     |
| 1"        | 980947M      | 980952M     | 980866M     |
| 1"1/4-2"  | 980948M      | 980953M     | 980963M     |
| 65-80     | 980949M      | 980954M     | 980964M     |
| 100       | 980950M      | 980955M     | 980965M     |

97/23/EC Directive N°0051 - 2009/142/EC - For methane, natural gas, lpg - Aluminium body - Closing time < 1 s - IP65 coil - PS: 6 bar - TS: -20°C/+60°C.

SIL 2 CE 0051 EN 151 Class A Group 2

### EV-6 - 6 bar

Normally closed.



| DN              | face to face (mm) | 230V AC  |         |
|-----------------|-------------------|----------|---------|
|                 |                   | power VA | code    |
| (BSP)           |                   |          |         |
| 1/2"            | 70                | 30/9     | 092502M |
| 3/4"            | 70                | 30/9     | 092503M |
| 1"              | 70                | 30/9     | 092504M |
| 1"1/4           | 160               | 55/15    | 092505M |
| 1"1/2           | 160               | 55/15    | 092506M |
| 2"              | 160               | 55/15    | 092507M |
| Flanged RF PN16 |                   |          |         |
| 65*             | 290               | 105/29   | 092508M |
| 80              | 310               | 105/29   | 092509M |
| 100             | 350               | 124/36   | 092510M |

\* 4 hole flanges.

### EVA-6 - 6 bar

Normally open.



| Ø     | face to face (mm) | 230V AC | 24V AC | 24V DC |
|-------|-------------------|---------|--------|--------|
|       |                   | code    | code   | code   |
| (BSP) |                   |         |        |        |
| 1/2"  | 70                | 092652  | 092662 | 092672 |
| 3/4"  | 70                | 092653  | 092663 | 092673 |
| 1"    | 70                | 092654  | 092664 | 092674 |
| 1"1/4 | 160               | 092655  | 092665 | 092675 |
| 1"1/2 | 160               | 092656  | 092666 | 092676 |
| 2"    | 160               | 092657  | 092667 | 092677 |

## Solenoid valves with manual resetting

97/23/EC Directive N°0497 - Risk category II / module D1 - Gas flow shut-off in case of lack of current - Manual reset - Normally closed - Aluminium body (except brass body for 1/2" to 1" for working pressure 6 bar) - TS: -20°C/+60°C - Built-in filter cartridge 50 µm for DN65 to 300 - IP 65 coil - Horizontal mounting solenoid coil on the top - Closing time < 1 s - Built-in short anti-disconnection device.

CE 0497 EN 151 Class A Group 2

### M14/RM / M16/RM - Gas (natural gas & lpg)

| DN              | face to face (mm) | Working pressure 500 mbar |         |          |         | Working pressure 6 bar |         |          |         |
|-----------------|-------------------|---------------------------|---------|----------|---------|------------------------|---------|----------|---------|
|                 |                   | 230V AC                   |         | 24V AC   |         | 230V AC                |         | 24V AC   |         |
|                 |                   | power VA                  | code    | power VA | code    | power VA               | code    | power VA | code    |
| (BSP)           |                   |                           |         |          |         |                        |         |          |         |
| 1/2"            | 70                | 9                         | 092802M | 8        | 092812M | 9                      | 092102M | 8        | 092122M |
| 3/4"            | 70                | 9                         | 092803M | 8        | 092813M | 9                      | 092103M | 8        | 092123M |
| 1"              | 90                | 9                         | 092804B | 8        | 092814M | 9                      | 092104B | 8        | 092124M |
| 1"1/4           | 160               | 9                         | 092805M | 8        | 092815M | 9                      | 092105M | 8        | 092125M |
| 1"1/2           | 160               | 9                         | 092806M | 8        | 092816M | 9                      | 092106M | 8        | 092126M |
| 2"              | 160               | 9                         | 092807M | 8        | 092817M | 9                      | 092107M | 8        | 092127M |
| Flanged RF PN16 |                   |                           |         |          |         |                        |         |          |         |
| 65*             | 290               | 18                        | 092903M | 20       | 092913M | 18                     | 092109M | 20       | 092129M |
| 80              | 310               | 18                        | 092904M | 20       | 092914M | 18                     | 092110M | 20       | 092130M |
| 100             | 350               | 18                        | 092905M | 20       | 092915M | 18                     | 092111M | 20       | 092131M |
| 125             | 480               | 18                        | 092906M | 20       | 092916M | 18                     | 092112M | 20       | 092132M |
| 150             | 480               | 18                        | 092907M | 20       | 092917M | 18                     | 092113M | 20       | 092133M |
| 200             | 600               | 18                        | 092908M | 20       | 092918M | 18                     | 092114M | 20       | 092134M |

\* 4 hole flanges.

### M14/RM / M16/RM - Biogas

| DN              | face to face (mm) | Working pressure 500 mbar |           |          |           |
|-----------------|-------------------|---------------------------|-----------|----------|-----------|
|                 |                   | 230V AC                   |           | 24V AC   |           |
|                 |                   | power VA                  | code      | power VA | code      |
| (BSP)           |                   |                           |           |          |           |
| 1/2"            | 70                | 9                         | 092802BIO | 8        | 092812BIO |
| 3/4"            | 70                | 9                         | 092803BIO | 8        | 092813BIO |
| 1"              | 90                | 9                         | 092804BIO | 8        | 092814BIO |
| 1"1/4           | 160               | 9                         | 092805BIO | 8        | 092815BIO |
| 1"1/2           | 160               | 9                         | 092806BIO | 8        | 092816BIO |
| 2"              | 160               | 9                         | 092807BIO | 8        | 092817BIO |
| Flanged RF PN16 |                   |                           |           |          |           |
| 65*             | 290               | 18                        | 092903BIO | 20       | 092913BIO |
| 80              | 310               | 18                        | 092904BIO | 20       | 092914BIO |
| 100             | 350               | 18                        | 092905BIO | 20       | 092915BIO |
| 125             | 480               | 18                        | 092906BIO | 20       | 092916BIO |
| 150             | 480               | 18                        | 092907BIO | 20       | 092917BIO |
| 200             | 600               | 18                        | 092908BIO | 20       | 092918BIO |
| 300             | 737               | 18                        | 092909BIO | 20       | 092919BIO |

\* 4 hole flanges.

### Micro shutt-off anti-disconnection device

Used for 230V AC solenoid coil up to 50W - Only for our range - Protection 1 to 3 s depending on power.



|        |
|--------|
| code   |
| 045006 |

not on stock, on request.



## Pressure reducing valves with built-in filter

97/23/EC Directive N°0497 - Risk category II / module D1 - 90/396/EC according to EN 88-2 - ATEX cat. II 2G/D for zones 1, 2, 21 & 22 - Aluminium body - Upstream built-in filter 50 µm - Built-in pressure connections.



### FRG 2MC - 1 bar

For non aggressive gases - PS: 1 bar - TS: -15°C/+60°C.



| DN              | face to face (mm) | max. flow (Nm³/h) | downstream pressure setting range (mbar) |         |       |         |        |         |         |         |         |         |
|-----------------|-------------------|-------------------|--|---------|-------|---------|--------|---------|---------|---------|---------|---------|
|                 |                   |                   | range                                    | code    | range | code    | range  | code    | range   | code    | range   | code    |
| (BSP)           |                   |                   |  |         |       |         |        |         |         |         |         |         |
| 1/2"            | 120               | 19                | 9-28                                     | 094004M | 18-40 | 094014M | 40-110 | 094024M | 110-150 | 094034M | 150-200 | 094044M |
| 3/4"            | 120               | 34                | 9-28                                     | 094005M | 18-40 | 094015M | 40-110 | 094025M | 110-150 | 094035M | 150-200 | 094045M |
| 1"              | 120               | 53                | 9-28                                     | 094006M | 18-40 | 094016M | 40-110 | 094026M | 110-150 | 094036M | 150-200 | 094046M |
| 1 1/4"          | 160               | 87                | 13-23                                    | 094007M | 20-36 | 094017M | 55-100 | 094027M | 90-190  | 094037M | 190-500 | 094047M |
| 1 1/2"          | 160               | 136               | 13-23                                    | 094008M | 20-36 | 094018M | 55-100 | 094028M | 90-190  | 094038M | 190-500 | 094048M |
| 2"              | 160               | 212               | 13-23                                    | 094009M | 20-36 | 094019M | 55-100 | 094029M | 90-190  | 094039M | 190-500 | 094049M |
| Flanged RF PN16 |                   |                   |  |         |       |         |        |         |         |         |         |         |
| 65              | 290               | 358               | 13-27                                    | 094010M | 22-58 | 094020M | 50-130 | 094030M | 110-200 | 094040M | 200-600 | 094050M |
| 80              | 310               | 543               | 13-27                                    | 094011M | 22-58 | 094021M | 50-130 | 094031M | 110-200 | 094041M | 200-600 | 094051M |
| 100             | 350               | 848               | 15-27                                    | 094012M | 27-55 | 094022M | 50-130 | 094032M | 130-200 | 094042M | 200-600 | 094052M |

not on stock, on request.

### FRG 2MCS - 5 bar (BSP)

For non aggressive gases - Shut-off in case of upstream over-pressure or pressure drop - With air vent - PS: 5 bar - TS: -20°C/+60°C.



| Ø    | face to face (mm) | max. flow (Nm³/h) | downstream pressure setting range (mbar) | code    |
|------|-------------------|-------------------|--|---------|
| 1/2" | 120               | 90                | 20-30                                    | 094104M |
| 3/4" | 120               | 90                | 20-30                                    | 094105M |
| 1"   | 120               | 90                | 20-30                                    | 094106M |

## Filters

97/23/EC Directive N°0497 - Risk category II / module D1 - 90/396/EC according to EN 126 - Impurities filtering - 50 µm filtering for 1/2" to DN100, 10 µm above - Aluminium body - FKM seat for biogas - Upstream pressure connection - PS: 2 bar or 6 bar - TS: -40°C/+70°C.



### FM - Gas & biogas filter



| DN              | face to face (mm) | Gas      |          | Biogas    |           |
|-----------------|-------------------|----------|----------|-----------|-----------|
|                 |                   | PS 2 bar | PS 6 bar | PS 2 bar  | PS 6 bar  |
|                 |                   | code     | code     | code      | code      |
| (BSP)           |                   |          |          |           |           |
| 1/2"            | 120               | 095004M  | 095104M  | 095004BIO | 095104BIO |
| 3/4"            | 120               | 095005M  | 095105M  | 095005BIO | 095105BIO |
| 1"              | 120               | 095006M  | 095106M  | 095006BIO | 095106BIO |
| 1 1/4"          | 160               | 095007M  | 095107M  | 095007BIO | 095107BIO |
| 1 1/2"          | 160               | 095008M  | 095108M  | 095008BIO | 095108BIO |
| 2"              | 160               | 095009M  | 095109M  | 095009BIO | 095109BIO |
| Flanged RF PN16 |                   |          |          |           |           |
| 65*             | 290               | 095506M  | 095516M  | 095506BIO | 095516BIO |
| 80              | 310               | 095507M  | 095517M  | 095507BIO | 095517BIO |
| 100             | 350               | 095508M  | 095518M  | 095508BIO | 095518BIO |
| 125             | 480               | 095509B  | 095519B  | 095509BIO | 095519BIO |
| 150             | 480               | 095510B  | 095520B  | 095510BIO | 095520BIO |
| 200             | 600               | 095511M  | 095521M  | 095511BIO | 095521BIO |
| 300             | 737               | 095512M  | 095522M  | 095512BIO | 095522BIO |

\* 4 hole flanges.

not on stock, on request.

## Accessories

### PGRF - Pressure switch

Aluminium body - Transparent plastic cover IP54 - Setting knob - Switch-off power 250V AC / 6A - 1/4" BSP threaded - Includes electric connector T30 - PS: 690 mbar - TS: 0°C/+85°C.



| type         | max. Δp (mbar) | code    |
|--------------|----------------|---------|
| 5-150 mbar   | ≤ 5            | 436002N |
| 100-500 mbar | ≤ 15           | 436003N |

### CP - Stop punch

Solenoid shut-off valve - 3A-240V shut-off - IP66.



| code   |
|--------|
| 098301 |



## Steam traps

### ■ Float

#### SK 51 - Ductile iron - PN16

Excluded from 97/23/EC Directive (art. 3 §3) - GGG40.3 body - Stainless steel mechanism - PS: 16 bar - TS: +250°C - Built-in thermostatic air eliminator - Horizontal mounting on stock - Vertical mounting on request (22 € additional).

#### Threaded

| Ø    | face to face (mm) | Δp 4,5 bar | Δp 10 bar | Δp 14 bar |
|------|-------------------|------------|-----------|-----------|
|      |                   | code       | code      | code      |
| 1/2" | 122               | 151040     | 151041    | 151042    |
| 3/4" | 122               | 151050     | 151051    | 151052    |
| 1"   | 145               | 151060     | 151061    | 151062    |

#### Flanged RF PN16

| DN | face to face (mm) | Δp 4,5 bar | Δp 10 bar | Δp 14 bar |
|----|-------------------|------------|-----------|-----------|
|    |                   | code       | code      | code      |
| 15 | 150               | 150915     | 150916    | 150917    |
| 20 | 150               | 150920     | 150921    | 150922    |
| 25 | 160               | 150925     | 150926    | 150927    |

#### SK 55 - Ductile iron - PN16 - Tempered sight glass

97/23/EC Directive n°0036 - Risk category I - GGG40.3 body - Stainless steel mechanism - Tempered borosilicate sight glass - PS: 16 bar - TS: +250°C - Built-in thermostatic air eliminator - Horizontal mounting on stock - Vertical mounting on request (22 € additional).



#### Flanged RF PN16

| DN | face to face (mm) | Δp 4,5 bar | Δp 10 bar | Δp 14 bar |
|----|-------------------|------------|-----------|-----------|
|    |                   | code       | code      | code      |
| 32 | 230               | 151840     | 151841    | 151842    |
| 40 | 230               | 151850     | 151851    | 151852    |
| 50 | 230               | 151860     | 151861    | 151862    |

#### SK 40 - Ductile iron - PN16 - Closed free float

Excluded from 97/23/EC Directive (art. 3 §3) - GGG40.3 body - Stainless steel mechanism - PS: 16 bar - TS: +220°C - Built-in filter & thermostatic air eliminator - Horizontal mounting.

#### Threaded

| Ø    | face to face (mm) | Δp 4,5 bar | Δp 10 bar | Δp 14 bar |
|------|-------------------|------------|-----------|-----------|
|      |                   | code       | code      | code      |
| 1/2" | 120               | 150204     | 150208    | 150209    |
| 3/4" | 120               | 150214     | 150218    | 150219    |
| 1"   | 120               | 150225     | 150228    | 150229    |

#### Flanged PN16

| DN | face to face (mm) | Δp 4,5 bar | Δp 10 bar | Δp 14 bar |
|----|-------------------|------------|-----------|-----------|
|    |                   | code       | code      | code      |
| 15 | 150               | 150244     | 150248    | 150249    |
| 20 | 150               | 150254     | 150258    | 150259    |
| 25 | 160               | 150264     | 150268    | 150269    |

#### SK 70 - Carbon steel - PN25

Excluded from 97/23/EC Directive (art. 3 §3) - A216WCB body - Stainless steel mechanism - PS: 25 bar - TS: +250°C - Built-in thermostatic air eliminator - Horizontal mounting on stock - Vertical mounting on request (22 € additional).

#### Threaded

| Ø    | face to face (mm) | Δp 4,5 bar | Δp 10 bar | Δp 14 bar |
|------|-------------------|------------|-----------|-----------|
|      |                   | code       | code      | code      |
| 1/2" | 122               | 151460SE   | 151461    | 151462    |
| 3/4" | 122               | 151465     | 151466    | 151467    |
| 1"   | 145               | 151470SE   | 151471    | 151472    |

#### Flanged RF PN25

| DN | face to face (mm) | Δp 4,5 bar | Δp 10 bar | Δp 14 bar |
|----|-------------------|------------|-----------|-----------|
|    |                   | code       | code      | code      |
| 15 | 150               | 151480SE   | 151481    | 151482    |
| 20 | 150               | 151485SE   | 151486    | 151487    |
| 25 | 160               | 151490SE   | 151491    | 151492    |

#### SK 61 - Stainless steel - PN25

Excluded from 97/23/EC Directive (art. 3 §3) - CF8M body - Stainless steel mechanism - PS: 25 bar - TS: +250°C - Built-in air eliminator - Horizontal mounting on stock - Vertical mounting on request (22 € additional).

#### Threaded

| Ø    | face to face (mm) | Δp 4,5 bar | Δp 10 bar | Δp 14 bar |
|------|-------------------|------------|-----------|-----------|
|      |                   | code       | code      | code      |
| 1/2" | 122               | 151315     | 151316    | 151317    |
| 3/4" | 122               | 151320     | 151321    | 151322    |
| 1"   | 145               | 151325     | 151326    | 151327    |

#### Flanged RF PN25

| DN | face to face (mm) | Δp 4,5 bar | Δp 10 bar | Δp 14 bar |
|----|-------------------|------------|-----------|-----------|
|    |                   | code       | code      | code      |
| 15 | 150               | 151332     | 151333    | 151334    |
| 20 | 150               | 151340     | 151341    | 151342    |
| 25 | 160               | 151350     | 151351    | 151352    |

#### BT 16 - Cast iron - PN16 - Reversed open float

Excluded from 97/23/EC Directive (art. 3 §3) - GGG40 body - Stainless steel mechanism - PS: 16 bar - TS: +220°C - Built-in filter - Horizontal mounting.

#### Threaded

| Ø    | face to face (mm) | Δp 5,4 bar | Δp 8,5 bar | Δp 15,5 bar |
|------|-------------------|------------|------------|-------------|
|      |                   | code       | code       | code        |
| 1/2" | 127               | 150504     | 150508     | 150512      |
| 3/4" | 127               | 150514     | 150518     | 150522      |
| 1"   | 127               | 150524     | 150528     | 150532      |

## ■ Thermostatic

### TKK 2Y - Carbon steel

A105 body - Stainless steel mechanism - Built-in strainer - Thermostatic capsule in hastelloy and stainless steel - PS: 32 bar - Max. ΔP: 22 bar - TS: +250°C - Horizontal mounting.



Threaded

| Ø    | face to face (mm) | code   |
|------|-------------------|--------|
| 1/2" | 95                | 151504 |
| 3/4" | 95                | 151505 |
| 1"   | 95                | 151506 |



Flanged RF PN40

| DN | face to face (mm) | code   |
|----|-------------------|--------|
| 15 | 150               | 151615 |
| 20 | 150               | 151620 |
| 25 | 160               | 151625 |

### TKK 42 - Stainless steel

F304 body - Built-in strainer - PS: 32 bar - Max. ΔP: 21 bar - TS: +240°C.



Threaded

| Ø    | face to face (mm) | code   |
|------|-------------------|--------|
| 1/4" | 65                | 152202 |
| 3/8" | 65                | 152203 |
| 1/2" | 65                | 152204 |
| 3/4" | 65                | 152205 |
| 1"   | 65                | 152206 |

### TKK 11 - Brass - Angle

CW617N body - Stainless steel mechanism - Built-in strainer - PS: 7 bar - TS: +200°C.



Threaded

| Ø    | code   |
|------|--------|
| 1/2" | 152504 |



### TKK 61 - Brass - Straight

CW617N body - Stainless steel mechanism - Built-in strainer - PS: 7 bar - TS: +200°C.

Threaded

| Ø    | face to face (mm) | code   |
|------|-------------------|--------|
| 1/2" | 76                | 152604 |

## ■ Bi-metallic

### TK 1 - Carbon steel

A105 body - Stainless steel mechanism - Built-in strainer and check valve - Possible adjustment of discharge capacity and condensate temperature - PS: 32 bar - Max. ΔP: 22 bar - TS: +250°C - Horizontal or vertical mounting.



Threaded

| Ø    | face to face (mm) | code   |
|------|-------------------|--------|
| 1/2" | 95                | 153604 |
| 3/4" | 95                | 153605 |
| 1"   | 95                | 153606 |



Flanged RF PN40

| DN | face to face (mm) | code   |
|----|-------------------|--------|
| 15 | 150               | 154015 |
| 20 | 150               | 154020 |
| 25 | 160               | 154025 |

## ■ Thermodynamic

### TDK 45 - Carbon steel

A105 body - Stainless steel mechanism - Built-in y-strainer - Downstream max. back pressure: 80% of the upstream pressure - PS: 32 bar - TS: +400°C - Horizontal mounting.



Threaded

| Ø    | face to face (mm) | code   |
|------|-------------------|--------|
| 1/2" | 95                | 153004 |
| 3/4" | 95                | 153005 |
| 1"   | 95                | 153006 |



Flanged RF PN40

| DN | face to face (mm) | code   |
|----|-------------------|--------|
| 15 | 150               | 153115 |
| 20 | 150               | 153120 |
| 25 | 160               | 153125 |

### TDK 71 - Stainless steel

A743 body - Built-in y-strainer - Downstream max. back pressure: 80% of the upstream pressure - PS: 42 bar - TS: +400°C - Horizontal mounting.



Threaded

| Ø    | face to face (mm) | code   |
|------|-------------------|--------|
| 1/2" | 78                | 153304 |
| 3/4" | 90                | 153305 |
| 1"   | 95                | 153306 |

## ■ Insulating jacket

### MI SK

Pyrogel XT Aspen Aerogels® hydrophobic insulation - Fiber glass fabric with silicone cover - Fabrics sewing by Kevlar® and stainless steel wires - Braided fiber glass ropes - TS: up to 250°C.



Threaded

| Ø    | code   |
|------|--------|
| 1/2" | 181001 |
| 3/4" | 181002 |
| 1"   | 181003 |

Flanged

| DN | code   |
|----|--------|
| 15 | 181004 |
| 20 | 181005 |
| 25 | 181006 |

| DN | code   |
|----|--------|
| 32 | 181007 |
| 40 | 181008 |
| 50 | 181009 |

## Pressure reducing valves



### BDV 25 - Ductile iron

For steam, compressed air & other gas - GGG40.3 body PN25 - Stainless steel mechanism - Built-in strainer - Locking device - PS: 17 bar - TS: +210°C - Max. flow ratio: 10/1 - Horizontal mounting.

ISO 9001 3.1 10 €/DN



**Threaded** (BSP) Downstream pressure range

| Ø    | face to face (mm) | Downstream pressure range |             |               |
|------|-------------------|---------------------------|-------------|---------------|
|      |                   | 0,14 - 1,7 bar            | 1,4 - 4 bar | 3,5 - 8,6 bar |
| 1/2" | 85                | 158041A                   | 158042A     | 158043A       |
| 3/4" | 98                | 158051A                   | 158052A     | 158053A       |
| 1"   | 110               | 158061A                   | 158062A     | 158063A       |

### PRV-S - Stainless steel

CF8M body - FKM/PTFE tightness - PS: 9 bar - TS: +180°C - Supplied with Ø 63 dry pressure gauge indicating the downstream pressure.

ISO 9001 3.1 10 €/DN



**Threaded** (BSP) Downstream pressure range

| Ø    | face to face (mm) | weight (kg) | Downstream pressure range |           |
|------|-------------------|-------------|---------------------------|-----------|
|      |                   |             | 1 - 6 bar                 | 4 - 9 bar |
| 1/2" | 70                | 0,80        | 158101                    | 158102    |
| 3/4" | 85                | 1,00        | 158111                    | 158112    |
| 1"   | 92                | 1,05        | 158121                    | 158122    |



**Flanged PN16** Downstream pressure range

| DN | face to face (mm) | weight (kg) | Downstream pressure range |           |
|----|-------------------|-------------|---------------------------|-----------|
|    |                   |             | 1 - 6 bar                 | 4 - 9 bar |
| 15 | 155               | 2           | 158301                    | 158302    |
| 20 | 155               | 3           | 158311                    | 158312    |
| 25 | 155               | 5           | 158321                    | 158322    |

## Separators



### SPR 25 - Threaded

Excluded from 97/23/EC (art. 3, §3) - For steam & compressed air - F304 or carbon steel body - PS: 20 bar - TS: +250°C.

| Ø    | face to face (mm) | Ø event | Ø drainer | Material             |                   |
|------|-------------------|---------|-----------|----------------------|-------------------|
|      |                   |         |           | stainless steel code | carbon steel code |
| 1/2" | 120               | 1/2"    | 1/2"      | 1560002              | 1560102           |
| 3/4" | 150               | 1/2"    | 1/2"      | 1560003              | 1560103           |
| 1"   | 160               | 1/2"    | 1/2"      | 1560004              | 1560104           |

### SPR 40 - Flanged PN40

97/23/EC Directive N°0036 - For steam & compressed air - Carbon steel body - Steam, PS: 32 bar / TS: +250°C - Compressed air, PS: 40 bar / TS: +20°C.



| DN  | face to face (mm) | Risk category | volume (l) | Ø event | Ø drainer | code     |
|-----|-------------------|---------------|------------|---------|-----------|----------|
| 15  | 180               | art. 3, §3    | 1,5        | 1/2"    | 1/2"      | 1560A015 |
| 20  | 230               | art. 3, §3    | 2,9        | 1"      | 1/2"      | 1560A020 |
| 25  | 230               | art. 3, §3    | 3,1        | 1"      | 1/2"      | 1560A025 |
| 32  | 250               | II            | 5,2        | 1"      | 1/2"      | 1560A032 |
| 40  | 300               | II            | 8,9        | 1"      | 1/2"      | 1560A040 |
| 50  | 310               | II            | 9,7        | 1"      | 1/2"      | 1560A050 |
| 65  | 400               | II            | 19,4       | 1"1/2   | 3/4"      | 1560A065 |
| 80  | 450               | III           | 34,3       | 1"1/2   | 3/4"      | 1560A080 |
| 100 | 500               | III           | 57,8       | 2"      | 1"        | 1560A100 |



0036

ISO 9001

3.1 10 €/DN



## Vacuum breakers

### VK 70 - Brass - PN16

TS: +260°C - Air intake 1/8".

| Ø    | code   |
|------|--------|
| 1/2" | 981405 |



### VK 71 - Stainless steel - PN25

TS: +400°C - Air intake 1/8".

| Ø    | code   |
|------|--------|
| 1/2" | 981400 |



ISO 9001

## Air vents

### PF 20 - Cast iron

PS: 10 bar - TS: +120°C.

| Ø    | code |
|------|------|
| 3/4" | PF20 |



### HA 62 - Stainless steel

CF8M body - Stainless steel mechanism - PS: 14 bar - TS: -10°C/+200°C.

| Ø    | code   |
|------|--------|
| 3/4" | 154810 |



ISO 9001

## Thermometers

### Digital



#### TD 915

LCD screen with h=18 mm characters & permanent display - Adjustable stainless steel Ø 100 screen housing - IP65 - Stainless steel plunger L=100 mm - 1/2" connection - Supplied with lithium AA 1,5V battery (3-4 years duration) - TS: -10°C/+40°C - Temperature range: -50/+150°C.

|        |
|--------|
| code   |
| 138001 |

### Vertical

Excluded from 2014/68/EU (art. 4, §3) - For non-corrosive gases & liquids - Brass fitting 1/2" - Aluminium case - Engraved scaled glass - All positions reading - Plunger Ø 10 mm - Solid glass prismatic capillary - PS: 16 bar - TS: -30°C/+300°C.

ISO 9001



#### 1670 / 1672 - Straight - 150 mm height

| scale       | plunger L (mm) | code    |
|-------------|----------------|---------|
| 0°C/+120°C  | 63             | 1670001 |
| -30°C/+50°C | 63             | 1670002 |
| 0°C/+120°C  | 100            | 1672001 |
| -30°C/+50°C | 100            | 1672002 |



#### 1675 / 1677 - Angle - 150 mm height

| scale       | plunger L (mm) | code    |
|-------------|----------------|---------|
| 0°C/+120°C  | 63             | 1675001 |
| -30°C/+50°C | 63             | 1675002 |
| 0°C/+120°C  | 100            | 1677001 |
| -30°C/+50°C | 100            | 1677002 |



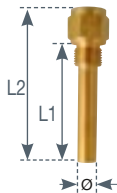
#### 1671 / 1673 - Straight - 200 mm height

| scale       | plunger L (mm) | code    |
|-------------|----------------|---------|
| 0°C/+120°C  | 63             | 1671001 |
| -30°C/+50°C | 63             | 1671002 |
| 0°C/+200°C  | 63             | 1671003 |
| 0°C/+300°C  | 63             | 1671004 |
| 0°C/+120°C  | 100            | 1673001 |
| -30°C/+50°C | 100            | 1673002 |
| 0°C/+200°C  | 100            | 1673003 |
| 0°C/+300°C  | 100            | 1673004 |



#### 1676 / 1678 - Angle - 200 mm height

| scale       | plunger L (mm) | code    |
|-------------|----------------|---------|
| 0°C/+120°C  | 63             | 1676001 |
| -30°C/+50°C | 63             | 1676002 |
| 0°C/+200°C  | 63             | 1676003 |
| 0°C/+300°C  | 63             | 1676004 |
| 0°C/+120°C  | 100            | 1678001 |
| -30°C/+50°C | 100            | 1678002 |
| 0°C/+200°C  | 100            | 1678003 |
| 0°C/+300°C  | 100            | 1678004 |



#### Brass thermowells 1/2"

| Ø  | L1 | L2  | plunger L (mm) | code    |
|----|----|-----|----------------|---------|
| 14 | 50 | 75  | 63             | 9880220 |
| 14 | 86 | 110 | 100            | 9880221 |

### Bi-metallic - Stainless steel

Excluded from 2014/68/EU (art. 4, §3) - Class 2 - IP31 - For gases & liquids - Inside use only - Instrumentation glass - Stainless steel F304 case mechanism & fitting 1/2" - Duralium dial & needle - Plunger Ø 8 mm - Tight welded pipe - PS: 40 bar - TS: -30°C/+200°C.

ISO 9001



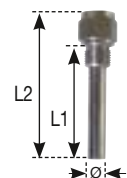
#### 1680 / 1681 - Radial - Ø 100

| scale       | plunger L (mm) | code    |
|-------------|----------------|---------|
| -30°C/+50°C | 77             | 1680001 |
| 0/+120°C    | 77             | 1680002 |
| 0/+160°C    | 77             | 1680003 |
| 0/+200°C    | 77             | 1680004 |
| -30°C/+50°C | 100            | 1681001 |
| 0/+120°C    | 100            | 1681002 |
| 0/+160°C    | 100            | 1681003 |
| 0/+200°C    | 100            | 1681004 |



#### 1685 / 1686 - Axial - Ø 100

| scale       | plunger L (mm) | code    |
|-------------|----------------|---------|
| -30°C/+50°C | 77             | 1685001 |
| 0/+120°C    | 77             | 1685002 |
| 0/+160°C    | 77             | 1685003 |
| 0/+200°C    | 77             | 1685004 |
| -30°C/+50°C | 100            | 1686001 |
| 0/+120°C    | 100            | 1686002 |
| 0/+160°C    | 100            | 1686003 |
| 0/+200°C    | 100            | 1686004 |



#### Stainless steel thermowells 1/2"

| Ø  | L1 | L2  | plunger L (mm) | code    |
|----|----|-----|----------------|---------|
| 14 | 65 | 90  | 77             | 9880210 |
| 14 | 86 | 110 | 100            | 9880211 |

## Pressure switches

### ELT - Control pressure switch

For all compatible fluids, except propane -  
 TS: -10°C/+120°C - Silver plated SPDT contacts -  
 Shut-off 0,2A-230V AC - IP40 - Room temperature:  
 -35°C/+60°C - According to EN 60947-1-5 -  
 Fluid connection: \*brass BSP female 1/4",  
 \*\*brass BSP male 1/4".



| pressure setting | differential | code     |
|------------------|--------------|----------|
| * -0,2 - 8 bar   | 0,6 - 3 bar  | 132001SE |
| * 5 - 16 bar     | 1 - 3,5 bar  | 132002SE |
| ** 5 - 28 bar    | 2 - 10 bar   | 132003   |

### MDR - Process pressure switch

Stainless steel 303 inner mechanism & fitting -  
 Stainless steel 316 Ti membrane - Aluminium support -  
 Polycarbonate housing - IP65 - 2 SPDT contacts -  
 Breaking capacity: resistive 10A@240VAC, inductive  
 4A@240VAC, 0,1A@240VDC - PS: 10 bar -  
 TS: -20°C/+70°C - Process connections 1/4" -  
 Gland pack M20 electric connection.



| pressure setting | differential  | code    |
|------------------|---------------|---------|
| 1 - 12 bar       | 0,5 - 0,8 bar | 1320501 |

## Pressure gauges

### ■ ABS plastic case - Dry

Excluded from 2014/68/EU Directive (art. 4, §3) - Accuracy class according to EN837-1 - For non-viscous, non-crystallizing & non-aggressive fluids -  
 Black ABS case - Brass Bourdon tube and mechanism - Brass connection - Clear Plexiglas window - White ABS dial - Duralumin pointer -  
 TS: 0°C/+60°C.

ISO  
9001



#### 1640 - Axial - Ø 40

Class 2,5 - Connection 1/8".

| scale (bar) | code    |
|-------------|---------|
| 0/4         | 1640004 |
| 0/6         | 1640005 |
| 0/10        | 1640006 |
| 0/16        | 1640007 |



#### 1643 - Radial - Ø 63

Class 1,6 - Connection 1/4".

| scale (bar) | range (psi) | code    |
|-------------|-------------|---------|
| 0/4         | 0/60        | 1643004 |
| 0/6         | 0/90        | 1643005 |
| 0/10        | 0/150       | 1643006 |
| 0/16        | 0/230       | 1643007 |
| 0/25        | 0/360       | 1643008 |
| 0/40        | 0/600       | 1643009 |



#### 1644 - Radial - Ø 80

Class 1,6 - Connection 1/2".

| scale (bar) | range (psi) | code    |
|-------------|-------------|---------|
| 0/4         | 0/60        | 1644004 |
| 0/6         | 0/90        | 1644005 |
| 0/10        | 0/150       | 1644006 |
| 0/16        | 0/230       | 1644007 |
| 0/25        | 0/360       | 1644008 |
| 0/40        | 0/600       | 1644009 |



#### 1645 - Radial - Ø 100

Class 1,6 - Connection 1/2".

| scale (bar) | code    |
|-------------|---------|
| 0/4         | 1645004 |
| 0/6         | 1645005 |
| 0/10        | 1645006 |
| 0/16        | 1645007 |
| 0/25        | 1645008 |
| 0/40        | 1645009 |

### ■ Carbon steel case - Brazed brass - Dry

Excluded from 2014/68/EU Directive (art. 4, §3) - Accuracy class according to EN837-1 - For non-viscous, non-crystallizing & non-aggressive fluids -  
 Black painted steel case - Brass Bourdon tube and mechanism, tin welded - Brass connection - Flat instrument glass window -  
 Duralumin dial - Steel pointer - TS: 0°C/+150°C (steam up to 100°C).

ISO  
9001



#### 1619 - Radial - Ø 100

Class 1,6 - Connection 1/2".

| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1619001 |
| 0/1,6       | 1619002 |
| 0/2,5       | 1619003 |
| 0/4         | 1619004 |
| 0/6         | 1619005 |
| 0/10        | 1619006 |
| 0/16        | 1619007 |
| 0/25        | 1619008 |
| 0/40        | 1619009 |

## ■ Stainless steel case - Glycerine filled

Excluded from 2014/68/EU Directive (art. 4, §3) - Accuracy class according to EN837-1 - IP65 - For non-viscous, non-crystallizing & non-aggressive fluids - F304 stainless steel case - Brass Bourdon tube and mechanism, tin welded - Brass connection - Polycarbonate window - Duralumin dial - Steel pointer (duralumin pointer for Ø100) - TS: 0°C/+60°C.

ISO  
9001



**1612 - Radial - Ø 50**  
Class 2,5 - Connection 1/4".

| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1612001 |
| 0/1,6       | 1612002 |
| 0/2,5       | 1612003 |
| 0/4         | 1612004 |
| 0/6         | 1612005 |
| 0/10        | 1612006 |
| 0/16        | 1612007 |
| 0/25        | 1612008 |
| 0/40        | 1612009 |
| 0/60        | 1612010 |



**1613 - Radial - Ø 63**  
Class 1,6 - Connection 1/4".

| scale (bar) | range (psi) | code    |
|-------------|-------------|---------|
| -1/+1       | -15/15      | 1613001 |
| 0/1,6       | 0/23        | 1613002 |
| 0/2,5       | 0/35        | 1613003 |
| 0/4         | 0/60        | 1613004 |
| 0/6         | 0/90        | 1613005 |
| 0/10        | 0/150       | 1613006 |
| 0/16        | 0/230       | 1613007 |
| 0/25        | 0/360       | 1613008 |
| 0/40        | 0/600       | 1613009 |
| 0/60        | 0/900       | 1613010 |



**1615 - Radial - Ø 100**  
Class 1,6 - Connection 1/2".

| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1615001 |
| 0/1,6       | 1615002 |
| 0/2,5       | 1615003 |
| 0/4         | 1615004 |
| 0/6         | 1615005 |
| 0/10        | 1615006 |
| 0/16        | 1615007 |
| 0/25        | 1615008 |
| 0/40        | 1615009 |
| 0/60        | 1615010 |



**1622 - Axial - Ø 50**  
Class 2,5 - Connection 1/4".

| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1622001 |
| 0/1,6       | 1622002 |
| 0/2,5       | 1622003 |
| 0/4         | 1622004 |
| 0/6         | 1622005 |
| 0/10        | 1622006 |
| 0/16        | 1622007 |
| 0/25        | 1622008 |
| 0/40        | 1622009 |
| 0/60        | 1622010 |



**1623 - Axial - Ø 63**  
Class 1,6 - Connection 1/4".

| scale (bar) | range (psi) | code    |
|-------------|-------------|---------|
| -1/+1       | -15/15      | 1623001 |
| 0/1,6       | 0/23        | 1623002 |
| 0/2,5       | 0/35        | 1623003 |
| 0/4         | 0/60        | 1623004 |
| 0/6         | 0/90        | 1623005 |
| 0/10        | 0/150       | 1623006 |
| 0/16        | 0/230       | 1623007 |
| 0/25        | 0/350       | 1623008 |
| 0/40        | 0/600       | 1623009 |
| 0/60        | 0/900       | 1623010 |



**1625 - Axial - Ø 100**  
Class 1 - Connection 1/2".

| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1625001 |
| 0/1,6       | 1625002 |
| 0/2,5       | 1625003 |
| 0/4         | 1625004 |
| 0/6         | 1625005 |
| 0/10        | 1625006 |
| 0/16        | 1625007 |

## ■ Stainless steel case - Dry - Gas capsule

Excluded from 2014/68/EU Directive (art. 4, §3) - Accuracy class according to EN837-3 - IP31 - For dry & non-aggressive gases - F304 stainless steel case - Brass capsule and mechanism - Brass connection - Acrylic window for 1633 / Polycarbonate window for 1635 - Duralumin dial & pointer - TS: 0°C/+60°C.

ISO  
9001



**1633 - Dry - Radial - Ø 63**  
Class 2,5 - Connection 1/4".

| scale (mbar) | code    |
|--------------|---------|
| 0/60         | 1633001 |
| 0/100        | 1633002 |
| 0/250        | 1633003 |
| 0/400        | 1633004 |
| 0/600        | 1633005 |



**1635 - Dry - Radial - Ø 100**  
Class 1 - Connection 1/2".

| scale (mbar) | code    |
|--------------|---------|
| 0/60         | 1635001 |
| 0/100        | 1635002 |
| 0/250        | 1635003 |
| 0/400        | 1635004 |
| 0/600        | 1635005 |



**Push-button valve**  
PS: 4 bar.

| Ø    | code    |
|------|---------|
| 1/4" | 9880302 |
| 1/2" | 9880304 |

## ■ Stainless steel case - Dry - For steam

Excluded from 2014/68/EU (art. 4, §3) - Accuracy class according to EN 837-1 - For steam - TS: +180°C.

ISO  
9001



**Radial - Ø 100**  
Class 1,6 - Connection 1/2" -  
TS: +180°C -  
To be installed with coil siphon.

| scale (bar) | code   |
|-------------|--------|
| 0/10        | 981703 |
| 0/25        | 981705 |



**Coil siphon**  
DIN 16282 C type - M1/2" x F1/2" -  
TS: +300°C (at 80 bar).

|                 | code   |
|-----------------|--------|
| Carbon steel    | 981712 |
| Stainless steel | 981713 |



**Pressure gauge valve**  
DIN 16270 A type - Carbon steel body -  
M1/2" x F1/2" - PS: 400 bar -  
TS: +200°C.

|                 | code   |
|-----------------|--------|
| Carbon steel    | 981710 |
| Stainless steel | 981717 |

## Full stainless steel

Excluded from 2014/68/EU Directive (art. 4, §3) - Accuracy class according to EN837-1 - IP65 - For non-viscous & non-crystallizing aggressive fluids - Dry or glycerine filled - F304 stainless steel case - F316 Bourdon tube and mechanism - F316 connection - Securit glass window - Aluminium dial & pointer - TS: 0°C/+100°C except fig. 1618 & 1628: 0°C/+60°C.

ISO  
9001

### 1616 - Dry - Radial - Ø 63

Class 1,6 - Connection 1/4".



| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1616001 |
| 0/1,6       | 1616002 |
| 0/2,5       | 1616003 |
| 0/4         | 1616004 |
| 0/6         | 1616005 |
| 0/10        | 1616006 |
| 0/16        | 1616007 |
| 0/25        | 1616008 |
| 0/40        | 1616009 |
| 0/60        | 1616010 |

### 1617 - Dry - Radial - Ø 100

Class 1 - Connection 1/2".



| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1617001 |
| 0/1,6       | 1617002 |
| 0/2,5       | 1617003 |
| 0/4         | 1617004 |
| 0/6         | 1617005 |
| 0/10        | 1617006 |
| 0/16        | 1617007 |
| 0/25        | 1617008 |
| 0/40        | 1617009 |
| 0/60        | 1617010 |

### 1618 - Glycerine - Radial - Ø 100

Class 1 - Connection 1/2" - Supplied filled.



| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1618001 |
| 0/1,6       | 1618002 |
| 0/2,5       | 1618003 |
| 0/4         | 1618004 |
| 0/6         | 1618005 |
| 0/10        | 1618006 |
| 0/16        | 1618007 |
| 0/25        | 1618008 |
| 0/40        | 1618009 |
| 0/60        | 1618010 |

### 1626 - Dry - Axial - Ø 63

Class 1,6 - Connection 1/4".



| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1626001 |
| 0/1,6       | 1626002 |
| 0/2,5       | 1626003 |
| 0/4         | 1626004 |
| 0/6         | 1626005 |
| 0/10        | 1626006 |
| 0/16        | 1626007 |
| 0/25        | 1626008 |
| 0/40        | 1626009 |
| 0/60        | 1626010 |

### 1628 - Glycerine - Axial - Ø 100

Class 1 - Connection 1/2" - Supplied filled.



| scale (bar) | code    |
|-------------|---------|
| -1/+1       | 1628001 |
| 0/1,6       | 1628002 |
| 0/2,5       | 1628003 |
| 0/4         | 1628004 |
| 0/6         | 1628005 |
| 0/10        | 1628006 |
| 0/16        | 1628007 |
| 0/25        | 1628008 |
| 0/40        | 1628009 |
| 0/60        | 1628010 |

## Accessories for pressure gauges

### Brass decompression valves

PS: 16 bar - TS: +90°C.

#### 1305 - Female/female



| Ø    | length (mm) | code    |
|------|-------------|---------|
| 1/4" | 46          | 1305002 |
| 3/8" | 50          | 1305003 |
| 1/2" | 56          | 1305004 |

#### 1306 - Male/female



| Ø    | length (mm) | code    |
|------|-------------|---------|
| 1/4" | 46          | 1306002 |
| 3/8" | 50          | 1306003 |
| 1/2" | 56          | 1306004 |

#### 1307 - Male/female



| Ø    | length (mm) | code    |
|------|-------------|---------|
| 1/4" | 60          | 1307002 |
| 1/2" | 68          | 1307004 |

### Coil siphons

#### Stainless steel - Male/female - PN20



| Ø    | code    |
|------|---------|
| 1/4" | 9880207 |
| 1/2" | 9880208 |

#### Carbon steel - Male/male - PN25



| Ø    | code    |
|------|---------|
| 1/4" | 9880200 |
| 1/2" | 9880201 |

#### Copper - Male/female - PN25



| Ø    | code    |
|------|---------|
| 1/4" | 9880202 |
| 1/2" | 9880204 |

#### Carbon steel - U type - Male/male - PN25



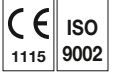
| Ø    | code    |
|------|---------|
| 1/4" | 9880205 |
| 1/2" | 9880206 |

#### Glycerine container 250 ml



| code    |
|---------|
| 9880401 |





## Level gauges

### L 135 - Brass set with valves

CW614N brass body - Needle valves - Silicone gasket -  
Pipe length: centre distance minus 15 mm. PS: 10 bar -  
TS: +90°C - Does not include pipe.



| DN   | pipe<br>ø | code    |
|------|-----------|---------|
| 1/4" | 10        | 2311210 |
| 3/8" | 13        | 2311313 |
| 1/2" | 13        | 2311413 |
| 1/2" | 16        | 2311416 |
| 3/4" | 18        | 2311518 |
| 3/4" | 20        | 2311520 |

### T 154 - Plexiglass pipe

1000 mm length - TS: +90°C.



| pipe<br>ø | code     |
|-----------|----------|
| 10        | 23181010 |
| 13        | 23181310 |
| 16        | 23181610 |
| 18        | 23181810 |
| 20        | 23182010 |

### L 146 - Level gauge

CW614N brass body - Plexiglass pipe -  
PS: 10 bar - TS: +90°C.



| DN   | height<br>(mm) | code    |
|------|----------------|---------|
| 1/4" | 100            | 2309210 |
| 3/8" | 150            | 2309315 |
| 1/2" | 200            | 2309420 |
| 1/2" | 250            | 2309425 |
| 1/2" | 300            | 2309430 |

### 151 - Fitting for L135 & T154



| DN   | pipe<br>ø | code    |
|------|-----------|---------|
| 1/2" | 13        | 2317413 |
| 1/2" | 16        | 2317416 |
| 3/4" | 18        | 2317518 |
| 3/4" | 20        | 2317520 |

### 2319 - Brass protection pipe

1000 mm length.



| pipe<br>ø | code     |
|-----------|----------|
| 10        | 23191010 |
| 13        | 23191310 |
| 16        | 23191610 |
| 18        | 23191810 |
| 20        | 23192010 |

### L 138 - Brass set

CW614N body - Silicone tightness -  
PS: 10 bar - TS: +90°C -  
 Does not include pipe.



| DN   | pipe<br>ø | code    |
|------|-----------|---------|
| 3/8" | 13        | 2310313 |
| 1/2" | 16        | 2310416 |

## Sight glasses



### 2210 - C 156 - Brass - With fins

CB754S body - Unidirectional use - Polycarbonate dome -  
Plastic fins - For polycarbonate compatible clear fluids -  
PS: 6 bar - TS: +10°C/+70°C.



| Ø    | face to face<br>(mm) | code   |
|------|----------------------|--------|
| 1/2" | 80                   | 221004 |

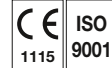


### 2211 - C 158 - Brass - With ball

CB754S body - Moplen ball - Tempered glass -  
One-way horizontal use only -  
PS: 16 bar - TS: +5°C/+80°C.



| Ø    | face to face<br>(mm) | code   |
|------|----------------------|--------|
| 1/2" | 97                   | 221104 |
| 3/4" | 100                  | 221105 |
| 1"   | 103                  | 221106 |



### 2215 - C 161 - Brass - Double glass with ball

CB754S body (1/2" to 1") - Bronze CC491K  
body (1"1/4 to 2") - Moplen ball - Double  
tempered glass - Horizontal mounting -  
PS: 16 bar - TS: +5°C/+80°C.



| Ø     | face to face<br>(mm) | code   |
|-------|----------------------|--------|
| 1/2"  | 95                   | 221504 |
| 3/4"  | 100                  | 221505 |
| 1"    | 107                  | 221506 |
| 1"1/4 | 126                  | 221507 |
| 1"1/2 | 137                  | 221508 |
| 2"    | 170                  | 221509 |



### 2220 - SKT 6 - Cast iron - With flapper

GG20 body - F304 flapper - Double tempered glass -  
PS: 16 bar - TS: -10°C/+180°C.



| Ø     | face to face<br>(mm) | code   |
|-------|----------------------|--------|
| 1/2"  | 75                   | 222004 |
| 3/4"  | 90                   | 222005 |
| 1"    | 90                   | 222006 |
| 1"1/4 | 120                  | 222007 |
| 1"1/2 | 120                  | 222008 |
| 2"    | 140                  | 222009 |



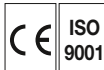
### 2225 - C 164 - Cast iron - With steady baffles - Flanged PN16

GG25 body - Double tempered glass -  
PS: 16 bar - TS: +5°C/+180°C.



| DN  | face to face<br>(mm) | code    |
|-----|----------------------|---------|
| 15  | 130                  | 2225015 |
| 20  | 150                  | 2225020 |
| 25  | 160                  | 2225025 |
| 32  | 180                  | 2225032 |
| 40  | 200                  | 2225040 |
| 50  | 230                  | 2225050 |
| 65* | 290                  | 2225065 |
| 80  | 310                  | 2225080 |
| 100 | 350                  | 2225091 |

\* 4 hole flanges.



### 2235 - USV - Carbon steel - With steady baffles - Flanged PN40

A105 body - Double borosilicate glass -  
PS: 40 bar up to DN20, 20 bar above -  
TS: +300°C.



| DN | face to face<br>(mm) | code    |
|----|----------------------|---------|
| 15 | 130                  | 2235015 |
| 20 | 150                  | 2235020 |
| 25 | 160                  | 2235025 |
| 32 | 180                  | 2235032 |
| 40 | 200                  | 2235040 |



### 2230 - USV - Carbon steel - With steady baffles

A105 body & baffle - Double borosilicate glass -  
PS: 40 bar up to 3/4", 20 bar above -  
TS: +300°C.



| Ø    | face to face<br>(mm) | code   |
|------|----------------------|--------|
| 1/2" | 90                   | 223004 |
| 3/4" | 90                   | 223005 |
| 1"   | 100                  | 223006 |

**Mandatory packing applies**

**Guarantee 5 Years**

**NEW**



Manufacturing acc. to EN 10242 - Use: cold water, hot water, heating, fire network, sprinklers, hydrocarbons, compressed air, steam - Material acc. to EN 1562: malleable cast iron EN-GJMB-350-10 or EN-GJMW-400-5, A design - Coating: black or hot-dipped galvanised - Galvanised coating for drinking water compatibility - BSP thread acc. to ISO 7-1 - PS: 1/8" to 3/4", 25 bar up to 120°C, 20 bar above; 1" and above, 20 bar up to 120°C, 16 bar above - TS: -20°C at +300°C.

ISO 14001 ISO 9001

## 1 - 90° long sweep bend male/female

| Ø          | 1/8"  | 1/4"  | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"      |
|------------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| pack       | 10    | 10    | 10     | 10     | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1       |
| black code | SF1N5 | SF1N8 | SF1N12 | SF1N15 | SF1N20 | SF1N26 | SF1N33 | SF1N40 | SF1N50 | SF1N66 | SF1N80 | SF1N102 |
| galv. code | SF1G5 | SF1G8 | SF1G12 | SF1G15 | SF1G20 | SF1G26 | SF1G33 | SF1G40 | SF1G50 | SF1G66 | SF1G80 | SF1G102 |

## 1A - 90° short bend male/female



| Ø          | 1/4"   | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"       |
|------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| pack       | 10     | 10      | 10      | 10      | 1       | 1       | 1       | 1       | 1       | 1       | 1        |
| black code | SF1AN8 | SF1AN12 | SF1AN15 | SF1AN20 | SF1AN26 | SF1AN33 | SF1AN40 | SF1AN50 | SF1AN66 | SF1AN80 | SF1AN102 |
| galv. code | SF1AG8 | SF1AG12 | SF1AG15 | SF1AG20 | SF1AG26 | SF1AG33 | SF1AG40 | SF1AG50 | SF1AG66 | SF1AG80 | SF1AG102 |

## 2 - 90° long sweep bend female/female



| Ø          | 1/4"  | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"      |
|------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| pack       | 1     | 10     | 10     | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1       |
| black code | SF2N8 | SF2N12 | SF2N15 | SF2N20 | SF2N26 | SF2N33 | SF2N40 | SF2N50 | SF2N66 | SF2N80 | SF2N102 |
| galv. code | SF2G8 | SF2G12 | SF2G15 | SF2G20 | SF2G26 | SF2G33 | SF2G40 | SF2G50 | SF2G66 | SF2G80 | SF2G102 |

## 2A - 90° short bend female/female



| Ø          | 1/4"   | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"       |
|------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| pack       | 1      | 10      | 10      | 10      | 1       | 1       | 1       | 1       | 1       | 1       | 1        |
| black code | SF2AN8 | SF2AN12 | SF2AN15 | SF2AN20 | SF2AN26 | SF2AN33 | SF2AN40 | SF2AN50 | SF2AN66 | SF2AN80 | SF2AN102 |
| galv. code | SF2AG8 | SF2AG12 | SF2AG15 | SF2AG20 | SF2AG26 | SF2AG33 | SF2AG40 | SF2AG50 | SF2AG66 | SF2AG80 | SF2AG102 |

## 3 - 90° long sweep bend male/male



| Ø          | 1/4"  | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"      |
|------------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| pack       | 1     | 10     | 10     | 1      | 1      | 1      | 1      | 1      | 1      | 1      | 1       |
| black code | SF3N8 | SF3N12 | SF3N15 | SF3N20 | SF3N26 | SF3N33 | SF3N40 | SF3N50 | SF3N66 | SF3N80 | SF3N102 |
| galv. code | SF3G8 | SF3G12 | SF3G15 | SF3G20 | SF3G26 | SF3G33 | SF3G40 | SF3G50 | SF3G66 | SF3G80 | SF3G102 |

## 40 - 45° long sweep bend male/female



| Ø          | 1/4"   | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"       |
|------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| pack       | 10     | 10      | 10      | 10      | 5       | 1       | 1       | 1       | 1       | 1       | 1        |
| black code | SF40N8 | SF40N12 | SF40N15 | SF40N20 | SF40N26 | SF40N33 | SF40N40 | SF40N50 | SF40N66 | SF40N80 | SF40N102 |
| galv. code | SF40G8 | SF40G12 | SF40G15 | SF40G20 | SF40G26 | SF40G33 | SF40G40 | SF40G50 | SF40G66 | SF40G80 | SF40G102 |

**NEW**



## 41 - 45° long sweep bend female/female

| Ø          | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"       |
|------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| pack       | 1       | 10      | 10      | 5       | 1       | 1       | 1       | 1       | 1       | 1        |
| black code | SF41N12 | SF41N15 | SF41N20 | SF41N26 | SF41N33 | SF41N40 | SF41N50 | SF41N66 | SF41N80 | -        |
| galv. code | SF41G12 | SF41G15 | SF41G20 | SF41G26 | SF41G33 | SF41G40 | SF41G50 | SF41G66 | SF41G80 | SF41G102 |



## 60 - 180° return bend female/female

| Ø          | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------------|---------|---------|---------|---------|---------|---------|
| pack       | 1       | 1       | 1       | 1       | 1       | 1       |
| black code | SF60N15 | SF60N20 | SF60N26 | SF60N33 | SF60N40 | SF60N50 |
| galv. code | SF60G15 | SF60G20 | SF60G26 | SF60G33 | SF60G40 | SF60G50 |



## 85 - Crossover female/female

| Ø          | 1/2"    | 1/2-3/4"  | 3/4"    | 1"      | 1"1/4"  |
|------------|---------|-----------|---------|---------|---------|
| pack       | 10      | 10        | 1       | 1       | 1       |
| black code | SF85N15 | SF85N1520 | SF85N20 | SF85N26 | SF85N33 |
| galv. code | SF85G15 | SF85G1520 | SF85G20 | SF85G26 | SF85G33 |



## 90 - 90° equal elbow female/female

| Ø          | 1/8"   | 1/4"   | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"       |
|------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| pack       | 10     | 10     | 10      | 10      | 10      | 10      | 1       | 1       | 1       | 1       | 1       | 1        |
| black code | SF90N5 | SF90N8 | SF90N12 | SF90N15 | SF90N20 | SF90N26 | SF90N33 | SF90N40 | SF90N50 | SF90N66 | SF90N80 | SF90N102 |
| galv. code | SF90G5 | SF90G8 | SF90G12 | SF90G15 | SF90G20 | SF90G26 | SF90G33 | SF90G40 | SF90G50 | SF90G66 | SF90G80 | SF90G102 |



## 90R - 90° reducing elbow female/female

| Ø          | 1/4"-1/8" | 3/8"-1/4" | 1/2"-1/4" | 1/2"-3/8" | 3/4"-3/8" | 3/4"-1/2" | 1"-3/8"   | 1"-1/2"   | 1"-3/4"   | 1"1/4"-1/2" | 1"1/4"-3/4" | 1"1/4"-1" |
|------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-------------|-------------|-----------|
| pack       | 1         | 10        | 10        | 10        | 10        | 10        | 10        | 10        | 10        | 1           | 1           | 1         |
| black code | SF90N85   | SF90N128  | SF90N158  | SF90N1512 | SF90N2012 | SF90N2015 | SF90N2612 | SF90N2615 | SF90N2620 | SF90N3315   | SF90N3320   | SF90N3326 |
| galv. code | SF90G85   | SF90G128  | SF90G158  | SF90G1512 | SF90G2012 | SF90G2015 | SF90G2612 | SF90G2615 | SF90G2620 | SF90G3315   | SF90G3320   | SF90G3326 |

| Ø          | 1"1/2-3/4" | 1"1/2-1"  | 1"1/2-1"1/4" | 2"-1"     | 2"-1"1/4" | 2"-1"1/2" | 2"1/2-2"  |
|------------|------------|-----------|--------------|-----------|-----------|-----------|-----------|
| pack       | 1          | 1         | 1            | 1         | 1         | 1         | 1         |
| black code | SF90N4020  | SF90N4026 | SF90N4033    | SF90N5026 | SF90N5033 | SF90N5040 | SF90N6650 |
| galv. code | SF90G4020  | SF90G4026 | SF90G4033    | SF90G5026 | SF90G5033 | SF90G5040 | SF90G6650 |



## 92 - 90° equal street elbow male/female

| Ø          | 1/8"   | 1/4"   | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      | 4"       |
|------------|--------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| pack       | 10     | 10     | 10      | 10      | 10      | 10      | 1       | 1       | 1       | 1       | 1       | 1        |
| black code | SF92N5 | SF92N8 | SF92N12 | SF92N15 | SF92N20 | SF92N26 | SF92N33 | SF92N40 | SF92N50 | SF92N66 | SF92N80 | SF92N102 |
| galv. code | SF92G5 | SF92G8 | SF92G12 | SF92G15 | SF92G20 | SF92G26 | SF92G33 | SF92G40 | SF92G50 | SF92G66 | SF92G80 | SF92G102 |

**NEW**



### 92R - 90° reducing street elbow female>male

| Ø          | 1/2"-3/8" | 3/4"-1/2" | 1"-1/2"   | 1"-3/4"   | 1"1/4-3/4" | 1"1/4-1"  | 1"1/2-1"  | 1"1/2-1"1/4" |
|------------|-----------|-----------|-----------|-----------|------------|-----------|-----------|--------------|
| pack       | 10        | 10        | 10        | 10        | 1          | 1         | 1         | 1            |
| black code | SF92N1512 | SF92N2015 | SF92N2615 | SF92N2620 | -          | SF92N3326 | SF92N4026 | SF92N4033    |
| galv. code | SF92G1512 | SF92G2015 | SF92G2615 | SF92G2620 | SF92G3320  | SF92G3326 | SF92G4026 | SF92G4033    |



### 92R - 90° reducing street elbow male>female

| Ø          | 3/8"-1/2" | 1/2"-3/4" | 3/4"-1"   |
|------------|-----------|-----------|-----------|
| pack       | 10        | 10        | 10        |
| black code | SF92N1215 | SF92N1520 | SF92N2026 |
| galv. code | SF92G1215 | SF92G1520 | SF92G2026 |



### 94 - 90° equal elbow male/male

| Ø          | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------------|---------|---------|---------|---------|---------|---------|---------|
| pack       | 1       | 10      | 10      | 10      | 1       | 1       | 1       |
| black code | SF94N12 | SF94N15 | SF94N20 | SF94N26 | SF94N33 | SF94N40 | SF94N50 |
| galv. code | SF94G12 | SF94G15 | SF94G20 | SF94G26 | SF94G33 | SF94G40 | SF94G50 |



### 95 - 90° union elbow flat bearing female/female

| Ø          | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------------|---------|---------|---------|---------|---------|---------|---------|
| pack       | 1       | 10      | 10      | 1       | 1       | 1       | 1       |
| black code | SF95N12 | SF95N15 | SF95N20 | SF95N26 | SF95N33 | SF95N40 | SF95N50 |
| galv. code | SF95G12 | SF95G15 | SF95G20 | SF95G26 | SF95G33 | SF95G40 | SF95G50 |



### 96 - 90° union elbow conical bearing female/female

| Ø          | 1/4"   | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      |
|------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack       | 1      | 1       | 10      | 5       | 1       | 1       | 1       | 1       | 1       | 1       |
| black code | SF96N8 | SF96N12 | SF96N15 | SF96N20 | SF96N26 | SF96N33 | SF96N40 | SF96N50 | SF96N66 | SF96N80 |
| galv. code | SF96G8 | SF96G12 | SF96G15 | SF96G20 | SF96G26 | SF96G33 | SF96G40 | SF96G50 | SF96G66 | SF96G80 |



### 97 - 90° union elbow flat bearing male/female

| Ø          | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------------|---------|---------|---------|---------|---------|---------|---------|
| pack       | 1       | 10      | 1       | 1       | 1       | 1       | 1       |
| black code | SF97N12 | SF97N15 | SF97N20 | SF97N26 | SF97N33 | SF97N40 | SF97N50 |
| galv. code | SF97G12 | SF97G15 | SF97G20 | SF97G26 | SF97G33 | SF97G40 | SF97G50 |



### 98 - 90° union elbow conical bearing male/female

| Ø          | 1/4"   | 3/8"    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      | 2"1/2"  | 3"      |
|------------|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack       | 1      | 1       | 5       | 1       | 1       | 1       | 1       | 1       | 1       | 1       |
| black code | SF98N8 | SF98N12 | SF98N15 | SF98N20 | SF98N26 | SF98N33 | SF98N40 | SF98N50 | SF98N66 | SF98N80 |
| galv. code | SF98G8 | SF98G12 | SF98G15 | SF98G20 | SF98G26 | SF98G33 | SF98G40 | SF98G50 | SF98G66 | SF98G80 |



### 120 - 45° equal elbow female/female

| Ø          | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10       | 10       | 10       | 10       | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF120N12 | SF120N15 | SF120N20 | SF120N26 | SF120N33 | SF120N40 | SF120N50 | SF120N66 | SF120N80 | SF120N102 |
| galv. code | SF120G12 | SF120G15 | SF120G20 | SF120G26 | SF120G33 | SF120G40 | SF120G50 | SF120G66 | SF120G80 | SF120G102 |

**NEW**



### 121 - 45° equal elbow male/female

| Ø          | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4    | 1"1/2    | 2"       | 2"1/2    | 3"       |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 10       | 10       | 10       | 10       | 1        | 1        | 1        | 1        | 1        |
| black code | SF121N12 | SF121N15 | SF121N20 | SF121N26 | SF121N33 | SF121N40 | SF121N50 | SF121N66 | SF121N80 |
| galv. code | SF121G12 | SF121G15 | SF121G20 | SF121G26 | SF121G33 | SF121G40 | SF121G50 | SF121G66 | SF121G80 |



### 130 - Equal tee female

| Ø          | 1/8"    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4    | 1"1/2    | 2"       | 2"1/2    | 3"       | 4"        |
|------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10      | 10      | 10       | 10       | 10       | 5        | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF130N5 | SF130N8 | SF130N12 | SF130N15 | SF130N20 | SF130N26 | SF130N33 | SF130N40 | SF130N50 | SF130N66 | SF130N80 | SF130N102 |
| galv. code | SF130G5 | SF130G8 | SF130G12 | SF130G15 | SF130G20 | SF130G26 | SF130G33 | SF130G40 | SF130G50 | SF130G66 | SF130G80 | SF130G102 |



### 130R - Reducing tee female 1=3<2

| Ø          | 3/8"-1/2"-3/8" | 1/2"-3/4"-1/2" | 1/2"-1"-1/2" | 3/4"-1"-3/4" | 1"-1"1/4-1"  | 1"-1"1/2-1"  | 1"1/4-1"1/2-1"1/4 | 1"1/4-2"-1"1/4 | 1"1/2-2"-1"1/2 | 2"-2"1/2-2"  |
|------------|----------------|----------------|--------------|--------------|--------------|--------------|-------------------|----------------|----------------|--------------|
| pack       | 10             | 10             | 10           | 10           | 1            | 1            | 1                 | 1              | 1              | 1            |
| black code | SF130N121512   | SF130N152015   | SF130N152615 | SF130N202620 | SF130N263326 | SF130N264026 | SF130N334033      | SF130N335033   | SF130N405040   | SF130N506650 |
| galv. code | SF130G121512   | SF130G152015   | SF130G152615 | SF130G202620 | SF130G263326 | SF130G264026 | SF130G334033      | SF130G335033   | SF130G405040   | SF130G506650 |



### 130R - Reducing tee female 1=3>2

| Ø          | 3/8"-1/4"-3/8"    | 1/2"-1/4"-1/2"    | 1/2"-3/8"-1/2"   | 3/4"-1/4"-3/4"   | 3/4"-3/8"-3/4" | 3/4" x 1/2"-3/4" | 1"-1/4"-1"       | 1"-3/8"-1"       | 1"-1/2" x 1"   |
|------------|-------------------|-------------------|------------------|------------------|----------------|------------------|------------------|------------------|----------------|
| pack       | 10                | 10                | 10               | 10               | 10             | 10               | 10               | 10               | 10             |
| black code | SF130N128         | SF130N158         | SF130N1512       | SF130N208        | SF130N2012     | SF130N2015       | SF130N268        | SF130N2612       | SF130N2615     |
| galv. code | SF130G128         | SF130G158         | SF130G1512       | SF130G208        | SF130G2012     | SF130G2015       | SF130G268        | SF130G2612       | SF130G2615     |
| Ø          | 1"-3/4"-1"        | 1"1/4-3/8"-1"1/4  | 1"1/4-1/2"-1"1/4 | 1"1/4-3/4"-1"1/4 | 1"1/4-1"-1"1/4 | 1"1/2-3/8"-1"1/2 | 1"1/2-1/2"-1"1/2 | 1"1/2-3/4"-1"1/2 | 1"1/2-1"-1"1/2 |
| pack       | 10                | 1                 | 1                | 1                | 1              | 1                | 1                | 1                | 1              |
| black code | SF130N2620        | SF130N3312        | SF130N3315       | SF130N3320       | SF130N3326     | SF130N4012       | SF130N4015       | SF130N4020       | SF130N4026     |
| galv. code | SF130G2620        | SF130G3312        | SF130G3315       | SF130G3320       | SF130G3326     | SF130G4012       | SF130G4015       | SF130G4020       | SF130G4026     |
| Ø          | 1"1/2-1"1/4-1"1/2 | 2"-1/2"-2"        | 2"-3/4"-2"       | 2"-1"-2"         | 2"-1"1/4-2"    | 2"-1"1/2-2"      | 2"1/2-1/2"-2"1/2 | 2"1/2-3/4"-2"1/2 | 2"1/2-1"-2"1/2 |
| pack       | 1                 | 1                 | 1                | 1                | 1              | 1                | 1                | 1                | 1              |
| black code | SF130N4033        | SF130N5015        | SF130N5015       | SF130N5020       | SF130N5026     | SF130N5033       | SF130N5040       | SF130N6615       | SF130N6620     |
| galv. code | SF130G4033        | SF130G5015        | SF130G5015       | SF130G5020       | SF130G5026     | SF130G5033       | SF130G5040       | SF130G6615       | SF130G6620     |
| Ø          | 2"1/2-1"1/4-2"1/2 | 2"1/2-1"1/2-2"1/2 | 2"1/2-2"1/2      | 2"1/2-2"-2"1/2   | 3"-1/2"-3"     | 3"-3/4"-3"       | 3"-1"-3"         | 3"-1"1/4-3"      | 3"-1"1/2-3"    |
| pack       | 1                 | 1                 | 1                | 1                | 1              | 1                | 1                | 1                | 1              |
| black code | SF130N6626        | SF130N6633        | SF130N6640       | SF130N6650       | SF130N8015     | SF130N8020       | SF130N8026       | SF130N8033       | SF130N8040     |
| galv. code | SF130G6626        | SF130G6633        | SF130G6640       | SF130G6650       | SF130G8015     | SF130G8020       | SF130G8026       | SF130G8033       | SF130G8040     |
| Ø          | 3"-2"-3"          | 3"-2"1/2-3"       | 4"-1"1/2-4"      | 4"-2"-4"         | 4"-2"1/2-4"    | 4"-3"-4"         |                  |                  |                |
| pack       | 1                 | 1                 | 1                | 1                | 1              | 1                |                  |                  |                |
| black code | SF130N8050        | SF130N8066        | SF130N10240      | SF130N10250      | SF130N10266    | SF130N10280      |                  |                  |                |
| galv. code | SF130G8050        | SF130G8066        | SF130G10240      | SF130G10250      | SF130G10266    | SF130G10280      |                  |                  |                |



### 130R - Reducing tee female 1>2=3

| Ø          | 1"1/2-3/8"-3/8" | 3/4"-1/2"-1/2" | 1"-1/2"-1/2" | 1"-3/4"-3/4" | 1"1/4-3/4"-3/4" | 1"1/4-1"-1"  | 1"1/2-1"-1"  | 1"1/2-1"1/4-1"1/4 | 2"-1"1/4-1"1/4 | 2"1/2-1"1/2-1"1/2 | 2"1/2-2"-2"  | 3"-2"-2"     |
|------------|-----------------|----------------|--------------|--------------|-----------------|--------------|--------------|-------------------|----------------|-------------------|--------------|--------------|
| pack       | 10              | 10             | 10           | 10           | 1               | 1            | 1            | 1                 | 1              | 1                 | 1            | 1            |
| black code | SF130N151212    | SF130N201515   | SF130N261515 | SF130N262020 | SF130N332020    | SF130N332626 | SF130N402626 | SF130N403333      | SF130N503333   | SF130N504040      | SF130N665050 | -            |
| galv. code | SF130G151212    | SF130G201515   | SF130G261515 | SF130G262020 | SF130G332020    | SF130G332626 | SF130G402626 | SF130G403333      | SF130G503333   | SF130G504040      | SF130G665050 | SF130G805050 |

**NEW**



### 130R - Reducing tee female 1=2>3

| Ø          | 1/2"-1/2"-3/8" | 3/4"-3/4"-3/8" | 3/4"-3/4"-1/2" | 1"-1"-3/8"   | 1"-1"-1/2"   | 1"-1"-3/4"   | 1 1/4"-1 1/4"-1/2" | 1 1/4"-1 1/4"-3/4" | 1 1/4"-1 1/4"-1" | 1 1/2"-1 1/2"-1/2" |
|------------|----------------|----------------|----------------|--------------|--------------|--------------|--------------------|--------------------|------------------|--------------------|
| pack       | 10             | 10             | 10             | 10           | 10           | 1            | 1                  | 1                  | 1                | 1                  |
| black code | SF130N151512   | SF130N202012   | SF130N202015   | SF130N262612 | SF130N262615 | SF130N262620 | SF130N333315       | SF130N333320       | SF130N333326     | SF130N404015       |
| galv. code | SF130G151512   | SF130G202012   | SF130G202015   | SF130G262612 | SF130G262615 | SF130G262620 | SF130G333315       | SF130G333320       | SF130G333326     | SF130G404015       |

| Ø          | 1 1/2"-1 1/2"-3/4" | 1 1/2"-1 1/2"-1" | 1 1/2"-1 1/2"-1 1/4" | 2"-2"-1/2"   | 2"-2"-3/4"   | 2"-2"-1"     | 2"-2"-1 1/4" | 2"-2"-1 1/2" | 2 1/2"-2 1/2"-2" |
|------------|--------------------|------------------|----------------------|--------------|--------------|--------------|--------------|--------------|------------------|
| pack       | 1                  | 1                | 1                    | 1            | 1            | 1            | 1            | 1            | 1                |
| black code | SF130N404020       | SF130N404026     | SF130N404033         | SF130N505015 | SF130N505020 | SF130N505026 | SF130N505033 | SF130N505040 | -                |
| galv. code | SF130G404020       | SF130G404026     | SF130G404033         | SF130G505015 | SF130G505020 | SF130G505026 | SF130G505033 | SF130G505040 | SF130G666650     |



### 130R - Reducing tee female 1≠2≠3

| Ø          | 3/4"-3/8"-1/2" | 3/4"-1/2"-3/8" | 3/4"-1"-1/2" | 1"-1/2"-3/4" | 1"-3/4"-1/2" | 1"-1 1/4"-3/4" | 1 1/4"-1/2"-1" | 1 1/4"-3/4"-1" | 1 1/4"-1"-3/4" | 1 1/4"-1 1/2"-1" |
|------------|----------------|----------------|--------------|--------------|--------------|----------------|----------------|----------------|----------------|------------------|
| pack       | 10             | 10             | 10           | 10           | 10           | 1              | 1              | 1              | 1              | 1                |
| black code | SF130N201215   | SF130N201512   | SF130N202615 | SF130N261520 | SF130N262015 | SF130N263320   | SF130N331526   | SF130N332026   | SF130N332620   | SF130N334026     |
| galv. code | SF130G201215   | SF130G201512   | SF130G202615 | SF130G261520 | SF130G262015 | SF130G263320   | SF130G331526   | SF130G332026   | SF130G332620   | SF130G334026     |

| Ø          | 1 1/2"-1/2"-1 1/4" | 1 1/2"-3/4"-1 1/4" | 1 1/2"-1"-1 1/4" | 1 1/2"-1 1/4"-1" | 1 1/2"-2"-1 1/4" | 2"-1/2"-1 1/2" | 2"-3/4"-1 1/2" | 2"-1"-1 1/2" | 2"-1 1/4"-1 1/2" |
|------------|--------------------|--------------------|------------------|------------------|------------------|----------------|----------------|--------------|------------------|
| pack       | 1                  | 1                  | 1                | 1                | 1                | 1              | 1              | 1            | 1                |
| black code | SF130N401533       | SF130N402033       | SF130N402633     | SF130N403326     | SF130N405033     | SF130N501540   | SF130N502040   | SF130N502640 | SF130N503340     |
| galv. code | SF130G401533       | SF130G402033       | SF130G402633     | SF130G403326     | SF130G405033     | SF130G501540   | SF130G502040   | SF130G502640 | SF130G503340     |



### 131 - Equal pitcher tee female

| Ø          | 1/2"     | 3/4"     | 1"       | 1 1/4"   | 1 1/2"   | 2"       | 2 1/2"   | 3"       |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 10       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| black code | SF131N15 | SF131N20 | SF131N26 | SF131N33 | SF131N40 | SF131N50 | SF131N66 | SF131N80 |
| galv. code | SF131G15 | SF131G20 | SF131G26 | SF131G33 | SF131G40 | SF131G50 | SF131G66 | SF131G80 |



### 132 - Equal twin elbows female

| Ø          | 1/2"     | 3/4"     | 1"       | 1 1/4"   | 1 1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|
| pack       | 10       | 1        | 1        | 1        | 1        | 1        |
| black code | SF132N15 | SF132N20 | SF132N26 | SF132N33 | SF132N40 | SF132N50 |
| galv. code | SF132G15 | SF132G20 | SF132G26 | SF132G33 | SF132G40 | SF132G50 |



### 133 - Equal tee female/male/female

| Ø          | 3/8"     | 1/2"     | 3/4"     | 1"       |
|------------|----------|----------|----------|----------|
| pack       | 10       | 10       | 1        | 1        |
| black code | SF133N12 | SF133N15 | SF133N20 | SF133N26 |
| galv. code | SF133G12 | SF133G15 | SF133G20 | SF133G26 |

**NEW**



### 134 - Equal tee male/female/female

| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 10      | 10       | 10       | 10       | 1        | 1        | 1        | 1        |
| black code | SF134N8 | SF134N12 | SF134N15 | SF134N20 | SF134N26 | SF134N33 | SF134N40 | SF134N50 |
| galv. code | SF134G8 | SF134G12 | SF134G15 | SF134G20 | SF134G26 | SF134G33 | SF134G40 | SF134G50 |

### SF134R - Reducing tee male/female/female 1=3>2



| Ø          | 1/2"-1/4" | 3/4"-1/2"  | 1"-1/2"    |
|------------|-----------|------------|------------|
| pack       | 1         | 10         | 1          |
| black code | SF134N158 | SF134N2015 | SF134N2615 |
| galv. code | SF134G158 | SF134G2015 | SF134G2615 |



### 135 - Equal tee male

| Ø          | 1/2"     | 3/4"     | 1"       |
|------------|----------|----------|----------|
| pack       | 10       | 1        | 1        |
| black code | SF135N15 | SF135N20 | SF135N26 |
| galv. code | SF135G15 | SF135G20 | SF135G26 |

### 165 - 45° equal tee female



| Ø          | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 1        | 10       | 10       | 5        | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF165N12 | SF165N15 | SF165N20 | SF165N26 | SF165N33 | SF165N40 | SF165N50 | SF165N66 | SF165N80 | SF165N102 |
| galv. code | -        | SF165G15 | SF165G20 | SF165G26 | SF165G33 | SF165G40 | SF165G50 | SF165G66 | SF165G80 | SF165G102 |

### 180 - Equal cross female



| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10      | 10       | 10       | 10       | 1        | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF180N8 | SF180N12 | SF180N15 | SF180N20 | SF180N26 | SF180N33 | SF180N40 | SF180N50 | SF180N66 | SF180N80 | SF180N102 |
| galv. code | SF180G8 | SF180G12 | SF180G15 | SF180G20 | SF180G26 | SF180G33 | SF180G40 | SF180G50 | SF180G66 | SF180G80 | SF180G102 |

### 180R - Reducing cross female 1=3>2=4



| Ø          | 3/4"-1/2"  | 1"-1/2"    | 1"-3/4"    | 1"1/4"-1"  | 1"1/2"-1"  | 2"-1"      |
|------------|------------|------------|------------|------------|------------|------------|
| pack       | 1          | 1          | 1          | 1          | 1          | 1          |
| black code | SF180N2015 | SF180N2615 | SF180N2620 | SF180N3326 | SF180N4026 | SF180N5026 |
| galv. code | SF180G2015 | SF180G2615 | SF180G2620 | SF180G3326 | SF180G4026 | SF180G5026 |

### 221 - Side outlet elbow



| Ø          | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 1        | 10       | 10       | 1        | 1        | 1        | 1        |
| black code | SF221N12 | SF221N15 | SF221N20 | SF221N26 | SF221N33 | SF221N40 | SF221N50 |
| galv. code | SF221G12 | SF221G15 | SF221G20 | SF221G26 | SF221G33 | SF221G40 | SF221G50 |

### 223 - Side outlet tee



| Ø          | 1/2"     | 3/4"     | 1"       |
|------------|----------|----------|----------|
| pack       | 1        | 1        | 1        |
| black code | SF223N15 | SF223N20 | SF223N26 |
| galv. code | SF223G15 | SF223G20 | SF223G26 |

### 220 - Equal Y distributor



| Ø          | 3/8"     | 1/2"     | 3/4"     | 1"       |
|------------|----------|----------|----------|----------|
| pack       | 10       | 10       | 10       | 1        |
| black code | SF220N12 | SF220N15 | SF220N20 | SF220N26 |
| galv. code | SF220G12 | SF220G15 | SF220G20 | SF220G26 |

**NEW**



## 240 - Reducing socket

| Ø          | 1/4"-1/8"   | 3/8"-1/8"  | 3/8"-1/4"  | 1/2"-1/4"  | 1/2"-3/8"   | 3/4"-1/4"   | 3/4"-3/8"   | 3/4"-1/2"   | 1"-3/8"     |
|------------|-------------|------------|------------|------------|-------------|-------------|-------------|-------------|-------------|
| pack       | 10          | 10         | 10         | 10         | 10          | 10          | 10          | 10          | 10          |
| black code | SF240N85    | SF240N125  | SF240N128  | SF240N158  | SF240N1512  | SF240N208   | SF240N2012  | SF240N2015  | SF240N2612  |
| galv. code | SF240G85    | SF240G125  | SF240G128  | SF240G158  | SF240G1512  | SF240G208   | SF240G2012  | SF240G2015  | SF240G2612  |
| Ø          | 1"-1/2"     | 1"-3/4"    | 1"1/4-3/8" | 1"1/4-1/2" | 1"1/4-3/4"  | 1"1/4-1"    | 1"1/2-1/2"  | 1"1/2-3/4"  | 1"1/2-1"    |
| pack       | 10          | 10         | 1          | 10         | 10          | 1           | 1           | 1           | 1           |
| black code | SF240N2615  | SF240N2620 | SF240N3312 | SF240N3315 | SF240N3320  | SF240N3326  | SF240N4015  | SF240N4020  | SF240N4026  |
| galv. code | SF240G2615  | SF240G2620 | SF240G3312 | SF240G3315 | SF240G3320  | SF240G3326  | SF240G4015  | SF240G4020  | SF240G4026  |
| Ø          | 1"1/2-1"1/4 | 2"-1/2"    | 2"-3/4"    | 2"-1"      | 2"-1"1/4    | 2"-1"1/2    | 2"1/2-1"    | 2"1/2-1"1/4 | 2"1/2-1"1/2 |
| pack       | 1           | 1          | 1          | 1          | 1           | 1           | 1           | 1           | 1           |
| black code | SF240N4033  | SF240N5015 | SF240N5020 | SF240N5026 | SF240N5033  | SF240N5040  | SF240N6626  | SF240N6633  | SF240N6640  |
| galv. code | SF240G4033  | SF240G5015 | SF240G5020 | SF240G5026 | SF240G5033  | SF240G5040  | SF240G6626  | SF240G6633  | SF240G6640  |
| Ø          | 2"1/2-2"    | 3"-1"1/2   | 3"-2"      | 3"-2"1/2   | 4"-2"       | 4"-2"1/2    | 4"-3"       |             |             |
| pack       | 1           | 1          | 1          | 1          | 1           | 1           | 1           |             |             |
| black code | SF240N6650  | SF240N8040 | SF240N8050 | SF240N8066 | SF240N10250 | SF240N10266 | SF240N10280 |             |             |
| galv. code | SF240G6650  | SF240G8040 | SF240G8050 | SF240G8066 | SF240G10250 | SF240G10266 | SF240G10280 |             |             |



## 241 - Reducing bush

| Ø          | 1/4"-1/8"   | 3/8"-1/8"   | 3/8"-1/4"   | 1/2"-1/8"   | 1/2"-1/4"  | 1/2"-3/8"  | 3/4"-1/4"  | 3/4"-3/8"  | 3/4"-1/2"  |
|------------|-------------|-------------|-------------|-------------|------------|------------|------------|------------|------------|
| pack       | 10          | 10          | 10          | 10          | 10         | 10         | 10         | 10         | 10         |
| black code | SF241N85    | SF241N125   | SF241N128   | SF241N155   | SF241N158  | SF241N1512 | SF241N208  | SF241N2012 | SF241N2015 |
| galv. code | SF241G85    | SF241G125   | SF241G128   | SF241G155   | SF241G158  | SF241G1512 | SF241G208  | SF241G2012 | SF241G2015 |
| Ø          | 1"-1/4"     | 1"-3/8"     | 1"-1/2"     | 1"-3/4"     | 1"1/4-3/8" | 1"1/4-1/2" | 1"1/4-3/4" | 1"1/4-1"   | 1"1/2-3/8" |
| pack       | 10          | 10          | 10          | 10          | 1          | 10         | 10         | 10         | 1          |
| black code | SF241N268   | SF241N2612  | SF241N2615  | SF241N2620  | SF241N3312 | SF241N3315 | SF241N3320 | SF241N3326 | SF241N4012 |
| galv. code | SF241G268   | SF241G2612  | SF241G2615  | SF241G2620  | SF241G3312 | SF241G3315 | SF241G3320 | SF241G3326 | SF241G4012 |
| Ø          | 1"1/2-1/2"  | 1"1/2-3/4"  | 1"1/2-1"    | 1"1/2-1"1/4 | 2"-1/2"    | 2"-3/4"    | 2"-1"      | 2"-1"1/4   | 2"-1"1/2   |
| pack       | 10          | 10          | 10          | 10          | 1          | 1          | 1          | 1          | 1          |
| black code | SF241N4015  | SF241N4020  | SF241N4026  | SF241N4033  | SF241N5015 | SF241N5020 | SF241N5026 | SF241N5033 | SF241N5040 |
| galv. code | SF241G4015  | SF241G4020  | SF241G4026  | SF241G4033  | SF241G5015 | SF241G5020 | SF241G5026 | SF241G5033 | SF241G5040 |
| Ø          | 2"1/2-1"    | 2"1/2-1"1/4 | 2"1/2-1"1/2 | 2"1/2-2"    | 3"-1"      | 3"-1"1/4   | 3"-1"1/2   | 3"-2"      | 3"-2"1/2   |
| pack       | 1           | 1           | 1           | 1           | 1          | 1          | 1          | 1          | 1          |
| black code | SF241N6626  | SF241N6633  | SF241N6640  | SF241N6650  | SF241N8026 | SF241N8033 | SF241N8040 | SF241N8050 | SF241N8066 |
| galv. code | SF241G6626  | SF241G6633  | SF241G6640  | SF241G6650  | SF241G8026 | SF241G8033 | SF241G8040 | SF241G8050 | SF241G8066 |
| Ø          | 4"-2"       | 4"-2"1/2    | 4"-3"       |             |            |            |            |            |            |
| pack       | 1           | 1           | 1           |             |            |            |            |            |            |
| black code | SF241N10250 | SF241N10266 | SF241N10280 |             |            |            |            |            |            |
| galv. code | SF241G10250 | SF241G10266 | SF241G10280 |             |            |            |            |            |            |



**NEW**



## 245 - Reducing hexagonal nipple male

| Ø          | 1/4"-1/8" | 3/8"-1/8" | 3/8"-1/4" | 1/2"-1/4" | 1/2"-3/8"  | 3/4"-1/4" | 3/4"-3/8"  | 3/4"-1/2"  | 1"-1/2"    |
|------------|-----------|-----------|-----------|-----------|------------|-----------|------------|------------|------------|
| pack       | 10        | 10        | 10        | 10        | 10         | 10        | 10         | 10         | 10         |
| black code | SF245N85  | SF245N125 | SF245N128 | SF245N158 | SF245N1512 | SF245N208 | SF245N2012 | SF245N2015 | SF245N2615 |
| galv. code | SF245G85  | SF245G125 | SF245G128 | SF245G158 | SF245G1512 | SF245G208 | SF245G2012 | SF245G2015 | SF245G2615 |

| Ø          | 1"-3/4"    | 1"1/4-1/2" | 1"1/4-3/4" | 1"1/4-1"   | 1"1/2-3/4" | 1"1/2-1"   | 1"1/2-1"1/4 | 2"-1"      | 2"-1"1/4   |
|------------|------------|------------|------------|------------|------------|------------|-------------|------------|------------|
| pack       | 10         | 1          | 5          | 5          | 1          | 1          | 1           | 1          | 1          |
| black code | SF245N2620 | SF245N3315 | SF245N3320 | SF245N3326 | SF245N4020 | SF245N4026 | SF245N4033  | SF245N5026 | SF245N5033 |
| galv. code | SF245G2620 | SF245G3315 | SF245G3320 | SF245G3326 | SF245G4020 | SF245G4026 | SF245G4033  | SF245G5026 | SF245G5033 |

| Ø          | 2"-1"1/2   | 2"1/2-1"1/2 | 2"1/2-2"   | 3"-2"      | 3"-2"1/2   | 4"-3"       |
|------------|------------|-------------|------------|------------|------------|-------------|
| pack       | 1          | 1           | 1          | 1          | 1          | 1           |
| black code | SF245N5040 | SF245N6640  | SF245N6650 | SF245N8050 | SF245N8066 | SF245N10280 |
| galv. code | SF245G5040 | SF245G6640  | SF245G6650 | SF245G8050 | SF245G8066 | SF245G10280 |



## 246 - Reducing socket female to male

| Ø          | 1/4"-1/8" | 3/8"-1/4" | 1/2"-1/4" | 1/2"-3/8"  | 3/4"-3/8"  | 3/4"-1/2"  | 1"-1/2"    | 1"-3/4"    | 1"1/4-1/2" |
|------------|-----------|-----------|-----------|------------|------------|------------|------------|------------|------------|
| pack       | 10        | 10        | 10        | 10         | 10         | 10         | 10         | 10         | 1          |
| black code | SF246N85  | SF246N128 | SF246N158 | SF246N1512 | SF246N2012 | SF246N2015 | SF246N2615 | SF246N2620 | SF246N3315 |
| galv. code | SF246G85  | SF246G128 | SF246G158 | SF246G1512 | SF246G2012 | SF246G2015 | SF246G2615 | SF246G2620 | SF246G3315 |

| Ø          | 1"1/4-3/4" | 1"1/4-1"   | 1"1/2-3/4" | 1"1/2-1"   | 1"1/2-1"1/4 | 2"-1"      | 2"-1"1/4   | 2"-1"1/2   | 2"1/2-1"1/2 |
|------------|------------|------------|------------|------------|-------------|------------|------------|------------|-------------|
| pack       | 5          | 5          | 1          | 1          | 1           | 1          | 1          | 1          | 1           |
| black code | SF246N3320 | SF246N3326 | SF246N4020 | SF246N4026 | SF246N4033  | SF246N5026 | SF246N5033 | SF246N5040 | SF246N6640  |
| galv. code | SF246G3320 | SF246G3326 | SF246G4020 | SF246G4026 | SF246G4033  | SF246G5026 | SF246G5033 | SF246G5040 | SF246G6640  |

| Ø          | 2"1/2-2"   | 3"-2"      | 3"-2"1/2   |
|------------|------------|------------|------------|
| pack       | 1          | 1          | 1          |
| black code | SF246N6650 | SF246N8050 | SF246N8066 |
| galv. code | SF246G6650 | SF246G8050 | SF246G8066 |



## 270 - Equal socket

| Ø          | 1/8"    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4    | 1"1/2    | 2"       | 2"1/2    | 3"       | 4"        |
|------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10      | 10      | 10       | 10       | 10       | 1        | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF270N5 | SF270N8 | SF270N12 | SF270N15 | SF270N20 | SF270N26 | SF270N33 | SF270N40 | SF270N50 | SF270N66 | SF270N80 | SF270N102 |
| galv. code | SF270G5 | SF270G8 | SF270G12 | SF270G15 | SF270G20 | SF270G26 | SF270G33 | SF270G40 | SF270G50 | SF270G66 | SF270G80 | SF270G102 |



## 271 - Right & left hand thread socket

| Ø          | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4    | 1"1/2    | 2"       |
|------------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 1        | 1        | 1        | 1        | 1        | 1        | 1        |
| black code | SF271N12 | SF271N15 | SF271N20 | SF271N26 | SF271N33 | SF271N40 | SF271N50 |
| galv. code | SF271G12 | SF271G15 | SF271G20 | SF271G26 | SF271G33 | SF271G40 | SF271G50 |

**NEW**



## 280 - Hexagonal nipple

| Ø          | 1/8"    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10      | 10      | 10       | 10       | 10       | 10       | 5        | 1        | 1        | 1        | 1        | 1         |
| black code | SF280N5 | SF280N8 | SF280N12 | SF280N15 | SF280N20 | SF280N26 | SF280N33 | SF280N40 | SF280N50 | SF280N66 | SF280N80 | SF280N102 |
| galv. code | SF280G5 | SF280G8 | SF280G12 | SF280G15 | SF280G20 | SF280G26 | SF280G33 | SF280G40 | SF280G50 | SF280G66 | SF280G80 | SF280G102 |



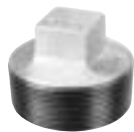
## 281 - Right & left hand thread hexagonal nipple

| Ø          | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 10       | 10       | 10       | 10       | 1        | 1        | 1        |
| black code | -        | SF281N15 | SF281N20 | SF281N26 | SF281N33 | SF281N40 | SF281N50 |
| galv. code | SF281G12 | SF281G15 | SF281G20 | SF281G26 | SF281G33 | SF281G40 | SF281G50 |



## 290 - Beaded square head plug

| Ø          | 1/8"    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10      | 10      | 10       | 10       | 10       | 10       | 10       | 1        | 1        | 1        | 1        | 1         |
| black code | SF290N5 | SF290N8 | SF290N12 | SF290N15 | SF290N20 | SF290N26 | SF290N33 | SF290N40 | SF290N50 | SF290N66 | SF290N80 | SF290N102 |
| galv. code | SF290G5 | SF290G8 | SF290G12 | SF290G15 | SF290G20 | SF290G26 | SF290G33 | SF290G40 | SF290G50 | SF290G66 | SF290G80 | SF290G102 |



## 291 - Square head plain plug

| Ø          | 1/8"    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10      | 10      | 10       | 10       | 10       | 10       | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF291N5 | SF291N8 | SF291N12 | SF291N15 | SF291N20 | SF291N26 | SF291N33 | SF291N40 | SF291N50 | SF291N66 | SF291N80 | SF291N102 |
| galv. code | SF291G5 | SF291G8 | SF291G12 | SF291G15 | SF291G20 | SF291G26 | SF291G33 | SF291G40 | SF291G50 | SF291G66 | SF291G80 | SF291G102 |



## 300 - Hexagonal cap

| Ø          | 1/8"    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10      | 10      | 10       | 10       | 10       | 10       | 10       | 1        | 1        | 1        | 1        | 1         |
| black code | SF300N5 | SF300N8 | SF300N12 | SF300N15 | SF300N20 | SF300N26 | SF300N33 | SF300N40 | SF300N50 | SF300N66 | SF300N80 | SF300N102 |
| galv. code | SF300G5 | SF300G8 | SF300G12 | SF300G15 | SF300G20 | SF300G26 | SF300G33 | SF300G40 | SF300G50 | SF300G66 | SF300G80 | SF300G102 |



## 312 - Recessed hexagonal backnut

| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 10      | 10       | 10       | 10       | 10       | 10       | 1        | 1        | 1        | 1        |
| black code | SF312N8 | SF312N12 | SF312N15 | SF312N20 | SF312N26 | SF312N33 | SF312N40 | SF312N50 | SF312N66 | SF312N80 |
| galv. code | SF312G8 | SF312G12 | SF312G15 | SF312G20 | SF312G26 | SF312G33 | SF312G40 | SF312G50 | SF312G66 | SF312G80 |



## 321 - Threaded flange

| Ø          | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|
| pack       | 1        | 1        | 1        | 1        | 1        | 1        |
| black code | SF321N15 | SF321N20 | SF321N26 | SF321N33 | SF321N40 | SF321N50 |
| galv. code | SF321G15 | SF321G20 | SF321G26 | SF321G33 | SF321G40 | SF321G50 |

**NEW**



### 326 - Threaded oval flange with holes

| Ø          | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|
| pack       | 1        | 1        | 1        | 1        | 1        | 1        |
| black code | SF326N15 | SF326N20 | SF326N26 | SF326N33 | SF326N40 | SF326N50 |
| galv. code | SF326G15 | SF326G20 | SF326G26 | SF326G33 | SF326G40 | SF326G50 |

### 330 - Equal union flat bearing female



| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 10      | 10       | 10       | 5        | 5        | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF330N8 | SF330N12 | SF330N15 | SF330N20 | SF330N26 | SF330N33 | SF330N40 | SF330N50 | SF330N66 | SF330N80 | SF330N102 |
| galv. code | SF330G8 | SF330G12 | SF330G15 | SF330G20 | SF330G26 | SF330G33 | SF330G40 | SF330G50 | SF330G66 | SF330G80 | SF330G102 |

### 331 - Equal union flat bearing male/female



| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 1       | 10       | 10       | 5        | 1        | 1        | 1        | 1        | 1        | 1        |
| black code | SF331N8 | SF331N12 | SF331N15 | SF331N20 | SF331N26 | SF331N33 | SF331N40 | SF331N50 | SF331N66 | SF331N80 |
| galv. code | SF331G8 | SF331G12 | SF331G15 | SF331G20 | SF331G26 | SF331G33 | SF331G40 | SF331G50 | SF331G66 | SF331G80 |

### 340 - Equal union conical bearing female



| Ø          | 1/8"    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 1       | 10      | 10       | 10       | 5        | 5        | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF340N5 | SF340N8 | SF340N12 | SF340N15 | SF340N20 | SF340N26 | SF340N33 | SF340N40 | SF340N50 | SF340N66 | SF340N80 | SF340N102 |
| galv. code | SF340G5 | SF340G8 | SF340G12 | SF340G15 | SF340G20 | SF340G26 | SF340G33 | SF340G40 | SF340G50 | SF340G66 | SF340G80 | SF340G102 |

### 341 - Equal union conical bearing male/female



| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 1       | 10       | 10       | 5        | 1        | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF341N8 | SF341N12 | SF341N15 | SF341N20 | SF341N26 | SF341N33 | SF341N40 | SF341N50 | SF341N66 | SF341N80 | SF341N102 |
| galv. code | SF341G8 | SF341G12 | SF341G15 | SF341G20 | SF341G26 | SF341G33 | SF341G40 | SF341G50 | SF341G66 | SF341G80 | SF341G102 |

### 342 - Equal union with bronze tightness ring female



| Ø          | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|
| pack       | 10       | 10       | 1        | 1        | 1        | 1        |
| black code | SF342N15 | SF342N20 | SF342N26 | SF342N33 | SF342N40 | SF342N50 |
| galv. code | SF342G15 | SF342G20 | SF342G26 | SF342G33 | SF342G40 | SF342G50 |

### 344 - Equal union conical bearing male



| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 1       | 1        | 10       | 1        | 1        | 1        | 1        | 1        |
| black code | SF344N8 | SF344N12 | SF344N15 | SF344N20 | SF344N26 | SF344N33 | SF344N40 | SF344N50 |
| galv. code | SF344G8 | SF344G12 | SF344G15 | SF344G20 | SF344G26 | SF344G33 | SF344G40 | SF344G50 |

**NEW**



### 370 - Female union bush for flat bearing union fitting

| Ø          | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   |
|------------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 1        | 1        | 10       | 5        | 1        | 1        | 1        |
| black code | SF370N15 | SF370N20 | SF370N26 | SF370N33 | SF370N40 | SF370N50 | SF370N66 |
| galv. code | SF370G15 | SF370G20 | SF370G26 | SF370G33 | SF370G40 | SF370G50 | SF370G66 |



### 371 - Male union end for flat bearing union fitting

| Ø          | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|
| pack       | 1        | 1        | 1        | 1        | 1        | 1        |
| black code | SF371N15 | SF371N20 | SF371N26 | SF371N33 | SF371N40 | SF371N50 |
| galv. code | SF371G15 | SF371G20 | SF371G26 | SF371G33 | SF371G40 | SF371G50 |



### 372 - Female union end for flat bearing union fitting

| Ø          | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|----------|----------|----------|----------|----------|----------|
| pack       | 1        | 1        | 1        | 1        | 1        | 1        |
| black code | SF372N15 | SF372N20 | SF372N26 | SF372N33 | SF372N40 | SF372N50 |
| galv. code | SF372G15 | SF372G20 | SF372G26 | SF372G33 | SF372G40 | SF372G50 |



### 374 - Union nut

| Ø          | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       | 2"1/2"   | 3"       | 4"        |
|------------|---------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack       | 1       | 10       | 1        | 10       | 10       | 1        | 1        | 1        | 1        | 1        | 1         |
| black code | SF374N8 | SF374N12 | SF374N15 | SF374N20 | SF374N26 | SF374N33 | SF374N40 | SF374N50 | SF374N66 | SF374N80 | SF374N102 |
| galv. code | SF374G8 | SF374G12 | SF374G15 | SF374G20 | SF374G26 | SF374G33 | SF374G40 | SF374G50 | SF374G66 | SF374G80 | SF374G102 |



### 471 - 90° bracket elbow female

| Ø          | 3/8"     | 1/2"     | 3/4"     |
|------------|----------|----------|----------|
| pack       | 10       | 10       | 10       |
| galv. code | SF471G12 | SF471G15 | SF471G20 |



### 529A - Socket male/female

| Ø          | 1/4"     | 3/8"      | 1/2"      | 3/4"      | 1"        | 1"1/4"    | 1"1/2"    | 2"        |
|------------|----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| pack       | 10       | 10        | 10        | 10        | 10        | 5         | 1         | 1         |
| black code | SF529AN8 | SF529AN12 | SF529AN15 | SF529AN20 | SF529AN26 | SF529AN33 | SF529AN40 | SF529AN50 |
| galv. code | SF529AG8 | SF529AG12 | SF529AG15 | SF529AG20 | SF529AG26 | SF529AG33 | SF529AG40 | SF529AG50 |



### 596 - Square hole plug

| Ø          | 1/8"    | 1/4"    | 3/8"     | 1/2"     | 3/4"     | 1"       | 1"1/4"   | 1"1/2"   | 2"       |
|------------|---------|---------|----------|----------|----------|----------|----------|----------|----------|
| pack       | 10      | 10      | 10       | 10       | 10       | 10       | 1        | 1        | 1        |
| black code | SF596N5 | SF596N8 | SF596N12 | SF596N15 | SF596N20 | SF596N26 | SF596N33 | SF596N40 | SF596N50 |
| galv. code | SF596G5 | SF596G8 | SF596G12 | SF596G15 | SF596G20 | SF596G26 | SF596G33 | SF596G40 | SF596G50 |



## Valves for water

- Resilient seated gate valves ..... pages 84 to 85
- Air release valves ..... page 85
- Concentric butterfly valves
  - Ductile iron - GGG40 ..... page 86
  - Ductile iron - GGG50 ..... page 87
  - Electric actuated butterfly valves ..... page 88
- Knife gate valves
  - Unidirectional tightness ..... page 89
  - Bidirectional tightness ..... page 89
- Check valves
  - Anti-pollution ..... page 89
  - Wafer swing - Dual plate ..... page 90
  - Spring ..... page 90
  - Foot valves ..... page 90
  - Strainer baskets ..... page 90
  - Ball ..... page 91
- Y-strainers ..... page 91
- Expansion joints
  - Rubber expansion joints ..... pages 92 to 93
- Hammer arresters ..... page 93
- Solenoid valves ..... pages 93 to 94
- Pressure reducing valve ..... page 95
- Overflow valve ..... page 95
- Float valve ..... page 95
- Water meters ..... page 96
- Service connection valves ..... page 97
- Flanges adaptors & couplings ..... pages 97 to 100
- Repair clamps ..... page 100

Excluded from 97/23/EC Directive (article 3, §3) up to DN300, risk category I / module A above - Flanged RF PN10/16 up to DN150, PN10 or PN16 above - GGG50 body - A420 stem - Full bore - Non rising stem - ⌚ clockwise closing - Epoxy coated - PS: 10 bar for PN10 valves, 16 bar for PN16 valves - TS: -10°C/+70°C.



## 180 - EPDM wedge - EN 558 series 14 (DIN 3202 F4) - With handwheel ⌚

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    | 450    | 500    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 140    | 150    | 170    | 180    | 190    | 200    | 210    | 230    | 250    | 270    | 290    | 310    | 330    | 350    |
| PN10 code    | -      | -      | -      | -      | -      | -      | -      | 180200 | 180250 | 180300 | 180350 | 180400 | 180450 | 180500 |
| PN16 code    | 180040 | 180050 | 180065 | 180080 | 180100 | 180125 | 180150 | 180201 | 180251 | 180301 | 180351 | 180401 | -      | -      |

## 180 - EPDM wedge - EN 558 series 14 (DIN 3202 F4) - With gearbox ⌚

| DN           | 600    | 700    | 800    |
|--------------|--------|--------|--------|
| face to face | 390    | 430    | 470    |
| PN10 code    | 180600 | 180700 | 180800 |

## 184 - EPDM wedge - EN 558 series 15 (DIN 3202 F5) - With square drive nut ⌚

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 240    | 250    | 270    | 280    | 300    | 325    | 350    | 400    | 450    | 500    | 550    | 600    |
| PN10 code    | -      | -      | -      | -      | -      | -      | -      | 184200 | 184250 | 184300 | 184350 | 184400 |
| PN16 code    | 184040 | 184050 | 184065 | 184080 | 184100 | 184125 | 184150 | 184201 | 184251 | 184301 | 184351 | 184401 |



Excluded from 97/23/EC Directive (article 3, §3) up to DN300, risk category I / module A above - Flanged RF PN10/16 up to DN150, PN10 or PN16 above - GGG50 body - F304 stainless steel stem & bolts - Full bore - Non rising stem - GSK certified AKZO NOBEL® special epoxy coating for ACS - PS: 10 bar for PN10 valves, 16 bar for PN16 valves - TS: -10°C/+70°C.



## 181 - EPDM wedge - EN 558 series 14 (DIN 3202 F4) - With handwheel ⌚

⌚ clockwise closing.

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    | 450    | 500    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 140    | 150    | 170    | 181    | 190    | 200    | 210    | 230    | 250    | 270    | 290    | 310    | 330    | 350    |
| PN10 code    | -      | -      | -      | -      | -      | -      | -      | 181200 | 181250 | 181300 | 181350 | 181400 | 181450 | 181500 |
| PN16 code    | 181040 | 181050 | 181065 | 181080 | 181100 | 181125 | 181150 | 181201 | 181251 | 181301 | 181351 | 181401 | -      | -      |



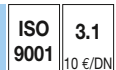
## 185 - EPDM wedge - EN 558 series 15 (DIN 3202 F5) - With square drive nut ⌚

⌚ anticlockwise closing.

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 240    | 250    | 270    | 280    | 300    | 325    | 350    | 400    | 450    | 500    | 550    | 600    |
| PN10 code    | -      | -      | -      | -      | -      | -      | -      | 185200 | 185250 | 185300 | 185350 | 185400 |
| PN16 code    | 185040 | 185050 | 185065 | 185080 | 185100 | 185125 | 185150 | 185201 | 185251 | 185301 | 185351 | 185401 |



Excluded from 97/23/EC Directive (article 3, §3) - Flanged RF PN10/16 up to DN150, PN10 or PN16 above - GGG50 body - A420 stem - Full bore - Non rising stem - ⌚ clockwise closing - Epoxy coated - PS: 10 bar for PN10 valves, 16 bar for PN16 valves - TS: -10°C/+70°C.



## 182 - NBR wedge - EN 558 series 14 (DIN 3202 F4) - With handwheel ⌚

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 140    | 150    | 170    | 180    | 190    | 200    | 210    | 230    | 250    | 270    |
| PN10 code    | -      | -      | -      | -      | -      | -      | -      | 182200 | 182250 | 182300 |
| PN16 code    | 182040 | 182050 | 182065 | 182080 | 182100 | 182125 | 182150 | 182201 | 182251 | 182301 |



## Spare square drive nut (for 180-181-182)



| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 9801831 | 9801831 | 9801831 | 9801832 | 9801832 | 9801833 | 9801833 | 9801833 | 9801834 | 9801834 | 9801838 | 9801838 |

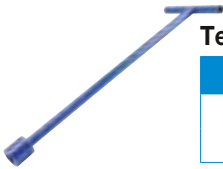
## Spare handwheel (for 184-185)

⌚ clockwise closing handwheel for 184 / ⌚ anticlockwise closing handwheel for 185.



| DN     | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |
|--------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| ⌚ code | 9801594 | 9801594 | 9801594 | 9801595 | 9801595 | 9801596 | 9801596 | 9801596 | 9801597 | 9801597 | 9801598 | 9801598 |
| ⌚ code | 9801590 | 9801590 | 9801590 | 9801591 | 9801591 | 9801592 | 9801592 | 9801592 | 9801593 | 9801593 | 9801599 | 9801599 |

## Tee key (for square drive nut; length 1 m)



| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 9802080 | 9802080 | 9802080 | 9802080 | 9802080 | 9802080 | 9802080 | 9802080 | 9802080 | 9802080 | 9802082 | 9802082 |

## Spare stem extensions

To be connected on a square drive nut.

| DN          | 40 to 300 | 350-400 |
|-------------|-----------|---------|
| 1 m code    | 9802020   | 9802029 |
| 1,25 m code | 9802031   | 9802040 |
| 1,50 m code | 9802042   | 9802051 |

## Spare telescopic stem extension

To be connected on a square drive nut.

| DN                  | 40 to 300 |
|---------------------|-----------|
| 1,3 m to 1,8 m code | 9802060   |
| 2 m to 2,5 m code   | 9802070   |

# Air release valves

Excluded from 2014/68/EU Directive (article 1, §2.b) - Construction acc. to EN 1074-4 - PN10/16 connection - Polypropylene float - EPDM gasket - PS: 16 bar - TS: 0°C/+60°C.

ISO 9001

## ■ Single effect - Degassing function

### 31110 - Composite - With isolating valve

Glass fiber reinforced polyamide body - NF certified CW617N brass ball valve - GGG40 flange DN40/65.



| Ø    | 1"      |
|------|---------|
| code | 3111006 |

## ■ Triple effect - Degassing, air release & vacuum function

### 31130 - Composite - With isolating valve

Glass fiber reinforced polyamide body - NF certified CW617N brass ball valve - GGG40 flange DN40/65.



| Ø    | 1"      | 2"      |
|------|---------|---------|
| code | 3113006 | 3113009 |

### 31132 - Ductile iron - With isolating valve

Ductile iron body - NF certified CW617N brass ball valve - GGG40 flange DN40/65.



| Ø    | 2"      |
|------|---------|
| code | 3113209 |

### 31133 - Ductile iron - Without isolating valve

Ductile iron body.



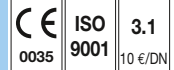
| DN   | 80      |
|------|---------|
| code | 3113311 |





## Ductile iron - GGG40

97/23/EC Directive N°0035 - Risk category III / module H - GGG40 body - Epoxy coated - ISO pad - PS: 16 bar up to DN300, 10 bar above - Supplied with gearbox above DN300.



Face to face according to EN 558 series 20 / ISO pad according to ISO 5211

| DN               | 40  | 50  | 65  | 80  | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450 | 500 | 600 |
|------------------|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| face to face "E" | 33  | 43  | 46  | 46  | 52  | 56  | 56  | 60  | 68  | 78  | 78  | 102 | 114 | 127 | 154 |
| ISO pad          | F07 | F07 | F07 | F07 | F07 | F07 | F07 | F10 | F10 | F10 | F10 | F14 | F14 | F14 | F16 |
| square drive     | 9   | 9   | 9   | 9   | 11  | 14  | 14  | 17  | 22  | 22  | 22  | 27  | 27  | 36  | 36  |



## ■ Wafer - Between flanges PN10/16 & ANSI 150

1170 - Disc **GGG40 epoxy coated** / Seat **EPDM**

TS: -10°C/+110°C.



| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      | 10      |
| code     | 1170040 | 1170050 | 1170065 | 1170080 | 1170100 | 1170125 | 1170150 | 1170200 | 1170250 | 1170300 | 1170350 | 1170400 | 1170450 | 1170500 | 1170600 |



1173 - Disc **CF8M** / Seat **High temperature EPDM**

TS: -10°C/+130°C.

| DN       | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      |
| code     | 1173040 | 1173050 | 1173065 | 1173080 | 1173100 | 1173125 | 1173150 | 1173200 | 1173250 | 1173300 | 1173350 | 1173400 | 1173450 | 1173500 |

not on stock, on request.

## ■ Lug - Between flanges PN10/16

1175 - Disc **GGG40 epoxy coated** / Seat **EPDM**

TS: -10°C/+110°C.



| DN        | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)  | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10/16*  | 10/16*  | 10/16*  | 10/16*  | 10/16*  |
| PN10 code | -       | -       | -       | -       | -       | -       | -       | 1175200 | 1175250 | 1175300 | 1175350 | 1175400 |
| PN16 code | 1175040 | 1175050 | 1175065 | 1175080 | 1175100 | 1175125 | 1175150 | 1175201 | 1175251 | 1175301 | 1175351 | 1175401 |

\* PS: 10 bar for PN10 valves, 16 bar for PN16 valves.



1176 - Disc **CF8M** / Seat **High temperature EPDM**

TS: -10°C/+130°C.

| DN        | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)  | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10/16*  | 10/16*  | 10/16*  |
| PN10 code | -       | -       | -       | -       | -       | -       | -       | 1176200 | 1176250 | 1176300 |
| PN16 code | 1176040 | 1176050 | 1176065 | 1176080 | 1176100 | 1176125 | 1176150 | 1176201 | 1176251 | 1176301 |

\* PS: 10 bar for PN10 valves, 16 bar for PN16 valves.

not on stock, on request.



## ■ Options & spare parts

1192 - Spare gearbox (only for butterfly valves 1170, 1173, 1174, 1175 & 1176)

| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 1192001 | 1192001 | 1192001 | 1192001 | 1192002 | 1192003 | 1192003 | 1192004 | 1192005 | 1192006 |



Spare lever (only for butterfly valves 1170, 1173, 1175 & 1176)

| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 9831150 | 9831150 | 9831150 | 9831150 | 9831151 | 9831152 | 9831152 | 9831153 | 9831154 | 9831154 |

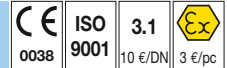






## Ductile iron - GGG50

97/23/EC Directive N°0038 - Risk category III / module H - GGG50 body - Rilsan coated - ISO pad - PS: 16 bar up to DN300, 10 bar above - Gearbox recommended above DN200 - Supplied bare shaft above DN300 or with gearbox on specific reference.



Face to face according to EN 558 series 20 / ISO pad according to ISO 5211

| DN               | 40 | 50 | 65 | 80 | 100 | 125 | 150 | 200 | 250 | 300 | 350 | 400 | 450   | 500   | 600   |
|------------------|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-------|-------|-------|
| face to face "E" | 33 | 43 | 46 | 46 | 52  | 56  | 56  | 60  | 68  | 78  | 78  | 102 | 114   | 127   | 154   |
| ISO pad          | F7 | F7 | F7 | F7 | F7  | F7  | F7  | F7  | F10 | F10 | F14 | F14 | F14   | F14   | F16   |
| square drive     | 8  | 8  | 9  | 11 | 11  | 14  | 14  | 17  | 19  | 22  | 22  | 27  | Ø 50* | Ø 50* | Ø 60* |

\* splined shaft.

### Wafer - Between flanges PN10/16 - ANSI 150 (up to DN400 / PN10 above)

**1150** - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** from DN125 to DN300,  
Disc **GGG50 rilsan coated** above / Seat **EPDM**

TS: -10°C/+110°C.



| DN           | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)     | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      | 10      |
| lever code   | 1150040 | 1150050 | 1150065 | 1150080 | 1150100 | 1150125 | 1150150 | 1150200 | 1150250 | 1150300 | 1150350 | 1150400 | 1150450 | 1150500 | 1150600 |
| gearbox code | -       | -       | -       | -       | -       | -       | -       | -       | -       | -       | 1150352 | 1150402 | 1150452 | 1150502 | 1150602 |

not on stock, on request.

### 1153 - Disc **CF8M** / Seat **EPDM**

TS: -10°C/+110°C.



| DN           | 32-40   | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PS (bar)     | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      | 10      | 10      |
| lever code   | 1153040 | 1153050 | 1153065 | 1153080 | 1153100 | 1153125 | 1153150 | 1153200 | 1153250 | 1153300 | 1153350 | 1153400 | 1153450 | 1153500 |
| gearbox code | -       | -       | -       | -       | -       | -       | 1153152 | 1153202 | 1153252 | 1153302 | 1153352 | 1153402 | 1153452 | 1153502 |

not on stock, on request.

### Lug - Between flanges PN10/16

**1160** - Disc **CF8M** up to DN100, Disc **GGG50 epoxy coated** from DN125 to DN300,  
Disc **GGG50 rilsan coated** above / Seat **EPDM**

TS: -10°C/+110°C.



| DN           |         |         |         |         |         |         |         |         | .../10: flanges PN10 |         | .../16: flanges PN16 |         |         |         |         |
|--------------|---------|---------|---------|---------|---------|---------|---------|---------|----------------------|---------|----------------------|---------|---------|---------|---------|
|              | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200/10               | 200/16  | 250/10               | 250/16  | 300/10  | 350/10  | 400/10  |
| PS (bar)     | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10                   | 16      | 10                   | 16      | 10      | 10      | 10      |
| lever code   | 1160032 | 1160040 | 1160050 | 1160065 | 1160080 | 1160100 | 1160125 | 1160150 | 1160200              | 1160201 | 1160250              | 1160251 | 1160300 | 1160350 | 1160400 |
| gearbox code | -       | -       | -       | -       | -       | -       | -       | -       | -                    | -       | -                    | -       | -       | 1160352 | 1160402 |

### 1163 - Disc **CF8M** / Seat **EPDM**

TS: -10°C/+110°C.



| DN       |         |         |         |         |         |         |         |         | .../10: flanges PN10 |         | .../16: flanges PN16 |         |         |         |         |
|----------|---------|---------|---------|---------|---------|---------|---------|---------|----------------------|---------|----------------------|---------|---------|---------|---------|
|          | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200/10  | 200/16               | 250/10  | 250/16               | 300/10  | 300/16  | 350/10  | 400/10  |
| PS (bar) | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 16                   | 10      | 16                   | 10      | 16      | 10      | 10      |
| code     | 1163040 | 1163050 | 1163065 | 1163080 | 1163100 | 1163125 | 1163150 | 1163200 | 1163201              | 1163250 | 1163251              | 1163300 | 1163301 | 1163350 | 1163400 |

## Options & spare parts

**1197 - Spare gearbox with position indicator** (only for butterfly valves 1150, 1153, 1160 & 1163)



| DN   | 50      | 65      | 80-100  | 125-150 | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 1197050 | 1197065 | 1197100 | 1197150 | 1197200 | 1197250 | 1197300 | 1197350 | 1197400 | 1197451 | 1197501 | 1197601 |

**983120 - Spare lever** (only for butterfly valves 1150, 1153, 1160 & 1163)



| DN   | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 9831201 | 9831201 | 9831202 | 9831203 | 9831203 | 9831204 | 9831204 | 9831205 | 9831206 | 9831207 |

## Electric actuated butterfly valves

CE 0038 ISO 9001 3.1 10 €/DN



### 1150 - Ductile iron butterfly valve

GGG50 body - GGG50 disc (CF8M disc up to DN100) - EPDM seat - Wafer type PN10/16 & ANSI 150 up to DN400, PN10 above - PS: 16 bar up to DN300, 10 bar above - TS: -10°C/+90°C - ⚠️ 230V actuator up to DN350, 3-400V above.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | UMA3.5   | 260303022060 |
| 50    | UMA3.5   | 260304022060 |
| 65    | UMA3.5   | 260305022060 |
| 80    | UMA3.5   | 260306022060 |
| 100   | UMB7     | 260307022170 |
| 125   | UMC10    | 260308022240 |
| 150   | UVC15    | 260309022330 |
| 200   | UVC15    | 260310022330 |
| 250   | UVD25    | 260311022350 |
| 300   | UVF50    | 260312022400 |
| 350   | UVG60    | 260313022450 |



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 260303023010 |
| 50    | SA05     | 260304023010 |
| 65    | SA05     | 260305023010 |
| 80    | SA05     | 260306023010 |
| 100   | SA05     | 260307023010 |
| 125   | NA09     | 260308023120 |
| 150   | NA15     | 260309023130 |
| 200   | NA15     | 260310023130 |
| 250   | NA28     | 260311023150 |
| 300   | NA38     | 260312023160 |
| 350   | NA60     | 260313023180 |
| 400   | NA100    | 260314023203 |
| 450   | NA200    | 260315023223 |
| 500   | NA250    | 260316023233 |



### 1153 - Ductile iron butterfly valve

GGG50 body - CF8M disc - EPDM seat - Wafer type PN10/16 & ANSI 150 - PS: 16 bar up to DN300, 10 bar above - TS: -10°C/+90°C.



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | UMA3.5   | 260363022060 |
| 50    | UMA3.5   | 260364022060 |
| 65    | UMA3.5   | 260365022060 |
| 80    | UMA3.5   | 260366022060 |
| 100   | UMB7     | 260367022170 |
| 125   | UMC10    | 260368022240 |
| 150   | UVC15    | 260369022330 |
| 200   | UVC15    | 260370022330 |
| 250   | UVD25    | 260371022350 |
| 300   | UVF50    | 260372022400 |
| 350   | UVG60    | 260373022450 |



| DN    | actuator | code         |
|-------|----------|--------------|
| 32-40 | SA05     | 260363023010 |
| 50    | SA05     | 260364023010 |
| 65    | SA05     | 260365023010 |
| 80    | SA05     | 260366023010 |
| 100   | SA05     | 260367023010 |
| 125   | NA09     | 260368023120 |
| 150   | NA15     | 260369023130 |
| 200   | NA15     | 260370023130 |
| 250   | NA28     | 260371023150 |
| 300   | NA38     | 260372023160 |
| 350   | NA60     | 260373023180 |

### 1160 - Ductile iron butterfly valve

GGG50 body - GGG50 disc (CF8M disc up to DN100) - EPDM seat - Lug type PN10/16 up to DN150, PN10 above - PS: 16 bar up to DN150, 10 bar above - TS: -10°C/+90°C.



| DN  | actuator | code          |
|-----|----------|---------------|
| 40  | UMA3.5   | 261303022060  |
| 50  | UMA3.5   | 261304022060  |
| 65  | UMA3.5   | 261305022060  |
| 80  | UMA3.5   | 261306022060  |
| 100 | UMC10    | 261307022240  |
| 125 | UMC10    | 261308022240  |
| 150 | UVC15    | 261309022330  |
| 200 | UVC15    | 261310022330* |
| 250 | UVD25    | 261311022350* |
| 300 | UVF50    | 261312022400* |



| DN  | actuator | code          |
|-----|----------|---------------|
| 40  | SA05     | 261303023010  |
| 50  | SA05     | 261304023010  |
| 65  | SA05     | 261305023010  |
| 80  | SA05     | 261306023010  |
| 100 | SA05     | 261307023010  |
| 125 | NA09     | 261308023120  |
| 150 | NA15     | 261309023130  |
| 200 | NA15     | 261310023130* |
| 250 | NA28     | 261311023150* |
| 300 | NA38     | 261312023160* |

\* PN16 execution available, please consult.

\* PN16 execution available, please consult.

### 1163 - Ductile iron butterfly valve

GGG50 body - CF8M disc - EPDM seat - Lug type PN10/16 up to DN150, PN10 above - PS: 16 bar up to DN150, 10 bar above - TS: -10°C/+90°C.



| DN  | actuator | code          |
|-----|----------|---------------|
| 40  | UMA3.5   | 261393022060  |
| 50  | UMA3.5   | 261394022060  |
| 65  | UMA3.5   | 261395022060  |
| 80  | UMA3.5   | 261396022060  |
| 100 | UMC10    | 261397022240  |
| 125 | UMC10    | 261398022240  |
| 150 | UVC15    | 261399022330  |
| 200 | UVC15    | 261400022330* |
| 250 | UVD25    | 261401022350* |
| 300 | UVF50    | 261402022400* |



| DN  | actuator | code          |
|-----|----------|---------------|
| 40  | SA05     | 261393023010  |
| 50  | SA05     | 261394023010  |
| 65  | SA05     | 261395023010  |
| 80  | SA05     | 261396023010  |
| 100 | SA05     | 261397023010  |
| 125 | NA09     | 261398023120  |
| 150 | NA15     | 261399023130  |
| 200 | NA15     | 261400023130* |
| 250 | NA28     | 261401023150* |
| 300 | NA38     | 261402023160* |

\* PN16 execution available, please consult.

\* PN16 execution available, please consult.

## Unidirectional tightness

Excluded from 2014/68/EU Directive (art. 4, §4) - Unidirectional tightness: specific mounting position - Between flanges PN10 - Rising stem, non rising hand wheel - Rilsan painted.



ISO 9001 3.1  
10 €/DN



### 170 - Cast iron - NBR gasket

GG25 body - Stainless steel F304 gate - TS: -10°C/+90°C.

### 171 - Cast iron - EPDM gasket

GG25 body - Stainless steel F304 gate - TS: -10°C/+110°C.

### 176 - Cast iron - Metal seat

GG25 body - Stainless steel F304 gate - TS: -10°C/+90°C - Incomplete tightness: loss factor 1%.

| DN       | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    | 450    | 500    | 600    | 700    | 800    |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 8      | 6      | 4      | 4      | 3      | 3      | 3      | 2      | 2      |
| 170 code | 170050 | 170065 | 170080 | 170100 | 170125 | 170150 | 170200 | 170250 | 170300 | 170350 | 170400 | 170450 | 170500 | 170600 | 170700 | 170800 |
| 171 code | 171050 | 171065 | 171080 | 171100 | 171125 | 171150 | 171200 | 171250 | 171300 | 171350 | 171400 | 171450 | 171500 | 171600 | -      | -      |
| 176 code | 176050 | 176065 | 176080 | 176100 | 176125 | 176150 | 176200 | 176250 | 176300 | -      | -      | -      | -      | -      | -      | -      |



### 172 - Stainless steel - EPDM gasket

CF8M body - Stainless steel F316 gate - TS: -15°C/+110°C.

### 173 - Stainless steel - Metal seat

CF8M body - Stainless steel F316 gate - TS: -15°C/+110°C - Incomplete tightness: loss factor 1%.

| DN       | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 8      | 6      | 4      | 4      |
| 172 code | 172050 | 172065 | 172080 | 172100 | 172125 | 172150 | 172200 | 172250 | 172300 | 172350 | 172400 |
| 173 code | 173050 | 173065 | 173080 | 173100 | 173125 | 173150 | 173200 | 173250 | 173300 | 173350 | 173400 |

not on stock,  
on request.

## Bidirectional tightness

Excluded from 2014/68/EU Directive (art. 4, §4) - Bidirectional tightness - Between flanges PN10 - Non rising stem & handwheel.



ISO 9001 3.1  
10 €/DN



### 178 - Cast iron - NBR gasket

GG25 body - Stainless steel F304 gate - TS: -10°C/+90°C.

### 177 - Cast iron - EPDM gasket

GG25 body - Stainless steel F304 gate - TS: -10°C/+110°C.

| DN       | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    | 450    | 500    |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 8      | 6      | 4      | 4      | 3      | 3      |
| 178 code | 178050 | 178065 | 178080 | 178100 | 178125 | 178150 | 178200 | 178250 | 178300 | 178350 | 178400 | 178450 | 178500 |
| 177 code | 177050 | 177065 | 177080 | 177100 | 177125 | 177150 | 177200 | -      | -      | -      | -      | -      | -      |

## Check valves



### Anti-pollution

Excluded from 2014/68/EU directive (article 1, §2.b) - Flanged RF PN10/16 - EN 558 series 1 - Ductile iron body & cap - Epoxy coated - Bronze inner part - EPDM gasket - Includes 2 tapping valves 1/2" - PS: 16 bar - TS: +10°C/+60°C.



### 346 - Ductile iron

| DN           | 40/50  | 60/65  | 80     | 100    | 150    |
|--------------|--------|--------|--------|--------|--------|
| face to face | 230    | 290    | 310    | 350    | 480    |
| code         | 346050 | 346065 | 346080 | 346100 | 346150 |

## Wafer swing - Dual plate

97/23/EC Directive N°0035 - Risk category III / module H - Lloyd's Register Type Approval for marine applications - Between flanges PN10/16 - GG25 body - PS: 16 bar - ⚠️ **Not suitable for pulsatory pace.**



### 375 - EPDM gasket - CF8M plates

TS: -10°C/+110°C.

| DN           | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 54     | 54     | 57     | 64     | 70     | 76     | 95     | 108    | 143    |
| code         | 375050 | 375065 | 375080 | 375100 | 375125 | 375150 | 375200 | 375250 | 375300 |

## Spring

Excluded from 2014/68/EU Directive (article 4, §3) - GG25 body - Epoxy coated - EPDM gasket - All positions - PS: 16 bar.



### 369 - Flanged PN16

F304 throttle - TS: -10°C/+110°C.



| DN           | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 100    | 120    | 135    | 165    | 200    | 231    | 288    | 354    | 395    |
| code         | 369050 | 369065 | 369080 | 369100 | 369125 | 369150 | 369200 | 369250 | 369300 |

### 366 - Flanged PN16 - For drinking water

GGG40 throttle - TS: -10°C/+120°C.



| DN           | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 100    | 120    | 140    | 165    | 195    | 230    | 290    | 355    | 400    |
| code         | 366050 | 366065 | 366080 | 366100 | 366125 | 366150 | 366200 | 366250 | 366300 |



Up to DN600 on request

## Foot valves

Excluded from 2014/68/EU Directive (article 1, §2.b) - GG25 body - Epoxy coated - Carbon steel strainer - All positions.



### 368 - Flanged PN16 - Check valve 369 with strainer basket

TS: -10°C/+110°C.

| DN   | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 368050 | 368065 | 368080 | 368100 | 368125 | 368150 | 368200 | 368250 |



### 363 - Flanged PN16 - Check valve 366 with strainer basket

TS: -10°C/+120°C.

| DN   | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 363050 | 363065 | 363080 | 363100 | 363125 | 363150 | 363200 | 363250 | 363300 |



## Strainer baskets

### 391 - Full stainless steel F316

TS: 0°C/+150°C.



| Ø         | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     | 2 1/2" | 3"     | 4"     |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| mesh (mm) | 1,2    | 1,2    | 1,2    | 1,2    | 1,2    | 1,2    | 1,2    | 1,5    | 1,5    | 2,0    |
| 391 code  | 391003 | 391004 | 391005 | 391006 | 391007 | 391008 | 391009 | 391010 | 391011 | 391012 |

### 367 - Flanged PN10/16 - Galvanized carbon steel

TS: -20°C/+200°C - Mesh 6 mm.



| DN       | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 367 code | 367050 | 367065 | 367080 | 367100 | 367125 | 367150 | 367200 | 367250 | 367300 |
| 366 code | 376050 | 376065 | 376080 | 376100 | 376125 | 376150 | 376200 | 376250 | 376300 |

### 376 - Flanged PN10/16 - Stainless steel F304

TS: -20°C/+200°C - Mesh 6 mm.

## Ball

Excluded from 2014/68/EU Directive (article 1, §2.b) - For water treatment and water distribution networks - Epoxy coated - PS: 10 bar.

ISO 9001 3.1  
10 €/DN

### Threaded



#### 331 - Ductile iron GGG40 body

NBR ball up to 1"1/2, NBR coated aluminium ball above - TS: -10°C/+80°C.

| Ø            | 1"     | 1"1/4  | 1"1/2  | 2"     | 2"1/2  | 3"     |
|--------------|--------|--------|--------|--------|--------|--------|
| face to face | 141    | 141    | 150    | 175    | 214    | 248    |
| code         | 331006 | 331007 | 331008 | 331009 | 331010 | 331011 |



#### 335 - Cast iron GG25 body

NBR coated aluminium ball - According to EN 12050-4 for lifting stations - TS: -10°C/+70°C.

| Ø            | 1"     | 1"1/4  | 1"1/2  | 2"     | 2"1/2  | 3"     |
|--------------|--------|--------|--------|--------|--------|--------|
| face to face | 141    | 141    | 150    | 175    | 214    | 248    |
| code         | 335006 | 335007 | 335008 | 335009 | 335010 | 335011 |



### Flanged RF PN10 - DIN 3202 F6



#### 332 - Ductile iron GGG40 body

NBR ball for DN40, NBR coated aluminium ball up to DN80, NBR coated steel ball above - TS: -10°C/+80°C.

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 178    | 200    | 240    | 260    | 300    | 350    | 400    | 500    | 600    | 700    |
| code         | 332040 | 332050 | 332065 | 332080 | 332100 | 332125 | 332150 | 332200 | 332250 | 332300 |



#### 336 - Cast iron GG25 body (DN65 to DN100) - Ductile iron GGG40 body (others)

NBR coated aluminium ball up to DN200, NBR coated ductile iron ball above - According to EN 12050-4 for lifting stations - TS: -10°C/+70°C.

| DN           | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 180    | 200    | 240    | 260    | 300    | 350    | 400    | 500    | 600    | 700    | 800    | 900    |
| code         | 336040 | 336050 | 336065 | 336080 | 336100 | 336125 | 336150 | 336200 | 336250 | 336300 | 336350 | 336400 |



# Y-strainers

Excluded from 2014/68/EU Directive (article 1, §2.b) - Flanged RF PN10/16 up to DN150, PN10 or PN16 above - EN 558 series 1 - GG25 body - Stainless steel screen - With draining cap - PS: 10 bar for PN10 strainers, 16 bar for PN16 strainers.

ISO 9001 3.1  
10 €/DN

### 220 - Cast iron

F304 screen - Grey epoxy paint - TS: -10°C/+120°C.



| DN           | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    | 250    | 300    | 350    | 400    |
|--------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| mesh (mm)    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,1    | 1,5    | 1,5    | 1,5    | 1,5    | 3      | 3      |
| face to face | 130    | 150    | 160    | 180    | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    | 730    | 850    | 980    | 1100   |
| PN10 code    | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | -      | 220201 | 220250 | 220300 | 220350 | 220400 |
| PN16 code    | 220015 | 220020 | 220025 | 220032 | 220040 | 220050 | 220065 | 220080 | 220100 | 220125 | 220150 | 220200 | 220251 | 220301 | -      | -      |

### 233 - Cast iron - Water use

F316 screen & draining cap - Blue epoxy paint - TS: -10°C/+80°C.



| DN                       | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200/10 | 200/16 | 250/10 | 250/16 | 300/10 | 300/16 |
|--------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| mesh (mm)                | 1      | 1      | 1,25   | 1,25   | 1,6    | 1,6    | 1,6    | 1,6    | 1,6    | 1,6    | 1,6    | 1,6    | 1,6    |
| face to face             | 200    | 230    | 290    | 310    | 350    | 400    | 480    | 600    | 600    | 730    | 730    | 850    | 850    |
| code                     | 233040 | 233050 | 233065 | 233080 | 233100 | 233125 | 233150 | 233200 | 233201 | 233250 | 233251 | 233300 | 233301 |
| code with draining valve | 233043 | 233053 | 233063 | 233083 | 233103 | 233123 | 233153 | 233203 | 233204 | 233253 | 233254 | 233303 | 233304 |



## Rubber expansion joints

### Threaded

Excluded from 2014/68/EU Directive (article 4, §3) - Lloyd's Register Type Approval for marine applications - Galvanized cast iron union fittings - Nylon reinforced liner - PS: 16 bar - TS: -10°C/+100°C.



#### 1504 - EPDM double wave (BSP)

| Ø           | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   | 3"      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 200     | 200     | 200     | 200     | 200     | 200     | 240     | 240     |
| code        | 1504004 | 1504005 | 1504006 | 1504007 | 1504008 | 1504009 | 1504010 | 1504011 |

### Flanged

Excluded from 2014/68/EU Directive (article 4, §3) - Lloyd's Register Type Approval for marine applications - Swiveling flanges - Galvanized steel flanges - Nylon reinforced liner - PS: 16 bar for PN16 expansion joints, 10 bar for PN10 expansion joints - TS: -10°C/+100°C.



#### 1501 - EPDM - Flanged PN10/16 up to DN150, PN10 above

#### 1502 - EPDM - Flanged PN16



| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 95      | 95      | 105     | 115     | 130     | 135     | 170     | 180     | 205     | 240     | 260     | 266     | 266     | 200     | 200     | 250     |
| 1501 code   | 1501032 | 1501040 | 1501050 | 1501065 | 1501080 | 1501100 | 1501125 | 1501150 | 1501200 | 1501250 | 1501300 | 1501350 | 1501400 | 1501450 | 1501500 | 1501600 |
| 1502 code   | -       | -       | -       | -       | -       | -       | -       | -       | 1502200 | 1502250 | 1502300 | -       | -       | -       | -       | -       |

#### 1505 - EPDM - Flanged PN10/16 up to DN150, PN10 above

Length 130 mm.



| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     |
| code        | 1505032 | 1505040 | 1505050 | 1505065 | 1505080 | 1505100 | 1505125 | 1505150 | 1505200 | 1505250 | 1505300 |

Excluded from 2014/68/EU Directive (article 4, §3) - Lloyd's Register Type Approval for marine applications - Swiveling flanges - Galvanized steel flanges - Nylon reinforced liner - PS: 16 bar for PN16 expansion joints, 10 bar for PN10 expansion joints - TS: -10°C/+80°C.



#### 1503 - NBR - Flanged PN10/16 up to DN150, PN10 above



| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 95      | 95      | 105     | 115     | 130     | 135     | 170     | 180     | 205     |
| code        | 1503032 | 1503040 | 1503050 | 1503065 | 1503080 | 1503100 | 1503125 | 1503150 | 1503200 |

#### 1506 - NBR - Flanged PN10/16 up to DN150, PN10 above

Length 130 mm.

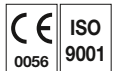


| DN          | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     | 130     |
| code        | 1506032 | 1506040 | 1506050 | 1506065 | 1506080 | 1506100 | 1506125 | 1506150 | 1506200 |

### Flanged - Teguflex®



97/23/EC Directive N°0056 - Risk category III / module H - Swiveling flanges - Dichromate zinc plated steel flanges - Integrated sealing surface with steel wire core - Synthetic fiber reinforcement - Standard length: 130 mm - Axial allowable movement: -30mm/+20mm - Lateral allowable movement: -/+20mm - PS: 16 bar up to DN50; 10 bar above.



#### 1561 - ACS EPDM liner

EPDM external cover - TS: -25°C/+90°C.

Main application: **Drinkable water.**



| DN   | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 1561032 | 1561040 | 1561050 | 1561065 | 1561080 | 1561100 | 1561125 | 1561150 | 1561200 | 1561250 | 1561300 |

not on stock, on request. Approx. 3 weeks delivery time.

## ■ Steel expansion limiters - Flanged PN10 & PN16

### For 1501, 1502 & 1503

Supplied with 2 tie rods & 4 plates up to DN300 or 4 tie rods & 8 plates above.

⚠ Expansion joint & flanges not included.



| DN        | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     | 350     | 400     | 450     | 500     | 600     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN10 code | 9860407 | 9860408 | 9860409 | 9860410 | 9860411 | 9860412 | 9860413 | 9860414 | 9860415 | 9860416 | 9860417 | 9860418 | 9860419 | 9860420 | 9860421 | 9860422 |
| PN16 code | 9860407 | 9860408 | 9860409 | 9860410 | 9860411 | 9860412 | 9860413 | 9860414 | 9860315 | 9860316 | 9860317 | -       | -       | -       | -       | -       |

### For 1505, 1506 & 1561

Supplied with 2 tie rods & 4 plates.

⚠ Expansion joint & flanges not included.



| DN        | 32      | 40      | 50      | 65      | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|-----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN10 code | 9860607 | 9860608 | 9860609 | 9860610 | 9860611 | 9860612 | 9860613 | 9860614 | 9860615 | 9860616 | 9860617 |

# Hammer arresters



Excluded from 97/23/EC Directive - Not compatible with gases from group 1 - NBR membrane - Pressurizing valve - Setting pressure 2,5 bar - Peak pressure up to 21 bar - Horizontal or vertical mounting - TS: -15°C/+80°C.

ISO 9001

### 4510 - AIT - Bronze

Bronze body - PS: 10 bar.



| Ø     | volume (cm³) | code     |
|-------|--------------|----------|
| 1/2"  | 17           | 451002SE |
| 3/4"  | 30           | 451003SE |
| 1"    | 65           | 451004SE |
| 1"1/2 | 250          | 451006SE |
| 2"    | 650          | 451007SE |

### 4515 - AIT - Stainless steel

CF8M body - PS: 12 bar.



| Ø     | volume (cm³) | code   |
|-------|--------------|--------|
| 1/2"  | 17           | 451502 |
| 3/4"  | 30           | 451503 |
| 1"    | 65           | 451504 |
| 1"1/2 | 250          | 451506 |
| 2"    | 650          | 451507 |

### 4520 - AIF - Cast iron - Flanged PN16

GG25 body - With pressure gauge - PS: 12 bar.



| DN  | volume (cm³) | code   |
|-----|--------------|--------|
| 80  | 2465         | 452008 |
| 100 | 5535         | 452009 |

### Spare pressure gauge for 4520

Stainless steel case - 1/8".

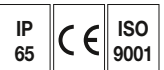
| code   |
|--------|
| 981680 |

# Solenoid valves



## ■ Threaded

97/23/EC Directive - Risk category I - 2006/95/EC Directive - CW617N brass body - Stainless steel inner parts - NBR membrane / EPDM KTW for ACS valves - Coil insulation class F - T30 connector (except ESM85) - Max. room temp.: +60°C (except VSO 84: +80°C) - PS: 10 bar - TS: +80°C (+90°C for ACS valves).



### ESM 85 - Servo-assisted

Normally closed (opening under tension) - T22 connector - Min. ΔP: 0,3 bar.



| Ø    |           |           | 230V 50Hz | 24V 50Hz |
|------|-----------|-----------|-----------|----------|
|      | bore (mm) | Kv (m³/h) | code      | code     |
| 3/8" | 10        | 1,86      | 085001    | 085011   |
| 1/2" | 12        | 2,2       | 085002    | 085012   |
| 3/4" | 20        | 5,7       | 085003    | 085013   |
| 1"   | 25        | 9,6       | 085004    | 085014   |

## ESM 86 - Servo-assisted

Normally closed (opening under tension) - Min. ΔP: 0,3 bar.



| Ø      | bore (mm) | Kv (m3/h) | 230V 50Hz |        | 24V 50Hz |      | 48V 50Hz |        | 12V DC |      | 24V DC |        | ACS certified |      |
|--------|-----------|-----------|-----------|--------|----------|------|----------|--------|--------|------|--------|--------|---------------|------|
|        |           |           | code      | code   | code     | code | code     | code   | code   | code | code   | code   | code          | code |
| 3/8"   | 10        | 1,86      | 086001    | 086011 |          |      | 086031   | 086041 | 086051 |      |        | -      | -             |      |
| 1/2"   | 12        | 2,1       | 086002    | 086012 |          |      | 086032   | 086042 | 086052 |      |        | 086502 | 086512        |      |
| 3/4"   | 20        | 5,7       | 086003    | 086013 |          |      | 086033   | 086043 | 086053 |      |        | 086503 | 086513        |      |
| 1"     | 25        | 9,6       | 086004    | 086014 |          |      | 086034   | 086044 | 086054 |      |        | 086504 | 086514        |      |
| 1 1/4" | 32        | 22        | 086005    | 086015 |          |      | 086035   | 086045 | 086055 |      |        | -      | -             |      |
| 1 1/2" | 39        | 27        | 086006    | 086016 |          |      | 086036   | 086046 | 086056 |      |        | -      | -             |      |
| 2"     | 51        | 35        | 086007    | 086017 |          |      | 086037   | 086047 | 086057 |      |        | -      | -             |      |
| 2 1/2" | 65        | 63        | 086008    | 086018 |          |      | 086038   | 086048 | 086058 |      |        | -      | -             |      |
| 3"     | 75        | 83        | 086009    | 086019 |          |      | 086039   | 086049 | 086059 |      |        | -      | -             |      |

## ESM 87 - Servo-assisted

Normally open (closing under tension) - Min. ΔP: 0,3 bar.



| Ø      | bore (mm) | Kv (m3/h) | 230V 50Hz |        | 24V 50Hz |      | 48V 50Hz |        | 12V DC |      | 24V DC |        | ACS certified |      |
|--------|-----------|-----------|-----------|--------|----------|------|----------|--------|--------|------|--------|--------|---------------|------|
|        |           |           | code      | code   | code     | code | code     | code   | code   | code | code   | code   | code          | code |
| 3/8"   | 10        | 1,86      | 087001    | 087011 |          |      | 087031   | 087041 | 087051 |      |        | -      | -             |      |
| 1/2"   | 12        | 2,1       | 087002    | 087012 |          |      | 087032   | 087042 | 087052 |      |        | 087502 | 087512        |      |
| 3/4"   | 20        | 5,7       | 087003    | 087013 |          |      | 087033   | 087043 | 087053 |      |        | 087503 | 087513        |      |
| 1"     | 25        | 9,6       | 087004    | 087014 |          |      | 087034   | 087044 | 087054 |      |        | 087504 | 087514        |      |
| 1 1/4" | 32        | 22        | 087005    | 087015 |          |      | 087035   | 087045 | 087055 |      |        | -      | -             |      |
| 1 1/2" | 39        | 27        | 087006    | 087016 |          |      | 087036   | 087046 | 087056 |      |        | -      | -             |      |
| 2"     | 51        | 35        | 087007    | 087017 |          |      | 087037   | 087047 | 087057 |      |        | -      | -             |      |
| 2 1/2" | 65        | 63        | 087008    | 087018 |          |      | 087038   | 087048 | 087058 |      |        | -      | -             |      |
| 3"     | 75        | 83        | 087009    | 087019 |          |      | 087039   | 087049 | 087059 |      |        | -      | -             |      |

## VSO 84 - Direct acting

Normally closed (opening under tension) - No ΔP required - Horizontal mounting, coil on the top.



| Ø      | bore (mm) | Kv (m3/h) | 230V 50Hz |        | 24V 50Hz |      | 48V 50Hz |        | 12V DC |      | 24V DC |        | ACS certified |      |
|--------|-----------|-----------|-----------|--------|----------|------|----------|--------|--------|------|--------|--------|---------------|------|
|        |           |           | code      | code   | code     | code | code     | code   | code   | code | code   | code   | code          | code |
| 3/8"   | 10        | 2,2       | 084001    | 084011 |          |      | 084031   | 084041 | 084051 |      |        | -      | -             |      |
| 1/2"   | 12        | 2,2       | 084002    | 084012 |          |      | 084032   | 084042 | 084052 |      |        | -      | -             |      |
| 3/4"   | 20        | 5,5       | 084003    | 084013 |          |      | 084033   | 084043 | 084053 |      |        | 084503 | 084513        |      |
| 1"     | 25        | 7,5       | 084004    | 084014 |          |      | 084034   | 084044 | 084054 |      |        | 084504 | 084514        |      |
| 1 1/4" | 32        | 17,5      | 084005    | 084015 |          |      | 084035   | 084045 | 084055 |      |        | -      | -             |      |
| 1 1/2" | 39        | 19,0      | 084006    | 084016 |          |      | 084036   | 084046 | 084056 |      |        | -      | -             |      |
| 2"     | 51        | 32,4      | 084007    | 084017 |          |      | 084037   | 084047 | 084057 |      |        | -      | -             |      |

⚠ Please check max. ΔP on datasheet.

## Flanged



97/23/EC Directive - Risk category I - 2006/95/EC Directive - Flanged RF PN16 - GG25 body - Epoxy coated - Brass & bronze inner parts - NBR membrane - Manual safety override - Coil insulation class F - T30 connector - Max. room temp. +60°C - Min. ΔP: 0,3 bar - PS: 16 bar - TS: -10°C/+80°C - ⚠ Only for liquids.



## EV82 - High flow

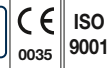


| DN  | face to face (mm) | Kv (m3/h) | Normally closed |             | Normally open |             |
|-----|-------------------|-----------|-----------------|-------------|---------------|-------------|
|     |                   |           | 230V AC code    | 24V AC code | 230V AC code  | 24V AC code |
| 50  | 190               | 64        | 082007          | 082017      | 082007NO      | 082017NO    |
| 65* | 210               | 89        | 082008          | 082018      | 082008NO      | 082018NO    |
| 80  | 225               | 119       | 082009          | 082019      | 082009NO      | 082019NO    |
| 100 | 255               | 222       | 082010          | 082020      | 082010NO      | 082020NO    |
| 125 | 285               | 333       | 082011          | 082021      | 082011NO      | 082021NO    |
| 150 | 315               | 470       | 082012          | 082022      | 082012NO      | 082022NO    |
| 200 | 420               | 854       | 082013          | 082023      | 082013NO      | 082023NO    |

\* 4 hole flanges



Epoxy-coated cast iron body - Brass & bronze inner parts - NBR tightness - Flanged RF PN16 - PS: 16 bar - TS: -10°C/+80°C - Downstream pressure adjustable with screw - Supplied with pressure gauge - For water - WRAS certificate available up to DN100.



## 2420 - BFR - Coaxial



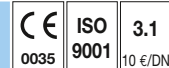
| DN  | Kv (m³/h) | face to face (mm) | weight (kg) | Downstream pressure range |                 |
|-----|-----------|-------------------|-------------|---------------------------|-----------------|
|     |           |                   |             | 1 - 7 bar code            | 4 - 12 bar code |
| 50  | 64        | 190               | 12          | 2420050SE                 | 2421050SE       |
| 65* | 89        | 210               | 14          | 2420065SE                 | 2421065SE       |
| 80  | 119       | 225               | 19          | 2420080SE                 | 2421080SE       |
| 100 | 222       | 255               | 26          | 2420100SE                 | 2421100SE       |
| 125 | 333       | 285               | 37          | 2420125                   | 2421125         |
| 150 | 470       | 315               | 50          | 2420150                   | 2421150         |
| 200 | 854       | 420               | 94          | 2420200                   | 2421200SE       |
| 250 | 1367      | 470               | 152         | 2420250                   | 2421250SE       |
| 300 | 1880      | 530               | 202         | 2420300                   | 2421300SE       |

\* 4 hole flanges.

not on stock, on request.

# Overflow valve

Flanged RF PN16 - Cast iron body, epoxy coated - Brass & bronze inner parts - NBR tightness - For clear water - PS: 16 bar - TS: -10°C/+80°C - Upstream pressure adjustable with screw - Supplied with pressure gauge - Horizontal mounting preferred - **⚠ Prohibited use for gas from group 1.**



## 2470 - BFS - Coaxial



| DN  | Kv (m³/h) | face to face (mm) | weight (kg) | Upstream pressure range |                |
|-----|-----------|-------------------|-------------|-------------------------|----------------|
|     |           |                   |             | 0,3 - 4 bar code        | 2 - 8 bar code |
| 50  | 64        | 190               | 12          | 2470050                 | 2471050        |
| 65* | 89        | 210               | 14          | 2470065                 | 2471065        |
| 80  | 119       | 225               | 19          | 2470080                 | 2471080        |
| 100 | 222       | 255               | 26          | 2470100                 | 2471100        |
| 125 | 333       | 285               | 37          | 2470125                 | 2471125        |
| 150 | 470       | 315               | 50          | 2470150                 | 2471150        |
| 200 | 854       | 420               | 94          | 2470200                 | 2471200        |
| 250 | 1367      | 470               | 152         | 2470250                 | 2471250        |
| 300 | 1880      | 530               | 202         | 2470300                 | 2471300        |

\* 4 hole flanges.

not on stock, on request.

# Float valve

Excluded from 2014/68/EU Directive (article 4, §3) - Flanged RF PN16 - GG25 body - Epoxy coated - Brass & bronze inner parts - NBR seat - Min. ΔP: 0,3 bar - PS: 16 bar - TS: -10°C/+80°C - **Actuated by an e-float valve (included)**, to be connected by pipes (not included) - BSP connection 1/2".



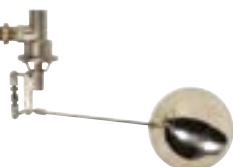
## BFF - Coaxial cast iron valve



| DN           | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|--------------|--------|--------|--------|--------|--------|--------|--------|
| face to face | 190    | 210    | 225    | 255    | 285    | 315    | 420    |
| code         | 292050 | 292065 | 292080 | 292100 | 292125 | 292150 | 292200 |

## e-float - Full stainless steel

F304 body, mechanism & float - EPDM gasket - PS: 10 bar - TS: -10°C/+80°C.



| Ø male  | 1/2"   | 3/4"   | 1"     | 1"1/4" | 2"     |
|---------|--------|--------|--------|--------|--------|
| Ø float | 100    | 100    | 100    | 150    | 150    |
| code    | 292002 | 292003 | 292004 | 292006 | 292007 |

## Spare float

| Ø float | 100    | 150    |
|---------|--------|--------|
| code    | 981860 | 981861 |

Excluded from 2014/68/EU Directive (art. 1, §2.b) - EU 75/33 ISO 4064 - Cast iron body - Flanged RF PN10/16 - Magnetic transmission - PS: 16 bar.



ISO 9001

## High flow - Woltman

Axial helicoid - Tight dial - Cold water: 0°C/+30°C - Hot water: +30°C/+90°C - MID 2004/22/CE.

Cold water - MID R100

Hot water - MID R100

| DN  | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | cold water code | hot water code |
|-----|-------------|---------------------|------------------|-----------------|----------------|
| 50  | 200         | 40                  | 50               | 1738050         | 1739050        |
| 65  | 200         | 63                  | 78,7             | 1738065         | 1739065        |
| 80  | 225         | 100                 | 125              | 1738080         | 1739080        |
| 100 | 250         | 160                 | 200              | 1738100         | 1739100        |
| 125 | 300         | 160                 | 200              | 1738125         | 1739125        |
| 150 | 300         | 250                 | 312,5            | 1738150         | 1739150        |
| 200 | 350         | 400                 | 500              | 1738200         | 1739200        |



## High flow - Woltman - Pulse transmitter

Axial helicoid - Tight dial - Cold water: 0°C/+30°C - Hot water: +30°C/+90°C - MID 2004/22/CE - REED contact for pulse transmitter.

Cold water - MID R100

Hot water - MID R100

| DN  | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | cold water code |            | hot water code |            |
|-----|-------------|---------------------|------------------|-----------------|------------|----------------|------------|
|     |             |                     |                  | 1 x 100 l       | 1 x 1000 l | 1 x 100 l      | 1 x 1000 l |
| 50  | 200         | 40                  | 50               | 1758050         | -          | 1748050        | -          |
| 65  | 200         | 63                  | 78,7             | 1758065         | -          | 1748065        | -          |
| 80  | 225         | 100                 | 125              | 1758080         | -          | 1748080        | -          |
| 100 | 250         | 160                 | 200              | 1758100         | -          | 1748100        | -          |
| 125 | 300         | 160                 | 200              | 1758126         | -          | 1748126        | -          |
| 150 | 300         | 250                 | 312,5            | 1758151         | -          | 1748151        | -          |
| 200 | 350         | 400                 | 500              | -               | 1758200    | -              | 1748200    |



## Irrigation

Tangential helicoid - Dry dial - Class A - Horizontal mounting - Pre-equipped for pulse transmitter - TS: 0°C/+50°C.

Cold water - Class A

| DN  | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code      |            |
|-----|-------------|---------------------|------------------|-----------|------------|
|     |             |                     |                  | 1 x 100 l | 1 x 1000 l |
| 50  | 200         | 35                  | 70               | 1720050   | -          |
| 65  | 200         | 50                  | 100              | 1720065   | -          |
| 80  | 225         | 75                  | 150              | 1720080   | -          |
| 100 | 250         | 125                 | 250              | 1720100   | -          |
| 125 | 250         | 175                 | 350              | -         | 1720125    |
| 150 | 300         | 250                 | 500              | -         | 1720150    |
| 200 | 350         | 450                 | 900              | -         | 1720200    |

## Irrigation - Pulse transmitter

Tangential helicoid - Dry dial - Class A - Horizontal mounting - REED contact for pulse transmitter - TS: 0°C/+50°C.

Cold water - Class A

| DN  | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code      |            |
|-----|-------------|---------------------|------------------|-----------|------------|
|     |             |                     |                  | 1 x 100 l | 1 x 1000 l |
| 50  | 200         | 35                  | 70               | 1724050   | -          |
| 65  | 200         | 50                  | 100              | 1724065   | -          |
| 80  | 225         | 75                  | 150              | 1724080   | -          |
| 100 | 250         | 125                 | 250              | 1724100   | -          |
| 125 | 250         | 175                 | 350              | -         | 1724125    |
| 150 | 300         | 250                 | 500              | -         | 1724150    |
| 200 | 350         | 450                 | 900              | -         | 1724200    |

Threaded water meters, see page 194.



## Pulse transmitter

| code    |
|---------|
| 9811017 |



Excluded from 2014/68/EU Directive (article 1, §2.b) - Inlet threaded connection (D2) acc. to ISO 965 & outlet compression fitting for PE pipes (D1) - Bronze or CW602N brass body - CW602N brass cap. - Brass ball - Plain PTFE seats - NBR stem tightness - Epoxy coated 30x30 square drive - anticlockwise closing - PS: 16 bar - TS: -4°C/+40°C.



## Service cock valves

### 29110 - Straight with o-ring gasket

Bronze body or CW602N brass body.



| DN                | 20      | 25      | 30      | 40      |
|-------------------|---------|---------|---------|---------|
| outlet Ø (D1)     | 25      | 32      | 40      | 50      |
| inlet thread (D2) | 40x300  | 40x300  | 55x300  | 55x300  |
| bore (mm)         | 25*     | 25      | 40      | 40      |
| bronze code       | 2911020 | 2911025 | 2911030 | 2911040 |
| brass code        | 2911021 | -       | -       | -       |

### Shut-off valve

#### 29180 - Straight with o-ring gaskets

Bronze body.



| DN          | 20      | 25      | 30      | 40      |
|-------------|---------|---------|---------|---------|
| bore        | 21      | 25      | 40      | 40      |
| ext. pipe Ø | 25      | 32      | 40      | 50      |
| code        | 2918020 | 2918025 | 2918030 | 2918040 |

## Tapping bridges

Excluded from 2014/68/EU Directive (article 1, §2.b) - Threaded connection acc. to ISO 965 - Forged steel body - Suitable for rigid pipes, such as cast iron, steel, PVC, asbestos cement - Double tightness EPDM gasket - PS: 16 bar - TS: +4°C/+40°C.



### 2950 - Small thread M40x300

### 2951 - Large thread M55x300



| DN          | 40      | 50      | 60      | 80      | 100     | 125     | 150     | 175     | 200     | 225     | 250     | 275     | 300     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pipe Ø (mm) | 50-62   | 63-74   | 75-89   | 90-109  | 110-135 | 136-159 | 160-175 | 175-211 | 212-233 | 234-269 | 270-290 | 291-310 | 311-325 |
| 2950 code   | 2950040 | 2950050 | 2950060 | 2950080 | 2950100 | 2950125 | 2950150 | 2950175 | 2950200 | 2950225 | 2950250 | 2950275 | 2950300 |
| 2951 code   | -       | 2951050 | 2951060 | 2951080 | 2951100 | 2951125 | 2951150 | 2951175 | 2951200 | 2951225 | 2951250 | 2951275 | 2951300 |

### 2956 - Bronze cap

For 2950 & 2951 tapping bridges



| Ø    | M40x300 | M55x300 |
|------|---------|---------|
| code | 2956040 | 2956055 |

### 2957 - Bronze reduced bush

For 2950 tapping bridge



| Ø                | 1/2"    | 3/4"    | 1"      |
|------------------|---------|---------|---------|
| tapping bridge Ø | M40x300 | M40x300 | M40x300 |
| code             | 2957004 | 2957005 | 2957006 |

### 2958 - Bronze reduced bush

For 2951 tapping bridge

| Ø                | 1/2"    | 3/4"    | 1"      |
|------------------|---------|---------|---------|
| tapping bridge Ø | M55x300 | M55x300 | M55x300 |
| code             | 2958004 | 2958005 | 2958006 |



### 29130 - Universal straight/angle with large gasket

Bronze body.



| DN                | 20      | 30      | 40      |
|-------------------|---------|---------|---------|
| outlet Ø (D1)     | 25      | 40      | 50      |
| inlet thread (D2) | 40x300  | 55x300  | 55x300  |
| bore (mm)         | 21      | 40      | 40      |
| code              | 2913020 | 2913030 | 2913040 |

### F304 tightening wrench for universal service valves

|      |         |
|------|---------|
| code | 2913010 |
|------|---------|

### HDPE centering ring for service valves



| valve type | 29110   | 29180   | 29130   |
|------------|---------|---------|---------|
| code       | 2994000 | 2994000 | 2913001 |

# Flanges adaptors & couplings

**NEW**

Excluded from 2014/68/EU Directive (article 1, §2.b) - Construction acc. to EN 14525 - For water supply & distribution networks - Flanged PN10/16 - GGG50 body - Epoxy coating 250 µm - EPDM gasket - Geomet 500 coated bolting - PS: 16 bar (except 2507 & 2509: see table) - TS: 0°C/+60°C.



### 2507 - Universal coupling

Suitable for rigid pipes, such as cast iron, carbon steel, PVC, PE-HD, asbestos cement - With mechanical locking ring to avoid axial movement of the pipes.



| Ø ext. min. | 46      | 70      | 88      | 108     | 133     | 159     | 200     | 250     | 315     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ø ext. max. | 70      | 95      | 123     | 143     | 168     | 194     | 235     | 285     | 350     |
| PS (bar)    | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      |
| length (mm) | 240     | 240     | 250     | 250     | 260     | 260     | 295     | 305     | 315     |
| code        | 2507050 | 2507065 | 2507080 | 2507100 | 2507125 | 2507150 | 2507200 | 2507250 | 2507300 |

**NEW**

## Couplings

### 2505 - Universal coupling for rigid pipes

Suitable for rigid pipes, such as cast iron, carbon steel, PVC, asbestos cement. ⚠️ **Not suitable for PE pipes.**



| Ø ext. min. | 58      | 68      | 84      | 109     | 133     | 157     | 194     | 218     | 242     | 266     | 280     | 302     | 324     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ø ext. max. | 74      | 84      | 105     | 133     | 157     | 182     | 215     | 242     | 268     | 291     | 305     | 327     | 350     |
| length (mm) | 160     | 160     | 160     | 165     | 165     | 190     | 190     | 210     | 240     | 240     | 240     | 240     | 240     |
| code        | 2505050 | 2505065 | 2505080 | 2505100 | 2505125 | 2505150 | 2505200 | 2505201 | 2505250 | 2505251 | 2505252 | 2505300 | 2505301 |
| Ø ext. min. | 352     | 386     | 410     | 436     |         |         |         |         |         |         |         |         |         |
| Ø ext. max. | 378     | 410     | 436     | 462     |         |         |         |         |         |         |         |         |         |
| length (mm) | 250     | 250     | 240     | 250     |         |         |         |         |         |         |         |         |         |
| code        | 2505350 | 2505351 | 2505400 | 2505401 |         |         |         |         |         |         |         |         |         |

### 2508 - Coupling for PVC & PE pipes

Suitable for PVC-U & PE-HD pipes - With mechanical locking ring to avoid axial movement of the pipes.



| Ø ext.      | 63      | 75      | 90      | 110     | 125     | 140     | 160     | 180     | 200     | 225     | 250     | 280     | 315     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| length (mm) | 155     | 160     | 165     | 155     | 155     | 155     | 165     | 165     | 170     | 225     | 235     | 250     | 280     |
| code        | 2508063 | 2508075 | 2508090 | 2508110 | 2508125 | 2508140 | 2508160 | 2508180 | 2508200 | 2508225 | 2508250 | 2508280 | 2508315 |

### 2509 - Flange adaptor

Suitable for rigid pipes, such as cast iron, carbon steel, PVC, PE-HD, asbestos cement - With mechanical locking ring to avoid axial movement of the pipes.



| DN          | 50      | 60-65   | 80      | 100     | 125     | 150     | 200     | 250     | 300     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ø ext. min. | 46      | 70      | 88      | 108     | 133     | 159     | 200     | 250     | 315     |
| Ø ext. max. | 70      | 95      | 123     | 143     | 168     | 194     | 235     | 285     | 350     |
| PS (bar)    | 16      | 16      | 16      | 16      | 16      | 16      | 16      | 10      | 10      |
| length (mm) | 170     | 195     | 215     | 225     | 225     | 225     | 245     | 265     | 275     |
| code        | 2509050 | 2509065 | 2509080 | 2509100 | 2509125 | 2509150 | 2509200 | 2509250 | 2509300 |

### 2501 - Universal flange adaptor with stop for rigid pipes

Suitable for rigid pipes, such as cast iron, carbon steel, PVC, asbestos cement. ⚠️ **Not suitable for PE pipes.**



| DN          | 50      | 60-65   | 80      | 100     | 125     | 150     | 200     | 200     | 250     | 250     | 250     | 300     | 300     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ø ext. min. | 58      | 68      | 84      | 109     | 133     | 157     | 194     | 218     | 242     | 266     | 280     | 302     | 324     |
| Ø ext. max. | 74      | 84      | 105     | 133     | 157     | 182     | 215     | 242     | 268     | 291     | 305     | 327     | 350     |
| length (mm) | 110     | 110     | 110     | 120     | 135     | 135     | 135     | 135     | 135     | 135     | 140     | 140     | 150     |
| code        | 2501050 | 2501060 | 2501080 | 2501100 | 2501125 | 2501150 | 2501200 | 2501201 | 2501250 | 2501251 | 2501252 | 2501300 | 2501301 |
| DN          | 350     | 350     | 400     | 400     | 400     |         |         |         |         |         |         |         |         |
| Ø ext. min. | 352     | 386     | 386     | 410     | 436     |         |         |         |         |         |         |         |         |
| Ø ext. max. | 378     | 410     | 410     | 436     | 462     |         |         |         |         |         |         |         |         |
| length (mm) | 135     | 150     | 180     | 185     | 180     |         |         |         |         |         |         |         |         |
| code        | 2501350 | 2501351 | 2501400 | 2501401 | 2501402 |         |         |         |         |         |         |         |         |

### 2503 - Flange adaptor for PVC & PE pipes

Suitable for PVC-U & PE-HD pipes - With mechanical locking ring to avoid axial movement of the pipes.



| DN          | 50-60-65 | 60-75   | 80      | 100     | 125     | 125     | 150     | 150     | 200     | 200     | 250     | 250     | 300     |
|-------------|----------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ø ext.      | 63       | 75      | 90      | 110     | 125     | 140     | 160     | 180     | 200     | 225     | 250     | 280     | 315     |
| length (mm) | 115      | 115     | 115     | 115     | 115     | 115     | 115     | 160     | 140     | 160     | 160     | 160     | 160     |
| code        | 2503063  | 2503075 | 2503090 | 2503110 | 2503125 | 2503140 | 2503160 | 2503180 | 2503200 | 2503225 | 2503250 | 2503280 | 2503315 |

## Flanges

### 2504 - Flange adaptor for PVC & PE pipes PN10/16

Suitable for PVC & polyethylene pipes.



| DN          | 50      | 60-65   | 60-65   | 80      | 100     | 125     | 125     | 150     | 200     | 200     | 250     | 300     | 400     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ø ext.      | 63      | 63      | 75      | 90      | 110     | 125     | 140     | 160     | 200     | 225     | 250     | 315     | 400     |
| length (mm) | 53      | 53      | 57      | 63      | 63      | 72      | 72      | 87,5    | 93,5    | 93,5    | 98      | 115     | 128     |
| code        | 2504063 | 2504064 | 2504075 | 2504090 | 2504110 | 2504125 | 2504140 | 2504160 | 2504200 | 2504225 | 2504250 | 2504315 | 2504400 |

**NEW**



## 2502 - Flange adaptor for PVC & PE pipes PN10/16

Suitable for PVC, PVC-O & PE pipes - With mechanical locking ring to avoid axial movement of the pipes.

| DN          | 50      | 60-65   | 60-65   | 80      | 100     | 125     | 125     | 150     | 200     | 200     | 250     | 300     | 400     |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ø ext.      | 63      | 63      | 75      | 90      | 110     | 125     | 140     | 160     | 200     | 225     | 250     | 315     | 400     |
| length (mm) | 53      | 53      | 57      | 63      | 63      | 72      | 72      | 87,5    | 93,5    | 93,5    | 98      | 115     | 128     |
| code        | 2502063 | 2502064 | 2502075 | 2502090 | 2502110 | 2502125 | 2502140 | 2502160 | 2502200 | 2502225 | 2502250 | 2502315 | 2502400 |

## 2510 - Studded adaptor flange

PN10/16 up to DN150, PN10 above - PS: 10 bar for PN10 flanges, 16 bar for PN16 flanges.

**DSA:** Double studded adaptor / **SSA:** Single studded adaptor



| DN   | 60-65   | 80      | 80      | 80      | 80      | 100     | 100     | 100     | 100     | 125     | 125     | 125     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 40      | 40      | 50      | 60      | 65      | 40      | 60      | 65      | 80      | 60      | 65      | 80      |
| type | DSA     | DSA     | DSA     | DSA     | DSA     | DSA     | DSA     | DSA     | DSA     | DSA     | DSA     | DSA     |
| code | 2510060 | 2510080 | 2510081 | 2510082 | 2510083 | 2510100 | 2510102 | 2510103 | 2510204 | 2510125 | 2510126 | 2510127 |
| DN   | 125     | 150     | 150     | 150     | 150     | 150     | 200     | 200     | 200     | 200     | 200     | 200     |
| PN   | 100     | 60      | 65      | 80      | 100     | 125     | 60      | 65      | 80      | 100     | 125     | 150     |
| type | DSA     | SSA     | SSA     | SSA     | DSA     | DSA     | SSA     | SSA     | SSA     | SSA     | SSA     | DSA     |
| code | 2510128 | 2510150 | 2510151 | 2510152 | 2510153 | 2510154 | 2510200 | 2510201 | 2510202 | 2510203 | 2510204 | 2510205 |
| DN   | 200/16  | 250     | 250     | 300     | 300     |         |         |         |         |         |         |         |
| PN   | 150     | 150     | 200     | 200     | 250     |         |         |         |         |         |         |         |
| type | DSA     | SSA     | DSA     | SSA     | DSA     |         |         |         |         |         |         |         |
| code | 2510206 | 2510250 | 2510251 | 2510300 | 2510301 |         |         |         |         |         |         |         |

## 2514 - Threaded flange RF PN10/16 (BSF)

PN10/16 up to DN150, PN10 above - PS: 10 bar for PN10 flanges, 16 bar for PN16 flanges.



| DN              | 40      | 40      | 50      | 50      | 60/65   | 60/65   | 60/65   | 60/65   | 80      | 80      | 80      | 80      |
|-----------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| threaded outlet | 3/4"    | 1"      | 3/4"    | 1"      | 3/4"    | 1"      | 1"1/2   | 2"      | 3/4"    | 1"      | 1"1/2   | 2"      |
| code            | 2514041 | 2514042 | 2514051 | 2514052 | 2514061 | 2514062 | 2514064 | 2514065 | 2514081 | 2514082 | 2514084 | 2514085 |
| DN              | 100     | 100     | 100     | 100     | 125     | 125     | 125     | 150     | 150     | 150     | 200     | 200     |
| threaded outlet | 3/4"    | 1"      | 1"1/2   | 2"      | 1"      | 1"1/2   | 2"      | 1"      | 1"1/2   | 2"      | 1"1/2   | 2"      |
| code            | 2514101 | 2514102 | 2514104 | 2514105 | 2514127 | 2514129 | 2514130 | 2514152 | 2514154 | 2514155 | 2514204 | 2514205 |
| DN              | 250     | 250     | 300     | 300     |         |         |         |         |         |         |         |         |
| threaded outlet | 1"1/2   | 2"      | 1"1/2   | 2"      |         |         |         |         |         |         |         |         |
| code            | 2514254 | 2514255 | 2514304 | 2514305 |         |         |         |         |         |         |         |         |

## 2512 - Threaded flange RF PN10/16 - Small thread M40x300

PN10/16 up to DN150, PN10 or PN16 above - PS: 10 bar for PN10 flanges, 16 bar for PN16 flanges.



| DN   | 40      | 50      | 60/65   | 80      | 100     | 125     | 150     | 200     | 250     | 250     | 300     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10      | 16      | 10      | 16      |
| code | 2512040 | 2512050 | 2512060 | 2512080 | 2512100 | 2512125 | 2512150 | 2512200 | 2512250 | 2512251 | 2512300 | 2512301 |

## 2513 - Threaded flange RF PN10/16 - Large thread M55x300

PN10/16 up to DN150, PN10 or PN16 above - PS: 10 bar for PN10 flanges, 16 bar for PN16 flanges.



| DN   | 40      | 50      | 60/65   | 80      | 100     | 125     | 150     | 200     | 250     | 250     | 300     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10      | 16      | 10      | 16      |
| code | 2513040 | 2513050 | 2513060 | 2513080 | 2513100 | 2513125 | 2513150 | 2513200 | 2513250 | 2513251 | 2513300 | 2513301 |

## 2511 - Blind flange RF PN10/16

PN10/16 up to DN150, PN10 or PN16 above - PS: 10 bar for PN10 flanges, 16 bar for PN16 flanges.



| DN   | 40      | 50      | 60/65   | 80      | 100     | 125     | 150     | 200     | 250     | 250     | 300     | 300     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| PN   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10/16   | 10      | 16      | 10      | 16      |
| code | 2511040 | 2511050 | 2511060 | 2511080 | 2511100 | 2511125 | 2511150 | 2511200 | 2511250 | 2511251 | 2511300 | 2511301 |

Excluded from 2014/68/EU Directive (article 1, §2.b) - For water supply & distribution networks.

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## 1189 - Tapping bridge for PVC & PE pipes

Polypropylene body - PS: 10 bar - TS: -10°C/+60°C.



| ext. pipe Ø | 25      | 25      | 32      | 32      | 40      | 40      | 40      | 50      | 50      | 50      | 63      | 63      | 63      | 63      | 63      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| thread      | 1/2"    | 3/4"    | 1/2"    | 3/4"    | 1/2"    | 3/4"    | 1"      | 1/2"    | 3/4"    | 1"      | 1/2"    | 3/4"    | 1"      | 1 1/4"  | 1 1/2"  |
| pack        | 10/170  | 10/170  | 10/170  | 10/170  | 5/140   | 5/140   | 5/140   | 5/130   | 5/130   | 5/130   | 5/120   | 5/120   | 5/120   | 5/120   | 5/120   |
| code        | 1189254 | 1189255 | 1189324 | 1189325 | 1189414 | 1189415 | 1189416 | 1189514 | 1189515 | 1189516 | 1189634 | 1189635 | 1189636 | 1189637 | 1189638 |

## 1190 - Tapping bridge for universal use

Cast iron body - NBR glued socket - F303 bridge & screws - Suitable for PE, PVC, carbon steel & cast iron pipes - PS: 10 bar - TS: -10°C/+60°C.



| DN  | Ø ext.  | Threaded outlet |         |         |         |         |         |         |         |
|-----|---------|-----------------|---------|---------|---------|---------|---------|---------|---------|
|     |         | 1/2"            | 3/4"    | 1"      | 1 1/4"  | 1 1/2"  | 2"      | 2 1/2"  | 3"      |
| 30  | 40-50   | 1190038         | 1190039 |         |         |         |         |         |         |
| 40  | 48-55   |                 | 1190048 | 1190049 |         |         |         |         |         |
| 50  | 60-68   |                 | 1190060 | 1190061 | 1190062 | 1190063 |         |         |         |
| 65  | 72-80   |                 | 1190070 | 1190071 | 1190072 | 1190073 |         |         |         |
| 70  | 76-84   |                 | 1190076 | 1190077 | 1190078 | 1190079 |         |         |         |
| 80  | 88-104  |                 | 1190089 | 1190090 | 1190091 | 1190092 | 1190093 |         |         |
| 90  | 98-112  |                 | 1190100 | 1190101 | 1190102 | 1190103 |         |         |         |
| 100 | 112-126 |                 | 1190114 | 1190115 | 1190116 | 1190117 | 1190118 |         |         |
| 125 | 140-154 |                 | 1190140 | 1190141 | 1190142 | 1190143 | 1190144 |         |         |
| 150 | 168-184 |                 | 1190168 | 1190169 | 1190170 | 1190171 | 1190172 | 1190173 | 1190174 |

# Repair clamps

Excluded from 2014/68/EU Directive (article 1, §2.b) - F304 stainless steel band - Ductile iron clamp - Steel bolts - EPDM or NBR rubber gasket - PS: see charts - TS: -10°C/+60°C - Suitable for rigid pipes such as cast iron, steel, PVC, low density PE. ⚠ Do not use on high density PE pipes.



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## ■ Repairing for complete break



**1403 - B Type - 3 bolts - EPDM - Length 200 mm**

| ext. pipe Ø |      | PS | code    |
|-------------|------|----|---------|
| min.        | max. |    |         |
| 48          | 56   | 20 | 1403048 |
| 56          | 64   | 20 | 1403056 |
| 60          | 68   | 20 | 1403060 |
| 68          | 78   | 20 | 1403068 |
| 78          | 88   | 20 | 1403078 |
| 88          | 98   | 20 | 1403088 |
| 98          | 108  | 20 | 1403098 |
| 108         | 118  | 20 | 1403108 |
| 114         | 126  | 20 | 1403114 |
| 126         | 138  | 16 | 1403126 |
| 138         | 150  | 16 | 1403138 |
| 140         | 153  | 16 | 1403140 |
| 150         | 162  | 16 | 1403150 |
| 162         | 174  | 16 | 1403162 |
| 168         | 182  | 16 | 1403168 |
| 174         | 186  | 16 | 1403174 |
| 186         | 198  | 16 | 1403186 |
| 198         | 210  | 10 | 1403198 |
| 210         | 223  | 10 | 1403210 |
| 222         | 234  | 10 | 1403222 |
| 234         | 246  | 10 | 1403234 |
| 243         | 255  | 10 | 1403243 |
| 273         | 285  | 8  | 1403273 |



**1405 - B Type - 3 bolts - NBR - Length 200 mm**

| ext. pipe Ø |      | PS | code    |
|-------------|------|----|---------|
| min.        | max. |    |         |
| 48          | 56   | 20 | 1405048 |
| 56          | 64   | 20 | 1405056 |
| 60          | 68   | 20 | 1405060 |
| 68          | 78   | 20 | 1405068 |
| 78          | 88   | 20 | 1405078 |
| 88          | 98   | 20 | 1405088 |
| 98          | 108  | 20 | 1405098 |
| 108         | 118  | 20 | 1405108 |
| 114         | 126  | 20 | 1405114 |
| 126         | 138  | 16 | 1405126 |
| 138         | 150  | 16 | 1405138 |
| 140         | 153  | 16 | 1405140 |
| 150         | 162  | 16 | 1405150 |
| 162         | 174  | 16 | 1405162 |
| 168         | 182  | 16 | 1405168 |
| 174         | 186  | 16 | 1405174 |
| 186         | 198  | 16 | 1405186 |
| 198         | 210  | 10 | 1405198 |
| 210         | 223  | 10 | 1405210 |
| 222         | 234  | 10 | 1405222 |
| 234         | 246  | 10 | 1405234 |
| 243         | 255  | 10 | 1405243 |
| 273         | 285  | 8  | 1405273 |



**1406 - D Type (2 piece) - 3 bolts x 2 - EPDM - Length 200 mm**

| ext. pipe Ø |      | PS  | code    |
|-------------|------|-----|---------|
| min.        | max. |     |         |
| 88          | 110  | 20  | 1406088 |
| 114         | 137  | 20  | 1406114 |
| 138         | 160  | 20  | 1406138 |
| 160         | 182  | 20  | 1406160 |
| 182         | 202  | 20  | 1406182 |
| 202         | 224  | 16  | 1406202 |
| 217         | 240  | 16  | 1406217 |
| 240         | 262  | 16  | 1406240 |
| 262         | 284  | 10  | 1406262 |
| 273         | 296  | 10  | 1406273 |
| 296         | 319  | 8   | 1406296 |
| 324         | 346  | 8   | 1406324 |
| 346         | 368  | 8   | 1406346 |
| 365         | 387  | 8   | 1406365 |
| 387         | 410  | 4,5 | 1406387 |
| 410         | 432  | 4,5 | 1406410 |
| 428         | 450  | 4,5 | 1406428 |
| 450         | 474  | 4,5 | 1406450 |
| 470         | 492  | 4,5 | 1406470 |
| 492         | 516  | 2,5 | 1406492 |

## ■ Repairing



**1401 - M Type - 1 bolt - EPDM - Length 80 mm**

| ext. pipe Ø |      | PS | code    |
|-------------|------|----|---------|
| min.        | max. |    |         |
| 21          | 25   | 20 | 1401021 |
| 26          | 30   | 20 | 1401026 |
| 29          | 33   | 20 | 1401029 |
| 33          | 37   | 20 | 1401033 |
| 38          | 42   | 20 | 1401038 |
| 42          | 45   | 20 | 1401042 |
| 48          | 51   | 20 | 1401048 |
| 50          | 54   | 20 | 1401050 |
| 55          | 60   | 20 | 1401055 |
| 60          | 64   | 20 | 1401060 |
| 65          | 69   | 20 | 1401065 |
| 69          | 73   | 20 | 1401069 |
| 71          | 76   | 20 | 1401071 |
| 76          | 82   | 20 | 1401076 |
| 82          | 87   | 20 | 1401082 |
| 87          | 93   | 20 | 1401087 |
| 94          | 100  | 20 | 1401094 |
| 99          | 104  | 20 | 1401099 |
| 105         | 111  | 20 | 1401105 |
| 112         | 118  | 20 | 1401112 |
| 120         | 126  | 20 | 1401120 |
| 126         | 131  | 20 | 1401126 |
| 131         | 136  | 20 | 1401131 |
| 139         | 145  | 16 | 1401139 |
| 156         | 162  | 16 | 1401139 |
| 167         | 173  | 16 | 1401167 |



## Valves for building

|                                     |                  |
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## PN25/20



Excluded from 2014/68/EU Directive (article 4, §3) - Nickel-plated CW617N brass body - NBR double o-ring - PTFE seats - Chrome-plated brass ball - Standard bore - Anti-blowout stem - Tracking: "15S" marked on body - TS: -10°C/+110°C.



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### Female/female



#### 515 - Red steel lever

#### 516 - Red butterfly handle

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 25     | 25     | 25     | 25     | 25     | 20     | 20     | 16     | 10     | 10     |
| pack     | 10     | 10     | 10     | 10     | 16     | 12     | 8      | 1      | 1      | 1      |
| 515 code | 515002 | 515003 | 515004 | 515005 | 515006 | 515007 | 515008 | 515009 | 515010 | 515011 |
| pack     | 15     | 15     | 15     | 12     | 16     |        |        |        |        |        |
| 516 code | 516002 | 516003 | 516004 | 516005 | 516006 | -      | -      | -      | -      | -      |

### Male/female



#### 562 - Red steel lever

#### 563 - Red butterfly handle

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 25     | 25     | 25     | 25     | 25     | 20     | 20     | 16     |
| pack     | 10     | 10     | 10     | 10     | 16     | 12     | 8      | 1      |
| 562 code | 562002 | 562003 | 562004 | 562005 | 562006 | 562007 | 562008 | 562009 |
| pack     | 15     | 15     | 15     | 12     | 16     |        |        |        |
| 563 code | 563002 | 563003 | 563004 | 563005 | 563006 | -      | -      | -      |

### Male/male



#### 572 - Red steel lever

#### 573 - Red butterfly handle

| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 25     | 25     | 25     | 25     | 20     | 20     | 16     |
| pack     | 10     | 10     | 10     | 16     | 12     | 8      | 1      |
| 572 code | 572003 | 572004 | 572005 | 572006 | 572007 | 572008 | 572009 |
| pack     | 15     | 15     | 15     | 12     |        |        |        |
| 573 code | 573003 | 573004 | 573005 | 573006 | -      | -      | -      |

### Female/female - With drainer



#### 574 - Red steel lever

| Ø        | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 25     | 25     | 25     | 20     | 20     | 16     |
| pack     | 10     | 10     | 10     | 8      | 4      | 1      |
| code     | 574004 | 574005 | 574006 | 574007 | 574008 | 574009 |

## PN30/20

Excluded from 2014/68/EU Directive (article 4, §3) - Nickel-plated CW617N brass body - PTFE gland pack & seats - Chrome-plated brass ball - Full bore - Anti-blowout stem - Tracking: "80S" marked on body - TS: -10°C/+120°C.



ISO 9001

### Stainless steel lever



#### 552 - Female/female

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 30     | 30     | 30     | 30     | 30     | 20     | 20     | 16     | 10     | 10     |
| pack     | 10     | 10     | 10     | 10     | 10     | 8      | 6      | 4      | 4      | 4      |
| code     | 552002 | 552003 | 552004 | 552005 | 552006 | 552007 | 552008 | 552009 | 552010 | 552011 |



## Female/female



**580 - Red steel lever**  
**508 - Blue steel lever**

**586 - Red butterfly handle**  
**564 - Blue butterfly handle**

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 30     | 30     | 30     | 30     | 30     | 20     | 20     | 16     | 10     | 10     | 10     |
| pack     | 10     | 10     | 10     | 10     | 10     | 8      | 6      | 4      | 4      | 4      | 4      |
| 580 code | 580002 | 580003 | 580004 | 580005 | 580006 | 580007 | 580008 | 580009 | 580010 | 580011 | 580012 |
| 586 code | 586002 | 586003 | 586004 | 586005 | 586006 | -      | -      | -      | -      | -      | -      |
| 508 code | 508002 | 508003 | 508004 | 508005 | 508006 | 508007 | 508008 | 508009 | -      | -      | -      |
| 564 code | 564002 | 564003 | 564004 | 564005 | 564006 | -      | -      | -      | -      | -      | -      |

## Male/female

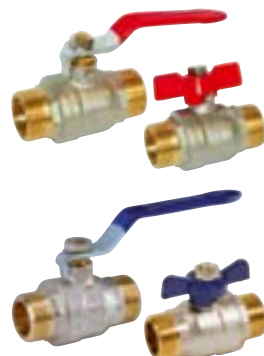


**581 - Red steel lever**  
**511 - Blue steel lever**

**587 - Red butterfly handle**  
**533 - Blue butterfly handle**

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 30     | 30     | 30     | 30     | 30     | 20     | 20     | 16     |
| pack     | 10     | 10     | 10     | 10     | 10     | 8      | 6      | 4      |
| 581 code | 581002 | 581003 | 581004 | 581005 | 581006 | 581007 | 581008 | 581009 |
| 587 code | 587002 | 587003 | 587004 | 587005 | 587006 | -      | -      | -      |
| 511 code | 511002 | 511003 | 511004 | 511005 | 511006 | -      | -      | -      |
| 533 code | 533002 | 533003 | 533004 | 533005 | 533006 | -      | -      | -      |

## Male/male



**582 - Red steel lever**  
**529 - Blue steel lever**

**588 - Red butterfly handle**  
**536 - Blue butterfly handle**

| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 30     | 30     | 30     | 30     | 20     | 20     | 16     |
| pack     | 10     | 10     | 10     | 10     | 8      | 6      | 4      |
| 582 code | 582003 | 582004 | 582005 | 582006 | 582007 | 582008 | 582009 |
| 588 code | 588003 | 588004 | 588005 | 588006 | -      | -      | -      |
| 529 code | 529003 | 529004 | 529005 | 529006 | -      | -      | -      |
| 536 code | 536003 | 536004 | 536005 | 536006 | -      | -      | -      |

## Female/female - With drainer



**585 - Red steel lever**    **560 - Red butterfly handle**

| Ø        | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 30     | 30     | 30     | 20     | 20     | 16     |
| pack     | 10     | 10     | 10     | 8      | 6      | 4      |
| 585 code | 585004 | 585005 | 585006 | 585007 | 585008 | 585009 |
| 560 code | 560004 | 560005 | 560006 | -      | -      | -      |

## Spare stem extension

For PN30/20 series, except butterfly handle valves.



| Ø    | 1/2"-3/4" | 1"      | 1"1/4"-1"1/2" | 2"      |
|------|-----------|---------|---------------|---------|
| code | 9812331   | 9812332 | 9812333       | 9812334 |



## PN40/30 - Lead-free brass

Excluded from 2014/68/EU Directive (article 4, §3) - Nickel-plated CW510L brass body - PTFE gland pack & seats - Chrome-plated brass ball up to 1/2", stainless steel ball above - **Full bore** - Anti-blowout stem - Tracking: "9SP" marked on body - TS: -10°C/+120°C.



**⚠ Complies with the 4MS Composition List & accepted metallic materials for PDW.**



### Female/female

**509 - Red steel lever**

**525 - Red butterfly handle**

**501 - Blue steel lever**

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"       | 1"1/4" | 1"1/2"   | 2"     | 2"1/2"   | 3"     | 4"       |
|----------|--------|--------|--------|--------|----------|--------|----------|--------|----------|--------|----------|
| PS (bar) | 40     | 40     | 40     | 40     | 40       | 30     | 25       | 20     | 10       | 10     | 10       |
| pack     | 10     | 10     | 10     | 10     | 10       | 8      | 6        | 4      | 1        | 1      | 1        |
| 509 code | 509002 | 509003 | 509004 | 509005 | 509006SF | 509007 | 509008SF | 509009 | 509010SF | 509011 | 509012SF |
| 525 code | 525002 | 525003 | 525004 | 525005 | 525006   | -      | -        | -      | -        | -      | -        |
| 501 code | 501002 | 501003 | 501004 | 501005 | 501006   | 501007 | 501008   | 501009 | 501010   | 501011 | 501012   |



### Male/female

**571 - Red steel lever**

**570 - Red butterfly handle**

**517 - Blue steel lever**

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 40     | 40     | 40     | 40     | 40     | 30     | 25     | 20     |
| pack     | 10     | 10     | 10     | 10     | 10     | 8      | 6      | 4      |
| 571 code | 571002 | 571003 | 571004 | 571005 | 571006 | 571007 | 571008 | 571009 |
| 570 code | 570002 | 570003 | 570004 | 570005 | 570006 | -      | -      | -      |
| 517 code | 517002 | 517003 | 517004 | 517005 | 517006 | 517007 | 517008 | 517009 |



### Male/male

**566 - Red steel lever**

**565 - Red butterfly handle**

**518 - Blue steel lever**

| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 40     | 40     | 40     | 40     | 30     | 25     | 20     |
| pack     | 10     | 10     | 10     | 10     | 8      | 6      | 4      |
| 566 code | 566003 | 566004 | 566005 | 566006 | 566007 | 566008 | 566009 |
| 565 code | 565003 | 565004 | 565005 | 565006 | -      | -      | -      |
| 518 code | 518003 | 518004 | 518005 | 518006 | 518007 | 518008 | 518009 |



### Female/female - With drainer

**510 - Red steel lever**

**530 - Red butterfly handle**

| Ø        | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 40     | 40     | 40     | 30     | 20     | 20     |
| pack     | 10     | 10     | 10     | 8      | 4      | 4      |
| 510 code | 510004 | 510005 | 510006 | 510007 | 510008 | 510009 |
| 530 code | 530004 | 530005 | 530006 | -      | -      | -      |



## PN40/30 - NF

Excluded from 2014/68/EU Directive (article 26, §3) - Nickel-plated CW617N brass body - PTFE double-tightness gland pack & seats - EPDM o-ring - Chrome-plated CW617N brass ball up to 1"1/2 - Full bore - Large flat bearing - Corrosion resistant handle & nut - Tracking: Airaga marked on body & handle - TS: -5°C/+90°C.



### Female/female



#### 577 - Green steel lever

#### 578 - Green aluminium butterfly handle

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 40     | 40     | 40     | 40     | 25     | 25     | 16     | 16     |
| pack     | 10     | 10     | 10     | 10     | 10     | 6      | 3      | 2      |
| 577 code | 577002 | 577003 | 577004 | 577005 | 577006 | 577007 | 577008 | 577009 |
| 578 code | 578002 | 578003 | 578004 | 578005 | 578006 | -      | -      | -      |

### Male/female



#### 528 - Green steel lever

#### 569 - Green aluminium butterfly handle

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 40     | 40     | 40     | 40     | 25     | 25     | 16     | 16     |
| pack     | 10     | 10     | 10     | 10     | 10     | 6      | 3      | 2      |
| 528 code | 528002 | 528003 | 528004 | 528005 | 528006 | 528007 | 528008 | 528009 |
| 569 code | 569002 | 569003 | 569004 | 569005 | 569006 | -      | -      | -      |

### Male/male



#### 567 - Green steel lever

#### 568 - Green aluminium butterfly handle

| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 40     | 40     | 40     | 25     | 25     | 16     | 16     |
| pack     | 10     | 10     | 10     | 10     | 6      | 3      | 2      |
| 567 code | 567003 | 567004 | 567005 | 567006 | 567007 | 567008 | 567009 |
| 568 code | 568003 | 568004 | 568005 | 568006 | -      | -      | -      |

### Female/female - With drainer



#### 506 - Green steel lever

#### 526 - Green aluminium butterfly handle

| Ø        | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 25     | 25     | 25     | 25     | 16     | 16     |
| pack     | 10     | 10     | 8      | 5      | 3      | 2      |
| 506 code | 506004 | 506005 | 506006 | 506007 | 506008 | 506009 |
| 526 code | 526004 | 526005 | 526006 | -      | -      | -      |

### Female/female - Steam extension



#### 610 - Green steel lever

| Ø        | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 40     | 40     | 25     | 25     | 16     | 16     |
| pack     | 10     | 10     | 8      | 3      | 2      | 1      |
| 506 code | 610004 | 610005 | 610006 | 610007 | 610008 | 610009 |

### Spare stem extension

For PN40/30 - NF series, except butterfly handle valves.



| Ø    | 1/2"    | 3/4"    | 1"      | 1"1/4"  | 1"1/2"  | 2"      |
|------|---------|---------|---------|---------|---------|---------|
| code | 9812321 | 9812321 | 9812322 | 9812323 | 9812323 | 9812324 |

## Valve for gas

AIRAGA

Excluded from 2014/68/EU Directive (article 1, §2f) - Valve for public gas network - Class MOP 5 - CW617N brass body - Anti-blowout stem - Chrome-plated brass ball - PTFE seats - NBR o-ring on stem - PS: 0 to 5 bar - TS: -5°C/+60°C.



### 620 - Female/female

| Ø    | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|
| pack | 10     | 10     | 10     | 5      | 3      | 2      |
| code | 620004 | 620005 | 620006 | 620007 | 620008 | 620009 |

## Stem extension valves

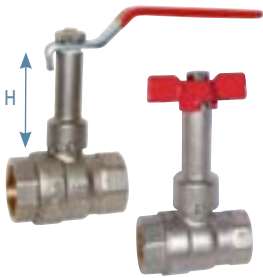
PN25/20 - Excluded from 2014/68/EU Directive (article 4, §3) - Nickel-plated CW617N brass body - PTFE gland pack & seats - Chrome-plated brass ball - Full bore - Anti-blowout stem - Tracking: "80S" marked on body - TS: -10°C/+120°C.



### Female/female

#### 615 - Red steel lever

#### 617 - Red butterfly handle

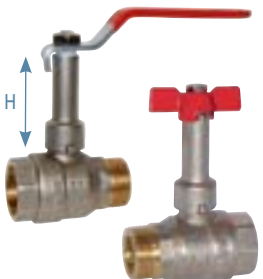


| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 30     | 30     | 30     | 30     | 20     | 20     | 16     |
| H (mm)   | 50     | 50     | 50     | 60     | 70     | 70     | 70     |
| pack     | 10     | 10     | 8      | 5      | 4      | 3      | 1      |
| 615 code | 615003 | 615004 | 615005 | 615006 | 615007 | 615008 | 615009 |
| 617 code | -      | 617004 | 617005 | -      | -      | -      | -      |

### Male/female

#### 616 - Red steel lever

#### 618 - Red butterfly handle



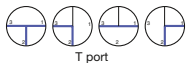
| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 30     | 30     | 30     | 30     | 20     | 20     | 16     |
| H (mm)   | 50     | 50     | 50     | 60     | 70     | 70     | 70     |
| pack     | 10     | 10     | 8      | 5      | 4      | 3      | 1      |
| 616 code | 616003 | 616004 | 616005 | 616006 | 616007 | 616008 | 616009 |
| 618 code | -      | 618004 | 618005 | -      | -      | -      | -      |

## 3 way valves

Excluded from 2014/68/EU Directive (article 4, §3) - Nickel-plated CW617N brass body - PTFE gland pack - Chrome-plated brass ball - 3 way tightness - PS: 16 bar - TS: -10°C/+120°C.



L port



T port

### 513 - PN16 L-port

### 514 - PN16 T-port

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 513 code | 513002 | 513003 | 513004 | 513005 | 513006 | 513007 | 513008 | 513009 |
| 514 code | 514002 | 514003 | 514004 | 514005 | 514006 | 514007 | 514008 | 514009 |

Excluded from 2014/68/EU Directive (article 4, §3) - Nickel-plated CW617N brass body - CW614N ball - PTFE gland pack & ball seat - FKM o-ring - Carbon steel handle - L-port: full bore - T-port: standard bore - PS: 25 bar - TS: -10°C/+100°C.



### 534 - PN25 L-port

### 535 - PN25 T-port

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 3"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 534 code | 534002 | 534003 | 534004 | 534005 | 534006 | 534007 | 534008 | 534009 | 534011 |
| 535 code | 535002 | 535003 | 535004 | 535005 | 535006 | 535007 | 535008 | 535009 | 535011 |



L port



T port

## Mini valves

Excluded from 2014/68/EU Directive (article 4, §3) - Nickel-plated CW617N brass body - PTFE ball seats - Aluminium handle - Anti-blowout stem - PS: 16 bar - TS: -10°C/+90°C.

ISO 9001



**677 - Female/female**  
**674 - Male/female**

| Ø        | 1/4"   | 3/8"   | 1/2"   |
|----------|--------|--------|--------|
| 677 code | 677002 | 677003 | 677004 |
| 674 code | 674002 | 674003 | 674004 |



**697 - Female/female**  
With exhaust hole.

| Ø    | 1/4"   | 3/8"   | 1/2"   |
|------|--------|--------|--------|
| code | 697002 | 697003 | 697004 |



**690 - Male/male**

| Ø    | 1/4"   | 3/8"   | 1/2"   |
|------|--------|--------|--------|
| code | 690002 | 690003 | 690004 |



**694 - Male/female**  
With exhaust hole.

| Ø    | 1/4"   | 1/2"   |
|------|--------|--------|
| code | 694002 | 694004 |

## Mini valves for compressed air



COMPRESSED AIR

Excluded from 2014/68/EU Directive (article 4, §3) - PN16 - Chrome-plated CW617N brass body - PTFE seats - FKM o-ring - Bore: 5,5 mm - TS: -10°C/+90°C.

ISO 9001



**691 - Female/female**

| Ø        | 1/8"   | 1/4"   |
|----------|--------|--------|
| PS (bar) | 16     | 16     |
| code     | 691001 | 691002 |



**692 - Male/female**

| Ø        | 1/8"   | 1/4"   |
|----------|--------|--------|
| PS (bar) | 16     | 16     |
| code     | 692001 | 692002 |



**693 - Male/male**

| Ø        | 1/8"   | 1/4"   |
|----------|--------|--------|
| PS (bar) | 16     | 16     |
| code     | 693001 | 693002 |

## Water meter valves



Excluded from 2014/68/EU Directive (article 4, §3) - Chrome-plated brass ball - CW617N brass body - PTFE gland pack & ball seats - PS: 20 bar - TS: -10°C/+120°C.



ISO 9001



**635 - Female/female**

| Ø free nut   | 3/4"   | 3/4"   |
|--------------|--------|--------|
| Ø connection | 1/2"   | 3/4"   |
| pack         | 10     | 10     |
| code         | 635054 | 635055 |



**636 - Male/female**

| Ø free nut   | 1/2"   | 3/4"   | 3/4"   | 3/4"   |
|--------------|--------|--------|--------|--------|
| Ø connection | 1/2"   | 1/2"   | 3/4"   | 1"     |
| pack         | 10     | 10     | 10     | 10     |
| code         | 636044 | 636054 | 636055 | 636056 |



**638 - Female/female with lock & key**

| Ø free nut   | 3/4"   |
|--------------|--------|
| Ø connection | 3/4"   |
| code         | 638055 |



**637 - Male/female with lock & key**

| Ø free nut   | 3/4"   | 3/4"   | 3/4"   | 1"     |
|--------------|--------|--------|--------|--------|
| Ø connection | 1/2"   | 3/4"   | 1"     | 1"     |
| code         | 637054 | 637055 | 637056 | 637066 |

## Distribution manifold valves



Excluded from 2014/68/EU Directive (article 4, §3) - CW617N brass body - For flat bearing manifolds - PS: 25 bar - TS: -10°C/+120°C (except 678: TS: -°C/+100°C).

ISO 9001



**633 - Male/female PN16**

| Ø free nut | 1/2"   |
|------------|--------|
| Ø male     | 1/2"   |
| pack       | 10     |
| code       | 633044 |



**Male/female standard**

| Ø free nut | 1/2"   |
|------------|--------|
| Ø male     | 1/2"   |
| pack       | 10     |
| code       | VANP2E |



**678 - Female/male PN25**

| Ø    | 1/2"   |
|------|--------|
| pack | 10     |
| code | 678004 |

## Union fitting valve

Excluded from 2014/68/EU Directive (article 4, §3) - Nickel-plated CW617N brass body - PTFE seats - NBR o-ring on stem - Aluminium handle - Full bore - Anti-blowout stem - PS: 25 bar - TS: -10°C/+80°C.

ISO  
9001



### 524 - Male/female

| Ø    | 1/2"   | 3/4"   | 1"     | 1"1/4" |
|------|--------|--------|--------|--------|
| pack | 10     | 10     | 10     | 6      |
| code | 524004 | 524005 | 524006 | 524007 |

## Other valves

AIRAGA

Excluded from 2014/68/EU Directive (article 4, §3) - CW617N brass body - PTFE gland pack & seats - Chrome-plated brass ball - Aluminium handle - Anti-blowout stem - PS: 16 bar - TS: -10°C/+120°C.



ISO  
9001



### 555A - Male/male & male/female

| high Ø | 1/2"M  | 1/2"F  | 3/4"M  | 3/4"M  |
|--------|--------|--------|--------|--------|
| low Ø  | 1/2"M  | 1/2"M  | 1/2"M  | 3/4"M  |
| pack   | 10     | 10     | 10     | 10     |
| code   | 555040 | 555044 | 555043 | 555055 |

Excluded from 2014/68/EU Directive (article 4, §3) - CW617N brass body.

ISO  
9001



### Valve with probe holder outlet

| Ø    | 1/2"    | 3/4"    | 1"      |
|------|---------|---------|---------|
| code | 9811004 | 9811005 | 9811006 |

# Gate valves

Excluded from 2014/68/EU Directive (article 4, §3) - EPDM gland pack - Full bore - Non-rising stem - PS: 16 bar - TS: -10°C/+80°C - Incomplete tightness: loss factor 0,3-0,5%.

### 102 - Brass

| Ø    | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 102002 | 102003 | 102004 | 102005 | 102006 | 102007 | 102008 | 102009 | 102010 | 102011 | 102012 |



### 146 - Bronze body - Brass gate & inner parts

| Ø    | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 146002 | 146003 | 146004 | 146005 | 146006 | 146007 | 146008 | 146009 | 146010 | 146011 | 146012 |



AIRAGA

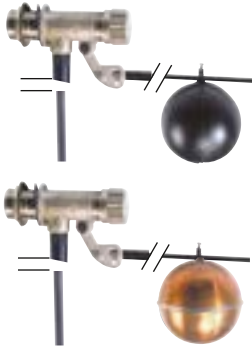
Excluded from 2014/68/EU Directive (article 4, §3) - Bronze body - CW617N brass gate & bonnet - Metal-metal tightness - PTFE stem gasket - Full bore - Quick closing - PS: 16 bar up to 2", 10 bar above - TS: -10°C/+110°C.

ISO  
9001

### 140 - Bronze - Quick closing

| Ø    | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| pack | 10     | 10     | 8      | 5      | 3      | 5      | 5      | 1      | 1      | 1      |
| code | 140003 | 140004 | 140005 | 140006 | 140007 | 140008 | 140009 | 140010 | 140011 | 140012 |





Excluded from 2014/68/EU Directive (article 4, §3) - ACS certification for ref. 491 only - Stainless steel inner mechanism - EPDM gasket - PS: 10 bar - TS: 0°C/+40°C.



## 490 - Brass body - PE float    491 - Brass body - Copper float

| Ø male   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|
| Ø float  | 120    | 150    | 180    | 220    | 220    | 300    |
| 490 code | 490004 | 490005 | 490006 | 490007 | 490008 | 490009 |
| 491 code | 491004 | 491005 | 491006 | 491007 | 491008 | 491009 |

Excluded from 2014/68/EU Directive (article 4, §3).



## RF1 - PVC-U

PVC-U body - EPDM or FKM seat & gasket - PE ball - Stainless steel lever - PS: 10 bar - TS: 0°C/+60°C.



| d (mm)            | 20        | 25        | 32        | 40        | 60        | 63        | 75        | 90        |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DN                | 15        | 20        | 25        | 32        | 40        | 50        | 65        | 80        |
| EPDM gaskets code | 6200RT015 | 6200RT020 | 6200RT025 | 6200RT032 | 6200RT040 | 6200RT050 | 6200RT065 | 6200RT080 |
| FKM gaskets code  | 6201RT015 | 6201RT020 | 6201RT025 | 6201RT032 | 6201RT040 | 6201RT050 | 6201RT065 | 6201RT080 |

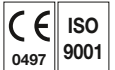
97/23/EC Directive N°0497 - Risk category III / module H - For fluids of group 2 - B62 Bronze body - Brass globe & bonnet - PTFE gland pack - PS: 16 bar - TS: -10°C/+110°C.



## 460 - Bronze - Metal-metal tightness    462 - Bronze - PTFE tightness

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 460 code | 460002 | 460003 | 460004 | 460005 | 460006 | 460007 | 460008 | 460009 |
| 462 code | 462002 | 462003 | 462004 | 462005 | 462006 | 462007 | 462008 | 462009 |

97/23/EC Directive N°0497 - Risk category III / module H - For fluids from group 2 - B62 Bronze body - Brass union bonnet - F316L seat - PS: 25 bar - TS: -10°C/+180°C.



## 451 - Bronze - Metal-metal tightness    454 - Bronze - PTFE tightness

| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 451 code | 451002 | 451003 | 451004 | 451005 | 451006 | 451007 | 451008 | 451009 |
| 454 code | 454002 | 454003 | 454004 | 454005 | 454006 | 454007 | 454008 | 454009 |

Excluded from 2014/68/EU Directive (article 4, §3) - CW617N brass body - Micrometric control - PS: 16 bar - TS: -10°C/+110°C.



## 465 - Column base valve - Brass

| Ø    | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|
| pack | 3      | 3      | 2      | 2      | 2      | 1      |
| code | 465004 | 465005 | 465006 | 465007 | 465008 | 465009 |

97/23/EC Directive - Risk category I / module A - For fluids from group 2 - Brass body up to Ø 2", cast iron body above - PS: 10 bar - TS: -10°C/+100°C.



## 430 - Perfection valve

| Ø    | 3/4"   | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|------|--------|--------|--------|--------|--------|--------|
| code | 430005 | 430008 | 430009 | 430010 | 430011 | 430012 |

Excluded from 2014/68/EU Directive (article 4, §3) - B62 Bronze body - Brass hat, needle & seat - PS: 25 bar - TS: -10°C/+180°C.

ISO 9001



### 482 - Bronze

| Ø    | 1/4"   | 3/8"   | 1/2"   | 3/4"   |
|------|--------|--------|--------|--------|
| code | 482002 | 482003 | 482004 | 482005 |

# Bibcock valves

Excluded from 2014/68/EU Directive (article 4, §3).

ISO 9001



### 696 - Nickel-plated brass

PS: 16 bar - TS: 0°C/+60°C.

| Ø      | 1/2"   | 3/4"   | 3/4"   |
|--------|--------|--------|--------|
| outlet | 3/4"   | 3/4"   | 1"     |
| hose   | 19     | 19     | 20,5   |
| pack   | 8      | 12     | 8      |
| code   | 696045 | 696055 | 696056 |



With butterfly handle -

PS: 16 bar - TS: 0°C/+60°C.

| Ø      | 1/2"   | 3/4"   |
|--------|--------|--------|
| outlet | 3/4"   | 3/4"   |
| hose   | 19     | 19     |
| pack   | 8      | 12     |
| code   | 696145 | 696155 |

### 682 A - Plain brass



CW617N brass body - Chrome-plated brass ball - PS: 16 bar - TS: 0°C/+60°C.



| Ø      | 1/2"   | 1/2"   | 3/4"   | 3/4"   | 1"     |
|--------|--------|--------|--------|--------|--------|
| outlet | 3/4"   | 3/4"   | 3/4"   | 1"     | 1 1/4" |
| hose   | 17     | 15     | 19     | 22     | 26     |
| pack   | 10     | 15     | 10     | 10     | 4      |
| code   | 682045 | 682046 | 682055 | 682056 | 682067 |



### 681 A - Plain brass



Same features as fig. 682 except: brass butterfly handle.

| Ø      | 1/2"   |
|--------|--------|
| outlet | 3/4"   |
| hose   | 17     |
| pack   | 10     |
| code   | 681045 |

### 680 - Tamped head drive



Nickel-plated CW617N brass body - Chrome-plated brass ball - PS: 16 bar - TS: 0°C/+60°C.



| Ø      | 1/2"   | 3/4"   |
|--------|--------|--------|
| outlet | 3/4"   | 3/4"   |
| hose   | 19     | 19     |
| code   | 680045 | 680055 |



Key for tamped head drive 6 mm

|      |         |
|------|---------|
| code | 9810401 |
|------|---------|



### 698 - Anti-frost

Chrome-plated CW617N brass body & ball -

PS: 30 bar - TS: -10°C/+90°C.

| Ø      | 1/2"   |
|--------|--------|
| outlet | 3/4"   |
| hose   | 16     |
| code   | 698045 |

### 699 - Nickel-plated brass

With locking device - Brass body & ball - PS: 16 bar - TS: -10°C/+60°C.



| Ø      | 1/2"   | 3/4"   |
|--------|--------|--------|
| outlet | 3/4"   | 3/4"   |
| hose   | 19     | 19     |
| code   | 699045 | 699055 |



### 795 - Stainless steel

CF8M body & ball -

PS: 16 bar - TS: -10°C/+150°C.

| Ø      | 1/2"   | 3/4"   |
|--------|--------|--------|
| outlet | 3/4"   | 3/4"   |
| hose   | 19     | 19     |
| code   | 795045 | 795055 |

### 1345 - Brushed brass

PS: 10 bar - TS: 0°C/+60°C.



| Ø      | 1/2"    | 3/4"    | 3/4"    |
|--------|---------|---------|---------|
| outlet | 3/4"    | 3/4"    | 1"      |
| hose   | 17      | 17      | 22      |
| code   | 1345045 | 1345055 | 1345056 |



### 695 - Watering box

With angle brass ball valve -

PS: 16 bar - TS: -10°C/+100°C.

| Ø           | 15        | 20     |
|-------------|-----------|--------|
| male outlet | 3/4"      | 1"     |
| female hose | 3/4"+1/2" | 3/4"   |
| code        | 695015    | 695020 |



## Spring

Excluded from 2014/68/EU Directive (article 4, §3) - ACS certification (except 309) - CW617N brass body - NBR seat - TS: -10°C/+100°C (except 328, 317 & 316: -10°C/+110°C).



### 309 - Block® - Nylon clack



| Ø        | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 12     | 12     | 12     | 10     | 10     | 10     |
| pack     | 14     | 12     | 10     | 8      | 6      | 4      |
| code     | 309004 | 309005 | 309006 | 309007 | 309008 | 309009 |

### 306 - PN16 - Nylon clack



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 16     | 16     | 16     | 16     | 10     | 10     | 10     | 8      | 8      | 8      |
| pack     | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 1      | 1      | 1      |
| code     | 306003 | 306004 | 306005 | 306006 | 306007 | 306008 | 306009 | 306010 | 306011 | 306012 |

### 307 - PN25 - Brass clack



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 25     | 25     | 25     | 25     | 18     | 18     | 18     | 12     | 12     | 12     |
| pack     | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 1      | 1      | 1      |
| code     | 307003 | 307004 | 307005 | 307006 | 307007 | 307008 | 307009 | 307010 | 307011 | 307012 |

### 305 - Europa® - Brass clack



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 25     | 25     | 25     | 25     | 18     | 18     | 18     | 12     | 12     | 12     |
| pack     | 10     | 10     | 8      | 6      | 4      | 4      | 2      | 1      | 1      | 1      |
| code     | 305003 | 305004 | 305005 | 305006 | 305007 | 305008 | 305009 | 305010 | 305011 | 305012 |

### 315 - Roma® - Heavy model with drainer

Stainless steel 304 inner parts - 2 brass drainer caps - FKM gasket.



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 25     | 25     | 25     | 25     | 18     | 18     | 18     |
| pack     | 10     | 10     | 8      | 6      | 4      | 4      | 2      |
| code     | 315003 | 315004 | 315005 | 315006 | 315007 | 315008 | 315009 |

### 328 - Male/male - Nylon clack



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     |
|----------|--------|--------|--------|--------|
| PS (bar) | 16     | 16     | 16     | 16     |
| pack     | 10     | 10     | 8      | 8      |
| code     | 328003 | 328004 | 328005 | 328006 |

### 317 - Male/female - Nylon clack



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     |
|----------|--------|--------|--------|--------|
| PS (bar) | 16     | 16     | 16     | 16     |
| pack     | 10     | 10     | 8      | 8      |
| code     | 317003 | 317004 | 317005 | 317006 |

### 316 - Female/male - Nylon clack



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     |
|----------|--------|--------|--------|--------|
| PS (bar) | 16     | 16     | 16     | 16     |
| pack     | 10     | 10     | 8      | 8      |
| code     | 316003 | 316004 | 316005 | 316006 |

## Swing

Excluded from 2014/68/EU Directive (article 4, §3) - CW617N brass body - PS: 10 bar for fig. 301 & 302 - PS: 16 bar for fig. 321 & 322.

ISO  
9001

### 301 - Metal seat

TS: 0°C/+90°C.

### 302 - EPDM seat for 3/8" to 2" - NBR seat for 2"1/2 to 4"

TS: 0°C/+60°C.



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 10     | 10     |
| pack     | 16     | 16     | 15     | 10     | 8      | 5      | 1      | 1      | 1      | 1      |
| 301 code | 301003 | 301004 | 301005 | 301006 | 301007 | 301008 | 301009 | 301010 | 301011 | 301012 |
| 302 code | 302003 | 302004 | 302005 | 302006 | 302007 | 302008 | 302009 | 302010 | 302011 | 302012 |

### 321 - Metal seat

TS: 0°C/+90°C.

### 322 - EPDM seat for 3/8" to 2"

TS: 0°C/+60°C.



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 16     | 16     | 16     | 16     | 16     | 16     | 16     |
| pack     | 10     | 20     | 15     | 10     | 8      | 5      | 1      |
| 321 code | 321003 | 321004 | 321005 | 321006 | 321007 | 321008 | 321009 |
| 322 code | 322003 | 322004 | 322005 | 322006 | 322007 | 322008 | 322009 |

## Vertical lift

97/23/EC Directive N°0497 - Risk category III / module H - B62 Bronze body - CW614N Brass union cap - F316L seat - PS: 25 bar - TS: -10°C/+180°C.

CE  
0497 ISO  
9001

### 350 - Bronze - Metal-metal tightness

### 354 - Bronze - PTFE tightness



| Ø        | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| 350 code | 350002 | 350003 | 350004 | 350005 | 350006 | 350007 | 350008 | 350009 |
| 354 code | 354002 | 354003 | 354004 | 354005 | 354006 | 354007 | 354008 | 354009 |

## Foot valves

Excluded from 2014/68/EU Directive (article 4, §3) - CW617N brass body.

### 311 - Nylon clack Stainless steel F304 strainer - NBR gasket - TS: 0°C/+65°C.



| Ø        | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 16     | 16     | 16     | 10     | 10     | 10     | 8      | 8      | 8      |
| pack     | 10     | 8      | 8      | 6      | 4      | 2      | 1      | 1      | 1      |
| code     | 311004 | 311005 | 311006 | 311007 | 311008 | 311009 | 311010 | 311011 | 311012 |

ISO  
9001

### 310 - Nylon clack Stainless steel F304 strainer - NBR gasket - TS: -10°C/+110°C.



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 16     | 16     | 16     | 16     | 10     | 10     | 10     | 8      | 8      | 8      |
| pack     | 10     | 10     | 8      | 8      | 6      | 4      | 2      | 1      | 1      | 1      |
| code     | 310003 | 310004 | 310005 | 310006 | 310007 | 310008 | 310009 | 310010 | 310011 | 310012 |

ISO  
9001

### 304 - Full brass CW617N brass strainer - NBR gasket - TS: 0°C/+90°C.



| Ø        | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 10     | 10     | 10     | 8      | 8      | 8      | 6      | 6      | 6      |
| pack     | 12     | 16     | 15     | 10     | 5      | 1      | 1      | 1      | 1      |
| code     | 304004 | 304005 | 304006 | 304007 | 304008 | 304009 | 304010 | 304011 | 304012 |

## Strainer baskets

Excluded from 2014/68/EU Directive (article 4, §3).

ISO  
9001

### 392 - Nylon threaded end - Stainless steel F304 screen

TS: 0°C/+95°C.

### 391 - Full stainless steel F316

TS: 0°C/+150°C.



| Ø         | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|-----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| mesh (mm) | 1,2    | 1,2    | 1,2    | 1,2    | 1,2    | 1,2    | 1,2    | 1,5    | 1,5    | 2,0    |
| 392 code  | 392003 | 392004 | 392005 | 392006 | 392007 | 392008 | 392009 | 392010 | 392011 | 392012 |
| 391 code  | 391003 | 391004 | 391005 | 391006 | 391007 | 391008 | 391009 | 391010 | 391011 | 391012 |

Excluded from 2014/68/EU Directive (article 4, §3) - Brass or bronze body - Stainless steel 304 screen - PS: 16 bar up to 2", 10 bar above - TS: -10°C/+120°C (except 211: 0°C/+120°C).



## 206 - Brass

CW617N brass body - Mesh 0,85 mm.



| Ø    | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 206003 | 206004 | 206005 | 206006 | 206007 | 206008 | 206009 | 206010 |

## 202 - Bronze

Mesh 0,4 mm up to 1", 0,5 mm above - TS: -10°C/+110°C.



| Ø        | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     | 4"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| 202 code | 202003 | 202004 | 202005 | 202006 | 202007 | 202008 | 202009 | 202010 | 202011 | 202012 |
| 203 code | 203003 | 203004 | 203005 | 203006 | 203007 | 203008 | 203009 | 203010 | 203011 | 203012 |

## 203 - Bronze - Screen for gas

Mesh 0,3 mm - TS: -10°C/+110°C.



## 211 - Brass with drain cock

CW617N brass body - Mesh 0,85 mm.



| Ø    | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|
| code | 211004 | 211005 | 211006 | 211007 | 211008 | 211009 |

# PVC & PP valves

# CORAPLAX

## PVC valves for water

### Ball valves

Excluded from 2014/68/EU Directive (article 4, §3) - Use : swimming pool, water treatment & distribution - PVC-U body & ball - PP handle - HPDE ball gaskets - EPDM o-ring gaskets - Max. Δp: 3 bar - TS: 0°C/+60°C.

ISO 9001



#### 583 - With glued unions ends

| d (mm)   | 20     | 25     | 32     | 40     | 50     | 63     | 75     | 90     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| DN       | 15     | 20     | 25     | 32     | 40     | 50     | 65     | 80     |
| PS (bar) | 16     | 16     | 16     | 16     | 16     | 16     | 10     | 10     |
| code     | 583020 | 583025 | 583032 | 583040 | 583050 | 583063 | 583075 | 583090 |



#### 584 - With threaded unions ends

| Ø        | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     |
|----------|--------|--------|--------|--------|--------|--------|--------|--------|
| PS (bar) | 16     | 16     | 16     | 16     | 16     | 16     | 10     | 10     |
| code     | 584004 | 584005 | 584006 | 584007 | 584008 | 584009 | 584010 | 584011 |

### Butterfly valve

Excluded from 2014/68/EU Directive (article 4, §3) - PVC-U body & disc - EPDM seat - 7 position ABS handle - ISO Pad - Max. Δp: 3 bar - TS: 0°C/+40°C.

ISO 9001



#### 1100 - Wafer - Flanged PN10

| DN       | 65      | 80      | 100     | 125     | 150     | 200     |
|----------|---------|---------|---------|---------|---------|---------|
| PS (bar) | 10      | 10      | 10      | 10      | 6       | 6       |
| code     | 1100065 | 1100080 | 1100100 | 1100125 | 1100150 | 1100200 |

### Ball check valve

Excluded from 2014/68/EU Directive (article 4, §3) - EN 12050-4 (for lifting stations) - PVC-U body & ball - EPDM gasket - PS: 10 bar - TS: 0°C/+60°C.



#### 334 - Threaded



| Ø            | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     |
|--------------|--------|--------|--------|--------|--------|
| face to face | 144    | 158    | 190    | 270    | 324    |
| code         | 334007 | 334008 | 334009 | 334010 | 334011 |

## PVC & PP valves for other fluids

97/23/EC Directive - Risk category I / module A - EPDM or FKM gaskets - ABS lever - Full bore - Supplied with solvent cement socket ends as standard.



### Ball valves

#### W1 - PVC-U

PVC-U body & ball - TPV seat - PS: 10 bar - TS: 0°C/+55°C.



| d (mm)              | 20        | 25        | 32        | 40        | 50        | 63        | 75        | 90        | 110       |
|---------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DN                  | 15        | 20        | 25        | 32        | 40        | 50        | 65        | 80        | 100       |
| mandatory pack code | 72        | 60        | 45        | 24        | 16        | 12        | 1         | 1         | 1         |
|                     | 5100WC015 | 5100WC020 | 5100WC025 | 5100WC032 | 5100WC040 | 5100WC050 | 5100WC065 | 5100WC080 | 5100WC100 |

#### CL1 - PVC-U

PVC-U body & ball - PTFE seats - Anti-UV protection - PS: 10 bar - TS: 0°C/+55°C.



| d (mm)            | 20        | 25        | 32        | 40        | 50        | 63        | 75        | 90        | 110       |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DN                | 15        | 20        | 25        | 32        | 40        | 50        | 65        | 80        | 100       |
| EPDM gaskets code | 5100SC015 | 5100SC020 | 5100SC025 | 5100SC032 | 5100SC040 | 5100SC050 | 5100SC065 | 5100SC080 | 5100SC100 |
| FKM gaskets code  | 5101SC015 | 5101SC020 | 5101SC025 | 5101SC032 | 5101SC040 | 5101SC050 | 5101SC065 | 5101SC080 | 5101SC100 |

#### CL1 - PP

PP body & ball - PTFE seats - Full bore - PS: 10 bar up to DN65, 6 bar above - TS: +10°C/+80°C.



| d (mm)            | 20        | 25        | 32        | 40        | 50        | 63        | 75        | 90        | 110       |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DN                | 15        | 20        | 25        | 32        | 40        | 50        | 65        | 80        | 100       |
| EPDM gaskets code | 5110SC015 | 5110SC020 | 5110SC025 | 5110SC032 | 5110SC040 | 5110SC050 | 5110SC065 | 5110SC080 | 5110SC100 |
| FKM gaskets code  | 5111SC015 | 5111SC020 | 5111SC025 | 5111SC032 | 5111SC040 | 5111SC050 | 5111SC065 | 5111SC080 | 5111SC100 |

### Butterfly valves

97/23/EC Directive - Risk category I / module A - Between flanges PN10 - Reinforced PP butterfly - EPDM or FKM seat - Stainless steel stem - ABS lever up to DN200, cast iron gearbox above.



#### PL1 - PVC-U

PVC-U body - Anti-UV protection - PS: 10 bar - TS: 0°C/+55°C.



| d (mm)            | 50        | 63        | 75        | 90        | 110       | 140       | 160       | 225       | 280       | 315       |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DN                | 40        | 50        | 65        | 80        | 100       | 125       | 150       | 200       | 250       | 300       |
| face to face (mm) | 34        | 43        | 46        | 49        | 58        | 64        | 70        | 88        | 98        | 108       |
| EPDM seat code    | 5300SW040 | 5300SW050 | 5300SW065 | 5300SW080 | 5300SW100 | 5300SW125 | 5300SW150 | 5300SW200 | 5300SW250 | 5300SW300 |
| FKM seat code     | 5301SW040 | 5301SW050 | 5301SW065 | 5301SW080 | 5301SW100 | 5301SW125 | 5301SW150 | 5301SW200 | -         | -         |

#### PVC PN10 flanges set



| DN   | 40     | 50     | 65     | 80     | 100    | 125    | 150    | 200    |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 982030 | 982031 | 982032 | 982033 | 982034 | 982035 | 982036 | 982037 |

#### PL1 - PP

PP body - PS: 10 bar - TS: +10°C/+80°C.



| d (mm)            | 50        | 63        | 75        | 90        | 110       | 140       | 160       | 225       |
|-------------------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| DN                | 40        | 50        | 65        | 80        | 100       | 125       | 150       | 200       |
| face to face (mm) | 34        | 43        | 46        | 49        | 58        | 64        | 70        | 88        |
| EPDM seat code    | 5310SW040 | 5310SW050 | 5310SW065 | 5310SW080 | 5310SW100 | 5310SW125 | 5310SW150 | 5310SW200 |
| FKM seat code     | 5311SW040 | 5311SW050 | 5311SW065 | 5311SW080 | 5311SW100 | 5311SW125 | 5311SW150 | 5311SW200 |



# Connections

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**Mandatory packing applies**



Press fitting system for heating, solar heating, potable water, gas, steam, air conditioning, compressed air & hot oils - Advantages: easy to install, very reliable, low weight, no fire risk during installation - Material: stainless steel 316 for fittings, stainless steel 304 & 316 for pipes - Supplied with EPDM gasket - FKM gasket available for solar use & hot oils - Max. pressure: 16 bar - **M type press jaw** - Length pipe: 5m & 6m -

⚠ The pipes are only sold by multiple of mentioned packs - Large quantities: please consult for special quotation.



## Stainless steel pipes

### Stainless steel 304 & 316 thin welded pipes



| Ø        | length (m) | weight (kg/m) | pack (m) | 304 code | 316 code |
|----------|------------|---------------|----------|----------|----------|
| 15 x 0,6 | 5          | 0,216         | 425      | 2TRS15M  | 4TRS15M  |
| 18 x 0,7 | 5          | 0,303         | 425      | 2TRS18M  | 4TRS18M  |
| 22 x 0,7 | 5          | 0,373         | 425      | 2TRS22M  | 4TRS22M  |
| 28 x 0,8 | 5          | 0,545         | 425      | 2TRS28M  | 4TRS28M  |
| 35 x 1   | 5          | 0,851         | 280      | 2TRS35M  | 4TRS35M  |
| 42 x 1,2 | 5          | 1,230         | 280      | 2TRS42M  | 4TRS42M  |
| 54 x 1,2 | 5          | 1,470         | 220      | 2TRS54M  | 4TRS54M  |
| 76,1 x 2 | 6          | 3,711         | 144      | 2TRS76M  | 4TRS76M  |

### Stainless steel 316 standard welded pipes



| Ø        | length (m) | pack weight (kg/m) | pack (m) | code     |
|----------|------------|--------------------|----------|----------|
| 15 x 1   | 6          | 0,351              | 510      | 4TRS151  |
| 18 x 1   | 6          | 0,426              | 510      | 4TRS181  |
| 22 x 1,2 | 6          | 0,625              | 510      | 4TRS2212 |
| 28 x 1,2 | 6          | 0,805              | 510      | 4TRS2812 |
| 35 x 1,5 | 6          | 1,258              | 336      | 4TRS3515 |
| 42 x 1,5 | 6          | 1,521              | 336      | 4TRS4215 |
| 54 x 1,5 | 6          | 1,972              | 265      | 4TRS5415 |

## Press fittings

### Union connector male



| Ø    | 15-1/2"  | 18-1/2"  | 22-3/4"  | 28-1"    | 35-1"1/4 | 42-1"1/2 | 54-2"    |
|------|----------|----------|----------|----------|----------|----------|----------|
| pack | 10       | 10       | 10       | 5        | 5        | 2        | 2        |
| code | RUMS1515 | RUMS1815 | RUMS2220 | RUMS2825 | RUMS3532 | RUMS4240 | RUMS5450 |

### Union connector female



| Ø    | 15-1/2"  | 18-1/2"  | 22-3/4"  | 28-1"    | 35-1"1/4 | 42-1"1/2 | 54-2"    |
|------|----------|----------|----------|----------|----------|----------|----------|
| pack | 10       | 10       | 10       | 5        | 5        | 2        | 2        |
| code | RUFS1515 | RUFS1815 | RUFS2220 | RUFS2825 | RUFS3532 | RUFS4240 | RUFS5450 |

### Union connector female



| Ø    | 15    | 18    | 22    | 28    | 35    | 42    | 54    |
|------|-------|-------|-------|-------|-------|-------|-------|
| pack | 10    | 10    | 10    | 5     | 5     | 2     | 2     |
| code | RUS15 | RUS18 | RUS22 | RUS28 | RUS35 | RUS42 | RUS54 |

### Elbow 90° female/female



| Ø    | 15   | 18   | 22   | 28   | 35   | 42   | 54   | 76,1 | 108   |
|------|------|------|------|------|------|------|------|------|-------|
| pack | 10   | 10   | 10   | 5    | 5    | 2    | 2    | 1    | 1     |
| code | CS15 | CS18 | CS22 | CS28 | CS35 | CS42 | CS54 | CS76 | CS108 |

### Elbow 90° male/female



| Ø    | 15    | 18    | 22    | 28    | 35    | 42    | 54    |
|------|-------|-------|-------|-------|-------|-------|-------|
| pack | 10    | 10    | 10    | 5     | 5     | 2     | 2     |
| code | CLS15 | CLS18 | CLS22 | CLS28 | CLS35 | CLS42 | CLS54 |

### Elbow 45° female/female



| Ø    | 15     | 18     | 22     | 28     | 35     | 42     | 54     | 76,1   | 108     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| pack | 10     | 10     | 10     | 5      | 5      | 2      | 2      | 1      | 1       |
| code | CS4515 | CS4518 | CS4522 | CS4528 | CS4535 | CS4542 | CS4554 | CS4576 | CS45108 |

## Elbow 45° male/female



| Ø    | 15      | 18      | 22      | 28      | 35      | 42      | 54      |
|------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 5       | 5       | 2       | 2       |
| code | CLS4515 | CLS4518 | CLS4522 | CLS4528 | CLS4535 | CLS4542 | CLS4554 |

## Diversion elbow



| Ø    | 15     | 18     | 22     |
|------|--------|--------|--------|
| pack | 10     | 10     | 10     |
| code | CDLS15 | CDLS18 | CDLS22 |

## By-pass



| Ø    | 15-15  | 18-18  | 22-22  | 28-28  |
|------|--------|--------|--------|--------|
| pack | 10     | 10     | 10     | 5      |
| code | CHAS15 | CHAS18 | CHAS22 | CHAS28 |

## Crosier bracket



| Ø    | 15     | 18     | 22     |
|------|--------|--------|--------|
| pack | 5      | 5      | 5      |
| code | CACS15 | CACS18 | CACS22 |

## Elbow 90° female/free nut



| Ø    | 15-1/2"  | 18-1/2"  | 18-3/4"  | 22-3/4"  | 22-1"    |
|------|----------|----------|----------|----------|----------|
| pack | 10       | 10       | 10       | 10       | 10       |
| code | CSET1515 | CSET1815 | CSET1820 | CSET2220 | CSET2225 |

## Elbow 90° female/female threaded



| Ø    | 15-1/2" | 18-1/2" | 22-3/4" | 28-1"   | 35-1/4" |
|------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 5       | 5       |
| code | CFS1515 | CFS1815 | CFS2220 | CFS2825 | CFS3532 |

## Elbow 90° female/female threaded static



| Ø    | 15-1/2"  | 18-1/2"  | 22-3/4"  | 28-1"    |
|------|----------|----------|----------|----------|
| pack | 10       | 10       | 10       | 5        |
| code | CFSP1515 | CFSP1815 | CFSP2220 | CFSP2825 |

## Elbow 15°



| Ø    | 28      | 35      | 42      | 54      |
|------|---------|---------|---------|---------|
| pack | 5       | 5       | 2       | 2       |
| code | CAS1528 | CAS1535 | CAS1542 | CAS1554 |

## Elbow 30°



| Ø    | 28      | 35      | 42      | 54      |
|------|---------|---------|---------|---------|
| pack | 5       | 5       | 2       | 2       |
| code | CAS3028 | CAS3035 | CAS3042 | CAS3054 |

## Elbow 60°



| Ø    | 28      | 35      | 42      | 54      |
|------|---------|---------|---------|---------|
| pack | 5       | 5       | 2       | 2       |
| code | CAS6028 | CAS6035 | CAS6042 | CAS6054 |

## Elbow 90°



| Ø    | 15      | 18      | 22      | 28      | 35      | 42      | 54      |
|------|---------|---------|---------|---------|---------|---------|---------|
| pack | 10      | 10      | 10      | 5       | 5       | 2       | 2       |
| code | CAS9015 | CAS9018 | CAS9022 | CAS9028 | CAS9035 | CAS9042 | CAS9054 |

## Equal nipple



| Ø    | 15   | 18   | 22   | 28   | 35   | 42   | 54   | 76,1 |
|------|------|------|------|------|------|------|------|------|
| pack | 10   | 10   | 10   | 5    | 5    | 2    | 2    | 1    |
| code | MS15 | MS18 | MS22 | MS28 | MS35 | MS42 | MS54 | MS76 |

## Long equal nipple



| Ø    | 15    | 18    | 22    | 28    | 35    | 42    | 54    |
|------|-------|-------|-------|-------|-------|-------|-------|
| pack | 10    | 10    | 10    | 5     | 5     | 2     | 2     |
| code | MLS15 | MLS18 | MLS22 | MLS28 | MLS35 | MLS42 | MLS54 |

## Expansion joint



| Ø    | 15    | 18    | 22    | 28    | 35    | 42    | 54    |
|------|-------|-------|-------|-------|-------|-------|-------|
| pack | 1     | 1     | 1     | 1     | 1     | 1     | 1     |
| code | MDS15 | MDS18 | MDS22 | MDS28 | MDS35 | MDS42 | MDS54 |

## Cap female



| Ø    | 15    | 18    | 22    | 28    | 35    | 42    | 54    | 76    | 88    | 108    |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| pack | 10    | 10    | 10    | 5     | 5     | 2     | 2     | 1     | 1     | 1      |
| code | BFS15 | BFS18 | BFS22 | BFS28 | BFS35 | BFS42 | BFS54 | BFS76 | BFS88 | BFS108 |

## Reducer male/female



| Ø    | 18-15   | 22-15   | 22-18   | 28-15   | 28-18     | 28-22    | 35-15    | 35-18   | 35-22   | 35-28   |
|------|---------|---------|---------|---------|-----------|----------|----------|---------|---------|---------|
| pack | 10      | 10      | 10      | 5       | 5         | 5        | 5        | 5       | 5       | 5       |
| code | RLS1815 | RLS2215 | RLS2218 | RLS2815 | RLS2818   | RLS2822  | RLS3515  | RLS3518 | RLS3522 | RLS3528 |
| Ø    | 42-15   | 42-18   | 42-22   | 42-28   | 42-35     | 54-15    | 54-18    | 54-22   | 54-28   | 54-35   |
| pack | 2       | 2       | 2       | 2       | 2         | 2        | 2        | 2       | 2       | 2       |
| code | RLS4215 | RLS4218 | RLS4222 | RLS4228 | RLS4235   | RLS5415  | RLS5418  | RLS5422 | RLS5428 | RLS5435 |
| Ø    | 54-42   | 76-42   | 76,1-54 | 88,9-54 | 88,9-76,1 | 108-54   | 108-76   |         |         |         |
| pack | 2       | 1       | 1       | 1       | 1         | 1        | 1        |         |         |         |
| code | RLS5442 | RLS7642 | RLS7654 | RLS8854 | RLS8876   | RLS10854 | RLS10876 |         |         |         |

## Adapter female/male threaded



| Ø    | 15-3/8"  | 15-1/2" | 15-3/4"  | 18-1/2"  | 18-3/4"  | 22-1/2"  | 22-3/4"  | 22-1"   | 28-3/4"    | 28-1"   |
|------|----------|---------|----------|----------|----------|----------|----------|---------|------------|---------|
| pack | 10       | 10      | 10       | 10       | 10       | 10       | 10       | 10      | 5          | 5       |
| code | AMS1510  | AMS1515 | AMS1520  | AMS1815  | AMS1820  | AMS2215  | AMS2220  | AMS2225 | AMS2820    | AMS2825 |
| Ø    | 28-1"1/4 | 35-1"   | 35-1"1/4 | 35-1"1/2 | 42-1"1/4 | 42-1"1/2 | 54-1"1/2 | 54-2"   | 76,1-2"1/2 | 88,9-3" |
| pack | 5        | 5       | 5        | 5        | 2        | 2        | 2        | 2       | 1          | 1       |
| code | AMS2832  | AMS3525 | AMS3532  | AMS3540  | AMS4232  | AMS4240  | AMS5440  | AMS5450 | AMS7665    | AMS8880 |

## Adapter female/female threaded



| Ø    | 15-1/2" | 15-3/4"  | 18-1/2"  | 18-3/4"  | 22-1/2"  | 22-3/4"  | 22-1"   | 28-3/4" | 28-1"   | 28-1"1/4 |
|------|---------|----------|----------|----------|----------|----------|---------|---------|---------|----------|
| pack | 10      | 10       | 10       | 10       | 10       | 10       | 10      | 5       | 5       | 5        |
| code | AFS1515 | AFS1520  | AFS1815  | AFS1820  | AFS2215  | AFS2220  | AFS2225 | AFS2820 | AFS2825 | AFS2832  |
| Ø    | 35-1"   | 35-1"1/4 | 35-1"1/2 | 42-1"1/4 | 42-1"1/2 | 54-1"1/2 | 54-2"   |         |         |          |
| pack | 5       | 5        | 2        | 2        | 2        | 2        | 2       |         |         |          |
| code | AFS3525 | AFS3532  | AFS3540  | AFS4232  | AFS4240  | AFS5440  | AFS5450 |         |         |          |

## Adapter female/free nut



| Ø    | 15-1/2" | 15-3/4" | 18-1/2"  | 18-3/4"    | 22-3/4" | 22-1"   | 28-1"   | 28-1"1/4 | 35-1"1/4 | 42-1"1/2 |
|------|---------|---------|----------|------------|---------|---------|---------|----------|----------|----------|
| pack | 10      | 10      | 10       | 10         | 10      | 10      | 5       | 5        | 5        | 2        |
| code | ETS1515 | ETS1520 | ETS1815  | ETS1820    | ETS2220 | ETS2225 | ETS2825 | ETS2832  | ETS3532  | ETS4240  |
| Ø    | 42-2"   | 54-2"   | 54-2"1/2 | 76,1-2"1/2 |         |         |         |          |          |          |
| pack | 2       | 2       | 2        | 1          |         |         |         |          |          |          |
| code | ETS4250 | ETS5450 | ETS5465  | ETS7665    |         |         |         |          |          |          |

## Flanged adapter



| Ø    | 15    | 18    | 22    | 28    | 35    | 42    | 54    | 76,1  | 88,9  |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| pack | 2     | 2     | 2     | 2     | 2     | 2     | 2     | 1     | 1     |
| code | ABS15 | ABS18 | ABS22 | ABS28 | ABS35 | ABS42 | ABS54 | ABS76 | ABS88 |

## Equal Tee



| Ø    | 15   | 18   | 22   | 28   | 35   | 42   | 54   | 76,1 | 88,9 | 108   |
|------|------|------|------|------|------|------|------|------|------|-------|
| pack | 10   | 10   | 10   | 5    | 5    | 2    | 2    | 1    | 1    | 1     |
| code | TS15 | TS18 | TS22 | TS28 | TS35 | TS42 | TS54 | TS76 | TS88 | TS108 |



## Tee threaded female



| Ø    | 15-1/2"-15 | 18-1/2"-18 | 18-3/4"-18 | 22-1/2"-22 | 22-3/4"-22 | 28-1/2"-28 | 28-3/4"-28 | 35-1/2"-35 | 35-3/4"-35   | 42-1/2"-42 |
|------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|------------|
| pack | 10         | 10         | 10         | 10         | 10         | 5          | 5          | 5          | 5            | 2          |
| code | TFS1515    | TFS1815    | TFS1820    | TFS2215    | TFS2220    | TFS2815    | TFS2820    | TFS3515    | TFS3520      | TFS4215    |
| Ø    | 42-3/4"-42 | 54-1/2"-54 | 54-3/4"-54 | 54-2"-54   | 76-3/4"-76 | 76-2"-76   | 88-3/4"-88 | 88-2"-88   | 108-3/4"-108 | 108-2"-108 |
| pack | 2          | 2          | 2          | 2          | 1          | 1          | 1          | 1          | 1            | 1          |
| code | TFS4220    | TFS5415    | TFS5420    | TFS5450    | TFS7620    | TFS7650    | TFS8820    | TFS8850    | TFS10820     | TFS10850   |

## Reduced tee



| Ø    | 18-15-18     | 22-15-22     | 22-18-22   | 28-15-28     | 28-18-28 | 28-22-28 | 35-15-35 | 35-18-35   | 35-22-35   | 35-28-35   |
|------|--------------|--------------|------------|--------------|----------|----------|----------|------------|------------|------------|
| pack | 10           | 10           | 10         | 5            | 5        | 5        | 5        | 5          | 5          | 5          |
| code | TRS1815      | TRS2215      | TRS2218    | TRS2815      | TRS2818  | TRS2822  | TRS3515  | TRS3518    | TRS3522    | TRS3528    |
| Ø    | 42-22-42     | 42-28-42     | 42-35-42   | 54-22-54     | 54-28-54 | 54-35-54 | 54-42-54 | 76-22-76   | 76-28-76   | 76-35-76   |
| pack | 2            | 2            | 2          | 2            | 2        | 2        | 2        | 1          | 1          | 1          |
| code | TRS4222      | TRS4228      | TRS4235    | TRS5422      | TRS5428  | TRS5435  | TRS5442  | TRS7622    | TRS7628    | TRS7635    |
| Ø    | 76,1-42-76,1 | 76,1-54-76,1 | 88-22-88   | 88-28-88     | 88-35-88 | 88-42-88 | 88-54-88 | 108-22-108 | 108-28-108 | 108-35-108 |
| pack | 1            | 1            | 1          | 1            | 1        | 1        | 1        | 1          | 1          | 1          |
| code | TRS7642      | TRS7654      | TRS8822    | TRS8828      | TRS8835  | TRS8842  | TRS8854  | TRS10822   | TRS10828   | TRS10835   |
| Ø    | 108-42-108   | 108-54-108   | 108-76-108 | 108-88,9-108 |          |          |          |            |            |            |
| pack | 1            | 1            | 1          | 1            |          |          |          |            |            |            |
| code | TRS10842     | TRS10854     | TRS10876   | TRS10888     |          |          |          |            |            |            |

## Spare EPDM gasket - Main use



| Ø    | 15   | 18   | 22   | 28   | 35   | 42   | 54   |
|------|------|------|------|------|------|------|------|
| pack | 10   | 10   | 10   | 5    | 5    | 2    | 2    |
| code | JS15 | JS18 | JS22 | JS28 | JS35 | JS42 | JS54 |

## Spare FKM gasket - Solar & hot oils uses



| Ø    | 15    | 18    | 22    | 28    | 35    | 42    | 54    |
|------|-------|-------|-------|-------|-------|-------|-------|
| pack | 10    | 10    | 10    | 5     | 5     | 2     | 2     |
| code | JVS15 | JVS18 | JVS22 | JVS28 | JVS35 | JVS42 | JVS54 |

## Metric clamp



| Ø    | 10    | 12    | 15    | 18    | 22    | 28    |
|------|-------|-------|-------|-------|-------|-------|
| code | CSM10 | CSM12 | CSM15 | CSM18 | CSM22 | CSM28 |

## Single clamp with wood screw thread



| Ø    | 10    | 12    | 15    | 18    | 22    | 28    | 35    | 42    |
|------|-------|-------|-------|-------|-------|-------|-------|-------|
| code | CSB10 | CSB12 | CSB15 | CSB18 | CSB22 | CSB28 | CSB35 | CSB42 |

## Double clamp with wood screw thread



| Ø    | 10    | 15    | 18    | 22    |
|------|-------|-------|-------|-------|
| code | CDB10 | CDB15 | CDB18 | CDB22 |

## Press jaw



| Ø    | 15   | 18   | 22   | 28   | 35   | 42   | 54   |
|------|------|------|------|------|------|------|------|
| code | PS15 | PS18 | PS22 | PS28 | PS35 | PS42 | PS54 |

## Press pilier set



| Ø    | 230V Ø<76,1* | battery Ø<76,1** |
|------|--------------|------------------|
| code | MACHSERTSECT | MACHSERT         |

\* Includes 230V press plier; jaw not supplied. \*\* Includes cordless press plier with battery & charger; jaw not supplied



Press fitting system for heating, solar heating, air conditioning & compressed air installations - Advantages: easy to install, very reliable, low weight, no fire risk during installation - Material: external & internal galvanised E195 carbon steel - 10 µm thickness external galvanisation - Black marking on each pipe & fitting - Toroidal seat for better tightness - Manufactured acc. to UNI EN ISO 9001/2000 - Supplied with EPDM (black) gasket - FKM (green) gasket available for solar use - Lens designed gasket for better tightness - Max. pressure: 16 bar up to Ø 76, 10 bar above - Temperature range: -20°C/+120°C with EPDM gasket, -20°C/+220°C with FKM gasket - **M type press jaw** - Lengths pipe: 3 m & 6 m - **⚠** The pipes are only sold by multiple of mentioned packs - Large quantities & 6 m pipes: please consult for special quotation.

## Galvanised carbon steel pipes



### Pipes - 3 m

| Ø          | Ø int (mm) | weight (kg/m) | pack (m) | code    |
|------------|------------|---------------|----------|---------|
| 15 x 1,2   | 12,6       | 0,408         | 468      | EZ15.3  |
| 18 x 1,2   | 15,6       | 0,497         | 396      | EZ18.3  |
| 22 x 1,5   | 19         | 0,824         | 216      | EZ22.3  |
| 28 x 1,5   | 25         | 1,052         | 168      | EZ28.3  |
| 35 x 1,5   | 32         | 1,320         | 132      | EZ35.3  |
| 42 x 1,5   | 39         | 1,620         | 108      | EZ42.3  |
| 54 x 1,5   | 51         | 2,098         | 84       | EZ54.3  |
| 76,1 x 2,0 | 72,1       | 3,652         | 48       | EZ76.3  |
| 88,9 x 2,0 | 84,9       | 4,290         | 36       | EZ88.3  |
| 108 x 2,0  | 104        | 5,230         | 27       | EZ108.3 |

## Press fittings

### Elbow 90° female/female



| Ø    | 15    | 18    | 22    | 28    | 35    | 42    | 54    | 76,1  | 88,9  | 108    |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| pack | 20    | 20    | 10    | 10    | 5     | 5     | 2     | 2     | 2     | 2      |
| code | EZC15 | EZC18 | EZC22 | EZC28 | EZC35 | EZC42 | EZC54 | EZC76 | EZC88 | EZC108 |

### Elbow 90° male/female



| Ø    | 15      | 18      | 22      | 28      | 35      | 42      | 54      | 76,1    | 88,9    | 108      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| pack | 20      | 20      | 10      | 10      | 5       | 5       | 2       | 2       | 2       | 2        |
| code | EZCTU15 | EZCTU18 | EZCTU22 | EZCTU28 | EZCTU35 | EZCTU42 | EZCTU54 | EZCTU76 | EZCTU88 | EZCTU108 |

### Elbow 45° female/female



| Ø    | 15      | 18      | 22      | 28      | 35      | 42      | 54      | 76,1    | 88,9    | 108      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| pack | 20      | 20      | 10      | 10      | 5       | 5       | 2       | 2       | 2       | 2        |
| code | EZC4515 | EZC4518 | EZC4522 | EZC4528 | EZC4535 | EZC4542 | EZC4554 | EZC4576 | EZC4588 | EZC45108 |

### Elbow 45° male/female



| Ø    | 15        | 18        | 22        | 28        | 35        | 42        | 54        | 76,1      | 88,9      | 108        |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|------------|
| pack | 20        | 20        | 10        | 10        | 5         | 5         | 2         | 2         | 2         | 2          |
| code | EZCTU4515 | EZCTU4518 | EZCTU4522 | EZCTU4528 | EZCTU4535 | EZCTU4542 | EZCTU4554 | EZCTU4576 | EZCTU4588 | EZCTU45108 |

### Elbow female threaded



| Ø    | 22-1/2" | 22-3/4" | 28-1"    | 35-1 1/4" | 42-1 1/2" | 54-2"    |
|------|---------|---------|----------|-----------|-----------|----------|
| pack | 10      | 10      | 5        | 5         | 5         | 5        |
| code | EZCF222 | EZCF422 | EZCF1028 | EZCF1435  | EZCF1242  | EZCF2054 |

### Elbow male threaded



| Ø    | 15-3/8" | 15-1/2" | 18-1/2" | 22-3/4" | 28-1"    | 35-1 1/4" | 42-1 1/2" | 54-2"    |
|------|---------|---------|---------|---------|----------|-----------|-----------|----------|
| pack | 20      | 10      | 10      | 10      | 5        | 5         | 2         | 2        |
| code | EZCM815 | EZCM215 | EZCM218 | EZCM422 | EZCM1028 | EZCM1435  | EZCM1242  | EZCM2054 |



**Short elbow 90° threaded male**

| Ø    | 15-3/8"  | 15-1/2"  | 18-1/2"  | 22-3/4"  | 28-1"     |
|------|----------|----------|----------|----------|-----------|
| pack | 20       | 20       | 20       | 10       | 10        |
| code | EZCCM815 | EZCCM215 | EZCCM218 | EZCCM422 | EZCCM1028 |



**Short elbow 90° threaded male**

| Ø    | 22-3/4"  | 28-1/2"  | 28-3/4"  |
|------|----------|----------|----------|
| pack | 10       | 10       | 10       |
| code | EZCCF422 | EZCCF228 | EZCCF428 |

**Equal tee**



| Ø    | 15    | 18    | 22    | 28    | 35    | 42    | 54    | 76,1  | 88,9  | 108    |
|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| pack | 20    | 20    | 20    | 10    | 4     | 4     | 2     | 2     | 2     | 2      |
| code | EZT15 | EZT18 | EZT22 | EZT28 | EZT35 | EZT42 | EZT54 | EZT76 | EZT88 | EZT108 |

**Tee threaded female**



| Ø    | 15-1/2"-15     | 18-1/2"-18   | 22-1/2"-22   | 22-3/4"-22 | 28-1/2"-28 | 28-3/4"-28 | 28-1"-28   | 35-1/2"-35     | 35-3/4"-35     |
|------|----------------|--------------|--------------|------------|------------|------------|------------|----------------|----------------|
| pack | 20             | 20           | 10           | 10         | 10         | 10         | 5          | 5              | 5              |
| code | EZTF215        | EZTF218      | EZTF222      | EZTF422    | EZTF228    | EZTF428    | EZTF1028   | EZTF235        | EZTF435        |
| Ø    | 35-1"-35       | 42-1/2"-42   | 42-1"-42     | 42-3/4"-42 | 54-1/2"-54 | 54-1"-54   | 54-3/4"-54 | 76,1-1/2"-76,1 | 76,1-3/4"-76,1 |
| pack | 5              | 4            | 2            | 4          | 2          | 2          | 2          | 2              | 2              |
| code | EZTF1035       | EZTF242      | EZTF1042     | EZTF442    | EZTF254    | EZTF1054   | EZTF454    | EZTF2076       | EZTF476        |
| Ø    | 88,9-3/4"-88,9 | 88,9-2"-88,9 | 108-3/4"-108 |            |            |            |            |                |                |
| pack | 2              | 2            | 2            |            |            |            |            |                |                |
| code | EZTF488        | EZTF2088     | EZTF4108     |            |            |            |            |                |                |

**Reduced tee**



| Ø    | 18-15-18       | 22-15-22     | 22-18-22     | 28-15-28     | 28-18-28     | 28-22-28     | 35-15-35     | 35-18-35     | 35-22-35     |
|------|----------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|--------------|
| pack | 10             | 10           | 10           | 10           | 10           | 10           | 5            | 5            | 5            |
| code | EZT181518      | EZT221522    | EZT221822    | EZT281528    | EZT281828    | EZT282228    | EZT351535    | EZT351835    | EZT352235    |
| Ø    | 35-28-35       | 42-15-42     | 42-22-42     | 42-28-42     | 42-35-42     | 54-15-54     | 54-22-54     | 54-28-54     | 54-35-54     |
| pack | 5              | 4            | 4            | 4            | 4            | 2            | 2            | 2            | 2            |
| code | EZT352835      | EZT421542    | EZT422242    | EZT422842    | EZT423542    | EZT541554    | EZT542254    | EZT542854    | EZT543554    |
| Ø    | 54-42-54       | 76,1-28-76,1 | 76,1-35-76,1 | 76,1-42-76,1 | 76,1-54-76,1 | 88,9-28-88,9 | 88,9-35-88,9 | 88,9-42-88,9 | 88,9-54-88,9 |
| pack | 2              | 2            | 2            | 2            | 2            | 2            | 2            | 2            | 2            |
| code | EZT544254      | EZT762876    | EZT763576    | EZT764276    | EZT765476    | EZT882888    | EZT883588    | EZT884288    | EZT885488    |
| Ø    | 88,9-76,1-88,9 | 108-28-108   | 108-35-108   | 108-42-108   | 108-54-108   | 108-76,1-108 | 108-88,9-108 |              |              |
| pack | 2              | 2            | 2            | 2            | 2            | 2            | 2            |              |              |
| code | EZT887688      | EZT10828108  | EZT10835108  | EZT10842108  | EZT10854108  | EZT10876108  | EZT10888108  |              |              |

**Equal nipple**



| Ø    | 15     | 18     | 22     | 28     | 35     | 42     | 54     | 76,1   | 88,9   | 108     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|---------|
| pack | 20     | 20     | 20     | 10     | 10     | 4      | 2      | 4      | 4      | 2       |
| code | EZMA15 | EZMA18 | EZMA22 | EZMA28 | EZMA35 | EZMA42 | EZMA54 | EZMA76 | EZMA88 | EZMA108 |

**Reduced nipple**



| Ø    | 18-15    | 22-15    | 22-18    | 28-15    | 28-22    | 35-15    | 35-22    | 35-28    | 42-35    | 54-28    |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| pack | 10       | 10       | 10       | 5        | 5        | 5        | 5        | 5        | 5        | 5        |
| code | EZMA1815 | EZMA2215 | EZMA2218 | EZMA2815 | EZMA2822 | EZMA3515 | EZMA3522 | EZMA3528 | EZMA4235 | EZMA5428 |

**Reducer male/female**



| Ø    | 18-15    | 22-15    | 22-18    | 28-15    | 28-18    | 28-22    | 35-15    | 35-18    | 42-22     | 42-28     | 42-35     | 54-18    |
|------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|----------|
| pack | 20       | 20       | 20       | 20       | 20       | 20       | 10       | 10       | 4         | 4         | 4         | 4        |
| code | EZTU1815 | EZTU2215 | EZTU2218 | EZTU2815 | EZTU2818 | EZTU2822 | EZTU3515 | EZTU3518 | EZTU4222  | EZTU4228  | EZTU4235  | EZTU5418 |
| Ø    | 54-22    | 54-28    | 54-35    | 54-42    | 76,1-42  | 76,1-54  | 88,9-54  | 88,9-76  | 108-54    | 108-76    | 108-88    |          |
| pack | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 4        | 2         | 2         | 2         |          |
| code | EZTU5422 | EZTU5428 | EZTU5435 | EZTU5442 | EZTU7642 | EZTU7654 | EZTU8854 | EZTU8876 | EZTU10854 | EZTU10876 | EZTU10888 |          |



## Adapter female

| Ø    | 15-3/8" | 15-1/2" | 15-3/4" | 18-1/2" | 18-3/4" | 22-1/2" | 22-3/4" | 22-1"   | 28-1/2" | 28-3/4" |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| pack | 20      | 20      | 10      | 20      | 10      | 10      | 10      | 10      | 20      | 10      |
| code | EZF815  | EZF215  | EZF415  | EZF218  | EZF418  | EZF222  | EZF422  | EZF1022 | EZF228  | EZF428  |

| Ø    | 28-1"   | 35-3/4" | 35-1"   | 35-1"1/4 | 42-1"1/2 | 54-2"   |
|------|---------|---------|---------|----------|----------|---------|
| pack | 10      | 10      | 5       | 5        | 4        | 4       |
| code | EZF1028 | EZF435  | EZF1035 | EZF1435  | EZF1242  | EZF2054 |



## Adapter male

| Ø    | 15-3/8" | 15-1/2" | 15-3/4" | 18-1/2" | 18-3/4" | 22-1/2" | 22-3/4" | 22-1"   | 28-3/4" | 28-1"   | 28-1"1/4 | 35-1"   |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| pack | 20      | 20      | 10      | 20      | 10      | 10      | 10      | 10      | 10      | 10      | 5        | 5       |
| code | EZM815  | EZM215  | EZM415  | EZM218  | EZM418  | EZM222  | EZM422  | EZM1022 | EZM428  | EZM1028 | EZM1428  | EZM1035 |

| Ø    | 35-1"1/4 | 35-1"1/2 | 42-1"1/2 | 54-1"1/2 | 54-2"   | 76,1-2"1/2 | 88,9-3" | 108-4"   |
|------|----------|----------|----------|----------|---------|------------|---------|----------|
| pack | 5        | 5        | 4        | 4        | 4       | 2          | 2       | 2        |
| code | EZM1435  | EZM1235  | EZM1242  | EZM1254  | EZM2054 | EZM2276    | EZM3088 | EZM40108 |



## Union connector female

| Ø    | 22-3/4" | 22-1"    | 28-1"    | 35-1"1/4 | 42-1"1/2 | 54-2"    |
|------|---------|----------|----------|----------|----------|----------|
| pack | 2       | 2        | 2        | 2        | 2        | 2        |
| code | EZUF422 | EZUF1022 | EZUF1028 | EZUF1435 | EZUF1242 | EZUF2054 |



## Union connector male

| Ø    | 15-1/2" | 18-1/2" | 22-3/4" | 22-1"    | 28-1"    | 35-1"1/4 | 42-1"1/2 | 54-2"    |
|------|---------|---------|---------|----------|----------|----------|----------|----------|
| pack | 2       | 2       | 2       | 2        | 2        | 2        | 2        | 2        |
| code | EZUM215 | EZUM218 | EZUM422 | EZUM1022 | EZUM1028 | EZUM1435 | EZUM1242 | EZUM2054 |



## Free nut female

| Ø    | 15-3/4" | 18-3/4" | 22-3/4" | 22-1"   | 28-1"1/4 | 35-1"1/2 | 42-1"3/4 |
|------|---------|---------|---------|---------|----------|----------|----------|
| pack | 10      | 10      | 10      | 10      | 10       | 4        | 2        |
| code | EZE415  | EZE418  | EZE422  | EZE1022 | EZE1428  | EZE1235  | EZE2042  |



## Cap female

| Ø    | 15       | 18       | 22       | 28       | 35       | 42       | 54       | 76,1     | 88,9     | 108       |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack | 20       | 20       | 10       | 10       | 5        | 5        | 2        | 2        | 2        | 2         |
| code | EZBOUF15 | EZBOUF18 | EZBOUF22 | EZBOUF28 | EZBOUF35 | EZBOUF42 | EZBOUF54 | EZBOUF76 | EZBOUF88 | EZBOUF108 |



## Flange PN16

| Ø    | 76,1    | 88,9    | 108      |
|------|---------|---------|----------|
| DN   | 65      | 80      | 100      |
| pack | 2       | 2       | 2        |
| code | EZBRI76 | EZBRI88 | EZBRI108 |

## Overpass

| Ø    | 15     | 18     | 22     | 28     |
|------|--------|--------|--------|--------|
| pack | 10     | 10     | 10     | 10     |
| code | EZDA15 | EZDA18 | EZDA22 | EZDA28 |

## Fitting to be welded

| Ø    | 42-48,3  | 54-60,3  | 76,1-76,1 | 88,9-88,9 | 108-114,3  |
|------|----------|----------|-----------|-----------|------------|
| pack | 2        | 2        | 2         | 2         | 2          |
| code | EZAS4248 | EZAS5460 | EZAS7676  | EZAS8888  | EZAS108114 |

## Spare EPDM gasket - Main use



| Ø    | 15       | 18       | 22       | 28       | 35       | 42       | 54       | 76,1     | 88,9     | 108       |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack | 20       | 20       | 20       | 20       | 20       | 20       | 20       | 10       | 10       | 10        |
| code | EZJCHA15 | EZJCHA18 | EZJCHA22 | EZJCHA28 | EZJCHA35 | EZJCHA42 | EZJCHA54 | EZJCHA76 | EZJCHA88 | EZJCHA108 |

## Spare FKM gasket - Solar use



| Ø    | 15       | 18       | 22       | 28       | 35       | 42       | 54       | 76,1     | 88,9     | 108       |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| pack | 20       | 20       | 20       | 20       | 20       | 20       | 20       | 10       | 10       | 10        |
| code | EZJSOL15 | EZJSOL18 | EZJSOL22 | EZJSOL28 | EZJSOL35 | EZJSOL42 | EZJSOL54 | EZJSOL76 | EZJSOL88 | EZJSOL108 |

## Tools



### Cutter-pipe Ø 12 to 67

|      |      |
|------|------|
| code | EZCT |
|------|------|



### Off-burr tool Ø 10 to 54

|      |         |
|------|---------|
| code | EZEBA54 |
|------|---------|



### Template Ø 15 to 54

|      |       |
|------|-------|
| code | EZGAB |
|------|-------|



### Cutter-pipe blade Ø 12 to 67

|      |        |
|------|--------|
| code | EZCTLA |
|------|--------|



### Off-burr tool Ø 63 to 110

|      |          |
|------|----------|
| code | EZEBA110 |
|------|----------|



### Fitting protection band

|      |       |
|------|-------|
| code | EZRUB |
|------|-------|

5 m x 9,15 m



### Press plier Ø 15 to 22

|      |       |
|------|-------|
| code | PINK2 |
|------|-------|



### Press jaw Ø 15 to 22

| Ø    | 15      | 18      | 22      |
|------|---------|---------|---------|
| code | EZMAC15 | EZMAC18 | EZMAC22 |



### Press plier Ø 15 to 54

|      |       |
|------|-------|
| code | SER54 |
|------|-------|



### Press jaw Ø 15 to 35

| Ø    | 15         | 18         | 22         | 28         | 35         |
|------|------------|------------|------------|------------|------------|
| code | EZMACSER15 | EZMACSER18 | EZMACSER22 | EZMACSER28 | EZMACSER35 |



### Chain support Ø 42 to 54

|      |            |
|------|------------|
| code | EZSUPCHA54 |
|------|------------|

+



### Chain Ø 42 to 54

| Ø    | 15      | 18      |
|------|---------|---------|
| code | EZCHA42 | EZCHA54 |



### Press plier Ø 15 to 108

|      |        |
|------|--------|
| code | SER108 |
|------|--------|



### Press jaw Ø 15 to 35

| Ø    | 15         | 18         | 22         | 28         | 35         |
|------|------------|------------|------------|------------|------------|
| code | EZMACSER15 | EZMACSER18 | EZMACSER22 | EZMACSER28 | EZMACSER35 |



### Chain support Ø 42 to 108

| Ø    | 42 to 54   | 76,1 to 108 |
|------|------------|-------------|
| code | EZSUPCHA54 | EZSUPCHA108 |

+



### Chain Ø 42 to 108

| Ø    | 42      | 54      | 76,1    | 88,9    | 108      |
|------|---------|---------|---------|---------|----------|
| code | EZCHA42 | EZCHA54 | EZCHA76 | EZCHA88 | EZCHA108 |

## Copper welding fittings

For copper pipes



**Mandatory packing applies**

For heating & sanitary, cold & hot water, gas oil & gas - Acc. to EN 1254-1 -  
**Mandatory packing:** 10 pcs up to Ø28, individual above.



### 5001 A - Bend 90° C x Ftg female/male solder end



**NEW**

| Ø    | 10      | 12      | 14      | 15      | 16      | 18      | 22      | 28      | 32      | 35       |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|----------|
| box  | 1 500   | 900     | 700     | 550     | 550     | 350     | 200     | 100     | 80      | 65       |
| code | 5001A10 | 5001A12 | 5001A14 | 5001A15 | 5001A16 | 5001A18 | 5001A22 | 5001A28 | 5001A32 | 5001A35  |
| Ø    | 36      | 40      | 42      | 52      | 54      | 63      | 64      | 76      | 89      | 108      |
| box  | 55      | 40      | 35      | 15      | 15      | -       | -       | -       | -       | -        |
| code | 5001A36 | 5001A40 | 5001A42 | 5001A52 | 5001A54 | 5001A63 | 5001A64 | 5001A76 | 5001A89 | 5001A108 |

### 5002 A - Bend 90° C x C female/female solder end



**NEW**

| Ø    | 10      | 12      | 14      | 15      | 16      | 18      | 22      | 28      | 32       | 35      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|----------|---------|
| box  | 1 400   | 1 000   | 550     | 550     | 500     | 350     | 200     | 100     | 95       | 65      |
| code | 5002A10 | 5002A12 | 5002A14 | 5002A15 | 5002A16 | 5002A18 | 5002A22 | 5002A28 | 5002A32  | 5002A35 |
| Ø    | 40      | 42      | 52      | 54      | 63      | 64      | 76      | 89      | 108      |         |
| box  | 40      | 35      | 15      | 15      | -       | -       | -       | -       | -        |         |
| code | 5002A40 | 5002A42 | 5002A52 | 5002A54 | 5002A63 | 5002A64 | 5002A76 | 5002A89 | 5002A108 |         |

### 5040 - Bend 45° C x Ftg female/male solder end



**NEW**

| Ø    | 10     | 12     | 14     | 15     | 16     | 18     | 22     | 28     | 32      | 35     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|
| box  | 1 800  | 1 300  | 850    | 700    | 750    | 400    | 280    | 160    | 130     | 110    |
| code | 504010 | 504012 | 504014 | 504015 | 504016 | 504018 | 504022 | 504028 | 504032  | 504035 |
| Ø    | 40     | 42     | 52     | 54     | 63     | 64     | 76     | 89     | 108     |        |
| box  | 70     | 60     | 25     | 30     | -      | -      | -      | -      | -       |        |
| code | 504040 | 504042 | 504052 | 504054 | 504063 | 504064 | 504076 | 504089 | 5040108 |        |

### 5041 - Bend 45° C x C female/female solder end



**NEW**

| Ø    | 10     | 12     | 14     | 15     | 16     | 18     | 22     | 28     | 32      | 35     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|
| box  | 1 500  | 1 200  | 700    | 800    | 600    | 450    | 280    | 150    | 120     | 100    |
| code | 504110 | 504112 | 504114 | 504115 | 504116 | 504118 | 504122 | 504128 | 504132  | 504135 |
| Ø    | 40     | 42     | 52     | 54     | 63     | 64     | 76     | 89     | 108     |        |
| box  | 70     | 60     | 25     | 25     | -      | -      | -      | -      | -       |        |
| code | 504140 | 504142 | 504152 | 504154 | 504163 | 504164 | 504176 | 504189 | 5041108 |        |

### 5090 - Elbow 90° C x C female/female solder end



**NEW**

| Ø    | 6      | 8      | 10     | 12     | 14     | 15     | 16     | 18     | 20     | 22     | 25     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| box  | 3 000  | 2 000  | 1 800  | 1 000  | 800    | 700    | 600    | 450    | 300    | 280    | 200    |
| code | 509006 | 509008 | 509010 | 509012 | 509014 | 509015 | 509016 | 509018 | 509020 | 509022 | 509025 |
| Ø    | 28     | 32     | 35     | 36     | 40     | 42     | 52     | 54     | 63     | 64     | 76     |
| box  | 150    | 120    | 90     | 65     | 55     | 55     | 20     | 20     | -      | -      | -      |
| code | 509028 | 509032 | 509035 | 509036 | 509040 | 509042 | 509052 | 509054 | 509063 | 509064 | 509076 |

### 5092 - Bend 90° C x Ftg female/male solder end



**NEW**

| Ø    | 10     | 12     | 14     | 15     | 16     | 18     | 22     | 28     | 32     | 35     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| box  | 1 500  | 1 200  | 800    | 700    | 600    | 400    | 250    | 130    | 120    | 80     |
| code | 509210 | 509212 | 509214 | 509215 | 509216 | 509218 | 509222 | 509228 | 509232 | 509235 |
| Ø    | 36     | 40     | 42     | 52     | 54     | 63     | 64     |        |        |        |
| box  | 80     | 55     | 50     | 20     | 20     | -      | -      |        |        |        |
| code | 509236 | 509240 | 509242 | 509252 | 509254 | 509263 | 509264 |        |        |        |



**NEW**

### 5130 - Equal tee C x C x C x female solder end

| Ø    | 6        | 8        | 10     | 12     | 14     | 15     | 16     | 18     | 22     | 28      | 32     |
|------|----------|----------|--------|--------|--------|--------|--------|--------|--------|---------|--------|
| box  | 3 000    | 1 500    | 1 000  | 800    | 500    | 500    | 400    | 300    | 160    | 90      | 70     |
| code | 513006TH | 513008TH | 513010 | 513012 | 513014 | 513015 | 513016 | 513018 | 513022 | 513028  | 513032 |
| Ø    | 35       | 40       | 42     | 52     | 54     | 63     | 64     | 76     | 89     | 108     |        |
| box  | 60       | 35       | 30     | 15     | 15     | -      | -      | -      | -      | -       |        |
| code | 513035   | 513040   | 513042 | 513052 | 513054 | 513063 | 513064 | 513076 | 513089 | 5130108 |        |



### 5130 - Reduced tee C x C x C female solder end

| Ø    | 8-10-8     | 10-08-10   | 10-12-10   | 12-08-12   | 12-10-10   | 12-10-12   | 12-12-10   | 12-14-12   | 12-15-12   | 12-16-12   | 12-18-12   | 14-10-14   |
|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| box  | 1 200      | 1 200      | 800        | 1 000      | 1 000      | 1 000      | 800        | 600        | 500        | 450        | 350        | 700        |
| code | 5130081008 | 5130100810 | 5130101210 | 5130120812 | 5130121010 | 5130121012 | 5130121210 | 5130121412 | 5130121512 | 5130121612 | 5130121812 | 5130141014 |
| Ø    | 14-12-12   | 14-12-14   | 14-14-12   | 14-16-14   | 14-18-14   | 15-12-15   | 15-15-12   | 15-18-15   | 15-22-15   | 16-12-12   | 16-12-14   | 16-12-16   |
| box  | 550        | 550        | 600        | 500        | 300        | 500        | 500        | 300        | 200        | 600        | 500        | 500        |
| code | 5130141212 | 5130141214 | 5130141412 | 5130141614 | 5130141814 | 5130151215 | 5130151512 | 5130151815 | 5130152215 | 5130161212 | 5130161214 | 5130161216 |
| Ø    | 16-14-12   | 16-14-14   | 16-14-16   | 16-16-12   | 16-16-14   | 16-18-14   | 16-18-16   | 16-22-16   | 18-12-12   | 18-12-16   | 18-12-18   | 18-14-14   |
| box  | 500        | 500        | 500        | 450        | 400        | 300        | 300        | 200        | 400        | 400        | 380        | 350        |
| code | 5130161412 | 5130161414 | 5130161416 | 5130161612 | 5130161614 | 5130161814 | 5130161816 | 5130162216 | 5130181212 | 5130181216 | 5130181218 | 5130181414 |
| Ø    | 18-14-16   | 18-14-18   | 18-15-15   | 18-15-18   | 18-16-14   | 18-16-16   | 18-16-18   | 18-18-14   | 18-18-16   | 18-22-18   | 22-12-22   | 22-14-18   |
| box  | 350        | 350        | 360        | 300        | 350        | 350        | 300        | 300        | 300        | 200        | 250        | 250        |
| code | 5130181416 | 5130181418 | 5130181515 | 5130181518 | 5130181614 | 5130181616 | 5130181618 | 5130181814 | 5130181816 | 5130182218 | 5130221222 | 5130221418 |
| Ø    | 22-14-22   | 22-15-15   | 22-15-22   | 22-16-16   | 22-16-18   | 22-16-22   | 22-18-14   | 22-18-16   | 22-18-18   | 22-18-22   | 22-22-14   | 22-22-16   |
| box  | 250        | 250        | 200        | 250        |            | 200        | 250        | 250        | 250        | 200        | 200        | 200        |
| code | 5130221422 | 5130221515 | 5130221522 | 5130221616 | 5130221618 | 5130221622 | 5130221814 | 5130221816 | 5130221818 | 5130221822 | 5130222214 | 5130222216 |
| Ø    | 22-22-18   | 22-28-22   | 28-12-28   | 28-14-28   | 28-16-28   | 28-18-18   | 28-18-22   | 28-18-28   | 28-22-22   | 28-22-28   | 28-28-18   | 28-28-22   |
| box  | 180        | 100        | 140        | 140        | 130        | 140        | 120        | 120        | 100        | 100        | 100        | 80         |
| code | 5130222218 | 5130222822 | 5130281228 | 5130281428 | 5130281628 | 5130281818 | 5130281822 | 5130281828 | 5130282222 | 5130282228 | 5130282818 | 5130282822 |
| Ø    | 28-35-28   | 32-22-32   | 32-28-32   | 35-18-35   | 35-22-28   | 35-22-35   | 35-28-28   | 35-28-35   | 35-35-22   | 35-35-28   | 35-42-35   | 42-22-42   |
| box  | 65         | 90         | 80         | 100        | 90         | 85         | 80         | 75         | 60         | 55         | 40         | 50         |
| code | 5130283528 | 5130322232 | 5130322832 | 5130351835 | 5130352228 | 5130352235 | 5130352828 | 5130352835 | 5130353522 | 5130353528 | 5130354235 | 5130422242 |
| Ø    | 42-28-42   | 42-35-42   | 54-22-54   | 54-28-54   | 54-35-54   | 54-42-54   | 63-28-63   | 64-35-64   | 64-42-64   |            |            |            |
| box  | 50         | 40         | 30         | 25         | 25         | 20         | -          | -          | -          |            |            |            |
| code | 5130422842 | 5130423542 | 5130542254 | 5130542854 | 5130543554 | 5130544254 | 5130632863 | 5130643564 | 5130644264 |            |            |            |

**NEW**

### 5270 - Socket C x C female/female solder end



**NEW**

| Ø    | 6        | 8        | 10     | 12     | 14     | 15     | 16     | 18     | 20     | 22     | 28      | 32     |
|------|----------|----------|--------|--------|--------|--------|--------|--------|--------|--------|---------|--------|
| box  | 3 500    | 3 000    | 1 700  | 1 500  | 1 200  | 1 000  | 1 000  | 700    | 400    | 400    | 200     | 200    |
| code | 527006TH | 527008TH | 527010 | 527012 | 527014 | 527015 | 527016 | 527018 | 527020 | 527022 | 527028  | 527032 |
| Ø    | 35       | 36       | 40     | 42     | 52     | 54     | 63     | 64     | 76     | 89     | 108     |        |
| box  | 170      | 150      | 100    | 90     | 50     | 45     | -      | -      | -      | -      | -       |        |
| code | 527035   | 527036   | 527040 | 527042 | 527052 | 527054 | 527063 | 527064 | 527076 | 527089 | 5270108 |        |

### 5301 - Cap C female solder end



| Ø    | 10     | 12     | 14     | 15     | 16     | 18     | 22     | 28     | 35     | 42     | 54     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| box  | 3 000  | 2 500  | 2 000  | 1 500  | 1 200  | 1 000  | 800    | 400    | 250    | 150    | 90     |
| code | 530110 | 530112 | 530114 | 530115 | 530116 | 530118 | 530122 | 530128 | 530135 | 530142 | 530154 |



## 5240 - Reduced socket C x C female/female solder end

| Ø    | 8-6      | 10-8     | 12-10    | 14-10    | 14-12    | 15-12    | 15-14    | 16-10    | 16-12    | 16-14    | 16-15     |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| box  | 3 000    | 2 000    | 1 500    | 1 400    | 1 000    | 1 100    | 1 000    | 1 200    | 1 200    | 1 000    | 1 100     |
| code | 52400806 | 52401008 | 52401210 | 52401410 | 52401412 | 52401512 | 52401514 | 52401610 | 52401612 | 52401614 | 52401615  |
| Ø    | 18-10    | 18-12    | 18-14    | 18-15    | 18-16    | 20-14    | 20-18    | 22-12    | 22-14    | 22-16    | 22-18     |
| box  | 900      | 900      | 800      | 800      | 700      | 500      | 500      | 500      | 500      | 500      | 500       |
| code | 52401810 | 52401812 | 52401814 | 52401815 | 52401816 | 52402014 | 52402018 | 52402212 | 52402214 | 52402216 | 52402218  |
| Ø    | 22-20    | 28-12    | 28-14    | 28-16    | 28-18    | 28-20    | 28-22    | 32-22    | 32-28    | 35-22    | 35-28     |
| box  | 400      | 300      | 280      | 280      | 280      | 280      | 280      | 200      | 180      | 150      | 140       |
| code | 52402220 | 52402812 | 52402814 | 52402816 | 52402818 | 52402820 | 52402822 | 52403222 | 52403228 | 52403522 | 52403528  |
| Ø    | 40-28    | 40-32    | 42-18    | 42-22    | 42-28    | 42-32    | 42-35    | 52-32    | 52-42    | 54-28    | 54-35     |
| box  | 80       | 100      | 100      | 130      | 80       | 100      | 60       | 60       | 40       | 40       | 50        |
| code | 52404028 | 52404032 | 52404218 | 52404222 | 52404228 | 52404232 | 52404235 | 52405232 | 52405242 | 52405428 | 52405435  |
| Ø    | 54-42    | 63-28    | 63-42    | 63-54    | 64-42    | 64-54    | 76-42    | 76-54    | 76-64    | 89-76    | 108-89    |
| box  | 40       | -        | -        | -        | -        | -        | -        | -        | -        | -        | -         |
| code | 52405442 | 52406328 | 52406342 | 52406354 | 52406442 | 52406454 | 52407642 | 52407654 | 52407664 | 52408976 | 524010899 |

**NEW**



## 5243 - Reduced socket C x Ftg female/male solder end

| Ø    | 8-6      | 10-8     | 12-8     | 12-10    | 14-10    | 14-12    | 15-12    | 15-14    | 16-10    | 16-12     | 16-14    |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|----------|
| box  | 3 000    | 3 000    | 2 000    | 2 000    | 1 300    | 1 200    | 1 200    | 1 000    | 1 200    | 1 100     | 1 000    |
| code | 52430806 | 52431008 | 52431208 | 52431210 | 52431410 | 52431412 | 52431512 | 52431514 | 52431610 | 52431612  | 52431614 |
| Ø    | 16-15    | 18-10    | 18-12    | 18-14    | 18-15    | 18-16    | 22-12    | 22-14    | 22-15    | 22-16     | 22-18    |
| box  | 1 000    | 1 000    | 800      | 800      | 800      | 800      | 600      | 550      | 550      | 550       | 500      |
| code | 52431615 | 52431810 | 52431812 | 52431814 | 52431815 | 52431816 | 52432212 | 52432214 | 52432215 | 52432216  | 52432218 |
| Ø    | 28-12    | 28-14    | 28-16    | 28-18    | 28-22    | 32-18    | 32-22    | 32-28    | 35-22    | 35-28     | 36-22    |
| box  | 300      | 300      | 300      | 300      | 280      | 200      | 200      | 160      | 180      | 140       | 160      |
| code | 52432812 | 52432814 | 52432816 | 52432818 | 52432822 | 52433218 | 52433222 | 52433228 | 52433522 | 52433528  | 52433622 |
| Ø    | 40-28    | 40-32    | 42-22    | 42-28    | 42-32    | 42-35    | 54-22    | 54-28    | 54-35    | 54-42     | 63-42    |
| box  | 120      | 120      | 100      | 100      | 80       | 60       | 60       | 60       | 50       | 40        | -        |
| code | 52434028 | 52434032 | 52434222 | 52434228 | 52434232 | 52434235 | 52435422 | 52435428 | 52435435 | 52435442  | 52436342 |
| Ø    | 63-54    | 64-35    | 64-42    | 64-54    | 76-54    | 76-64    | 89-54    | 89-64    | 89-76    | 108-76    |          |
| box  | -        | -        | -        | -        | -        | -        | -        | -        | -        | -         |          |
| code | 52436354 | 52436435 | 52436442 | 52436454 | 52437654 | 52437664 | 52438954 | 52438964 | 52438976 | 524310876 |          |

**NEW**



## 5060 - Bend 180° C x C female/female solder end

| Ø    | 10     | 12     | 14     | 15     | 16     | 18     | 22     | 28     | 35     | 42     | 54     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| box  | 800    | 500    | 300    | 200    | 200    | 180    | 90     | 50     | 20     | 12     | 4      |
| code | 506010 | 506012 | 506014 | 506015 | 506016 | 506018 | 506022 | 506028 | 506035 | 506042 | 506054 |

## 5085 - Crossover C x C female solder end



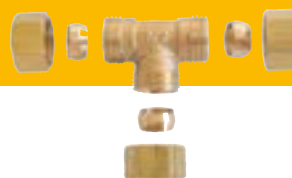
| Ø    | 12     | 14     | 15     | 16     | 18     | 22     |
|------|--------|--------|--------|--------|--------|--------|
| box  | 300    | 200    | 200    | 180    | 120    | 70     |
| code | 508512 | 508514 | 508515 | 508516 | 508518 | 508522 |

## 5086 - Crossover C x Ftg female/male solder end



| Ø    | 12     | 14     | 15     | 16     | 18     | 22     |
|------|--------|--------|--------|--------|--------|--------|
| box  | 400    | 250    | 250    | 250    | 180    | 100    |
| code | 508612 | 508614 | 508615 | 508616 | 508618 | 508622 |





## Brass compression fittings with brass olive



**Mandatory packing applies**

Recommended tightness torque: 10 to 15 Nm for 3/8", 15 to 20 Nm for 1/2", 20 to 25 Nm for 3/4" -  
**Mandatory packing:** 10 pcs up to 1", 5 pcs above.

### 704 B - Male



| Ø    | 1/4"-08  | 3/8"-08  | 3/8"-10  | 3/8"-12  | 3/8"-14  | 1/2"-12  | 1/2"-14  | 1/2"-15  | 1/2"-16  | 1/2"-18  |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| box  | 1 000    | 1 000    | 1 000    | 550      | 550      | 550      | 550      | 550      | 500      | 400      |
| code | 704B0808 | 704B0812 | 704B1012 | 704B1212 | 704B1412 | 704B1215 | 704B1415 | 704B1515 | 704B1615 | 704B1815 |
| Ø    | 3/4"-14  | 3/4"-16  | 3/4"-18  | 1"-22    |          |          |          |          |          |          |
| box  | 400      | 350      | 350      | 150      |          |          |          |          |          |          |
| code | 704B1420 | 704B1620 | 704B1820 | 704B2226 |          |          |          |          |          |          |

### 700 B - Female



| Ø    | 1/4"-08  | 3/8"-08  | 3/8"-10  | 3/8"-12  | 3/8"-14  | 1/2"-10  | 1/2"-12  | 1/2"-14  | 1/2"-15  | 1/2"-16  |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| box  | 1 000    | 1 000    | 1 000    | 500      | 500      | 500      | 600      | 500      | 500      | 400      |
| code | 700B0808 | 700B0812 | 700B1012 | 700B1212 | 700B1412 | 700B1015 | 700B1215 | 700B1415 | 700B1515 | 700B1615 |
| Ø    | 3/4"-14  | 3/4"-16  | 3/4"-18  |          |          |          |          |          |          |          |
| box  | 400      | 350      | 350      |          |          |          |          |          |          |          |
| code | 700B1420 | 700B1620 | 700B1820 |          |          |          |          |          |          |          |

### 703 B - Equal socket



| Ø    | 10     | 12     | 14     | 15     | 16     | 18     |
|------|--------|--------|--------|--------|--------|--------|
| box  | 500    | 400    | 400    | 400    | 400    | 200    |
| code | 703B10 | 703B12 | 703B14 | 703B15 | 703B16 | 703B18 |

### 703 BR - Reduced socket



| Ø    | 12/10     | 14/10     | 14/12     |
|------|-----------|-----------|-----------|
| box  | 400       | 400       | 400       |
| code | 703BR1210 | 703BR1410 | 703BR1412 |

### Wall connection



| Ø    | 1/2"-12 | 1/2"-14 |
|------|---------|---------|
| box  | 12      | 14      |
| code | AMB1215 | AMB1415 |

### 705 B - Elbow



| Ø    | 10     | 12     | 14     | 15     | 16     | 18     |
|------|--------|--------|--------|--------|--------|--------|
| box  | 500    | 300    | 300    | 300    | 300    | 250    |
| code | 705B10 | 705B12 | 705B14 | 705B15 | 705B16 | 705B18 |

### 706 B - Tee



| Ø    | 10     | 12     | 14     | 15     | 16     | 18     |
|------|--------|--------|--------|--------|--------|--------|
| box  | 300    | 200    | 200    | 200    | 200    | 110    |
| code | 706B10 | 706B12 | 706B14 | 706B15 | 706B16 | 706B18 |

### 707 B - Elbow male



| Ø    | 3/8"-10  | 3/8"-12  | 1/2"-12  | 1/2"-14  | 1/2"-16  | 3/4"-18  | 1"-22    |
|------|----------|----------|----------|----------|----------|----------|----------|
| box  | 500      | 400      | 350      | 350      | 350      | 200      | 100      |
| code | 707B1012 | 707B1212 | 707B1215 | 707B1415 | 707B1615 | 707B1820 | 707B2226 |

### ES 700 - Nut



| Ø    | 3/8"-10   | 3/8"-12   | 1/2"-12   | 1/2"-14   | 1/2"-16   | 5/8"-18   | 3/4"-18   | 3/4"-20   | 1"-22     |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| code | ES7001210 | ES7001212 | ES7001512 | ES7001514 | ES7001516 | ES7001716 | ES7002018 | ES7002020 | ES7002622 |

### BS700 - Olive



| Ø    | 8       | 10      | 12      | 14      | 16      | 18      | 20      | 22      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | BS70008 | BS70010 | BS70012 | BS70014 | BS70016 | BS70018 | BS70020 | BS70022 |

## Brass threaded fittings



**Mandatory packing applies**

For heating & sanitary applications - Material: brass CW617N or CW615N - Use flat gasket for tightness when possible - Use PTFE band or Loctite® type glue, no oakum - Tight with flat key (max. torque 3 to 4 kg/m) - **Mandatory packing:** 10 pcs up to 1", 5 pcs above.

### 90 GC - Elbow female threaded/female copper



| Ø    | 12-3/8"  | 14-3/8"  | 12-1/2"  | 14-1/2"  | 15-1/2"  | 16-1/2"  | 18-1/2"  | 14-3/4"  | 15-3/4"  | 16-3/4"  |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| box  | 400      | 400      | 360      | 360      | 300      | 300      | 200      | 200      |          | 200      |
| code | 90GC1212 | 90GC1412 | 90GC1215 | 90GC1415 | 90GC1515 | 90GC1615 | 90GC1815 | 90GC1420 | 90GC1520 | 90GC1620 |
| Ø    | 18-3/4"  | 22-3/4"  |          |          |          |          |          |          |          |          |
| box  | 200      | 150      |          |          |          |          |          |          |          |          |
| code | 90GC1820 | 90GC2220 |          |          |          |          |          |          |          |          |

### 90 GCL - Elbow female threaded/female copper



| Ø    | 12-3/8"   | 14-3/8"   | 12-1/2"   | 14-1/2"   | 15-1/2"   | 16-1/2"   |
|------|-----------|-----------|-----------|-----------|-----------|-----------|
| code | 90GC1212L | 90GC1214L | 90GC1512L | 90GC1514L | 90GC1515L | 90GC1516L |

### 92 GC - Elbow male threaded/female copper



| Ø    | 12-3/8"  | 14-3/8"  | 12-1/2"  | 14-1/2"  | 15-1/2"  | 16-1/2"  | 18-1/2"  | 16-3/4"  | 18-3/4"  | 22-3/4"  | 22-1"    |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| box  | 480      | 480      | 450      | 450      | 450      | 360      | 250      | 200      | 200      | 170      | 120      |
| code | 92GC1212 | 92GC1412 | 92GC1215 | 92GC1415 | 92GC1515 | 92GC1615 | 92GC1815 | 92GC1620 | 92GC1820 | 92GC2220 | 92GC2226 |

### 130 GC - Tee center female threaded/female copper



| Ø    | 12-3/8"-12  | 14-3/8"-14  | 12-1/2"-12  | 14-1/2"-14  | 15-1/2"-15  | 16-1/2"-16  | 18-1/2"-18  | 22-1/2"-22  |
|------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| box  | 300         | 250         | 250         | 200         | 180         | 180         | 150         | 120         |
| code | 130GC121212 | 130GC141214 | 130GC121512 | 130GC141514 | 130GC151515 | 130GC161516 | 130GC181518 | 130GC221522 |

### 243 GC - Welding socket male threaded/female copper



| Ø    | 10-3/8"   | 12-3/8"   | 14-3/8"   | 16-3/8"   | 10-1/2"   | 12-1/2"   | 14-1/2"   | 12-1/2"-B.14.5 | 14-1/2"-B.14.5 | 15-1/2"   | 16-1/2"   |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------------|----------------|-----------|-----------|
| box  | 750       | 750       | 750       | 750       | 500       | 500       | 500       | 500            | 500            | 500       | 500       |
| code | 243GC1012 | 243GC1212 | 243GC1412 | 243GC1612 | 243GC1015 | 243GC1215 | 243GC1415 | 243GC1215G     | 243GC1415G     | 243GC1515 | 243GC1615 |
| Ø    | 18-1/2"   | 14-3/4"   | 15-3/4"   | 16-3/4"   | 18-3/4"   | 20-3/4"   | 22-3/4"   | 28-3/4"        | 18-1"          | 22-1"     | 28-1"     |
| box  | 500       | 350       | 350       | 350       | 350       | 400       | 300       | 220            | 200            | 200       | 180       |
| code | 243GC1815 | 243GC1420 | 243GC1520 | 243GC1620 | 243GC1820 | 243GC2020 | 243GC2220 | 243GC2820      | 243GC1826      | 243GC2226 | 243GC2826 |
| Ø    | 32-1"     | 28-1"1/4  | 32-1"1/4  | 35-1"1/4  | 36-1"1/4  | 32-1"1/2  | 36-1"1/2  | 40-1"1/2       | 42-1"1/2       | 52-2"     | 54-2"     |
| box  | 160       | 100       | 100       | 120       | 120       | 100       | 100       | 70             | 70             | 40        | 40        |
| code | 243GC3226 | 243GC2833 | 243GC3233 | 243GC3533 | 243GC3633 | 243GC3240 | 243GC3640 | 243GC4040      | 243GC4240      | 243GC5250 | 243GC5450 |

### 270 GC - Welding socket female threaded/female copper



| Ø    | 10-3/8"   | 12-3/8"   | 14-3/8"   | 12-1/2"   | 14-1/2"   | 15-1/2"   | 16-1/2"   | 18-1/2"   | 14-3/4"   | 15-3/4"   |  |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|--|
| box  | 700       | 700       | 700       | 700       | 700       | 540       | 540       | 500       | 400       | 400       |  |
| code | 270GC1012 | 270GC1212 | 270GC1412 | 270GC1215 | 270GC1415 | 270GC1515 | 270GC1615 | 270GC1815 | 270GC1420 | 270GC1520 |  |
| Ø    | 16-3/4"   | 18-3/4"   | 20-3/4"   | 22-3/4"   | 28-3/4"   | 18-1"     | 22-1"     | 28-1"     | 32-1"     | 28-1"1/4  |  |
| box  | 400       | 300       | 100       | 300       | 160       | 300       | 160       | 160       | 100       | 80        |  |
| code | 270GC1620 | 270GC1820 | 270GC2020 | 270GC2220 | 270GC2820 | 270GC1826 | 270GC2226 | 270GC2826 | 270GC3226 | 270GC2833 |  |
| Ø    | 32-1"1/4  | 35-1"1/4  | 36-1"1/4  | 32-1"1/2  | 36-1"1/2  | 40-1"1/2  | 42-1"1/2  | 52-2"     | 54-2"     |           |  |
| box  | 80        | 80        | 80        | 80        | 80        | 80        | 80        | 42        | 16        |           |  |
| code | 270GC3233 | 270GC3533 | 270GC3633 | 270GC3240 | 270GC3640 | 270GC4040 | 270GC4240 | 270GC5250 | 270GC5450 |           |  |



### 359 GC - 2 piece union female threaded/female copper

| Ø    | 10-3/8"   | 12-3/8"   | 10-1/2"   | 12-1/2"   | 14-1/2"   | 15-1/2"   | 12-3/4"   | 14-3/4"   | 16-3/4"   | 18-3/4"   | 20-3/4"   |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 720       | 720       | 600       | 600       | 600       | 600       | 400       | 400       | 300       | 300       | 300       |
| code | 359GC1012 | 359GC1212 | 359GC1015 | 359GC1215 | 359GC1415 | 359GC1515 | 359GC1220 | 359GC1420 | 359GC1620 | 359GC1820 | 359GC2020 |

| Ø    | 18-1"     | 20-1"     | 22-1"     | 28-1"1/4" | 32-1"1/4" | 36-1"1/2" | 40-2"     |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 200       | 200       | 100       | 80        | 80        | 80        | 30        |
| code | 359GC1826 | 359GC2026 | 359GC2226 | 359GC2833 | 359GC3233 | 359GC3640 | 359GC4050 |



### 340 CU - Welding union female copper 2 ends

| Ø    | 10      | 12      | 14      | 16      | 18      | 20      | 22      | 28      | 32      | 40      | 42      | 52      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code | 340CU10 | 340CU12 | 340CU14 | 340CU16 | 340CU18 | 340CU20 | 340CU22 | 340CU28 | 340CU32 | 340CU40 | 340CU42 | 340CU52 |



### 340 GC - Welding union female threaded/female copper - Metal/metal, conical bearing

| Ø    | 10-3/8"   | 12-3/8"   | 14-3/8"   | 12-1/2"   | 14-1/2"   | 15-1/2"   | 16-1/2"   | 18-1/2"   | 14-3/4"   | 15-3/4"   |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  |           |           | 300       | 260       | 250       | 320       | 200       | 150       | 200       | 200       |
| code | 340GC1012 | 340GC1212 | 340GC1412 | 340GC1215 | 340GC1415 | 340GC1515 | 340GC1615 | 340GC1815 | 340GC1420 | 340GC1520 |

| Ø    | 16-3/4"   | 18-3/4"   | 20-3/4"   | 22-3/4"   | 28-3/4"   | 22-1"     | 28-1"     | 32-1"     | 28-1"1/4" | 32-1"1/4" |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 160       | 160       |           | 100       |           | 100       | 50        | 40        | 60        | 30        |
| code | 340GC1620 | 340GC1820 | 340GC2020 | 340GC2220 | 340GC2820 | 340GC2226 | 340GC2826 | 340GC3226 | 340GC2833 | 340GC3233 |

| Ø    | 35-1"1/4" | 36-1"1/4" | 40-1"1/4" | 32-1"1/2" | 40-1"1/2" | 42-1"1/2" | 52-2"     | 54-2"     |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 50        | 50        | 50        | 20        | 20        | 20        | 15        | 15        |
| code | 340GC3533 | 340GC3633 | 340GC4033 | 340GC3240 | 340GC4040 | 340GC4240 | 340GC5250 | 340GC5450 |



### 341 GC - Welding union male threaded/female copper - Metal/metal, conical bearing

| Ø    | 10-3/8"   | 12-3/8"   | 12-1/2"   | 14-1/2"   | 15-1/2"   | 16-1/2"   | 18-1/2"   | 14-3/4"   | 15-3/4"   | 16-3/4"   |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 400       | 400       | 200       | 300       | 320       | 300       | 200       | 200       | 200       | 200       |
| code | 341GC1012 | 341GC1212 | 341GC1215 | 341GC1415 | 341GC1515 | 341GC1615 | 341GC1815 | 341GC1420 | 341GC1520 | 341GC1620 |

| Ø    | 18-3/4"   | 20-3/4"   | 22-3/4"   | 22-1"     | 28-1"     | 32-1"     | 28-1"1/4" | 32-1"1/4" | 35-1"1/4" | 36-1"1/4" |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 200       | 200       | 150       | 150       | 70        | 50        | 50        | 50        | 50        | 50        |
| code | 341GC1820 | 341GC2020 | 341GC2220 | 341GC2226 | 341GC2826 | 341GC3226 | 341GC2833 | 341GC3233 | 341GC3533 | 341GC3633 |

| Ø    | 40-1"1/4" | 32-1"1/2" | 40-1"1/2" | 42-1"1/2" | 52-2"     | 54-2"     |
|------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 50        | 50        | 30        | 20        | 10        | 15        |
| code | 341GC4033 | 341GC3240 | 341GC4040 | 341GC4240 | 341GC5250 | 341GC5450 |



### 331 GC - Welding union with flat bearing & flat gasket - Male threaded/female copper

| Ø    | 10-3/8"   | 12-3/8"   | 14-3/8"   | 12-1/2"   | 14-1/2"   | 16-1/2"   | 18-1/2"   | 14-3/4"   | 16-3/4"   | 18-3/4"   |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| code | 331GC1012 | 331GC1212 | 331GC1412 | 331GC1215 | 331GC1415 | 331GC1615 | 331GC1815 | 331GC1420 | 331GC1620 | 331GC1820 |

| Ø    | 20-3/4"   | 22-3/4"   | 18-1"     | 20-1"     | 22-1"     | 28-1"     | 28-1"1/4" | 36-1"1/2" |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| code | 331GC2020 | 331GC2220 | 331GC1826 | 331GC2026 | 331GC2226 | 331GC2826 | 331GC2833 | 331GC3640 |



### 96 GCU - Elbow union female threaded/female copper

| Ø    | 12-3/8"   | 14-3/8"   | 14-1/2"   | 15-1/2"   | 16-1/2"   | 15-3/4"   | 16-3/4"   | 18-3/4"   | 22-3/4"   | 22-1"     | 28-1"     |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 120       | 120       | 120       | 120       | 120       | 120       | 120       | 120       | 120       | 120       | 60        |
| code | 96GCU1212 | 96GCU1412 | 96GCU1415 | 96GCU1515 | 96GCU1615 | 96GCU1520 | 96GCU1620 | 96GCU1820 | 96GCU2220 | 96GCU2226 | 96GCU2826 |



### 98 GCU - Elbow union male threaded/female copper

| Ø    | 12-3/8"   | 14-3/8"   | 14-1/2"   | 15-1/2"   | 16-1/2"   | 15-3/4"   | 16-3/4"   | 18-3/4"   | 22-3/4"   | 22-1"     | 28-1"     |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 120       | 120       | 120       | 120       | 120       | 120       | 120       | 120       | 120       | 96        | 96        |
| code | 98GCU1212 | 98GCU1412 | 98GCU1415 | 98GCU1515 | 98GCU1615 | 98GCU1520 | 98GCU1620 | 98GCU1820 | 98GCU2220 | 98GCU2226 | 98GCU2826 |



### 359 GCL - 2 piece socket copper/brass - Flat bearing



| Ø    | 10-3/8"    | 12-3/8"    | 14-3/8"    | 12-1/2"    | 14-1/2"    | 15-1/2"    | 16-1/2"    | 18-1/2"    | 14-3/4"    | 15-3/4"    |
|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| box  | 800        | 800        | 800        | 500        | 500        | 500        | 500        | 500        | 400        | 400        |
| code | 359GCL1012 | 359GCL1212 | 359GCL1412 | 359GCL1215 | 359GCL1415 | 359GCL1515 | 359GCL1615 | 359GCL1815 | 359GCL1420 | 359GCL1520 |

| Ø    | 16-3/4"    | 18-3/4"    | 20-3/4"    | 22-3/4"    | 22-1"      | 28-1"      | 28-1"1/4"  | 32-1"1/4"  | 40-1"1/4"  | 42-1"1/2"  |
|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| box  | 400        | 400        | 300        | 300        | 200        | 200        | 100        | 100        | 60         | 60         |
| code | 359GCL1620 | 359GCL1820 | 359GCL2020 | 359GCL2220 | 359GCL2226 | 359GCL2826 | 359GCL3228 | 359GCL3233 | 359GCL4040 | 359GCL4042 |



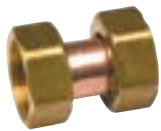
### 5002 GC - 2 piece elbow copper/brass - Flat bearing



| Ø    | 12-3/8"    | 14-3/8"    | 12-1/2"    | 14-1/2"    | 15-1/2"    | 16-1/2"    | 14-3/4"    | 15-3/4"    | 16-3/4"    | 18-3/4"    |
|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| box  | 500        | 400        | 500        | 400        | 400        | 400        | 250        | 200        | 250        | 250        |
| code | 5002GC1212 | 5002GC1412 | 5002GC1215 | 5002GC1415 | 5002GC1515 | 5002GC1615 | 5002GC1420 | 5002GC1520 | 5002GC1620 | 5002GC1820 |

| Ø    | 22-3/4"    | 22-1"      | 28-1"      |
|------|------------|------------|------------|
| box  | 200        | 100        | 100        |
| code | 5002GC2220 | 5002GC2226 | 5002GC2826 |



### R 80 - Equal socket female/female - Flat bearing

| Ø    | 3/8"  | 1/2"  | 3/4"  | 1"    |
|------|-------|-------|-------|-------|
| box  | 300   | 500   | 200   | 100   |
| code | R8012 | R8015 | R8020 | R8026 |



### R 81 - Reduced socket female/female - Flat bearing

| Ø    | 1/2"-3/8" | 3/4"-1/2" |
|------|-----------|-----------|
| box  | 100       | 100       |
| code | R811512   | R812015   |



### CR 80 - Equal elbow female/female - Flat bearing

| Ø    | 1/2"-1/2" | 3/4"-3/4" | 1"-1"  |
|------|-----------|-----------|--------|
| box  | 400       | 200       | 100    |
| code | CR8015    | CR8020    | CR8026 |



### CR 80 - Reduced elbow female/female - Flat bearing

| Ø    | 3/4"-1/2" |
|------|-----------|
| box  | 200       |
| code | CR802015  |



### 90 G - Elbow female/female

| Ø    | 1/4"  | 3/8"  | 1/2"  | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"    |
|------|-------|-------|-------|-------|-------|--------|--------|-------|
| box  | 300   | 300   | 170   | 100   | 50    | 30     | 20     | 12    |
| code | 90G08 | 90G12 | 90G15 | 90G20 | 90G26 | 90G33  | 90G40  | 90G50 |



### 92 G - Elbow male/female

| Ø    | 1/8"  | 1/4"  | 3/8"  | 1/2"  | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"    |
|------|-------|-------|-------|-------|-------|-------|--------|--------|-------|
| box  | 1 000 | 300   | 200   | 180   | 80    | 50    | 25     | 15     | 10    |
| code | 92G05 | 92G08 | 92G12 | 92G15 | 92G20 | 92G26 | 92G33  | 92G40  | 92G50 |



### 92 G - Compact elbow male/female

| Ø    | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" |
|------|--------|--------|--------|--------|--------|
| box  | 600    | 400    | 200    | 120    | 60     |
| code | 92G12C | 92G15C | 92G20C | 92G26C | 92G33C |



### 92 G - Reduced elbow female/male

| Ø    | 3/4"-1/2" |
|------|-----------|
| box  | 300       |
| code | 92G2015   |



### 94 G - Elbow male

| Ø    | 1/4"  | 10-3/8" | 12-1/2" | 14-1/2" | 16-3/4" | 18-3/4" | 1"    |
|------|-------|---------|---------|---------|---------|---------|-------|
| box  | 1000  | 500     | 300     | 250     | 170     | 170     | 100   |
| code | 94G08 | 94G1012 | 94G1215 | 94G1415 | 94G1620 | 94G1820 | 94G26 |



### 94 G - Reduced elbow male

| Ø    | 1/2"-3/8" |
|------|-----------|
| box  | 400       |
| code | 94G1512R  |

## 130 G - Tee female



| Ø    | 1/8"   | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| box  | 800    | 300    | 200    | 180    | 50     | 40     | 20     | 15     | 10     |
| code | 130G05 | 130G08 | 130G12 | 130G15 | 130G20 | 130G26 | 130G33 | 130G40 | 130G50 |

## 130 G - Reduced tee female



| Ø    | 1 1/4"-3/4"-1 1/4" |
|------|--------------------|
| box  | 20                 |
| code | 130G332033         |

## 135 G - Tee male



| Ø    | 1/4"   | 10-3/8"  | 12-1/2"  | 14-1/2"  | 16-3/4"  | 18-3/4"  | 1"     |
|------|--------|----------|----------|----------|----------|----------|--------|
| box  | 700    | 300      | 300      | 300      | 120      | 120      | 50     |
| code | 135G08 | 135G1012 | 135G1215 | 135G1415 | 135G1620 | 135G1820 | 135G26 |

## Tee 3/4 male/male/female



| Ø    | 3/4"  |
|------|-------|
| box  | 100   |
| code | ZTMMF |

## Chrome-plated tee 3/4 male/male/female



| Ø    | 3/4"   |
|------|--------|
| box  | 80     |
| code | ZTMMFN |

## 180 G - Cross female



| Ø    | 1/2"   | 3/4"   | 1"     |
|------|--------|--------|--------|
| box  | 80     | 50     | 30     |
| code | 180G15 | 180G20 | 180G26 |

## 270 R - Nipple



| Ø    | 3/8"   | 1/2"   | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|--------|
| box  | 700    | 450    | 300    | 130    | 90     | 70     | 40     |
| code | 270R12 | 270R15 | 270R20 | 270R26 | 270R33 | 270R40 | 270R50 |

## 280 G - Equal nipple male



| Ø    | 1/8"   | 1/4"   | 3/8"   | 1/2"   | 1/2" B. 14.5 | 3/4"   | 1"     | 1 1/4" | 1 1/2" | 2"     |
|------|--------|--------|--------|--------|--------------|--------|--------|--------|--------|--------|
| box  | 2 000  | 1 500  | 900    | 500    | 500          | 300    | 150    | 100    | 70     | 40     |
| code | 280G05 | 280G08 | 280G12 | 280G15 | 280G15G      | 280G20 | 280G26 | 280G33 | 280G40 | 280G50 |

| Ø    | 2 1/2" | 3"     |
|------|--------|--------|
| box  | 40     | 40     |
| code | 280G65 | 280G80 |

## 280 GR - Multi threaded fitting (sold by 2)



| Ø    | M3/4"-F1/2" & M3/4"-M1/2" |
|------|---------------------------|
| code | 280GR2015                 |

## 245 G - Reduced nipple male



| Ø    | 1/4"-1/8" | 3/8"-1/8" | 3/8"-1/4" | 1/2"-1/8" | 1/2"-1/4" | 1/2"-3/8" | 3/4"-3/8" | 3/4"-1/2" | 1"-1/2"  | 1"-3/4"  |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|
| box  | 1 800     | 1 000     | 1 000     | 650       | 650       | 550       | 400       | 350       | 250      | 180      |
| code | 245G0805  | 245G1205  | 245G1208  | 245G1505  | 245G1508  | 245G1512  | 245G2012  | 245G2015  | 245G2615 | 245G2620 |

| Ø    | 1 1/4"-3/4" | 1 1/4"-1" | 1 1/2"-1" | 1 1/2"-1 1/4" | 2"-1 1/4" | 2"-1 1/2" | 2 1/2"-2" |
|------|-------------|-----------|-----------|---------------|-----------|-----------|-----------|
| box  | 120         | 100       | 80        | 80            | 50        | 60        | 30        |
| code | 245G3320    | 245G3326  | 245G4026  | 245G4033      | 245G5033  | 245G5040  | 245G6550  |

## 374 G - Nut female



| Ø    | 10-3/8"  | 12-3/8"  | 10-1/2"  | 12-1/2"  | 14-1/2"  | 15-1/2"  | 16-1/2"  | 12-3/4"  | 14-3/4"  | 16-3/4"  |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| box  | 1 000    | 1 000    |          | 700      | 700      | 700      | 700      | 450      | 450      | 450      |
| code | 374G1012 | 374G1212 | 374G1015 | 374G1215 | 374G1415 | 374G1515 | 374G1615 | 374G1220 | 374G1420 | 374G1620 |

| Ø    | 18-3/4"  | 20-3/4"  | 22-3/4"  | 18-1"    | 20-1"    | 22-1"    | 26-1"    | 28-1 1/4" | 32-1 1/4" | 42-1 1/2" |
|------|----------|----------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
| box  | 450      | 450      | 450      | 250      | 250      | 250      | 250      | 150       | 150       | 150       |
| code | 374G1820 | 374G2020 | 374G2220 | 374G1826 | 374G2026 | 374G2226 | 374G2626 | 374G2833  | 374G3233  | 374G4240  |

## 169 G - Nut



| Ø    | 3/8"   | 1/2"   | 3/4"   | 1"     |
|------|--------|--------|--------|--------|
| box  | 1 600  | 1 500  | 1 000  | 1 000  |
| code | 169G12 | 169G15 | 169G20 | 169G26 |

## 169 GL - Lock nut



| Ø    | 3/8"    | 1/2"    | 3/4"    | 1"      |
|------|---------|---------|---------|---------|
| box  | 900     | 620     | 350     | 220     |
| D    | 30      | 35      | 45      | 54      |
| code | 169GL12 | 169GL15 | 169GL20 | 169GL26 |



### 280 GL - Extension male/male

| Ø    | 3/8"    | 1/2"    | 3/4"    | 1"      |
|------|---------|---------|---------|---------|
| box  | 400     | 250     | 140     | 80      |
| L    | 40      | 40      | 40      | 40      |
| code | 280GL12 | 280GL15 | 280GL20 | 280GL26 |



### 246 EL - Extension male/female

| Ø    | 3/8"    | 1/2"    | 3/4"    | 1"      |
|------|---------|---------|---------|---------|
| box  | 350     | 250     | 150     | 90      |
| L    | 40      | 40      | 40      | 40      |
| code | 246EL12 | 246EL15 | 246EL20 | 246EL26 |

### RD - Straight extension



| Ø    | 3/8"    | 3/8"    | 3/8"    | 3/8"    | 1/2"    | 1/2"    | 1/2"    | 1/2"    | 3/4"    | 3/4"    | 3/4"    | 3/4"    |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| L    | 25      | 50      | 75      | 100     | 25      | 50      | 75      | 100     | 25      | 50      | 75      | 100     |
| code | RD02512 | RD05012 | RD07512 | RD10012 | RD02515 | RD05015 | RD07515 | RD10015 | RD02520 | RD05020 | RD07520 | RD10020 |

### Elbow union - Conical bearing



| Ø    | 3/8" | 1/2" | 3/4" | 1"   | 1"1/4* | 1"1/2* | 2"*  |
|------|------|------|------|------|--------|--------|------|
| box  | 80   | 70   | 60   | 40   | 25     | 24     | 12   |
| code | CU12 | CU15 | CU20 | CU26 | CU33   | CU40   | CU50 |

\* with o-ring

### Elbow union - Nickel plated - Conical bearing



| Ø    | 1/2"  | 3/4"  | 1"    |
|------|-------|-------|-------|
| box  | 70    | 60    | 40    |
| code | CU15N | CU20N | CU26N |

### Union fitting - Conical bearing



| Ø    | 3/8" | 1/2" | 3/4" | 1"   | 1"1/4* | 1"1/2* | 2"*  |
|------|------|------|------|------|--------|--------|------|
| box  | 160  | 180  | 90   | 60   | 40     | 20     | 10   |
| code | RU12 | RU15 | RU20 | RU26 | RU33   | RU40   | RU50 |

\* with o-ring

### Union fitting - Nickel plated - Conical bearing



| Ø    | 1/2"  | 3/4"  | 1"    |
|------|-------|-------|-------|
| box  | 180   | 90    | 60    |
| code | RU15N | RU20N | RU26N |

### Elbow union - Flat bearing & gasket



| Ø    | 3/8"   | 1/2"   | 3/4"   | 1"     |
|------|--------|--------|--------|--------|
| box  | 20     | 20     | 20     | 8      |
| code | CU12PP | CU15PP | CU20PP | CU26PP |

### 2 piece fitting female/female



| Ø    | 1"-1/2"  | 1"1/4-3/4" | 1"1/2-1" | 2"-1"1/4" |
|------|----------|------------|----------|-----------|
| box  | 10       | 10         | 10       | 10        |
| code | ZRU2615F | ZRU3320F   | ZRU4026F | ZRU5033F  |

### Union fitting female/female - Conical bearing



| Ø    | 3/8"  | 1/2"  | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"    |
|------|-------|-------|-------|-------|--------|--------|-------|
| box  | 120   | 120   | 120   | 48    | 36     | 30     | 24    |
| code | RU12F | RU15F | RU20F | RU26F | RU33F  | RU40F  | RU50F |

### 2 piece fitting female/male - Flat bearing



| Ø    | 1/2"-3/8" | 3/4"-1/2" | 1"-1/2" | 1"-3/4" | 1"-1"   | 1"1/4-3/4" | 1"1/4-1" |
|------|-----------|-----------|---------|---------|---------|------------|----------|
| code | ZRU1512   | ZRU2015   | ZRU2615 | ZRU2620 | ZRU2626 | ZRU3320    | ZRU3326  |

### 300 G - Female cap



| Ø    | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| box  | 1 500  | 1 000  | 750    | 400    | 250    | 140    | 100    | 60     |
| code | 300G08 | 300G12 | 300G15 | 300G20 | 300G26 | 300G33 | 300G40 | 300G50 |

### 292 G - Male cap



| Ø    | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| box  | 1 500  | 1 500  | 800    | 320    | 200    | 100    | 80     | 50     |
| code | 292G08 | 292G12 | 292G15 | 292G20 | 292G26 | 292G33 | 292G40 | 292G50 |

### 199 G - Reduced nut female/male



| Ø    | 1/2"-3/8" | 3/4"-3/8" | 3/4"-1/2" | 1"-1/2"  | 1"-3/4"  | 1"-1/4-1" | 1"1/2-1"1/4" |
|------|-----------|-----------|-----------|----------|----------|-----------|--------------|
| box  | 1 000     | 1 000     | 1 000     | 1 000    | 600      | 350       | 200          |
| code | 199G1512  | 199G2012  | 199G2015  | 199G2615 | 199G2620 | 199G3326  | 199G4033     |



### 241 G - Reduced nipple female/male

| Ø    | 1/4"-1/8" | 3/8"-1/8" | 3/8"-1/4" | 1/2"-1/8" | 1/2"-1/4" | 1/2"-3/8" | 3/4"-3/8" | 3/4"-1/2" | 1"-1/2"  | 1"-3/4"  |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|
| box  | 2 200     | 1 500     | 1 500     | 1 000     | 1 000     | 750       | 750       | 500       | 300      | 450      |
| code | 241G0805  | 241G1205  | 241G1208  | 241G1505  | 241G1508  | 241G1512  | 241G2012  | 241G2015  | 241G2615 | 241G2620 |

| Ø    | 1"1/4-3/4" | 1"1/4-1" | 1"1/2-1" | 1"1/2-1"1/4" | 2"-1"1/4" | 2"-1"1/2" | 2"1/2-2" |
|------|------------|----------|----------|--------------|-----------|-----------|----------|
| box  | 150        | 120      | 120      | 100          | 75        | 75        | 40       |
| code | 241G3320   | 241G3326 | 241G4026 | 241G4033     | 241G5033  | 241G5040  | 241G6550 |



### 240 G - Reduced socket female

| Ø    | 1/4"-1/8" | 3/8"-1/4" | 1/2"-1/4" | 1/2"-3/8" | 3/4"-3/8" | 3/4"-1/2" | 1"-3/8"  | 1"-1/2"  | 1"-3/4"  | 1"1/4-3/4" |
|------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|------------|
| box  | 720       | 720       | 550       | 500       | 400       | 400       | 200      | 200      | 200      | 100        |
| code | 240G0805  | 240G1208  | 240G1508  | 240G1512  | 240G2012  | 240G2015  | 240G2612 | 240G2615 | 240G2620 | 240G3320   |

| Ø    | 1"1/4-1" | 1"1/2-1" | 1"1/2-1"1/4" | 2"-1"1/2" |
|------|----------|----------|--------------|-----------|
| box  | 100      | 100      | 100          | 100       |
| code | 240G3326 | 240G4026 | 240G4033     | 240G5040  |



### 270 G - Equal socket with thrust female

| Ø    | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|--------|
| box  | 1 000  | 400    | 300    | 200    | 100    | 60     | 36     |
| code | 270G12 | 270G15 | 270G20 | 270G26 | 270G33 | 270G40 | 270G50 |



### 272 G - Equal socket female

| Ø    | 1/8"   | 1/4"   | 3/8"   | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| box  | 1 000  | 1 000  | 1 000  | 400    | 300    | 200    | 100    | 80     | 40     |
| code | 272G05 | 272G08 | 272G12 | 272G15 | 272G20 | 272G26 | 272G33 | 272G40 | 272G50 |



### 246 E - Equal nipple male/female

| Ø    | 1/8"   | 1/4"   | 3/8"   | 1/2"   | 1/2"Al.14.5 | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     | 2"1/2" | 3"     |
|------|--------|--------|--------|--------|-------------|--------|--------|--------|--------|--------|--------|--------|
| box  | 1 000  | 1 000  | 1 000  | 500    | 500         | 300    | 200    | 100    | 80     | 50     | 20     | 20     |
| code | 246E05 | 246E08 | 246E12 | 246E15 | 246E15G     | 246E20 | 246E26 | 246E33 | 246E40 | 246E50 | 246E65 | 246E80 |



### 246 G - Reduced nipple male/female

| Ø    | 1/4"-1/8" | 3/8"-1/8" | 3/4"-1/4" | 1/2"-1/4" | 1/2"-3/8" | 3/4"-3/8" | 3/4"-1/2" | 1"-3/8"  | 1"-1/2"  | 1"-3/4"  |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|----------|
| box  | 900       | 200       | 650       | 650       | 650       | 450       | 350       | 130      | 300      | 200      |
| code | 246G0805  | 246G1205  | 246G1208  | 246G1508  | 246G1512  | 246G2012  | 246G2015  | 246G2612 | 246G2615 | 246G2620 |

| Ø    | 1"1/4-3/4" | 1"1/4-1" | 1"1/2-1" | 1"1/2-1"1/4" | 2"-1"    | 2"-1"1/4" | 2"-1"1/2" | 2"1/2-2" |
|------|------------|----------|----------|--------------|----------|-----------|-----------|----------|
| box  | 100        | 100      | 100      | 90           | 50       | 50        | 50        | 50       |
| code | 246G3320   | 246G3326 | 246G4026 | 246G4033     | 246G5026 | 246G5033  | 246G5040  | 246G6550 |



### 243 G - Nipple male/reduced female

| Ø    | 1/4"-1/8" | 3/8"-1/8" | 3/8"-1/4" | 1/2"-1/4" | 1/2"-3/8" | 3/4"-3/8" | 3/4"-1/2" | 1"-1/2"  | 1"-3/4"  | 1"1/4-3/4" |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|----------|----------|------------|
| box  | 1 000     | 750       | 750       | 750       | 750       | 450       | 350       | 250      | 250      | 150        |
| code | 243G0805  | 243G1205  | 243G1208  | 243G1508  | 243G1512  | 243G2012  | 243G2015  | 243G2615 | 243G2620 | 243G3320   |

| Ø    | 1"1/4-1" | 1"1/2-1" | 1"1/2-1"1/4" | 2"-1"1/4" | 2"-1"1/2" | 2"1/2-2" |
|------|----------|----------|--------------|-----------|-----------|----------|
| box  | 150      | 100      | 80           | 50        | 50        | 50       |
| code | 243G3326 | 243G4026 | 243G4033     | 243G5033  | 243G5040  | 243G6550 |



### Wall connection elbow 1/2" female/female copper

| Ø    | 12      | 14      | 16      |
|------|---------|---------|---------|
| box  | 300     | 300     | 250     |
| code | AMS1512 | AMS1514 | AMS1516 |



### Wall connection

| Ø    | 1/2" | 12*  | 14*  |
|------|------|------|------|
| code | AM   | AM12 | AM14 |

\* with nut & gasket

## Chrome-plated threaded fittings



**Mandatory packing applies**

For sanitary applications - Material: chrome plated brass CW617N or CW615N - Use flat gasket for tightness when possible - Use PTFE band or Loctite® type glue, no oakum - Tight with flat key (max. torque 3 to 4 kg/m) - **Mandatory packing:** 10 pcs up to 1", 5 pcs above.

### 280 GCH - Equal nipple male



| Ø    | 3/8"     | 1/2"     | 3/4"     | 1"       |
|------|----------|----------|----------|----------|
| box  | 400      | 250      | 300      | 150      |
| code | 280G12CH | 280G15CH | 280G20CH | 280G26CH |

### 245 GCH - Reduced nipple male



| Ø    | 1/2"-3/8"  | 3/4"-1/2"  | 1"-3/4"    |
|------|------------|------------|------------|
| box  | 550        | 300        | 130        |
| code | 245G1512CH | 245G2015CH | 245G2620CH |

### 374 GCH - Nut female



| Ø    | 10-3/8"    | 12-3/8"    | 12-1/2"    | 14-1/2"    | 16-1/2"    | 14-3/4"    | 16-3/4"    | 18-3/4"    |
|------|------------|------------|------------|------------|------------|------------|------------|------------|
| box  | 500        | 500        | 350        | 500        | 500        | 450        | 450        | 350        |
| code | 374G1012CH | 374G1212CH | 374G1215CH | 374G1415CH | 374G1615CH | 374G1420CH | 374G1620CH | 374G1820CH |

### 300 GCH - Female cap



| Ø    | 3/8"     | 1/2"     | 3/4"     |
|------|----------|----------|----------|
| box  | 300      | 400      | 350      |
| code | 300G12CH | 300G15CH | 300G20CH |

### 292 GCH - Male cap



| Ø    | 3/8"     | 1/2"     | 3/4"     |
|------|----------|----------|----------|
| box  | 500      | 450      | 250      |
| code | 292G12CH | 292G15CH | 292G20CH |

### 270 GCH - Equal socket with thrust female



| Ø    | 3/8"     | 1/2"     | 3/4"     |
|------|----------|----------|----------|
| box  | 300      | 200      | 200      |
| code | 270G12CH | 270G15CH | 270G20CH |

### 240 GCH - Reduced socket female



| Ø    | 1/2"-3/8"  | 3/4"-1/2"  |
|------|------------|------------|
| box  | 250        | 200        |
| code | 240G1512CH | 240G2015CH |

### 243 GCH - Nipple male/reduced female



| Ø    | 1/2"-3/8"  | 3/4"-1/2"  |
|------|------------|------------|
| box  | 300        | 300        |
| code | 243G1512CH | 243G2015CH |

### 246 ECH - Equal nipple male/female



| Ø    | 3/8"     | 1/2"     | 3/4"     | 1"       |
|------|----------|----------|----------|----------|
| box  | 250      | 250      | 200      | 150      |
| code | 246E12CH | 246E15CH | 246E20CH | 246E26CH |

### 241 GCH - Reduced nipple female/male



| Ø    | 1/2"-3/8"  | 3/4"-1/2"  | 1"-3/4"    |
|------|------------|------------|------------|
| box  | 250        | 300        | 250        |
| code | 241G1512CH | 241G2015CH | 241G2620CH |

### 246 GCH - Reduced nipple male/female



| Ø    | 1/2"-3/8"  | 3/4"-1/2"  | 1"-3/4"    |
|------|------------|------------|------------|
| box  | 300        | 200        | 200        |
| code | 246G1512CH | 246G2015CH | 246G2620CH |

### 199 GCH - Nut reduced female/male



| Ø    | 1/2"-3/8"  | 3/4"-1/2"  | 1"-3/4"    |
|------|------------|------------|------------|
| box  | 400        | 350        | 300        |
| code | 199G1512CH | 199G2015CH | 199G2620CH |

### Wall connection



| Ø    | 1/2" | 12*   | 14*   |
|------|------|-------|-------|
| code | AMC  | AMC12 | AMC14 |

\* with nut & gasket

### 90 GCH - Elbow female/female



| Ø    | 3/8"    | 1/2"    | 3/4"    | 1"      |
|------|---------|---------|---------|---------|
| box  |         |         |         |         |
| code | 90G12CH | 90G15CH | 90G20CH | 90G26CH |

### 92 GCH - Elbow male/female



| Ø    | 3/8"    | 1/2"    | 3/4"    | 1"      |
|------|---------|---------|---------|---------|
| box  | 600     | 350     | 250     | 120     |
| code | 92G12CH | 92G15CH | 92G20CH | 92G26CH |

### 130 GCH - Tee female



| Ø    | 3/8"     | 1/2"     | 3/4"     | 1"       |
|------|----------|----------|----------|----------|
| box  |          |          |          |          |
| code | 130G12CH | 130G15CH | 130G20CH | 130G26CH |

### 270 RCH - Nipple



| Ø    | 3/8"     | 1/2"     | 3/4"     |
|------|----------|----------|----------|
| box  | 700      | 450      | 300      |
| code | 270R12CH | 270R15CH | 270R20CH |

### Straight extension



| Ø    | 3/8"      | 3/8"      | 3/8"      | 3/8"      | 1/2"      | 1/2"      | 1/2"      | 1/2"      | 3/4"      | 3/4"      | 3/4"      | 3/4"      |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| box  | 320       | 240       | 160       | 80        | 192       | 144       | 96        | 48        | 128       | 96        | 64        | 32        |
| L    | 25        | 50        | 75        | 100       | 25        | 50        | 75        | 100       | 25        | 50        | 75        | 100       |
| code | RD02512CH | RD05012CH | RD07512CH | RD10012CH | RD02515CH | RD05015CH | RD07515CH | RD10015CH | RD02520CH | RD05020CH | RD07520CH | RD10020CH |



## Brass fittings for PE pipes

Material: brass CW617N - Agreement: DIN 8076-1 - Excluded from 2014/68/EU directive (article 1, §2.b) - PS: 16 bar up to Ø 63, 10 bar above - TS: +4°C/+40°C - Male conical bearing - NBR o-ring.



### Male



| Ø    | 20-1/2" | 25-1/2" | 25-3/4" | 32-1"  | 40-1"1/4 | 50-1"1/2 | 63-2"  | 75-2"1/2 | 90-3"  |
|------|---------|---------|---------|--------|----------|----------|--------|----------|--------|
| code | 811420  | 811524  | 811525  | 811632 | 811740   | 811850   | 811963 | 811075   | 811090 |

### Female



| Ø    | 20-1/2" | 25-1/2" | 25-3/4" | 32-1"  | 40-1"1/4 | 50-1"1/2 | 63-2"  | 75-2"1/2 | 90-3"  |
|------|---------|---------|---------|--------|----------|----------|--------|----------|--------|
| code | 810420  | 810524  | 810525  | 810632 | 810740   | 810850   | 810963 | 810075   | 810090 |

### Equal socket



| Ø    | 20     | 25     | 32     | 40     | 50     | 63     | 75     | 90     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 813020 | 813025 | 813032 | 813040 | 813050 | 813063 | 813075 | 813090 |

### Reduced male



| Ø    | 20-3/8" | 25-1/2" | 32-3/4" | 40-1"  | 50-1"1/4 | 63x1"1/2 |
|------|---------|---------|---------|--------|----------|----------|
| code | 862320  | 862425  | 862532  | 862640 | 862750   | 862863   |

### Elbow 90° male



| Ø    | 20-1/2" | 25-3/4" | 32-1"  | 40-1"1/4 | 50-1"1/2 | 63-2"  | 75-2"1/2 |
|------|---------|---------|--------|----------|----------|--------|----------|
| code | 817420  | 817525  | 817632 | 817740   | 817850   | 817963 | 867075   |

### Elbow 90° female



| Ø    | 20-1/2" | 25-3/4" | 32-1"  | 40-1"1/4 | 50-1"1/2 | 63-2"  |
|------|---------|---------|--------|----------|----------|--------|
| code | 818420  | 818525  | 818632 | 818740   | 818850   | 818963 |

### Elbow 90° socket



| Ø    | 20     | 25     | 32     | 40     | 50     | 63     | 75     |
|------|--------|--------|--------|--------|--------|--------|--------|
| code | 816020 | 816025 | 816032 | 816040 | 816050 | 816063 | 866075 |

### Equal tee



| Ø    | 20     | 25     | 32     | 40     | 50     | 63     | 75     | 90     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 814020 | 814025 | 814032 | 814040 | 814050 | 814063 | 814075 | 814090 |

### Tee female/male



| Ø    | 20-1/2"M-3/8"F | 25-1/2"M-3/8"F | 25-3/4"M-1/2"F | 32-1"M-3/4"F | 40-1"1/4M-1"F | 50-1"1/2M-1"1/4F | 63-2"M-1"1/2F | 75-2"1/2M-2"F | 90-3"M-2"1/2F |
|------|----------------|----------------|----------------|--------------|---------------|------------------|---------------|---------------|---------------|
| code | 815420         | 815524         | 815525         | 815632       | 815740        | 815850           | 815963        | 865075        | 865090        |

### Fitting with free nut & flat gasket



| Ø    | 20-3/4" | 25-3/4" | 25-1"  | 32-1"  |
|------|---------|---------|--------|--------|
| code | 806520  | 806525  | 806625 | 806632 |

### Spare rings



| Ø    | 20     | 25     | 32     |
|------|--------|--------|--------|
| code | 498204 | 498254 | 498324 |

### Long socket for repairing



| Ø    | 25     | 32     | 40     | 50     |
|------|--------|--------|--------|--------|
| code | 807025 | 807032 | 807040 | 807050 |

### Wall connection female



| Ø    | 20-1/2" | 25-1/2" | 25-3/4" |
|------|---------|---------|---------|
| code | 819420  | 819425  | 819525  |

### Ball valve w/ free nut

After water meter



| Ø    | 25-3/4" | 25-1"  | 32-3/4" | 32-1"  |
|------|---------|--------|---------|--------|
| code | 490254  | 490264 | 490354  | 490364 |

### Ball valve w/ free nut & drain outlet

After water meter



| Ø    | 25-3/4" |
|------|---------|
| code | 491254  |

## Polyethylene pipes

### Black pipes

For underground watering and irrigation.



| Ø 20 - 6,3 bar |        |
|----------------|--------|
| length (m)     | code   |
| 25             | 005620 |
| 50             | 005720 |

| Ø 25 - 12,5 bar |        |
|-----------------|--------|
| length (m)      | code   |
| 25              | 005625 |
| 50              | 005725 |

| Ø 32 - 12,5 bar |        |
|-----------------|--------|
| length (m)      | code   |
| 25              | 005632 |
| 50              | 005732 |

### Blue strip pipes

High density - For drinking water distribution.



| Ø 20 - 16 bar |        |
|---------------|--------|
| length (m)    | code   |
| 10            | 006520 |
| 25            | 006620 |
| 50            | 006720 |

| Ø 25 - 16 bar |        |
|---------------|--------|
| length (m)    | code   |
| 10            | 006525 |
| 25            | 006625 |
| 50            | 006725 |
| 100           | 006825 |

| Ø 32 - 12,5 bar |        |
|-----------------|--------|
| length (m)      | code   |
| 10              | 005582 |
| 25              | 005682 |
| 50              | 005782 |

## Polypropylene fittings for PE pipes

Excluded from 2014/68/EU directive (article 1, §2.b) - Polypropylene body - Nylon clamping ring - NBR gasket - PS: 16 bar up to Ø 63, 10 bar above - TS: -10°C/+45°C.



### Male



| Ø    | 20-1/2" | 25-3/4" | 32-1"   | 40-1"1/4 | 50-1"1/2 | 63-2"   | 75-2"1/2 |
|------|---------|---------|---------|----------|----------|---------|----------|
| box  | 10      | 10      | 10      | 1        | 1        | 1       | 1        |
| code | 1001020 | 1001025 | 1001032 | 1001040  | 1001050  | 1001063 | 1001075  |

### Enhanced male



| Ø    | 20-3/4" | 25-1"   | 32-1"1/4 | 40-1"1/2 | 50-2"   |
|------|---------|---------|----------|----------|---------|
| box  | 10      | 10      | 10       | 1        | 1       |
| code | 1002020 | 1002025 | 1002032  | 1002040  | 1002050 |

### Reduced male



| Ø    | 25-1/2" | 32-1/4" | 40-1"   | 63-1"1/2 |
|------|---------|---------|---------|----------|
| box  | 10      | 10      | 1       | 1        |
| code | 1000025 | 1000032 | 1000040 | 1000063  |

### Female



| Ø    | 16-1/2" | 20-1/2" | 25-3/4" | 32-1"   | 40-1"1/4 | 50-1"1/2 | 63-2"   |
|------|---------|---------|---------|---------|----------|----------|---------|
| box  | 10      | 10      | 10      | 10      | 1        | 1        | 1       |
| code | 1003016 | 1003020 | 1003025 | 1003032 | 1003040  | 1003050  | 1003063 |

### Equal socket



| Ø    | 16      | 20      | 25      | 32      | 40      | 50      | 63      | 75      | 90      | 110     |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| box  | 10      | 10      | 10      | 10      | 1       | 1       | 1       | 1       | 1       | 1       |
| code | 1005016 | 1005020 | 1005025 | 1005032 | 1005040 | 1005050 | 1005063 | 1005075 | 1005090 | 1005110 |

### Reduced socket



| Ø    | 20/16   | 25/20   | 32/25   | 40/32   |
|------|---------|---------|---------|---------|
| box  | 10      | 10      | 10      | 10      |
| code | 1006020 | 1006025 | 1006032 | 1006040 |

## Equal tee



| Ø    | 16      | 20      | 25      | 32      | 40      | 50      | 63      |
|------|---------|---------|---------|---------|---------|---------|---------|
| box  | 10      | 10      | 10      | 10      | 1       | 1       | 1       |
| code | 1007016 | 1007020 | 1007025 | 1007032 | 1007040 | 1007050 | 1007063 |

## Center female threaded tee



| Ø    | 20-1/2"F | 25-3/4"F | 32-1"F  | 40-1"1/4F | 50-1"1/2F | 63-2"F  |
|------|----------|----------|---------|-----------|-----------|---------|
| box  | 10       | 10       | 10      | 1         | 1         | 1       |
| code | 1009020  | 1009025  | 1009032 | 1009040   | 1009050   | 1009063 |

## Center reduced tee



| Ø    | 25/20   | 32/25   |
|------|---------|---------|
| box  | 10      | 10      |
| code | 1008025 | 1008032 |

## Reduced female threaded tee



| Ø    | 25-1/2"F | 32-3/4"F | 40-1"F  |
|------|----------|----------|---------|
| box  | 10       | 10       | 1       |
| code | 1016025  | 1016032  | 1016040 |

## Center male threaded tee



| Ø    | 25-3/4" | 32-3/4" | 40-1"1/4 | 63-2"   |
|------|---------|---------|----------|---------|
| box  | 10      | 10      | 1        | 1       |
| code | 1017025 | 1017032 | 1017040  | 1017063 |

## Elbow 90°



| Ø    | 16      | 20      | 25      | 32      | 40      | 50      | 63      | 75      |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| box  | 10      | 10      | 10      | 1       | 1       | 1       | 1       | 1       |
| code | 1012016 | 1012020 | 1012025 | 1012032 | 1012040 | 1012050 | 1012063 | 1012075 |

## Elbow 90° female



| Ø    | 20-1/2" | 25-3/4" | 32-1"   | 40-1"1/4 | 50-1"1/2 |
|------|---------|---------|---------|----------|----------|
| box  | 10      | 10      | 10      | 1        | 1        |
| code | 1013020 | 1013025 | 1013032 | 1013040  | 1013050  |

## Elbow 90° male



| Ø    | 16-1/2" | 20-1/2" | 25-3/4" | 32-1"   | 40-1"1/4 | 50-1"1/2 |
|------|---------|---------|---------|---------|----------|----------|
| box  | 10      | 10      | 10      | 10      | 1        | 1        |
| code | 1014016 | 1014020 | 1014025 | 1014032 | 1014040  | 1014050  |

## Elbow 90° reduced female



| Ø    | 25-1/2" | 32-3/4" |
|------|---------|---------|
| box  | 10      | 10      |
| code | 1015025 | 1015032 |

## Cap



| Ø    | 20      | 25      | 32      | 40      | 50      | 63      | 75      |
|------|---------|---------|---------|---------|---------|---------|---------|
| box  | 10      | 10      | 10      | 1       | 1       | 1       | 1       |
| code | 1020020 | 1020025 | 1020032 | 1020040 | 1020050 | 1020063 | 1020075 |

**PTFE band** (sold by 10)  
12 m long, 12 mm wide,  
0,075 mm thick.



|      |        |
|------|--------|
| code | 262204 |
|------|--------|

Excluded from 2014/68/EU Directive (article 1, §2.b) - For water supply & distribution networks (polyethylene and PVC pipes) - Polypropylene body - NBR o-ring - PS: 10 bar - TS: -10°C/+45°C.

**ISO 9001**

## Tapping bridge



| ext. pipe Ø | 25      | 25      | 32      | 32      | 40      | 40      | 40      | 50      | 50      | 50      | 63      | 63      | 63      | 63      | 63      |
|-------------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| thread      | 1/2"    | 3/4"    | 1/2"    | 3/4"    | 1/2"    | 3/4"    | 1"      | 1/2"    | 3/4"    | 1"      | 1/2"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   |
| pack        | 10/170  | 10/170  | 10/170  | 10/170  | 5/140   | 5/140   | 5/140   | 5/130   | 5/130   | 5/130   | 5/120   | 5/120   | 5/120   | 5/120   | 5/120   |
| code        | 1189254 | 1189255 | 1189324 | 1189325 | 1189414 | 1189415 | 1189416 | 1189514 | 1189515 | 1189516 | 1189634 | 1189635 | 1189636 | 1189637 | 1189638 |

## PER pipes

Heating & sanitary installations - Corrosion resistant - Flexible & easy to use - Low head loss thanks to PER pipe interior surface.



### PER bare pipe



| Ø       | coil length (m) | blue code | red code  |
|---------|-----------------|-----------|-----------|
| 10 x 12 | 25              | PERR1225  | PERR1225  |
|         | 120             | PERR12120 | PERR12120 |
|         | 240             | PERR12240 | PERR12240 |
| 13 x 16 | 25              | PERR1625  | PERR1625  |
|         | 80              | PERR1680  | PERR1680  |
|         | 120             | PERR16120 | PERR16120 |
|         | 200             | PERR16200 | PERR16200 |
|         | 240             | PERR16240 | PERR16240 |
|         | 600             | -         | PERR16600 |
| 16 x 20 | 120             | PERR20120 | PERR20120 |
|         | 240             | PERR20240 | PERR20240 |
|         | 20 x 25         | 50        | PERR2550  |
|         | 100             | PERR25100 | PERR25100 |

### PER pre-sheated pipe

| Ø       | coil length (m) | blue code  | red code   |
|---------|-----------------|------------|------------|
| 10 x 12 | 25              | PERPB1225  | PERPR1225  |
|         | 50              | PERPB1250  | PERPR1250  |
|         | 100             | PERPB12100 | PERPR12100 |
| 13 x 16 | 25              | PERPB1625  | PERPR1625  |
|         | 50              | PERPB1650  | PERPR1650  |
|         | 100             | PERPB16100 | PERPR16100 |
| 16 x 20 | 25              | PERPB2025  | PERPR2025  |
|         | 50              | PERPB2050  | PERPR2050  |
| 20 x 25 | 50              | PERPB2550  | PERPR2550  |



## Radial press fittings



**Mandatory packing applies**

For PER & PB pipes - CW617N body, stainless steel socket, plastic ring - Tracking: "Pbtub" marked - Pressure: sanitary hot water 6 bar, sanitary cold water (20°C) 10 bar, radiators & floor heating 6 bar, cold water (min. 5°C) 10 bar - Max. torque tightness: 30 KN/m - Series 5 (acc. to ISO 4065): 12x1,3, 16x1,5, 20x1,9, 25x2,3, 32x2,9 - ⚠ Take into account the potential pipe extension while installing - Do not use oakum - **Mandatory packing:** 25 pcs up to Ø20, individually above.



### Free nut



| Ø    | 3/8"-12 | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-12 | 3/4"-16 | 3/4"-20 | 3/4"-25 | 1"-25  |
|------|---------|---------|---------|---------|---------|---------|---------|---------|---------|--------|
| box  | 450     | 300     | 450     | 450     | 450     | 300     | 300     | 300     | 200     | 200    |
| code | RE812   | RE816   | RE212   | RE216   | RE220   | RE412   | RE416   | RE420   | RE425   | RE1025 |

### Male



| Ø    | 3/8"-12 | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-16 | 3/4"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| box  | 450     | 450     | 450     | 450     | 300     | 300     | 300     | 200     |
| code | RM812   | RM816   | RM212   | RM216   | RM220   | RM416   | RM420   | RM425   |

### Female



| Ø    | 3/8"-12 | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-16 | 3/4"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| box  | 450     | 450     | 450     | 300     | 300     | 300     | 200     | 200     |
| code | RF812   | RF816   | RF212   | RF216   | RF220   | RF416   | RF420   | RF425   |

### Equal socket



| Ø    | 12    | 16    | 20    | 25    |
|------|-------|-------|-------|-------|
| box  | 450   | 450   | 300   | 300   |
| code | RMA12 | RMA16 | RMA20 | RMA25 |

### Reduced socket



| Ø    | 12-16   | 12-20   | 16-20   | 16-25   | 25-20   |
|------|---------|---------|---------|---------|---------|
| box  | 450     | 300     | 300     | 300     | 200     |
| code | RMA1216 | RMA1220 | RMA1620 | RMA1625 | RMA2520 |

### Elbow free nut



| Ø    | 3/8"-12 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-16 | 3/4"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|---------|---------|
| box  | 300     | 200     | 200     | 200     | 200     | 150     | 150     |
| code | RCE812  | RCE212  | RCE216  | RCE220  | RCE416  | RCE420  | RCE425  |

### Elbow



| Ø    | 12   | 16   | 20   | 25   |
|------|------|------|------|------|
| box  | 300  | 300  | 300  | 200  |
| code | RC12 | RC16 | RC20 | RC25 |

### Elbow female



| Ø    | 3/8"-12 | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|---------|
| box  | 300     | 300     | 300     | 300     | 200     | 200     |
| code | RCF812  | RCF816  | RCF212  | RCF216  | RCF220  | RCF425  |

### Elbow male



| Ø    | 3/8"-12 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|
| box  | 300     | 300     | 300     | 200     | 200     |
| code | RCM812  | RCM212  | RCM216  | RCM220  | RCM425  |



## Elbow wall connection



| Ø    | short<br>1/2"-12 | short<br>1/2"-16 | short<br>1/2"-20 | long<br>1/2"-12 | long<br>1/2"-16 | long<br>1/2"-20 |
|------|------------------|------------------|------------------|-----------------|-----------------|-----------------|
| box  | 200              | 200              | 200              | 200             | 200             | 200             |
| code | RCA212           | RCA216           | RCA220           | RCAL212         | RCAL216         | RCAL220         |

## Tee wall connection\*



| Ø    | 12-M3/8"-F1/2" | 16-M3/8"-F1/2" |
|------|----------------|----------------|
| box  | 160            | 160            |
| code | RTAMF12        | RTAMF16        |

\*pack of 20 pcs

## Equal tee



| Ø    | 12   | 16   | 20   | 25   |
|------|------|------|------|------|
| box  | 200  | 200  | 200  | 150  |
| code | RT12 | RT16 | RT20 | RT25 |

## Tee female



| Ø    | 1/2"-12 | 1/2"-16 | 1/2"-20 |
|------|---------|---------|---------|
| box  | 200     | 200     | 200     |
| code | RTF212  | RTF216  | RTF220  |

## Tee male



| Ø    | 1/2"-16 |
|------|---------|
| box  | 200     |
| code | RTM216  |

## Reduced tee



| Ø    | 16-12-12 | 16-16-12 | 16-12-16 | 16-20-16 | 20-12-12 | 20-12-16 | 20-12-20 | 20-16-16 | 20-16-20 | 20-20-16 | 25-20-25* |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|-----------|
| box  | 200      | 200      | 200      | 200      | 200      | 200      | 200      | 200      | 200      | 200      | 120       |
| code | RT161212 | RT161612 | RT161216 | RT162016 | RT201212 | RT201216 | RT201220 | RT201616 | RT201620 | RT202016 | RT252025  |

\*pack of 20 pcs

## Adaptor for copper pipe



| Ø    | 10x12-10 | 10x12-12 | 10x12-14 | 13x16-14 | 13x16-16 | 13x16-18 | 16x20-16 | 16x20-18 | 16x20-20 | 16x20-22 | 20x25-18 | 20x25-22 |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| box  | 500      | 450      | 450      | 450      | 450      | 450      | 300      | 300      | 300      | 300      | 300      | 200      |
| code | RAC1210  | RAC1212  | RAC1214  | RAC1614  | RAC1616  | RAC1618  | RAC2016  | RAC2018  | RAC2020  | RAC2022  | RAC2518  | RAC2522  |

## Elbow adaptor for copper piper



| Ø    | 10x12-12 | 10x12-14 | 13x16-14 | 13x16-16 | 16x20-16 |
|------|----------|----------|----------|----------|----------|
| box  | 300      | 300      | 300      | 300      | 300      |
| code | RCAC1212 | RCAC1214 | RCAC1614 | RCAC1616 | RCAC2016 |

## Ball valve for press fitting



| Ø    | 1/2"-12  | 1/2"-16  |
|------|----------|----------|
| box  | 150      | 150      |
| code | VANPR212 | VANPR216 |

## Sphero-conical free nut



| Ø    | 3/4"-12 | 3/4"-16 |
|------|---------|---------|
| box  | 300     | 300     |
| code | RESC412 | RESC416 |

## Sleeve



| Ø    | 12   | 16   | 20   | 25   |
|------|------|------|------|------|
| code | RB12 | RB16 | RB20 | RB25 |

## Wall outlet\*



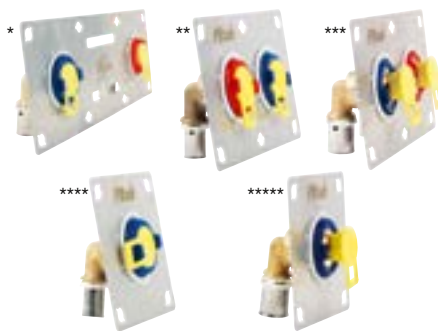
| Ø    | pipe 10x12 | pipe 13x16 | pipe 16x20 |
|------|------------|------------|------------|
| box  | 40         | 40         | 40         |
| code | RSC12      | RSC16      | RSC20      |

\*pack of 5 pcs

## Bracket for wall outlet

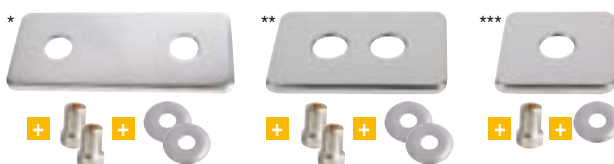


|      |     |
|------|-----|
| box  | 50  |
| code | EQU |



## Support system for plasterboard

| Ø                     | center distance (mm) | pack | code          |
|-----------------------|----------------------|------|---------------|
| * F 1/2" - 10 x 12    | 150                  | 16   | PLACR212      |
| F 1/2" - 13 x 16      | 150                  | 16   | PLACR216      |
| ** F 1/2" - 10 x 12   | 55                   | 32   | PLACRF212     |
| F 1/2" - 13 x 16      | 55                   | 32   | PLACRF216     |
| *** M 3/8" - 10 x 12  | 55                   | 32   | PLACRM812     |
| M 3/8" - 13 x 16      | 55                   | 32   | PLACRM816     |
| **** F 1/2" - 10 x 12 |                      | 32   | PLACR212MONO  |
| F 1/2" - 13 x 16      |                      | 32   | PLACR216MONO  |
| **** M 3/8" - 10 x 12 |                      | 32   | PLACRM812MONO |
| M 3/8" - 13 x 16      |                      | 32   | PLACRM816MONO |



## Stainless steel board set


| center distance (mm) | pack | code         |
|----------------------|------|--------------|
| * 150                | 16   | PLACINOX     |
| ** 55                | 32   | PLACINOX55   |
| ***                  | 32   | PLACINOXMONO |



## Sliding sleeve fittings



**Mandatory packing applies**

For PER & PB pipes - CW617 & CW614 brass - Tracking: "Pbtub" marked - Pressure: sanitary hot water 6 bar, radiators & floor heating 6 bar, cold water (min. 5°C) 10 bar - Max. torque tightness: 30 KN/m - Series 5 (acc. to ISO 4065:1996): 12x1,3, 16x1,5, 20x1,9, 25x2,3, 32x2,9 -  Take into account the potential pipe extension while installing - Do not use oakum - **Mandatory packing:** 25 pcs up to Ø20, individually above.



### Free nut



| Ø    | 3/8"-12 | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-16 | 3/4"-20 | 3/4"-25 | 1"-25 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|-------|
| box  | 450     | 450     | 450     | 450     | 300     | 300     | 300     | 300     | 300   |
| code | E812    | E816    | E212    | E216    | E220    | E416    | E420    | E425    | E1025 |

### Male



| Ø    | 3/8"-12 | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-16 | 3/4"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| box  | 450     | 450     | 450     | 450     | 300     | 300     | 300     | 300     |
| code | M812    | M816    | M212    | M216    | M220    | M416    | M420    | M425    |

### Female



| Ø    | 3/8"-12 | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|---------|---------|
| box  | 450     | 450     | 450     | 300     | 300     | 200     | 200     |
| code | F812    | F816    | F212    | F216    | F220    | F420    | F425    |

### Elbow



| Ø    | 12  | 16  | 20  | 25  |
|------|-----|-----|-----|-----|
| box  | 300 | 300 | 300 | 200 |
| code | C12 | C16 | C20 | C25 |

### Elbow male



| Ø    | 3/8"-12 | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|---------|
| box  | 300     | 300     | 300     | 300     | 300     | 150     |
| code | CM812   | CM816   | CM212   | CM216   | CM220   | CM425   |

### Elbow female



| Ø    | 3/8"-12 | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|---------|
| box  | 300     | 300     | 300     | 300     | 300     | 200     |
| code | CF812   | CF816   | CF212   | CF216   | CF220   | CF425   |

### Elbow free nut



| Ø    | 3/8"-16 | 1/2"-12 | 1/2"-16 | 1/2"-20 | 3/4"-16 | 3/4"-20 | 3/4"-25 |
|------|---------|---------|---------|---------|---------|---------|---------|
| box  | 200     | 300     | 300     | 200     | 200     | 200     | 150     |
| code | CE816   | CE212   | CE216   | CE220   | CE416   | CE420   | CE425   |

### Short elbow wall female connection



| Ø    | 1/2"-12 | 1/2"-16 | 1/2"-20 |
|------|---------|---------|---------|
| box  | 200     | 200     | 200     |
| code | CA212   | CA216   | CA220   |

### Long elbow female wall connection



| Ø    | 1/2"-12 | 1/2"-18 | 1/2"-20 |
|------|---------|---------|---------|
| box  | 200     | 200     | 200     |
| code | CAL212  | CAL216  | CAL220  |

### Long elbow male wall connection



| Ø    | 3/8"-12 | 3/8"-16 |
|------|---------|---------|
| box  | 150     | 150     |
| code | CALM812 | CALM816 |

### Tee wall connection\*



| Ø    | 12-M3/8"-F1/2" | 16-M3/8"-F1/2" |
|------|----------------|----------------|
| box  | 160            | 160            |
| code | TAMF12         | TAMF16         |

\* pack of 20 pcs

## Tee female

| Ø    | 12-1/2"-12 | 16-1/2"-16 | 20-1/2"-20 | 25-3/4"-25* |
|------|------------|------------|------------|-------------|
| box  | 200        | 200        | 200        | 120         |
| code | TF212      | TF216      | TF220      | TF425       |

\* pack of 20 pcs

## Tee male

| Ø    | 12-1/2"-12 | 16-1/2"-16 | 20-1/2"-20 | 25-3/4"-25 |
|------|------------|------------|------------|------------|
| box  | 300        | 200        | 200        | 150        |
| code | TM212      | TM216      | TM220      | TM425      |

## Equal tee

| Ø    | 12-12-12 | 16-16-16 | 20-20-20 | 25-25-25 |
|------|----------|----------|----------|----------|
| box  | 200      | 200      | 200      | 150      |
| code | T12      | T16      | T20      | T25      |

## Valve for sliding sleeve fitting

| Ø    | 1/2"-10x12 | 1/2"-13x16 |
|------|------------|------------|
| box  | 150        | 150        |
| code | VANP212    | VANP216    |

## Reduced tee

| Ø    | 16-12-12 | 16-12-16 | 16-16-12 | 16-20-16 | 20-12-16 | 20-16-16 | 20-16-20 | 20-20-16 | 20-25-20 | 25-20-20 | 25-20-25 |
|------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|----------|
| box  | 200      | 200      | 200      | 200      | 200      | 200      | 200      | 200      | 200      | 150      | 150      |
| code | T161212  | T161216  | T161612  | T162016  | T201216  | T201616  | T201620  | T202016  | T202520  | T252020  | T252025  |

## Equal socket

| Ø    | 12   | 16   | 20   | 25   |
|------|------|------|------|------|
| box  | 450  | 450  | 300  | 200  |
| code | MA12 | MA16 | MA20 | MA25 |

## Reduced socket

| Ø    | 12-16  | 12-20  | 16-20  | 20-25  | 25-32  |
|------|--------|--------|--------|--------|--------|
| box  | 450    | 450    | 450    | 150    | 150    |
| code | MA1216 | MA1220 | MA1620 | MA2025 | MA2532 |

## Adaptor for copper pipe

| Ø    | 10x12-12 | 10x12-14 | 13x16-12 | 13x16-14 | 13x16-16 | 13x16-18 | 16x20-16 | 16x20-18 |
|------|----------|----------|----------|----------|----------|----------|----------|----------|
| box  | 450      | 450      | 450      | 450      | 450      | 450      | 300      | 300      |
| code | AC1212   | AC1214   | AC1612   | AC1614   | AC1616   | AC1618   | AC2016   | AC2018   |

## Elbow adaptor for copper pipe

| Ø    | 10x12-12 | 10x12-14 | 13x16-12 | 13x16-14 | 13x16-16 | 16x20-16 | 16x20-18 |
|------|----------|----------|----------|----------|----------|----------|----------|
| box  | 450      | 450      | 450      | 450      | 450      | 300      | 300      |
| code | CAC1212  | CAC1214  | CAC1612  | CAC1614  | CAC1616  | CAC2016  | CAC2018  |

## Sleeve

| Ø    | 12  | 16  | 20  | 25  |
|------|-----|-----|-----|-----|
| code | B12 | B16 | B20 | B25 |

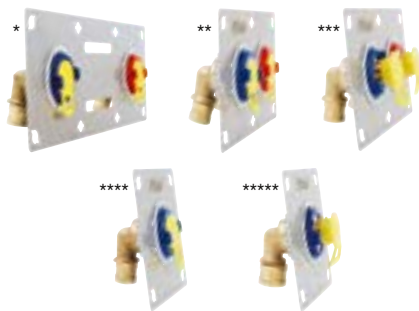
## Wall outlet\*

| Ø    | pipe 10x12 | pipe 13x16 |
|------|------------|------------|
| box  | 40         | 40         |
| code | SC12       | SC16       |

\*pack of 5 pcs

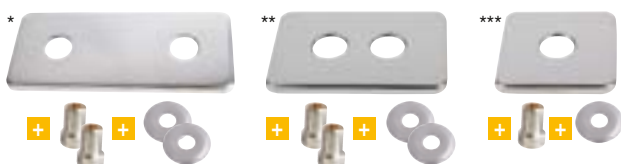
## Bracket for wall outlet SC12 & SC16

|      |     |
|------|-----|
| box  | 50  |
| code | EQU |



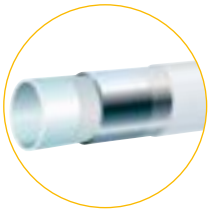
## Support system for plasterboard

| Ø                      | center distance (mm) | pack | code         |
|------------------------|----------------------|------|--------------|
| * F 1/2" - 10 x 12     | 150                  | 16   | PLAC212      |
| F 1/2" - 13 x 16       | 150                  | 16   | PLAC216      |
| ** F 1/2" - 10 x 12    | 55                   | 32   | PLACF212     |
| F 1/2" - 13 x 16       | 55                   | 32   | PLACF216     |
| *** M 3/8" - 10 x 12   | 55                   | 32   | PLACM812     |
| M 3/8" - 13 x 16       | 55                   | 32   | PLACM816     |
| **** F 1/2" - 10 x 12  |                      | 32   | PLAC212MONO  |
| F 1/2" - 13 x 16       |                      | 32   | PLAC216MONO  |
| ***** M 3/8" - 10 x 12 |                      | 32   | PLACM812MONO |
| M 3/8" - 13 x 16       |                      | 32   | PLACM816MONO |



## Stainless steel board set

| center distance (mm) | pack | code         |
|----------------------|------|--------------|
| * 150                | 16   | PLACINOX     |
| ** 55                | 32   | PLACINOX55   |
| *** 55               | 32   | PLACINOXMONO |



## Multilayer pipes

PE-RT/AL/PE-RT (Aluminium core with an inner & outer layer of high temperature stabilized polyethylene - PE) - Aluminium thickness: min. 0,2 mm - Each meter stamped - Made in Germany - Pipes & fittings system: 10 year guarantee.



### Single pipe

#### Coil



| Ø      | coil length (m) | code     |
|--------|-----------------|----------|
| 16 x 2 | 25              | MCT1625  |
|        | 100             | MCT16100 |
|        | 200             | MCT16200 |
|        | 240             | MCT16240 |
|        | 500             | MCT16500 |
| 20 x 2 | 25              | MCT2025  |
|        | 100             | MCT20100 |
|        | 200             | MCT20200 |
| 26 x 3 | 50              | MCT2650  |
| 32 x 3 | 50              | MCT3250  |

#### Bar (2,5 m & 5 m)



| Ø      | pack (m) | code     |
|--------|----------|----------|
| 16 x 2 | 2,5 x 20 | MCT162.5 |
|        | 5 x 15   | MCT16    |
| 20 x 2 | 2,5 x 20 | MCT202.5 |
|        | 5 x 10   | MCT20    |
| 26 x 3 | 2,5 x 10 | MCT262.5 |
|        | 5 x 10   | MCT26    |
| 32 x 3 | 5 x 4    | MCT32    |

### Pre-sheathed pipes

#### Coil



| Ø      | coil length (m) | blue sheath code | red sheath code |
|--------|-----------------|------------------|-----------------|
| 16 x 2 | 25              | MCTPB1625        | MCTPR1625       |
|        | 50              | MCTPB1650        | MCTPR1650       |
|        | 100             | MCTPB16100       | MCTPR16100      |
| 20 x 2 | 25              | MCTPB2025        | MCTPR2025       |
|        | 50              | MCTPB2050        | MCTPR2050       |
|        | 100             | MCTPB20100       | MCTPR20100      |
| 26 x 3 | 50              | MCTPB2650        | MCTPR2650       |

#### Cutter-pipe



|            | code   |
|------------|--------|
| Ø 16 to 26 | MCCT   |
| Ø 16 to 75 | MCCT75 |

## Radial press fittings



Radial press F type - Compatible with TH & B types from Ø 16 to Ø 32 only - Pipes & fittings system: 10 year guarantee - **Mandatory packing:** 10 pcs up to Ø20, individually above.

### Free nut



| Ø    | 3/8"-16  | 1/2"-16  | 3/4"-16  | 1/2"-20  | 3/4"-20  | 1"-20    | 3/4"-26 | 1"-26    | 1"-32    | 1"1/4-32 |
|------|----------|----------|----------|----------|----------|----------|---------|----------|----------|----------|
| pack | 10       | 10       | 10       | 10       | 10       | 10       | 5       | 5        | 5        | 5        |
| code | MCRE816  | MCRE216  | MCRE416  | MCRE220  | MCRE420  | MCRE1020 | MCRE426 | MCRE1026 | MCRE1032 | MCRE1432 |
| Ø    | 1"1/2-32 | 1"1/4-40 | 1"1/2-40 | 2"-50    | 2"-63    |          |         |          |          |          |
| box  | 5        | 3        | 3        | 2        | 2        |          |         |          |          |          |
| code | MCRE1232 | MCRE1440 | MCRE1240 | MCRE2050 | MCRE2063 |          |         |          |          |          |

### Female



| Ø    | 1/2"-16 | 1/2"-20 | 3/4"-20 | 3/4"-26 | 1"-26    | 1"-32    | 1"-40    | 1"1/4-40 | 1"1/2-50 | 2"-63    |
|------|---------|---------|---------|---------|----------|----------|----------|----------|----------|----------|
| pack | 10      | 10      | 10      | 5       | 5        | 5        | 5        | 3        | 2        | 1        |
| code | MCRF216 | MCRF220 | MCRF420 | MCRF426 | MCRF1026 | MCRF1032 | MCRF1040 | MCRF1440 | MCRF1250 | MCRF2063 |

### Male



| Ø    | 3/8"-16  | 1/2"-16  | 3/4"-16  | 1/2"-20  | 3/4"-20  | 1"-20    | 3/4"-26 | 1"-26    | 1"-32    | 1"-40    |
|------|----------|----------|----------|----------|----------|----------|---------|----------|----------|----------|
| pack | 10       | 10       | 10       | 10       | 10       | 10       | 5       | 5        | 5        | 3        |
| code | MCRM816  | MCRM216  | MCRM416  | MCRM220  | MCRM420  | MCRM1020 | MCRM426 | MCRM1026 | MCRM1032 | MCRM1040 |
| Ø    | 1"1/4-40 | 1"1/2-40 | 1"1/2-50 | 2"-50    | 2"-63    | 2"1/2-75 |         |          |          |          |
| box  | 3        | 3        | 2        | 2        | 1        | 1        |         |          |          |          |
| code | MCRM1440 | MCRM1240 | MCRM1250 | MCRM2050 | MCRM2063 | MCRM2275 |         |          |          |          |



## Equal socket



| Ø    | PPSU    |         |         |         |          |          |          | Brass   |
|------|---------|---------|---------|---------|----------|----------|----------|---------|
|      | 16      | 20      | 26      | 32      | 40       | 50       | 63       | 75      |
| pack | 10      | 10      | 5       | 5       | 3        | 2        | 1        | 1       |
| code | MCRMA16 | MCRMA20 | MCRMA26 | MCRMA32 | MCRMA40P | MCRMA50P | MCRMA63P | MCRMA75 |

## Reduced socket



| Ø    | PPSU      |           |           |           |           |            |
|------|-----------|-----------|-----------|-----------|-----------|------------|
|      | 16-20     | 16-26     | 20-26     | 20-32     | 26-32     | 40-50      |
| pack | 10        | 5         | 5         | 5         | 5         | 2          |
| code | MCRMA1620 | MCRMA1626 | MCRMA2026 | MCRMA2032 | MCRMA2632 | MCRMA4050P |



| Ø    | Brass     |           |           |           |           |           |           |           |
|------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
|      | 26-40     | 32-40     | 32-50     | 40-63     | 40-75     | 50-63     | 50-75     | 63-75     |
| pack | 3         | 3         | 2         | 1         | 1         | 1         | 1         | 1         |
| code | MCRMA2640 | MCRMA3240 | MCRMA3250 | MCRMA4063 | MCRMA4075 | MCRMA5063 | MCRMA5075 | MCRMA6375 |

## Elbow 90° male



| Ø    | Brass    |          |          |          |          |           |           |           |
|------|----------|----------|----------|----------|----------|-----------|-----------|-----------|
|      | 3/8"-16  | 1/2"-16  | 1/2"-20  | 3/4"-20  | 3/4"-26  | 1"-32     | 1"1/4"-40 | 1"1/2"-50 |
| pack | 10       | 10       | 10       | 10       | 5        | 5         | 3         | 2         |
| code | MCRCM816 | MCRCM216 | MCRCM220 | MCRCM420 | MCRCM426 | MCRCM1032 | MCRCM1440 | MCRCM1250 |

## Elbow 90° female



| Ø    | Brass    |          |          |          |           |
|------|----------|----------|----------|----------|-----------|
|      | 1/2"-16  | 1/2"-20  | 3/4"-20  | 3/4"-26  | 1"-32     |
| pack | 10       | 10       | 10       | 5        | 5         |
| code | MCRCF216 | MCRCF220 | MCRCF420 | MCRCF426 | MCRCF1032 |

## Elbow 90° with free nut



| Ø    | Brass    |          |          |           |
|------|----------|----------|----------|-----------|
|      | 1/2"-16  | 3/4"-16  | 3/4"-20  | 1"-26     |
| pack | 10       | 10       | 10       | 10        |
| code | MCRCE216 | MCRCE416 | MCRCE420 | MCRCE1026 |

## Elbow 90°



| Ø    | PPSU   |        |        |        |         |         |         | Brass  |
|------|--------|--------|--------|--------|---------|---------|---------|--------|
|      | 16     | 20     | 26     | 32     | 40      | 50      | 63      | 75     |
| pack | 10     | 10     | 5      | 5      | 3       | 2       | 1       | 1      |
| code | MCRC16 | MCRC20 | MCRC26 | MCRC32 | MCRC40P | MCRC50P | MCRC63P | MCRC75 |

## Elbow 45°



| Ø    | PPSU     |          |           |           |           | Brass    |
|------|----------|----------|-----------|-----------|-----------|----------|
|      | 26       | 32       | 40        | 50        | 63        | 75       |
| pack | 5        | 5        | 3         | 2         | 1         | 1        |
| code | MCRC2645 | MCRC3245 | MCRC4045P | MCRC5045P | MCRC6345P | MCRC7545 |

## Tee female



| Ø    | Brass      |            |            |            |            |            |            |           |            |            |
|------|------------|------------|------------|------------|------------|------------|------------|-----------|------------|------------|
|      | 16-1/2"-16 | 20-1/2"-20 | 20-3/4"-20 | 26-1/2"-26 | 26-3/4"-26 | 32-1/2"-32 | 32-3/4"-32 | 32-1"-32  | 40-1/2"-40 | 40-3/4"-40 |
| pack | 10         | 10         | 10         | 5          | 5          | 5          | 5          | 5         | 1          | 1          |
| code | MCRTF216   | MCRTF220   | MCRTF420   | MCRTF226   | MCRTF426   | MCRTF232   | MCRTF432   | MCRTF1032 | MCRTF240   | MCRTF440   |
| box  | 50-3/4"-50 |            |            | 63-1"-63   |            | 75-1"-75   |            |           |            |            |
| code | MCRTF450   | MCRTF1063  | MCRTF1075  |            |            |            |            |           |            |            |

## Tee male



| Ø    | Brass      |            |            |            |            |
|------|------------|------------|------------|------------|------------|
|      | 16-1/2"-16 | 20-1/2"-20 | 20-3/4"-20 | 26-3/4"-26 | 32-3/4"-32 |
| pack | 10         | 10         | 10         | 5          | 5          |
| code | MCRTM216   | MCRTM220   | MCRTM420   | MCRTM426   | MCRTM432   |



## Bracket for elbow wall connection

|      |        |
|------|--------|
| code | MCREQU |
|------|--------|



### Equal tee

| Ø    | PPSU   |        |        |        |         |         | Brass  |        |
|------|--------|--------|--------|--------|---------|---------|--------|--------|
|      | 16     | 20     | 26     | 32     | 40      | 50      | 63     | 75     |
| pack | 10     | 10     | 5      | 5      | 3       | 2       | 1      | 1      |
| code | MCRT16 | MCRT20 | MCRT26 | MCRT32 | MCRT40P | MCRT50P | MCRT63 | MCRT75 |



### Reduced tee with reduced central outlet

| Ø    | PPSU       |            |            |            |            |            |             |
|------|------------|------------|------------|------------|------------|------------|-------------|
|      | 20-16-20   | 26-16-26   | 26-20-26   | 32-16-32   | 32-20-32   | 32-26-32   | 50-40-50    |
| pack | 10         | 5          | 5          | 5          | 5          | 5          | 2           |
| code | MCRT201620 | MCRT261626 | MCRT262026 | MCRT321632 | MCRT322032 | MCRT322632 | MCRT504050P |



| Ø    | Brass      |            |            |            |            |            |            |            |            |            |            |
|------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
|      | 40-20-40   | 40-26-40   | 40-32-40   | 50-20-50   | 50-26-50   | 50-32-50   | 63-32-63   | 63-40-63   | 63-50-63   | 75-40-75   | 75-50-75   |
| pack | 3          | 3          | 3          | 2          | 2          | 2          | 1          | 1          | 1          | 1          | 1          |
| code | MCRT402040 | MCRT402640 | MCRT403240 | MCRT502050 | MCRT502650 | MCRT503250 | MCRT633263 | MCRT634063 | MCRT635063 | MCRT754075 | MCRT755075 |

### Reduced tee with reduced central and end outlets

| Ø    | PPSU       |            |            |
|------|------------|------------|------------|
|      | 20-16-16   | 26-20-20   | 32-26-26   |
| pack | 10         | 5          | 5          |
| code | MCRT201616 | MCRT262020 | MCRT322626 |

### Reduced tee with enhanced central outlet

| Ø    | PPSU       |            |
|------|------------|------------|
|      | 16- 20-16  | 20-26-20   |
| pack | 10         | 5          |
| code | MCRT162016 | MCRT202620 |



### Reduced tee with reduced end outlet

| Ø    | PPSU       |            |
|------|------------|------------|
|      | 20-20-16   | 26-26-20   |
| pack | 10         | 5          |
| code | MCRT202016 | MCRT262616 |

### Reduced tee with 3 different Ø

| Ø    | PPSU       |
|------|------------|
|      | 26-16-20   |
| pack | 5          |
| code | MCRT261620 |



### Press cap

| Ø    | PPSU     |          |          |          |
|------|----------|----------|----------|----------|
|      | 16       | 20       | 26       | 32       |
| pack | 10       | 10       | 5        | 5        |
| code | MCRBOU16 | MCRBOU20 | MCRBOU26 | MCRBOU32 |



### Adaptor for copper pipe

| Ø    | Brass     |           |           |
|------|-----------|-----------|-----------|
|      | 16x2-14   | 16x2-16   | 20x2-18   |
| pack | 10        | 10        | 10        |
| code | MCRAC1614 | MCRAC1616 | MCRAC2018 |



### Stainless steel sleeve

| Ø    | 10     | 20     | 26     | 32     | 40     | 50     | 63     | 75     |
|------|--------|--------|--------|--------|--------|--------|--------|--------|
| pack | 10     | 10     | 5      | 5      | 1      | 1      | 1      | 1      |
| code | MCRB16 | MCRB20 | MCRB26 | MCRB32 | MCRB40 | MCRB50 | MCRB63 | MCRB75 |

### Elbow wall connection

| Ø    | 35 mm length |          |          | 52 mm length | 78 mm length |           |
|------|--------------|----------|----------|--------------|--------------|-----------|
|      | 1/2"-16      | 1/2"-20  | 3/4"-26  | 1/2"-16      | 1/2"-16      | 1/2"-20   |
| pack | 10           | 10       | 5        | 10           | 10           | 10        |
| code | MCRCA216     | MCRCA220 | MCRCA426 | MCRCAM216    | MCRCAL216    | MCRCAL220 |

### Outlet wall connection set

| Ø    | ext. 3/4"-int.1/2"-16 |
|------|-----------------------|
| pack | 10                    |
| code | MCRSOR16              |

### Support system for plasterboard

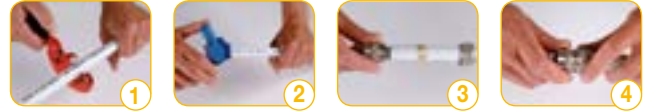
| Ø                   | center distance (mm) | pack | code            |
|---------------------|----------------------|------|-----------------|
| * F 1/2" - 16 x 2   | 150                  | 16   | PLACMCR216      |
| F 1/2" - 20 x 2     | 150                  | 16   | PLACMCR220      |
| ** F 1/2" - 16 x 2  | 55                   | 32   | PLACMCRF216     |
| *** M 3/8" - 16 x 2 |                      | 32   | PLACMCRM816MONO |

### Stainless steel board set

| center distance (mm) | pack | code         |
|----------------------|------|--------------|
| * 150                | 16   | PLACINOX     |
| ** 55                | 32   | PLACINOX55   |
| *** 32               | 32   | PLACINOXMONO |



## Compression fittings



For 16 x 2, 20 x 2 & 26 x 3 multilayer pipes - ⚠ Add a PTFE gasket for male fittings before connecting.

### Female



| Ø    | 16-3/8" | 16-1/2" | 16-3/4" | 20-1/2" | 20-3/4" | 26-1"  |
|------|---------|---------|---------|---------|---------|--------|
| code | 120034  | 120044  | 120054  | 120144  | 120154  | 120264 |

### Equal socket



| Ø    | 16     | 20     | 26     |
|------|--------|--------|--------|
| code | 126004 | 126104 | 126204 |

### Male



| Ø    | 16-3/8" | 16-1/2" | 20-1/2" | 20-3/4" | 26-3/4" | 26-1"  |
|------|---------|---------|---------|---------|---------|--------|
| code | 121034  | 121044  | 121144  | 121154  | 121254  | 121264 |

### Reduced socket



| Ø    | 20-16  |
|------|--------|
| code | 126304 |

### Elbow female



| Ø    | 16-1/2" |
|------|---------|
| code | 127044  |

### Elbow male



| Ø    | 16-1/2" |
|------|---------|
| code | 128044  |

### Elbow equal



| Ø    | 16     | 20     | 26     |
|------|--------|--------|--------|
| code | 125004 | 125104 | 125204 |

### Reduced tee



| Ø    | 20-16-20 | 20-16-16 |
|------|----------|----------|
| code | 124304   | 124404   |

### Equal tee



| Ø    | 16     | 20     | 26     |
|------|--------|--------|--------|
| code | 124004 | 124104 | 124204 |



### Wall connection

| Ø    | 16-1/2" |
|------|---------|
| code | 129044  |

### PTFE gaskets

1,5 mm thickness - Sold by 10.



| Ø    | 3/8"   | 1/2"   | 3/4"   | 1"     |
|------|--------|--------|--------|--------|
| code | 123034 | 123044 | 123054 | 123064 |



### Sizing tool

For pipes Ø 16 to 26.

| Ø    | 16-1/2" |
|------|---------|
| code | 123604  |

## Compression fittings - Radiators connections

### Free nut Eurocone 3/4"

For metal pipe Ø15 on male lockshield valves, valves for panel radiators & Eurocone 3/4"



|        |  |
|--------|--|
| code   |  |
| 437515 |  |

### Free nut Eurocone

Connection on radiators & lockshields valves 3/4" male Eurocone (sold by 2)

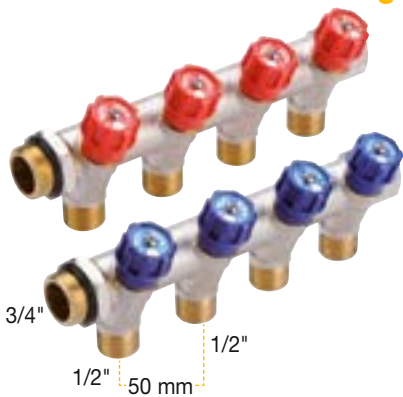


| Ø         | code     |
|-----------|----------|
| F 3/4"-16 | MCCEC416 |
| F 3/4"-20 | MCCEC420 |

## Distribution manifolds



### Flat bearing manifolds

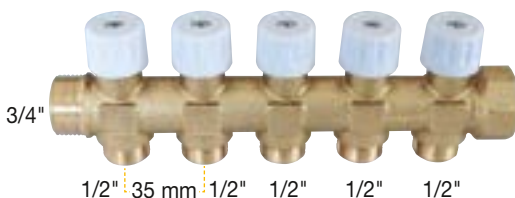


#### Sanitary manifolds with built-in valves

##### 3/4" - Ø body 27 mm

Ø outlet 1/2" - Center distance 50 mm.

| outlets         | 2       | 3       | 4       | 5       |
|-----------------|---------|---------|---------|---------|
| blue valve code | COLRB42 | COLRB43 | COLRB44 | COLRB45 |
| red valve code  | COLRR42 | COLRR43 | COLRR44 | COLRR45 |

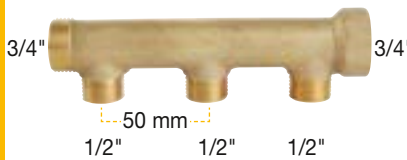


##### 3/4" - Ø body 24,5 mm

Ø outlet 1/2" - Center distance 35 mm (compact).

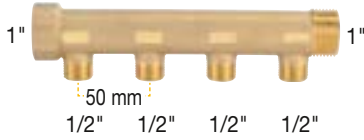
| outlets | 2      | 3      | 4      | 5      |
|---------|--------|--------|--------|--------|
| code    | SANR42 | SANR43 | SANR44 | SANR45 |

## Modular manifolds



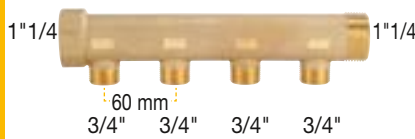
**Male/female - 3/4" - Ø body 24 mm for 2 to 6 outlets - Ø body 26 mm for 7 to 9 outlets**  
 Ø outlet 1/2" - Center distance 50 mm.

| outlets | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code    | ECOMP42 | ECOMP43 | ECOMP44 | ECOMP45 | ECOMP46 | CCOMF47 | CCOMF48 | CCOMF49 |



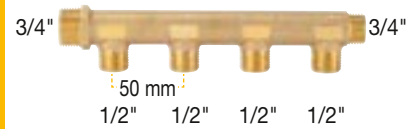
**Male/female - 1" - Ø body 30 mm**  
 Ø outlet 1/2" - Center distance 50 mm.

| outlets | 2        | 3        | 4        | 5        | 6        | 7        |
|---------|----------|----------|----------|----------|----------|----------|
| code    | CCOMP102 | CCOMP103 | CCOMP104 | CCOMP105 | CCOMP106 | CCOMP107 |



**Male/female - 1 1/4" - Ø body 39 mm**  
 Ø outlet 3/4" - Center distance 60 mm.

| outlets | 2        | 3        | 4        | 5        | 6        |
|---------|----------|----------|----------|----------|----------|
| code    | CCOMP142 | CCOMP143 | CCOMP144 | CCOMP145 | CCOMP146 |



**Male/male - 3/4" - Ø body 19 mm for 1 outlet - Ø body 23 mm for 2 to 10 outlets**  
 Ø outlet 1/2" - Center distance 50 mm.

| outlets | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       | 10      |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code    | CCOMP41 | CCOMP42 | CCOMP43 | CCOMP44 | CCOMP45 | CCOMP46 | CCOMP47 | CCOMP48 | CCOMP49 |

## Pre-equipped with valves

Ø outlet 1/2" - Center distance 50 mm.

|         | 3/4" - Ø body 26 mm |         |         |         |         | 1" - Ø body 30 mm |          |          |          |          |
|---------|---------------------|---------|---------|---------|---------|-------------------|----------|----------|----------|----------|
| outlets | 2                   | 3       | 4       | 5       | 6       | 2                 | 3        | 4        | 5        | 6        |
| code    | COLET42             | COLET43 | COLET44 | COLET45 | COLET46 | COLET102          | COLET103 | COLET104 | COLET105 | COLET106 |

## Modular manifolds with built-in fittings

**With radial press fittings - 3/4" - Ø body 26 mm**

Center distance 50 mm.

|         | For PER pipe 10 x 12 |          |          |          |          | For PER pipe 13 x 16 |          |          |          |          |
|---------|----------------------|----------|----------|----------|----------|----------------------|----------|----------|----------|----------|
| outlets | 2                    | 3        | 4        | 5        | 6        | 2                    | 3        | 4        | 5        | 6        |
| code    | GCOL4212             | GCOL4312 | GCOL4412 | GCOL4512 | GCOL4612 | GCOL4216             | GCOL4316 | GCOL4416 | GCOL4516 | GCOL4616 |

**With sliding fittings - 3/4" - Ø body 26 mm**

Center distance 50 mm.

|         | For PER pipe 10 x 12 |          |          |          |          | For PER pipe 13 x 16 |          |          |          |          |
|---------|----------------------|----------|----------|----------|----------|----------------------|----------|----------|----------|----------|
| outlets | 2                    | 3        | 4        | 5        | 6        | 2                    | 3        | 4        | 5        | 6        |
| code    | RCOL4212             | RCOL4312 | RCOL4412 | RCOL4512 | RCOL4612 | RCOL4216             | RCOL4316 | RCOL4416 | RCOL4516 | RCOL4616 |

## Single manifolds with draining outlet

**3/4" - Ø body 25 mm for 2 to 5 outlets - Ø body 28 mm for 6 to 9 outlets**

Ø outlet 1/2" - Center distance 50 mm.

| outlets | 2       | 3       | 4       | 5       | 6       | 7       | 8       | 9       |
|---------|---------|---------|---------|---------|---------|---------|---------|---------|
| code    | SIMPP42 | SIMPP43 | SIMPP44 | SIMPP45 | SIMPP46 | SIMPP47 | SIMPP48 | SIMPP49 |

**1" - Ø body 30 mm for 2 to 4 outlets - Ø body 32 mm for 5 to 9 outlets**

Ø outlet 1/2" - Center distance 50 mm.

| outlets | 2        | 3        | 4        | 5        | 6        | 7        | 8        | 9        |
|---------|----------|----------|----------|----------|----------|----------|----------|----------|
| code    | SIMPP102 | SIMPP103 | SIMPP104 | SIMPP105 | SIMPP106 | SIMPP107 | SIMPP108 | SIMPP109 |



## Accessories for manifolds

### Compact ball valve (FM1/2")



With free nut  
for flat bearing manifolds

|        |
|--------|
| code   |
| VANP2E |



Without free nut  
for flat bearing manifolds

|        |
|--------|
| code   |
| 678004 |

### Drain cock ball valve



| Ø       | code   |
|---------|--------|
| 1/2" FM | ROB554 |

### Fitting 2 outlets (F3/8" & F1/2")



| Ø      | code      |
|--------|-----------|
| 3/4"   | BOU599D4  |
| 1"     | BOU599D10 |
| 1 1/4" | BOU599D14 |

### Plain cap for flat bearing



| Ø    | code    |
|------|---------|
| 1/2" | BOUFP2  |
| 3/4" | BOUFP4  |
| 1"   | BOUFP10 |

### Thermometer holder



F1/2" - M1/2"  
(threaded F1/4")

|         |
|---------|
| code    |
| PORDER2 |

### Ball valve with free nut (FM1/2")



For conical bearing  
manifolds

|         |
|---------|
| code    |
| VANDERC |

For flat bearing manifolds

|         |
|---------|
| code    |
| VANDERP |

### Ball valve with union fitting



| Ø      | code     |
|--------|----------|
| 3/4"   | VAN5244  |
| 1"     | VAN52410 |
| 1 1/4" | VAN52414 |

### Fitting 1 outlet (F3/8")



| Ø      | code      |
|--------|-----------|
| 3/4"   | BOU599R4  |
| 1"     | BOU599R10 |
| 1 1/4" | BOU599R14 |

### Plain cap for conical bearing



| Ø      | code      |
|--------|-----------|
| 1/2"   | BOU599C2  |
| 3/4"   | BOU599C4  |
| 1"     | BOU599C10 |
| 1 1/4" | BOU599C14 |

### Thermometer with glove finger



1/4" M - Ø 40 mm

|        |
|--------|
| code   |
| THE391 |

### Housing cabinet

For 3/4" & 1" manifolds - Plastic.



| dimension (mm) | center distance (mm) | max. outlets | code   |
|----------------|----------------------|--------------|--------|
| 320 x 250 x 90 | 35                   | 8            | COF320 |
|                | 50                   | 6            |        |
| 500 x 250 x 90 | 35                   | 12           | COF500 |
|                | 50                   | 9            |        |

### Brackets (sold by 2)



| Ø      | code    |
|--------|---------|
| 3/4"   | SUP4    |
| 1"     | SUP10   |
| 1 1/4" | SUP658U |

### Clips for housing cabinet

For 3/4" & 1" manifolds (sold by 4)

| code  |
|-------|
| SUP35 |
| SUP50 |

### Single clips for pipe sheathes

(sold by box of 100)



| Ø clip | 16       | 18       | 20       | 22       | 25       | 28       |
|--------|----------|----------|----------|----------|----------|----------|
| pack   | 16 boxes | 16 boxes | 16 boxes | 16 boxes | 12 boxes | 12 boxes |
| code   | FIXS16   | FIXS18   | FIXS20   | FIXS22   | FIXS25   | FIXS28   |

### Double clips for pipe sheathes

(sold by box of 100, except Ø 28: box of 50)



| Ø clip | 16       | 18       | 20       | 22      | 25      | 28       |
|--------|----------|----------|----------|---------|---------|----------|
| pack   | 16 boxes | 12 boxes | 12 boxes | 9 boxes | 9 boxes | 12 boxes |
| code   | FIXD16   | FIXD18   | FIXD20   | FIXD22  | FIXD25  | FIXD28   |

### Pipe guide angle



| Ø pipe | 12   | 16   | 20   |
|--------|------|------|------|
| pack   | 10   | 10   | 10   |
| code   | GT12 | GT16 | GT20 |

### Quadruple clips for pipe sheathes

(sold by box of 50)



| Ø clip | 20       | 25      |
|--------|----------|---------|
| pack   | 12 boxes | 9 boxes |
| code   | FIXQ20   | FIXQ25  |

For domestic use only (stove, oven, cooktop, baking sheet, ...) - Blister packaging.



### Natural gas - No expiration date

According to NF D36-121 -  
1/2" connections - PS: 21 mbar.

| length (m) | pack | code    |
|------------|------|---------|
| 0,75       | 10   | FGN0750 |
| 1,00       | 10   | FGN1000 |
| 1,25       | 10   | FGN1250 |
| 1,50       | 5    | FGN1500 |
| 2,00       | 5    | FGN2000 |



### Butane/propane - No expiration date

According to NF D36-125 - 1/2" x 20 x 150  
connections - PS: butane 37 mbar; propane 28 mbar.

| length (m) | pack | code    |
|------------|------|---------|
| 0,75       | 10   | FGP0750 |
| 1,00       | 10   | FGP1000 |
| 1,25       | 10   | FGP1250 |
| 1,50       | 5    | FGP1500 |
| 2,00       | 5    | FGP2000 |



### Natural gas - 10 year validity

According to NF D36-103 -  
1/2" connections - PS: 21 mbar.

| length (m) | pack | code   |
|------------|------|--------|
| 1,00       | 10   | MN1000 |
| 1,25       | 10   | MN1250 |
| 1,50       | 10   | MN1500 |
| 2,00       | 10   | MN2000 |



### Butane/propane - 10 year validity

According to NF D36-112 - 1/2" x 20 x 150  
connections - PS: butane 37 mbar; propane 28 mbar.

| length (m) | pack | code   |
|------------|------|--------|
| 1,00       | 10   | MP1000 |
| 1,25       | 10   | MP1250 |
| 1,50       | 10   | MP1500 |
| 2,00       | 10   | MP2000 |

### Natural gas - 2 gasket set

| color | code  |
|-------|-------|
| blue  | JOISN |

### Butane/propane - 2 gasket set

| color  | code  |
|--------|-------|
| orange | JOISP |

# Braided rubber flexible hoses

## Sanitary - Bore Ø 8 mm



For hot & cold water, sanitary taps, toilet tank, coffee machine, etc... - Stainless steel 304 braid (minimal cover 95%) - EPDM inner hose - Brass fittings - Nickel plated brass or stainless steel sockets - EPDM gaskets - Max. temperature & pressure: 90°C / 10 bar - Water PH: 6 to 8 - Water & glycol: max. 30% glycol - Min. radial bending 30 mm.



### Female/female

| Ø 8 mm          | fittings        | length (mm) | pack       | code       |
|-----------------|-----------------|-------------|------------|------------|
|                 | F 3/8" - F 3/8" | 150         | 10         | FF88 0150S |
| 200             |                 | 10          | FF88 0200S |            |
| 300             |                 | 10          | FF88 0300S |            |
| 400             |                 | 10          | FF88 0400S |            |
| 500             |                 | 10          | FF88 0500S |            |
| 600             |                 | 10          | FF88 0600S |            |
| 800             |                 | 10          | FF88 0800S |            |
| 1000            |                 | 10          | FF88 1000S |            |
| 1500            |                 | 10          | FF88 1500  |            |
| F 3/8" - F 1/2" |                 | 200         | 10         | FF82 0200S |
|                 | 300             | 10          | FF82 0300S |            |
|                 | 400             | 10          | FF82 0400S |            |
|                 | 500             | 10          | FF82 0500  |            |
|                 | 600             | 10          | FF82 0600S |            |
| F 1/2" - F 1/2" | 150             | 10          | FF22 0150S |            |
|                 | 200             | 10          | FF22 0200S |            |
|                 | 300             | 10          | FF22 0300S |            |
|                 | 400             | 10          | FF22 0400S |            |
|                 | 500             | 10          | FF22 0500S |            |
|                 | 600             | 10          | FF22 0600S |            |
|                 | 800             | 10          | FF22 0800S |            |
|                 | 1000            | 10          | FF22 1000S |            |
|                 | 1500            | 10          | FF22 1500  |            |
|                 | 2000            | 10          | FF22 2000  |            |
| F 3/4" - F 3/4" | 300             | 10          | FF44 0300S |            |
|                 | 500             | 10          | FF44 0500S |            |
|                 | 800             | 10          | FF44 0800  |            |
|                 | 1000            | 10          | FF44 1000  |            |



### Female/male

| Ø 8 mm          | fittings        | length (mm) | pack       | code       |
|-----------------|-----------------|-------------|------------|------------|
|                 | F 3/8" - M 3/8" | 150         | 10         | FM88 0150S |
| 200             |                 | 10          | FM88 0200S |            |
| 300             |                 | 10          | FM88 0300S |            |
| 400             |                 | 10          | FM88 0400S |            |
| 500             |                 | 10          | FM88 0500S |            |
| 800             |                 | 10          | FM88 0800  |            |
| F 3/8" - M 1/2" | 150             | 10          | FM82 0150  |            |
|                 | 300             | 10          | FM82 0300S |            |
|                 | 500             | 10          | FM82 0500  |            |
| F 1/2" - M 1/2" | 150             | 10          | FM22 0150S |            |
|                 | 300             | 10          | FM22 0300S |            |
|                 | 400             | 10          | FM22 0400S |            |
|                 | 500             | 10          | FM22 0500S |            |
|                 | 600             | 10          | FM22 0600S |            |
|                 | 800             | 10          | FM22 0800  |            |
|                 | 1000            | 10          | FM22 1000S |            |
| F 1/2" - M 3/8" | 300             | 10          | FM28 0300S |            |
|                 | 500             | 10          | FM28 0500  |            |
| F 3/4" - M 3/4" | 300             | 10          | FM44 0300  |            |
|                 | 500             | 10          | FM44 0500  |            |



## Elbow female/female

|        | fittings         | length (mm) | pack | code        |
|--------|------------------|-------------|------|-------------|
| Ø 8 mm | EF 3/8" - F 3/8" | 300         | 10   | CFF88 0300  |
|        |                  | 500         | 10   | CFF88 0500  |
|        |                  | 700         | 10   | CFF88 0700  |
|        | EF 1/2" - F 1/2" | 300         | 10   | CFF22 0300S |
|        |                  | 500         | 10   | CFF22 0500S |
|        |                  | 800         | 10   | CFF22 0800  |
|        |                  | 1000        | 10   | CFF22 1000S |
|        | EF 3/4" - F 3/4" | 1200        | 10   | CFF44 1200  |
|        |                  | 1500        | 10   | CFF44 1500  |
|        |                  | 2000        | 10   | CFF44 2000  |



## Elbow female/male

|        | fittings         | length (mm) | pack | code        |
|--------|------------------|-------------|------|-------------|
| Ø 8 mm | EF 1/2" - M 1/2" | 1000        | 10   | CFM22 1000S |
|        | EF 3/4" - M 3/4" | 500         | 10   | CFM44 0500S |
|        |                  | 1000        | 10   | CFM44 1000S |



## Female/bicone

|        | fittings           | length (mm) | pack | code         |
|--------|--------------------|-------------|------|--------------|
| Ø 8 mm | F 3/8" - Bicone 10 | 300         | 10   | FB8810 0300S |
|        |                    | 500         | 10   | FB8810 0500  |
|        | F 3/8" - Bicone 12 | 300         | 10   | FB8812 0300S |
|        |                    | 500         | 10   | FB8812 0500  |
|        | F 1/2" - Bicone 10 | 300         | 10   | FB2810 0300S |
|        |                    | 500         | 10   | FB2810 0500  |
|        | F 1/2" - Bicone 12 | 300         | 10   | FB2812 0300S |
|        |                    | 500         | 10   | FB2812 0500  |
|        | F 1/2" - Bicone 14 | 300         | 10   | FB2214 0300S |
|        |                    | 500         | 10   | FB2214 0500S |



## Bicone/bicone

|        | fittings              | length (mm) | pack | code           |
|--------|-----------------------|-------------|------|----------------|
| Ø 8 mm | Bicone 10 - Bicone 10 | 300         | 10   | BB881010 0300  |
|        |                       | 500         | 10   | BB881012 0300S |
|        | Bicone 10 - Bicone 12 | 300         | 10   | BB881012 0300S |
|        |                       | 500         | 10   | BB881012 0500  |
|        | Bicone 12 - Bicone 12 | 300         | 10   | BB881212 0300  |
|        |                       | 500         | 10   | BB881214 0300S |
|        | Bicone 10 - Bicone 14 | 300         | 10   | BB821014 0300S |
|        |                       | 500         | 10   | BB821014 0500  |
|        | Bicone 12 - Bicone 14 | 300         | 10   | BB821214 0300  |



## Male/bicone

|        | fittings           | length (mm) | pack | code         |
|--------|--------------------|-------------|------|--------------|
| Ø 8 mm | M 1/2" - Bicone 14 | 300         | 10   | MB8810 0300S |
|        | M 1/2" - Bicone 12 | 300         | 10   | MB8812 0300  |
|        | M 1/2" - Bicone 10 | 300         | 10   | MB2810 0300S |
|        | M 3/8" - Bicone 12 | 300         | 10   | MB2812 0300  |



## Female/sleek end

|        | fittings       | length (mm) | pack | code        |
|--------|----------------|-------------|------|-------------|
| Ø 8 mm | F 3/8" - SE 10 | 300         | 10   | FTL810 0300 |
|        | F 1/2" - SE 10 | 300         | 10   | FTL210 0300 |



## Male (short)/female

|        | fittings                | length (mm) | pack | code       |
|--------|-------------------------|-------------|------|------------|
| Ø 8 mm | M 10 - 1 short - F 3/8" | 300         | 10   | MXF8 0300S |



## Male (middle)/female

|        | fittings                 | length (mm) | pack | code       |
|--------|--------------------------|-------------|------|------------|
| Ø 8 mm | M 10 - 1 middle - F 3/8" | 300         | 10   | MYF8 0300S |



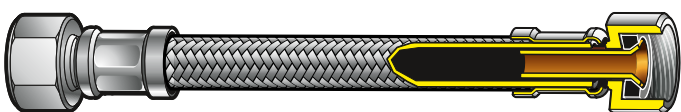
## Hospital & collective housing - Bore Ø 8,2 mm

For chlorine treatment - Stainless steel 304 braid (minimal cover 95%) - PEX inner hose - Nickel plated brass fittings - Stainless steel sockets - Max temperature & pressure: 90°C / 10 bar.



|        | fittings        | length (mm) | pack | code       |
|--------|-----------------|-------------|------|------------|
| Ø 8 mm | F 3/8" - F 3/8" | 300         | 10   | PFF88 0300 |
|        |                 | 500         | 10   | PFF88 0500 |
|        |                 | 700         | 10   | PFF88 0700 |
|        |                 | 1000        | 10   | PFF88 1000 |

|        | fittings        | length (mm) | pack | code       |
|--------|-----------------|-------------|------|------------|
| Ø 8 mm | F 1/2" - F 1/2" | 300         | 10   | PFF22 0300 |
|        |                 | 500         | 10   | PFF22 0500 |
|        |                 | 700         | 10   | PFF22 0700 |
|        |                 | 1000        | 10   | PFF22 1000 |



## Plumbing - Bore Ø 13 mm

For hot & cold water, sanitary taps, plumbing, water heater, etc... - Stainless steel 304 braid (minimal cover 95%) - EPDM inner hose - Nickel plated brass fittings - Nickel plated brass or stainless steel sockets - EPDM gaskets - Max. temperature & pressure: 5°C to 90°C / 10 bar - Water PH: 6 to 8 - Min. radial bending 45 mm.



### Female/female

|         | fittings        | length (mm) | pack        | code        |
|---------|-----------------|-------------|-------------|-------------|
| Ø 13 mm | F 1/2" - F 1/2" | 300         | 10          | GFF22 0300S |
|         |                 | 500         | 10          | GFF22 0500S |
|         |                 | 700         | 10          | GFF22 0700S |
|         |                 | 1000        | 10          | GFF22 1000S |
|         |                 | 1200        | 10          | GFF22 1200  |
|         |                 | 1500        | 10          | GFF22 1500  |
|         | 2000            | 10          | GFF22 2000  |             |
|         | F 3/4" - F 3/4" | 300         | 10          | GFF44 0300S |
|         |                 | 500         | 10          | GFF44 0500S |
|         |                 | 700         | 10          | GFF44 0700S |
| 1000    |                 | 10          | GFF44 1000S |             |
|         | 1200            | 10          | GFF44 1200  |             |
|         | 1500            | 10          | GFF44 1500  |             |
|         | 2000            | 10          | GFF44 2000  |             |

### Female/male

|                 | fittings        | length (mm) | pack        | code        |
|-----------------|-----------------|-------------|-------------|-------------|
| Ø 13 mm         | F 1/2" - M 1/2" | 300         | 10          | GFM22 0300S |
|                 |                 | 500         | 10          | GFM22 0500S |
|                 |                 | 700         | 10          | GFM22 0700S |
|                 |                 | 1000        | 10          | GFM22 1000S |
|                 | F 3/4" - M 1/2" | 300         | 10          | GFM42 0300  |
|                 |                 | 500         | 10          | GFM42 0500S |
|                 | 700             | 10          | GFM42 0700  |             |
| F 3/4" - M 3/4" | 300             | 10          | GFM44 0300S |             |
|                 | 500             | 10          | GFM44 0500S |             |
|                 | 700             | 10          | GFM44 0700S |             |
|                 | 1000            | 10          | GFM44 1000S |             |



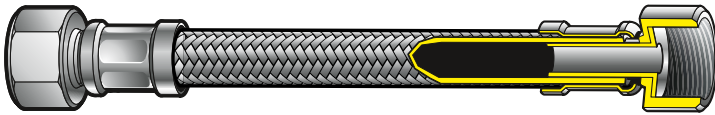
### Elbow female/female

|         | fittings         | length (mm)      | pack | code         |
|---------|------------------|------------------|------|--------------|
| Ø 13 mm | EF 1/2" - F 1/2" | 300              | 10   | GCFF22 0300S |
|         |                  | 500              | 10   | GCFF22 0500S |
|         |                  | 700              | 10   | GCFF22 0700S |
|         |                  | 1000             | 10   | GCFF22 1000S |
|         |                  | 1200             | 10   | GCFF22 1200  |
|         |                  | 1500             | 10   | GCFF22 1500  |
|         |                  | 2000             | 10   | GCFF22 2000  |
|         |                  | EF 3/4" - F 3/4" | 500  | 10           |
|         | 700              |                  | 10   | GCFF44 0700S |
|         | 800              |                  | 10   | GCFF44 0800S |
|         | 1000             |                  | 10   | GCFF44 1000S |
|         | 1200             |                  | 10   | GCFF44 1200S |
|         | 1500             |                  | 10   | GCFF44 1500S |
|         | 2000             |                  | 10   | GCFF44 2000  |

### Elbow female/male

|         | fittings         | length (mm) | pack | code        |
|---------|------------------|-------------|------|-------------|
| Ø 13 mm | EF 1/2" - M 1/2" | 300         | 10   | GCFM22 0300 |
|         |                  | 500         | 10   | GCFM22 0500 |
|         | EF 3/4" - M 3/4" | 300         | 10   | GCFM44 0300 |
|         |                  | 500         | 10   | GCFM44 0500 |
|         |                  | 800         | 10   | GCFM44 0800 |
|         |                  | 1000        | 10   | GCFM44 1000 |





## Plumbing, heating, air conditioning & pressurisation set - Bore Ø 15 to 50 mm

For hot & cold water, boiler, water heater, air conditioning & pressurisation set - Stainless steel 304 braid (minimal cover 95%) - EPDM inner hose - Nickel plated brass fittings - Anodised aluminium sockets - Temperature & pressure: -5°C to 100°C / 10 bar up to Ø 3/4" & 6 bar above - Water PH: 6 to 8.



### Female/female

|         | fittings            | length (mm) | min. radial bending (mm) | pack | code          |   |               |
|---------|---------------------|-------------|--------------------------|------|---------------|---|---------------|
| Ø 15 mm | F 1/2" - F 1/2"     | 300         | 70                       | 10   | HFF22 0300S   |   |               |
|         |                     | 500         | 70                       | 10   | HFF22 0500S   |   |               |
|         |                     | 700         | 70                       | 10   | HFF22 0700S   |   |               |
|         |                     | 1000        | 70                       | 10   | HFF22 1000S   |   |               |
|         |                     | 1500        | 70                       | 10   | HFF22 1500    |   |               |
| Ø 19 mm | F 3/4" - F 3/4"     | 300         | 70                       | 10   | H15FF44 0300  |   |               |
|         |                     | 500         | 70                       | 10   | H15FF44 0500  |   |               |
|         |                     | 700         | 70                       | 10   | H15FF44 0700  |   |               |
|         |                     | 1000        | 70                       | 10   | H15FF44 1000  |   |               |
|         |                     | 1500        | 70                       | 10   | H15FF44 1500  |   |               |
| Ø 25 mm | F 1" - F 1"         | 300         | 100                      | 5    | HFF1010 0300S |   |               |
|         |                     | 500         | 100                      | 5    | HFF1010 0500S |   |               |
|         |                     | 700         | 100                      | 5    | HFF1010 0700S |   |               |
|         |                     | 1000        | 100                      | 5    | HFF1010 1000S |   |               |
|         |                     | Ø 32 mm     | F 1 1/4" - F 1 1/4"      | 500  | 160           | 5 | HFF1414 0500S |
| 700     | 160                 |             |                          | 5    | HFF1414 0700S |   |               |
| 1000    | 160                 |             |                          | 5    | HFF1414 1000S |   |               |
| Ø 40 mm | F 1 1/2" - F 1 1/2" |             |                          | 500  | 180           | 5 | HFF1212 0500S |
|         |                     |             |                          | 700  | 180           | 5 | HFF1212 0700S |
|         |                     | 1000        | 180                      | 5    | HFF1212 1000S |   |               |
|         |                     | Ø 50 mm     | F 2" - F 2"              | 500  | 230           | 5 | HFF2020 0500S |
|         |                     |             |                          | 700  | 230           | 5 | HFF2020 0700S |
| 1000    | 230                 |             |                          | 5    | HFF2020 1000S |   |               |



### Female/male

|         | fittings            | length (mm) | min. radial bending (mm) | pack | code          |   |               |
|---------|---------------------|-------------|--------------------------|------|---------------|---|---------------|
| Ø 15 mm | F 1/2" - M 1/2"     | 300         | 70                       | 10   | HFM22 0300S   |   |               |
|         |                     | 500         | 70                       | 10   | HFM22 0500S   |   |               |
|         |                     | 700         | 70                       | 10   | HFM22 0700S   |   |               |
|         |                     | 1000        | 70                       | 10   | HFM22 1000S   |   |               |
|         |                     | Ø 19 mm     | F 3/4" - M 3/4"          | 300  | 80            | 5 | HFM44 0300S   |
| 500     | 80                  |             |                          | 5    | HFM44 0500S   |   |               |
| 700     | 80                  |             |                          | 5    | HFM44 0700S   |   |               |
| 1000    | 80                  |             |                          | 5    | HFM44 1000S   |   |               |
| Ø 25 mm | F 1" - M 1"         |             |                          | 300  | 100           | 5 | HFM1010 0300S |
|         |                     | 500         | 100                      | 5    | HFM1010 0500S |   |               |
|         |                     | 700         | 100                      | 5    | HFM1010 0700S |   |               |
|         |                     | 1000        | 100                      | 5    | HFM1010 1000S |   |               |
|         |                     | Ø 32 mm     | F 1 1/4" - M 1 1/4"      | 500  | 160           | 5 | HFM1414 0500S |
| 700     | 160                 |             |                          | 5    | HFM1414 0700S |   |               |
| 1000    | 160                 |             |                          | 5    | HFM1414 1000S |   |               |
| Ø 40 mm | F 1 1/2" - M 1 1/2" |             |                          | 500  | 180           | 5 | HFM1212 0500S |
|         |                     |             |                          | 700  | 180           | 5 | HFM1212 0700S |
|         |                     | 1000        | 180                      | 5    | HFM1212 1000S |   |               |
|         |                     | Ø 50 mm     | F 2" - M 2"              | 500  | 230           | 5 | HFM2020 0500S |
|         |                     |             |                          | 700  | 230           | 5 | HFM2020 0700S |
| 1000    | 230                 |             |                          | 5    | HFM2020 1000S |   |               |



### Elbow female/female

|         | fittings         | length (mm) | min. radial bending (mm) | pack | code           |
|---------|------------------|-------------|--------------------------|------|----------------|
| Ø 15 mm | EF 1/2" - F 1/2" | 300         | 70                       | 10   | HCFF22 0300S   |
|         |                  | 500         | 70                       | 10   | HCFF22 0500S   |
|         |                  | 700         | 70                       | 10   | HCFF22 0700S   |
|         |                  | 1000        | 70                       | 10   | HCFF22 1000S   |
| Ø 19 mm | EF 3/4" - F 3/4" | 300         | 80                       | 10   | HCFF44 0300S   |
|         |                  | 500         | 80                       | 10   | HCFF44 0500S   |
|         |                  | 700         | 80                       | 10   | HCFF44 0700S   |
|         |                  | 1000        | 80                       | 10   | HCFF44 1000S   |
| Ø 25 mm | EF 1" - F 1"     | 500         | 100                      | 5    | HCFF1010 0500S |
|         |                  | 700         | 100                      | 5    | HCFF1010 0700S |
|         |                  | 1000        | 100                      | 5    | HCFF1010 1000S |



### Elbow female/male

|                | fittings             | length (mm) | min. radial bending (mm) | pack | code           |
|----------------|----------------------|-------------|--------------------------|------|----------------|
| NEW<br>Ø 25 mm | EF 1" - M 1"         | 500         | 100                      | 5    | HCFM1010 0500S |
|                |                      | 700         | 100                      | 5    | HCFM1010 0700S |
|                |                      | 800         | 100                      | 5    | HCFM1010 0800S |
|                |                      | 1000        | 100                      | 5    | HCFM1010 1000S |
| Ø 32 mm        | EF 1 1/4" - M 1 1/4" | 700         | 130                      | 5    | HCFM1414 0700S |

## Air conditioning, heating & heat pump - Bore Ø 13 to 50 mm

For air conditioning, heating, heat pump & solid fuel boiler - High resistance textile & EPDM hose - High springback - Ozone & condensate protection - Brass fittings - Aluminium sockets - TS: -40°C/+120°C - Max. pressure: 20 bar up to F1"-F1", 10 bar above - Water & glycol: max. 30% glycol.



### Female/female

|         | fittings          | length (mm) | Ø fitting bore (mm) | min. radial bending (mm) | code          |
|---------|-------------------|-------------|---------------------|--------------------------|---------------|
| Ø 13 mm | F 1/2" - F 1/2"   | 300         | 10,5                | 105                      | ITFF22 0300   |
|         |                   | 500         | 10,5                | 105                      | ITFF22 0500   |
|         |                   | 700         | 10,5                | 105                      | ITFF22 0700   |
|         |                   | 1000        | 10,5                | 105                      | ITFF22 1000   |
| Ø 19 mm | F 3/4" - F 3/4"   | 300         | 15                  | 150                      | ITFF44 0300   |
|         |                   | 500         | 15                  | 150                      | ITFF44 0500   |
|         |                   | 700         | 15                  | 150                      | ITFF44 0700   |
|         |                   | 1000        | 15                  | 150                      | ITFF44 1000   |
| Ø 25 mm | F 1" - F 1"       | 500         | 20                  | 200                      | ITFF1010 0500 |
|         |                   | 700         | 20                  | 200                      | ITFF1010 0700 |
|         |                   | 1000        | 20                  | 200                      | ITFF1010 1000 |
| Ø 32 mm | F 1"1/4 - F 1"1/4 | 500         | 27                  | 250                      | ITFF1414 0500 |
|         |                   | 700         | 27                  | 250                      | ITFF1414 0700 |
|         |                   | 1000        | 27                  | 250                      | ITFF1414 1000 |
| Ø 38 mm | F 1"1/2 - F 1"1/2 | 500         | 33                  | 300                      | ITFF1212 0500 |
|         |                   | 1000        | 33                  | 300                      | ITFF1212 1000 |
| Ø 50 mm | F 2" - F 2"       | 500         | 44                  | 350                      | ITFF2020 0500 |
|         |                   | 1000        | 44                  | 350                      | ITFF2020 1000 |

### Female/male

|         | fittings        | length (mm) | Ø fitting bore (mm) | min. radial bending (mm) | code        |
|---------|-----------------|-------------|---------------------|--------------------------|-------------|
| Ø 13 mm | F 1/2" - M 1/2" | 500         | 10,5                | 105                      | ITFM22 0500 |
|         |                 | 700         | 10,5                | 105                      | ITFM22 0700 |
|         |                 | 1000        | 10,5                | 105                      | ITFM22 1000 |
| Ø 19 mm | F 3/4" - M 3/4" | 300         | 15                  | 150                      | ITFM44 0300 |
|         |                 | 500         | 15                  | 150                      | ITFM44 0500 |
|         |                 | 700         | 15                  | 150                      | ITFM44 0700 |
|         |                 | 1000        | 15                  | 150                      | ITFM44 1000 |

## Corrugated stainless steel flexible piping system



### Flexible & extensible hoses - Boilerflex

Extensible (twice the initial length) - Flexible in any direction - Suitable for: water, steam, hydrocarbons... - Stainless steel 316 hose - Stainless steel 303 male fittings - Nickel plated brass nut with stainless steel 303 flat bearing - PS: 10 bar - TS: 250°C.



| Ø pipe (mm) | fittings        | extensible length (mm) | interior Ø (mm) | exterior Ø (mm) | code        |
|-------------|-----------------|------------------------|-----------------|-----------------|-------------|
| 12          | F 1/2" - M 1/2" | 90 to 140              | 12,1            | 16,5            | RFM22 090   |
|             |                 | 130 to 220             | 12,1            | 16,5            | RFM22 130   |
|             |                 | 220 to 420             | 12,1            | 16,5            | RFM22 220   |
| 16          | F 3/4" - M 3/4" | 90 to 140              | 16,1            | 21,5            | RFM44 090   |
|             |                 | 130 to 220             | 16,1            | 21,5            | RFM44 130   |
|             |                 | 220 to 420             | 16,1            | 21,5            | RFM44 220   |
| 25          | F 1" - M 1"     | 130 to 220             | 25,3            | 32,0            | RFM1010 130 |
|             |                 | 220 to 420             | 25,3            | 32,0            | RFM1010 220 |



## Flexible pipes & fittings

### ■ Insulated solar panel connections



Material: stainless steel 316L - Anti-UV insulation foam socket - Probe with PVC sheath for bi-pipe - Insulation thickness 13 mm - PS: 10 bar - TS: -57°C/+127°C (temporarily: +175°C).



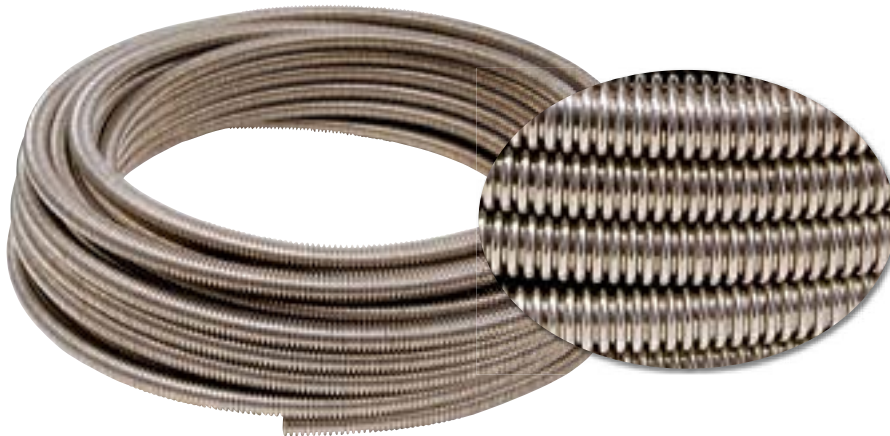
#### Bi-pipe set

1 coil & 4 fitting set

| Ø pipe (mm) | fittings | coil length (m) | code       |
|-------------|----------|-----------------|------------|
| 16          | FF 3/4"  | 10              | ECO1610C13 |
|             |          | 15              | ECO1615C13 |
|             |          | 20              | ECO1620C13 |
| 20          | FF 1"    | 10              | ECO2010C13 |
|             |          | 15              | ECO2015C13 |
|             |          | 20              | ECO2020C13 |

### ■ Heating, plumbing & air-conditioning connections

Material: stainless steel 316L - Max. temperature & pressure: 300°C / 10 bar.

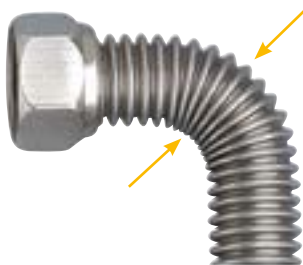


Cutter-pipe

| code |
|------|
| ICT  |

#### Pipe

Sold only by coil



| Ø pipe (mm) | coil length (m) | interior Ø (mm) | exterior Ø (mm) | working pressure (bar) | max pressure (bar) | min. radial bending (mm) | code   |
|-------------|-----------------|-----------------|-----------------|------------------------|--------------------|--------------------------|--------|
| 12          | 25              | 12,1            | 16,5            | 10                     | 40                 | 45                       | I1225  |
|             | 50              | 12,1            | 16,5            | 10                     | 40                 | 45                       | I1250  |
| 16          | 25              | 16,1            | 21,5            | 10                     | 40                 | 58                       | I1625  |
|             | 50              | 16,1            | 21,5            | 10                     | 40                 | 58                       | I1650  |
|             | 100             | 16,1            | 21,5            | 10                     | 40                 | 58                       | I16100 |
| 20          | 25              | 20,1            | 26,5            | 10                     | 40                 | 70                       | I2025  |
| 25          | 25              | 25,3            | 32              | 7                      | 28                 | 85                       | I2525  |



#### Pipe set - Flat bearing

1 coil & 10 fitting set

| Ø pipe (mm) | coil length (m) | Ø fitting | code   |
|-------------|-----------------|-----------|--------|
| 16          | 15              | 3/4"      | IKIT16 |

## ■ Fittings - Conical bearing



### Female



| Ø pipe (mm) | fittings | code    |
|-------------|----------|---------|
| 12          | 1/2"     | IRF212  |
| 16          | 3/4"     | IRF416  |
| 20          | 1"       | IRF1020 |

### Male



| Ø pipe (mm) | fittings | code    |
|-------------|----------|---------|
| 12          | 1/2"     | IRM212  |
| 16          | 3/4"     | IRM416  |
| 20          | 1"       | IRM1020 |



## ■ Fittings - Flat bearing

### Fittings set

Nut + ring + gasket, mandatory packing: 10 sets



| Ø pipe (mm) | fittings | code |
|-------------|----------|------|
| 12          | 1/2"     | IR12 |
| 16          | 3/4"     | IR16 |
| 20          | 1"       | IR20 |
| 25          | 1 1/4"   | IR25 |



### Piston

| code    |
|---------|
| IPISTON |



### Head

| Ø pipe (mm) | code  |
|-------------|-------|
| 12          | ITE12 |
| 16          | ITE16 |
| 20          | ITE20 |
| 25          | ITE25 |



### Nipple

Economical solution for flat bearing instead of piston & head.



| Ø      | pack | code |
|--------|------|------|
| 1/2"   | 10   | IM2  |
| 3/4"   | 10   | IM4  |
| 1"     | 10   | IM10 |
| 1 1/4" | 10   | IM14 |



# Heating

|   |                  |
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## Thermostatic radiator valves

### ■ Control head

Acc. to EN 215 - Built-in sensor with liquid-filled element - Connection M30 x 1,5.



### Thermostatic control head

| pack  | code |
|-------|------|
| 1/126 | TTH  |

### ■ Female radiator valves

Chrome-plated - With internal o-ring & external gasket.



#### Angle type

| Ø    | pack  | code   |
|------|-------|--------|
| 3/8" | 15/90 | RTH12E |
| 1/2" | 6/48  | RTH15E |



#### Straight type

| Ø    | pack   | code   |
|------|--------|--------|
| 3/8" | 15/120 | RTH12D |
| 1/2" | 6/48   | RTH15D |



#### Reverse type

| Ø    | pack | code    |
|------|------|---------|
| 3/8" | 9/72 | RTH12EI |
| 1/2" | 9/72 | RTH15EI |

### ■ Female lockshield valves

Chrome-plated - With internal o-ring & external gasket.



#### Angle type

| Ø    | pack | code   |
|------|------|--------|
| 3/8" | 20   | CR12CH |
| 1/2" | 15   | CR15CH |



#### Straight type

| Ø    | pack | code   |
|------|------|--------|
| 3/8" | 20   | TR12CH |
| 1/2" | 15   | TR15CH |



Mandatory packing 12 pcs

## Manual radiator valves



Nickel-plated brass CW617N body - Internal o-ring - Max. temperature: +110°C - Max. pressure: 10 bar.

### ■ Female radiator valves

#### Angle type

| Ø    | pack   | code   |
|------|--------|--------|
| 1/2" | 12/144 | RRI15E |

### ■ Female lockshield valves

#### Angle type

| Ø    | pack   | code |
|------|--------|------|
| 1/2" | 12/156 | CR15 |



#### Straight type

| Ø    | pack  | code   |
|------|-------|--------|
| 1/2" | 12/96 | RRI15D |



#### Straight type

| Ø    | pack   | code  |
|------|--------|-------|
| 1/2" | 12/156 | TRI15 |

### ■ Male radiator valves

#### Angle type

| Ø    | pack  | code    |
|------|-------|---------|
| 1/2" | 12/96 | RRI15EM |

### ■ Male lockshield valves

#### Angle type

| Ø    | pack   | code  |
|------|--------|-------|
| 1/2" | 12/156 | CR15M |



#### Straight type

| Ø    | pack  | code    |
|------|-------|---------|
| 1/2" | 12/96 | RRI15DM |



#### Straight type

| Ø    | pack   | code   |
|------|--------|--------|
| 1/2" | 12/156 | TRI15M |



## Thermostatic radiator valves

### ■ Control head



Acc. to EN215 - Built-in sensor with oil-filled element - Adjustable temperature range: +5°C/+28°C - Antifreeze position set: +5°C - Locking temperature setting - Connection M30x1,5 - Class A energy saving.



### Thermostatic control head

| pack  | code |
|-------|------|
| 1/120 | TTI  |

Nickel-plated brass CW617N body - Internal o-ring & external gasket - Max. temperature: +110°C - Max. pressure: 10 bar - Max. glycol: 30%.

### ■ Female radiator valves

#### Angle type

| Ø    | pack | code    |
|------|------|---------|
| 1/2" | 4/96 | RRT115E |



### ■ Female lockshield valves

#### Angle type

| Ø    | pack   | code   |
|------|--------|--------|
| 1/2" | 12/156 | CRT115 |



#### Straight type

| Ø    | pack | code    |
|------|------|---------|
| 1/2" | 4/96 | RRT115D |



#### Straight type

| Ø    | pack   | code   |
|------|--------|--------|
| 1/2" | 12/132 | TRT115 |



Nickel-plated brass CW617N body - Internal o-ring & external gasket - Max. temperature: +110°C - Max. pressure: 10 bar - Max. glycol: 30%.

### ■ Male radiator valves

#### Angle type

| Ø    | pack | code     |
|------|------|----------|
| 1/2" | 4/96 | RRT115EM |



### ■ Male lockshield valves

#### Angle type

| Ø    | pack   | code    |
|------|--------|---------|
| 1/2" | 12/192 | CRT115M |



#### Straight type

| Ø    | pack | code     |
|------|------|----------|
| 1/2" | 4/96 | RRT115DM |



#### Straight type

| Ø    | pack   | code    |
|------|--------|---------|
| 1/2" | 12/156 | TRT115M |



## Fittings for radiator valve

### Fitting 1/2" for multilayer pipes

| Ø               | pack   | code      |
|-----------------|--------|-----------|
| 1/2" - M 16x2,0 | 10/500 | MCI1516X2 |



### Fitting 1/2" for copper pipes

| Ø       | pack   | code    |
|---------|--------|---------|
| 1/2"x15 | 50/600 | CUI1515 |



## Radiator air vents & drain cocks

For carbon steel radiators.

Packaging:  
blister of 10 pcs  
or bulk



blister of 10 pcs



bulk



### Angle type

| Ø    | packaging     | pack    | code  |
|------|---------------|---------|-------|
| 1/2" | blister of 10 | 50/200  | BP15  |
| 1/2" | bulk          | 100/500 | BP15V |



### Plain cap

| Ø    | packaging     | pack    | code   |
|------|---------------|---------|--------|
| 1/2" | blister of 10 | 50/200  | BPL15  |
| 1/2" | bulk          | 100/500 | BPL15V |



### Reduction nipple

| Ø           | packaging     | pack    | code   |
|-------------|---------------|---------|--------|
| 1/2" - 3/8" | blister of 10 | 50/200  | R1512  |
| 1/2" - 3/8" | bulk          | 100/500 | R1512V |
| 1/2" - 1/8" | blister of 10 | 50/200  | R1505  |
| 1/2" - 1/8" | bulk          | 100/500 | R1505V |



### Mini drain cock with adjustable outlet

| Ø    | packaging     | pack    | code  |
|------|---------------|---------|-------|
| 1/2" | blister of 10 | 50/200  | RV15  |
| 1/2" | bulk          | 100/500 | RV15V |



### Mini drain cock with o-ring

| Ø    | packaging     | pack   | code  |
|------|---------------|--------|-------|
| 3/8" | blister of 10 | 50/200 | RV12  |
| 3/8" | bulk          | 50     | RV12V |



### Automatic hygroscopic air vent

| Ø    | pack | code |
|------|------|------|
| 1/8" | 25   | PD05 |
| 1/4" | 25   | PD08 |
| 3/8" | 25   | PD12 |
| 1/2" | 25   | PD15 |



### Wheel air vent

| Ø    | packaging     | pack   | code   |
|------|---------------|--------|--------|
| 1/8" | blister of 10 | 50/200 | PV05C  |
| 1/8" | bulk          | 100    | PV05CV |



### Wheel air vent with adjustable outlet

| Ø    | packaging     | pack   | code   |
|------|---------------|--------|--------|
| 1/8" | blister of 10 | 50/200 | PV05B  |
| 1/8" | bulk          | 50     | PV05BV |
| 1/4" | blister of 10 | 50/200 | PV08B  |
| 1/4" | bulk          | 50/200 | PV08BV |



### Hostaform wheel air vent

Rubber seat & PTFE ring

| Ø    | packaging | pack | code  |
|------|-----------|------|-------|
| 1/8" | bulk      | 50   | PV05L |



### Square driving air vent

| Ø    | packaging     | pack   | code   |
|------|---------------|--------|--------|
| 1/8" | blister of 10 | 50/200 | PC05C  |
| 1/8" | bulk          | 100    | PC05CV |

### Key for square driving air vent

|      | pack | code  |
|------|------|-------|
| 4 mm | 10   | ZCLE4 |
| 5 mm | 10   | ZCLE5 |



### Drain cock ball valve

| Ø    | pack | code   |
|------|------|--------|
| 1/2" | 150  | RVC15T |

## Conical drain valves

### Male - Female



| Ø    | pack | code  |
|------|------|-------|
| 3/8" | 25   | 60112 |
| 1/2" | 25   | 60115 |
| 3/4" | 10   | 60120 |



### Male & cap

| Ø    | pack | code  |
|------|------|-------|
| 3/8" | 25   | 60312 |
| 1/2" | 25   | 60315 |
| 3/4" | 10   | 60320 |

### Female - Female



| Ø    | pack | code  |
|------|------|-------|
| 3/8" | 25   | 60212 |
| 1/2" | 25   | 60215 |
| 3/4" | 10   | 60220 |



### Nozzle

| Ø    | pack | code  |
|------|------|-------|
| 3/8" | 25   | ZRT12 |
| 1/2" | 25   | ZRT15 |
| 3/4" | 25   | ZRT20 |



## Towel heaters

### Hydraulic

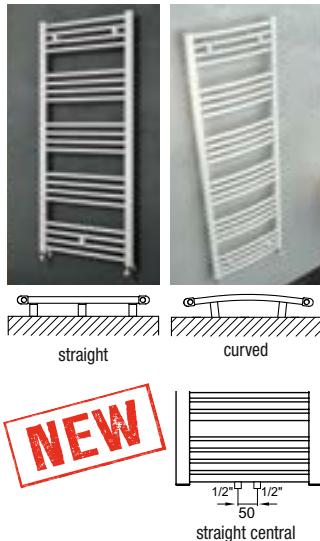
Acc. to EN 442-1 - White RAL 9016 - Support set & drain cock included - Max. temperature: +110°C - ⚠ Do not use any electric resistor with a power (W) higher than the one mentioned in the chart (power  $\Delta t = 50^\circ\text{C}$  (W)).



#### Mahana

Laquered carbon steel 22 mm diameter vertical radiant bodies - 30 x 40 mm horizontal manifolds - Connections 2 x 1/2" F & 1 x 1/2" for drain cock - Max. pressure: 8 bar.

| height (mm) | width (mm) | center distance (mm) |        | weight (kg) | volume (l) | power $\Delta t = 50^\circ\text{C}$ (W) | straight code         | curved code |
|-------------|------------|----------------------|--------|-------------|------------|---|-----------------------|-------------|
|             |            | straight             | curved |             |            |   |                       |             |
| 700         | 500        | 450                  | 444    | 4,1         | 2,9        | 301                                     | MAH500700D            | MAH500700G  |
| 1238        | 500        | 450                  | 444    | 7,1         | 5,0        | 514                                     | MAH5001238D           | MAH5001238G |
| 1238        | 600        | 550                  | 546    | 7,9         | 5,7        | 598                                     | MAH6001238D           | MAH6001238G |
| 1496        | 500        | 450                  | 444    | 8,5         | 6,0        | 631                                     | MAH5001496D           | MAH5001496G |
| 1496        | 600        | 550                  | 546    | 9,5         | 6,8        | 728                                     | MAH6001496D           | MAH6001496G |
| 1775        | 600        | 550                  | 546    | 11,2        | 8,0        | 858                                     | MAH6001775D           | MAH6001775G |
| height (mm) | width (mm) | center distance (mm) |        | weight (kg) | volume (l) | power $\Delta t = 50^\circ\text{C}$ (W) | straight central code |             |
|             |            | straight             | curved |             |            |   |                       |             |
| 1238        | 500        | 50                   | 50     | 7,1         | 5          | 514                                     | MAH5001238DC          |             |
| 1238        | 600        | 50                   | 50     | 7,9         | 5,7        | 598                                     | MAH6001238DC          |             |
| 1496        | 500        | 50                   | 50     | 8,5         | 6          | 631                                     | MAH5001496DC          |             |
| 1496        | 600        | 50                   | 50     | 9,5         | 6,8        | 728                                     | MAH6001496DC          |             |



**NEW**

#### Hita

Laquered carbon steel 28 mm diameter vertical radiant bodies - 50 x 10 mm horizontal manifolds - Connections 2 x 1/2" F & 1 x 1/2" for drain cock - Max. pressure: 5 bar.

| height (mm) | width (mm) | center distance (mm) | weight (kg) | volume (l) | power $\Delta t = 50^\circ\text{C}$ (W) | code       |
|-------------|------------|----------------------|-------------|------------|---|------------|
| 930         | 400        | 370                  | 8,80        | 3,8        | 396                                     | HIT400930  |
| 930         | 500        | 470                  | 10,40       | 4,35       | 477                                     | HIT500930  |
| 930         | 600        | 570                  | 12          | 4,90       | 558                                     | HIT600930  |
| 1 290       | 400        | 370                  | 12,30       | 5          | 536                                     | HIT4001290 |
| 1 290       | 500        | 470                  | 14,50       | 5,75       | 653                                     | HIT5001290 |
| 1 290       | 600        | 570                  | 16,70       | 6,50       | 770                                     | HIT6001290 |
| 1 640       | 400        | 370                  | 15          | 6,40       | 673                                     | HIT4001640 |
| 1 640       | 500        | 470                  | 17,75       | 7,35       | 812                                     | HIT5001640 |
| 1 640       | 600        | 570                  | 20,50       | 8,30       | 952                                     | HIT6001640 |



**NEW**

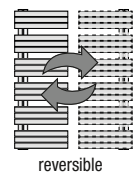
#### Wela

Laquered carbon steel 38 mm diameter vertical radiant bodies - 50 x 10 mm horizontal manifolds - Connections 4 x 1/2" F - Max. pressure: 5 bar.

| height (mm) | width (mm) | center distance (mm) | weight (kg) | volume (l) | power $\Delta t = 50^\circ\text{C}$ (W) | code       |
|-------------|------------|----------------------|-------------|------------|---|------------|
| 976         | 550        | 50                   | 11,5        | 4,3        | 461                                     | WEL550976  |
| 1421        | 550        | 50                   | 16,4        | 6,2        | 656                                     | WEL5501421 |
| 1869        | 550        | 50                   | 21,4        | 8,1        | 860                                     | WEL5501869 |



**NEW**



### Electric

Acc. to EN 442-1 - White RAL 9016 - Tension 230V/50Hz - IP44 class II - 1,2m wire - Water + glycol - Programmable thermostat.



#### Mahana

| height (mm) | width (mm) | weight (kg) | power (W) | code         |
|-------------|------------|-------------|-----------|--------------|
| 1308        | 400        | 11,3        | 500       | MAH4001308DE |
| 1566        | 500        | 15,2        | 750       | MAH5001566DE |
| 1845        | 550        | 18,9        | 1000      | MAH5501845DE |



**NEW**

#### Hita

| height (mm) | width (mm) | weight (kg) | power (W) | code        |
|-------------|------------|-------------|-----------|-------------|
| 1000        | 500        | 15,45       | 500       | HIT5001000E |
| 1360        | 500        | 20,95       | 750       | HIT5001360E |
| 1710        | 500        | 27,65       | 1000      | HIT5001710E |



## Electric sets for towel heater



When the boiler is off, the device offers the requested temperature & dries the towels - Includes: heating cartridge, chromed tee, control panel, o-rings & key.

### Digital

Temperature setting: +5 to +30°C -  
1 ou 2 h boost mode.

| power (W) | white code | grey code |
|-----------|------------|-----------|
| 300       | KM0300DB   | KM0300DG  |
| 500       | KM0500DB   | KM0500DG  |
| 750       | KM0750DB   | KM0750DG  |
| 1000      | KM1000DB   | KM1000DG  |
| 1250      | KM1250DB   | KM1250DG  |

### Analogue

Temperature setting: +7 to +30°C.  
2 h boost mode -  
6 order pilot wire.

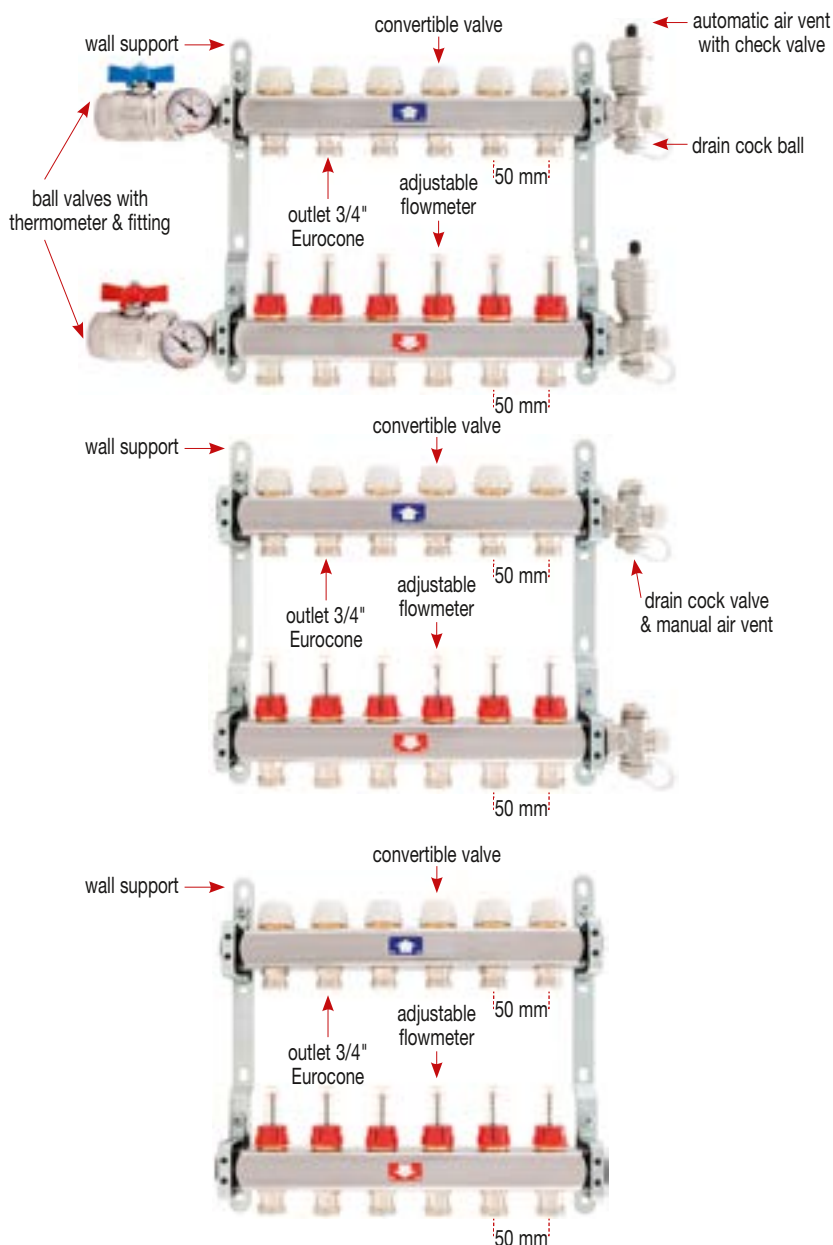


| power (W) | code     |
|-----------|----------|
| 300       | KM0300AB |
| 500       | KM0500AB |
| 750       | KM0750AB |
| 1000      | KM1000AB |
| 1250      | KM1250AB |

## Heating floor components



### Stainless steel distribution manifolds



### Complete set

Max. pressure: 6 bar - Max. temperature: +70°C.

| outlets | dimension (mm) | code      |
|---------|----------------|-----------|
| 2       | 312            | COLSTCI2  |
| 3       | 362            | COLSTCI3  |
| 4       | 412            | COLSTCI4  |
| 5       | 462            | COLSTCI5  |
| 6       | 512            | COLSTCI6  |
| 7       | 562            | COLSTCI7  |
| 8       | 612            | COLSTCI8  |
| 9       | 662            | COLSTCI9  |
| 10      | 712            | COLSTCI10 |

### Set with flowmeters, air vents & drain cocks

Max. pressure: 6 bar - Max. temperature: +70°C.

| outlets | dimension (mm) | code        |
|---------|----------------|-------------|
| 2       | 199            | COLSTFADI2  |
| 3       | 249            | COLSTFADI3  |
| 4       | 299            | COLSTFADI4  |
| 5       | 349            | COLSTFADI5  |
| 6       | 399            | COLSTFADI6  |
| 7       | 449            | COLSTFADI7  |
| 8       | 499            | COLSTFADI8  |
| 9       | 549            | COLSTFADI9  |
| 10      | 599            | COLSTFADI10 |

### Set with flowmeters

Max. pressure: 6 bar - Max. temperature: +70°C.

| outlets | dimension (mm) | code      |
|---------|----------------|-----------|
| 2       | 143            | COLSTFI2  |
| 3       | 193            | COLSTFI3  |
| 4       | 243            | COLSTFI4  |
| 5       | 293            | COLSTFI5  |
| 6       | 343            | COLSTFI6  |
| 7       | 393            | COLSTFI7  |
| 8       | 443            | COLSTFI8  |
| 9       | 493            | COLSTFI9  |
| 10      | 543            | COLSTFI10 |

### Electrothermic head for stainless steel manifolds

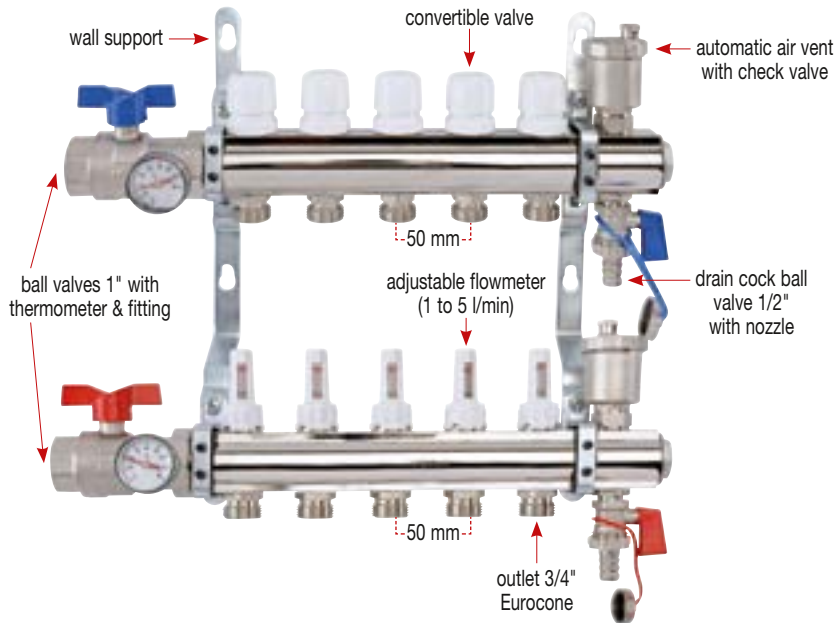
No tension, normally closed - 1 m wire - 230V - 1W - TS: 0°C/+60°C -  
Δp: 1,5 bar - IP54 - 2 threads w/ a 300 mA auxiliary microswitch.



| code  |
|-------|
| TETI2 |



## Brass distribution manifold



### Complete set

Max. pressure: 6 bar - TS: +5°C/+65°C.

| outlets | dimension (mm) | code     |
|---------|----------------|----------|
| 2       | 270            | COLSTC2  |
| 3       | 320            | COLSTC3  |
| 4       | 370            | COLSTC4  |
| 5       | 420            | COLSTC5  |
| 6       | 470            | COLSTC6  |
| 7       | 520            | COLSTC7  |
| 8       | 570            | COLSTC8  |
| 9       | 620            | COLSTC9  |
| 10      | 670            | COLSTC10 |



## Accessories for brass distribution manifold



### Flowmeter

|        |
|--------|
| code   |
| DEBSTC |



### Thermometer

|        |
|--------|
| code   |
| THESTC |



### Thermometer

|        |
|--------|
| code   |
| THDERH |



### Thermostatic shut-off valve

|          |
|----------|
| code     |
| ROBTHSTC |



### Electrothermic head

No tension, normally closed -  
1 m wire - 230V - 1,2W -  
Position indicator - M30 x 1,5.

|       |
|-------|
| code  |
| TETPB |



### Air vent

|        |
|--------|
| code   |
| PURSTC |



### Drain cock ball valve

1/2" inlet & 3/4" outlet

|      |         |
|------|---------|
| code |         |
| Red  | ROBSTCR |
| Blue | ROBSTCB |



### Wall support

(sold by 2)

|        |
|--------|
| code   |
| SUPSTC |



### Housing

Adjustable depth 110 mm to 140 mm.

| dimension (mm) | outlets  | code  |
|----------------|----------|-------|
| 500 x 400      | 2 to 3   | COF3  |
| 500 x 600      | 4 to 6   | COF6  |
| 500 x 800      | 7 to 9   | COF9  |
| 500 x 1000     | 10 to 12 | COF12 |

## Fittings for distribution manifolds

Eurocone connection (compatible for stainless steel & brass distribution manifolds).

### Fittings for multilayer pipes



| Ø           | pack   | code         |
|-------------|--------|--------------|
| 3/4" - 16x2 | 20/300 | MCEUR341620I |
| 3/4" - 20x2 | 20/300 | MCEUR342020I |

### Fittings for plastic (PEX) pipes



| Ø             | pack   | code        |
|---------------|--------|-------------|
| 3/4" - 16x1,5 | 25/200 | PEUR341615I |
| 3/4" - 16x2   | 20/300 | PEUR341620I |
| 3/4" - 17x2   | 20/300 | PEUR341720I |

## Accessories for heating floor slabs



**Slab heating cutter**

|      |
|------|
| code |
| THE  |



**Spare blade**

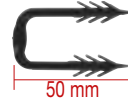
|      |
|------|
| code |
| LAM  |



**Mechanical staple**

For AG400, AG500, AG40PLUS & AG55PLUS

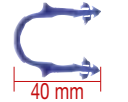
|       |
|-------|
| code  |
| AGRAF |



**Jumpers**

(sold by box of 500)

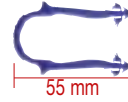
|       |
|-------|
| code  |
| 50 mm |
| CAV   |



**High performance thermic staples**

(sold by box of 300)

| pack  | code              |
|-------|-------------------|
| 40 mm | 20 boxes AG40PLUS |
| 55 mm | 10 boxes AG55PLUS |



**Staples**

For 13x16 & 16x20 pipes (sold by box of 300)



| pack  | code            |
|-------|-----------------|
| 40 mm | 20 boxes AGR400 |
| 55 mm | 10 boxes AGR550 |

## Peripheral insulations



**Standard**

(sold by roll)

| pack                       | code           |
|----------------------------|----------------|
| 50 m x 120 mm - 8 mm thick | 10 rolls ISOST |
| 50 m x 180 mm - 8 mm thick | 6 rolls ISOST2 |



50 m x 150 mm - 5 mm thick

|                |
|----------------|
| 8 rolls ISOSTM |
|----------------|



**With wiper**

(sold by roll)

| pack                       | code           |
|----------------------------|----------------|
| 50 m x 150 mm - 8 mm thick | 8 rolls ISOFB  |
| 25 m x 180 mm - 8 mm thick | 4 rolls ISOFB2 |



**Self-adhesive with wiper**

(sold by roll)

| pack                       | code          |
|----------------------------|---------------|
| 50 m x 150 mm - 8 mm thick | 4 rolls ISOFA |



**With adhesive wiper**

(sold by roll)

| pack                       | code             |
|----------------------------|------------------|
| 50 m x 120 mm - 5 mm thick | 10 rolls ISOFBAM |
| 50 m x 150 mm - 5 mm thick | 8 rolls ISOFBAM2 |



**With adhesive wiper for sleek tile**

(sold by roll)

| pack                       | code           |
|----------------------------|----------------|
| 50 m x 150 mm - 8 mm thick | 8 rolls ISOFBA |



**Cutting pliers**

For pipes up to Ø 32

|         |
|---------|
| code    |
| Blister |
| PINCOU  |



For pipes up to Ø 32

|           |
|-----------|
| code      |
| Blister   |
| PINCT     |
| Box of 10 |
| PINCT10   |



**Test pump**

Max. pressure: 50 bar

|        |
|--------|
| code   |
| POMEPR |



**Bending springs**

For plastic pipes

|            | code  |
|------------|-------|
| 10 x 12 mm | RES12 |
| 13 x 16 mm | RES16 |
| 16 x 20 mm | RES20 |
| 20 x 25 mm | RES25 |



**Para-heating protection fluid**

|      |
|------|
| code |
| 1 l  |
| PAR1 |
| 5 l  |
| PAR5 |



**Filling pump**

For Para-heating 1 l  
For Para-heating 5 l

|      |
|------|
| code |
| POM1 |
| POM5 |

## Circulators for heating



Acc. to the 2013 & 2015 European Directive ErP 2009/125/EC - EEI between 0,19 & 0,23 - Max. pressure: 10 bar - IP44 - Insulation class: F - 230V~50/60Hz - Max. glycol: 30%.



### Domestic use



#### EVOSTA

0,4 to 3,3 m<sup>3</sup>/h up to 6,9 m -  
Temperature range: +2°C/+95°C.

|                | length (mm) | Ø             | code            |
|----------------|-------------|---------------|-----------------|
| EVOSTA 40      | 130         | 1 1/2"        | EVA4070130      |
|                | 130         | 1"            | EVA407013026    |
|                | 180         | 1 1/2"        | EVA4070180      |
|                | 180         | 2"            | EVA4060180X     |
| EVOSTA 40 DPC* | 120         | oval flanges  | EVA4060120      |
|                | 130         | 1 1/2"        | EVA4070130DPC   |
|                | 130         | 1"            | EVA407013026DPC |
| 180            | 1 1/2"      | EVA4070180DPC |                 |

\* for heating floor.



#### EVOTRON

0,4 to 4,2 m<sup>3</sup>/h up to 8 m -  
Temperature range: -10°C/+110°C.

|            | length (mm) | Ø        | code      |
|------------|-------------|----------|-----------|
| EVOTRON 40 | 130         | 1 1/2"   | EV40130   |
|            | 180         | 1 1/2"   | EV40180   |
|            | 180         | 2"       | EV40180X  |
|            | 130         | 1"       | EV4013026 |
| EVOTRON 60 | 130         | 1 1/2"   | EV60130   |
|            | 180         | 1 1/2"   | EV60180   |
|            | 180         | 2"       | EV60180X  |
| EVOTRON 80 | 130         | 1"       | EV6013026 |
|            | 130         | 1 1/2"   | EV80130   |
|            | 180         | 1 1/2"   | EV80180   |
| 180        | 2"          | EV80180X |           |

**NEW**



### Collective use



|                       | length (mm) | Ø      | flanged | code        |
|-----------------------|-------------|--------|---------|-------------|
| EVOPLUS 40            | 180         | 1 1/2" |         | EVO40180M   |
| EVOPLUS 40            | 180         | 2"     |         | EVO40180XM  |
| EVOPLUS 60            | 180         | 1 1/2" |         | EVO60180M   |
| EVOPLUS 60            | 180         | 2"     |         | EVO60180XM  |
| EVOPLUS 80            | 180         | 1 1/2" |         | EVO80180M   |
| EVOPLUS 80            | 180         | 2"     |         | EVO80180XM  |
| EVOPLUS 110           | 180         | 1 1/2" |         | EVO110180M  |
| EVOPLUS 110           | 180         | 2"     |         | EVO110180XM |
| EVOPLUS B40           | 220         |        | DN32    | EVOB40220   |
| EVOPLUS B40           | 250         |        | DN40    | EVOB40250   |
| EVOPLUS D40 - Double  | 220         |        | DN32    | EVD040220   |
| EVOPLUS D40 - Double  | 250         |        | DN40    | EVD040250   |
| EVOPLUS B60           | 220         |        | DN32    | EVOB60220   |
| EVOPLUS B60           | 250         |        | DN40    | EVOB60250   |
| EVOPLUS D60 - Double  | 220         |        | DN32    | EVD60220    |
| EVOPLUS D60 - Double  | 250         |        | DN40    | EVD60250    |
| EVOPLUS B80           | 220         |        | DN32    | EVOB80220   |
| EVOPLUS B80           | 250         |        | DN40    | EVOB80250   |
| EVOPLUS D80 - Double  | 220         |        | DN32    | EVD80220    |
| EVOPLUS D80 - Double  | 250         |        | DN40    | EVD80250    |
| EVOPLUS B110          | 220         |        | DN32    | EVOB110220  |
| EVOPLUS B110          | 250         |        | DN40    | EVOB110250  |
| EVOPLUS D110 - Double | 220         |        | DN32    | EVD110220   |
| EVOPLUS D110 - Double | 250         |        | DN40    | EVD110250   |
| EVOPLUS B120          | 220         |        | DN32    | EVOB12032   |
| EVOPLUS D120 - Double | 220         |        | DN32    | EVD12032    |
| EVOPLUS B40           | 220         |        | DN40    | EVOB4040    |
| EVOPLUS B60           | 220         |        | DN40    | EVOB6040    |
| EVOPLUS B80           | 220         |        | DN40    | EVOB8040    |
| EVOPLUS B100          | 220         |        | DN40    | EVOB10040   |
| EVOPLUS B120          | 250         |        | DN40    | EVOB12040   |
| EVOPLUS B150          | 250         |        | DN40    | EVOB15040   |
| EVOPLUS B180          | 250         |        | DN40    | EVOB18040   |
| EVOPLUS D40 - Double  | 220         |        | DN40    | EVD04040    |
| EVOPLUS D60 - Double  | 220         |        | DN40    | EVD6040     |
| EVOPLUS D80 - Double  | 220         |        | DN40    | EVD8040     |
| EVOPLUS D100 - Double | 220         |        | DN40    | EVD10040    |
| EVOPLUS D120 - Double | 250         |        | DN40    | EVD12040    |
| EVOPLUS D150 - Double | 250         |        | DN40    | EVD15040    |
| EVOPLUS D180 - Double | 250         |        | DN40    | EVD18040    |



|                       | length (mm) | Ø | flanged | code       |
|-----------------------|-------------|---|---------|------------|
| EVOPLUS B40           | 240         |   | DN50    | EVOB4050   |
| EVOPLUS B60           | 240         |   | DN50    | EVOB6050   |
| EVOPLUS B80           | 240         |   | DN50    | EVOB8050   |
| EVOPLUS B100          | 280         |   | DN50    | EVOB10050  |
| EVOPLUS B120          | 280         |   | DN50    | EVOB12050  |
| EVOPLUS B150          | 280         |   | DN50    | EVOB15050  |
| EVOPLUS B180          | 280         |   | DN50    | EVOB18050  |
| EVOPLUS D40 - Double  | 240         |   | DN50    | EVD04050   |
| EVOPLUS D60 - Double  | 240         |   | DN50    | EVD06050   |
| EVOPLUS D80 - Double  | 240         |   | DN50    | EVD08050   |
| EVOPLUS D100 - Double | 280         |   | DN50    | EVD10050   |
| EVOPLUS D120 - Double | 280         |   | DN50    | EVD12050   |
| EVOPLUS D150 - Double | 280         |   | DN50    | EVD15050   |
| EVOPLUS D180 - Double | 280         |   | DN50    | EVD18050   |
| EVOPLUS B40           | 340         |   | DN65    | EVOB4065   |
| EVOPLUS B60           | 340         |   | DN65    | EVOB6065   |
| EVOPLUS B80           | 340         |   | DN65    | EVOB8065   |
| EVOPLUS B100          | 340         |   | DN65    | EVOB10065  |
| EVOPLUS B120          | 340         |   | DN65    | EVOB12065  |
| EVOPLUS B150          | 340         |   | DN65    | EVOB15065  |
| EVOPLUS D40 - Double  | 340         |   | DN65    | EVD04065   |
| EVOPLUS D60 - Double  | 340         |   | DN65    | EVD06065   |
| EVOPLUS D80 - Double  | 340         |   | DN65    | EVD08065   |
| EVOPLUS D100 - Double | 340         |   | DN65    | EVD10065   |
| EVOPLUS D120 - Double | 340         |   | DN65    | EVD12065   |
| EVOPLUS D150 - Double | 340         |   | DN65    | EVD15065   |
| EVOPLUS B40           | 340         |   | DN80    | EVOB4080   |
| EVOPLUS B60           | 340         |   | DN80    | EVOB6080   |
| EVOPLUS B80           | 340         |   | DN80    | EVOB8080   |
| EVOPLUS B100          | 340         |   | DN80    | EVOB10080  |
| EVOPLUS B120          | 340         |   | DN80    | EVOB12080  |
| EVOPLUS D40 - Double  | 340         |   | DN80    | EVD04080   |
| EVOPLUS D60 - Double  | 340         |   | DN80    | EVD06080   |
| EVOPLUS D80 - Double  | 340         |   | DN80    | EVD08080   |
| EVOPLUS D100 - Double | 340         |   | DN80    | EVD10080   |
| EVOPLUS D120 - Double | 340         |   | DN80    | EVD12080   |
| EVOPLUS B40           | 450         |   | DN100   | EVOB40100  |
| EVOPLUS B60           | 450         |   | DN100   | EVOB60100  |
| EVOPLUS B80           | 450         |   | DN100   | EVOB80100  |
| EVOPLUS B100          | 450         |   | DN100   | EVOB100100 |
| EVOPLUS B120          | 450         |   | DN100   | EVOB120100 |
| EVOPLUS D40 - Double  | 450         |   | DN100   | EVD040100  |
| EVOPLUS D60 - Double  | 450         |   | DN100   | EVD060100  |
| EVOPLUS D80 - Double  | 450         |   | DN100   | EVD080100  |
| EVOPLUS D100 - Double | 450         |   | DN100   | EVD100100  |
| EVOPLUS D120 - Double | 450         |   | DN100   | EVD120100  |

## Circulators for sanitary hot water

Brass body - Ball turbine rotor motor - Includes valve, check valve & 1/2" M union fittings - Max. pressure: 10 bar - Max. temperature: +95°C.



### Standard

IP42 - 230V/50Hz - Max. 25 W.

With clock & thermostat +45/+65°C  
 With clock, without thermostat  
 Without clock, with thermostat +35/+90°C  
 Without clock & thermostat

| code   |
|--------|
| V152HT |
| V152H  |
| V153TR |
| V152M  |

Body FF 1/2"

Without clock & thermostat

| code  |
|-------|
| V152F |

### BLUEONE universal motors

Compatible with all circulators - 2,5 to 9 W.



Self-regulating  
 With clock

| code     |
|----------|
| ZMV155SL |
| ZMV155VZ |



### Very low consumption

IP44 - 115-230V/50/60Hz - 2,5 to 9 W.

Self-regulating  
 With clock

| code   |
|--------|
| V155SL |
| V155VZ |

Body FF 1/2"

Without clock & thermostat

| code  |
|-------|
| V155R |

With thermostat +35/+75°C  
 Without clock & thermostat

| code      |
|-----------|
| ZMV155ERT |
| ZMV155R   |

Acc. to the 2013 & 2015 European Directive ErP 2009/125/EC - Bronze body.



EVOTRON SAN 40  
 EVOTRON SAN 60  
 EVOTRON SAN 80

| length (mm) | Ø     | code     |
|-------------|-------|----------|
| 150         | 1"1/2 | EVS40150 |
| 150         | 1"1/2 | EVS60150 |
| 150         | 1"1/2 | EVS80150 |

EVOPLUS SAN 40  
 EVOPLUS SAN 60  
 EVOPLUS SAN 80  
 EVOPLUS SAN 110

| length (mm) | Ø     | code      |
|-------------|-------|-----------|
| 180         | 1"1/2 | EVS40180  |
| 180         | 1"1/2 | EVS60180  |
| 180         | 1"1/2 | EVS80180  |
| 180         | 1"1/2 | EVS110180 |

## Accessories for circulators

### Thermostat check valves

Direct mounting on union connected circulator -  
 Declutchable for drainage - Max. temperature: +130°C -  
 Max. pressure: 10 bar - Opening pressure: 0,02 bar.



| Ø     | code   |
|-------|--------|
| 1"1/2 | CT26   |
| 2"    | CT33   |
| 1"    | CTB026 |
| 1"1/4 | CTB033 |
| 1"1/2 | CTB040 |
| 2"    | CTB050 |
| 65    | CTB065 |
| 80    | CTB080 |
| 100   | CTB100 |

### Union fittings (sold by 2)

Threaded

For threaded circulators Ø 1"1/2



|              | Ø       | pack | code   |
|--------------|---------|------|--------|
| Cast iron    | 3/4" F  | 24   | ZRU20  |
| Cast iron    | 1" F    | 24   | ZRU26  |
| Carbon steel | 1"1/4 M | 24   | ZRU33M |
| Brass        | 1/2" F  | 50   | ZRUL15 |
| Brass        | 3/4" F  | 50   | ZRUL20 |
| Brass        | 1" F    | 50   | ZRUL26 |

For threaded circulators Ø 1"1/2



Welding

|       | Ø  | pack | code   |
|-------|----|------|--------|
| Brass | 22 | 50   | ZRCU22 |
| Brass | 28 | 50   | ZRCU28 |

For threaded circulators Ø 2"



Threaded

|           | Ø       | pack | code   |
|-----------|---------|------|--------|
| Cast iron | 1"1/4 F | 24   | ZRU33F |

### Ball valve free nut



| Ø           | code     |
|-------------|----------|
| 1"1/2 - 1"F | ZVSC4026 |

### Free nut check valve

Direct mounting on union connected circulator -  
 Declutchable for drainage.



| Ø           | code  |
|-------------|-------|
| 1"1/2 - 1"M | CATET |

### Oval DN25 flanges with bolts

(sold by set of 2)



| Ø       | pack | code  |
|---------|------|-------|
| 3/4" F  | 50   | ZCB20 |
| 1" F    | 35   | ZCB26 |
| 1"1/4 F | 25   | ZCB33 |

### Threaded oval flanges with gaskets & bolts

(sold by set of 2)



| Ø     | code  |
|-------|-------|
| 1"1/2 | ZBO40 |
| 2"    | ZBO50 |

### Adaptors with gaskets

(sold by set of 2)



| Ø          | code   |
|------------|--------|
| 1"1/2 - 2" | ZF4050 |

## Closed tanks - SBR membrane

Carbon steel body - SBR membrane according to DIN 4807 - Test pressure: 6 bar - Working pressure: 4 bar, except 6 bar for 80 l - Working temperature: -10°C/+99°C - Max. temperature: +110°C - Max. glycol: 30%.



CE  
CE

### Standard

| volume (l) | set pressure (bar) | connection | Ø (mm) | height (mm) | code |
|------------|--------------------|------------|--------|-------------|------|
| 4          | 0,5                | 3/4" M     | 225    | 195         | V004 |
| 8          | 0,5                | 3/4" M     | 220    | 295         | V008 |
| 12         | 1                  | 3/4" M     | 294    | 281         | V012 |
| 18         | 1                  | 3/4" M     | 290    | 400         | V018 |
| 25         | 1                  | 3/4" M     | 324    | 415         | V025 |



CE

### Standard

| volume (l) | set pressure (bar) | connection | Ø (mm) | height (mm) | code |
|------------|--------------------|------------|--------|-------------|------|
| 35         | 1,5                | 3/4" M     | 404    | 387         | V035 |
| 50         | 1,5                | 3/4" M     | 404    | 507         | V050 |



CE

### Standard

| volume (l) | set pressure (bar) | connection | Ø (mm) | height (mm) | code |
|------------|--------------------|------------|--------|-------------|------|
| 80         | 2                  | 3/4" M     | 450    | 608         | V080 |
| 105        | 2                  | 3/4" M     | 500    | 665         | V105 |
| 150        | 2                  | 3/4" M     | 500    | 897         | V150 |
| 200        | 2,5                | 3/4" M     | 600    | 812         | V200 |
| 250        | 2,5                | 3/4" M     | 630    | 957         | V250 |
| 300        | 2,5                | 3/4" M     | 630    | 1105        | V300 |
| 400        | 2,5                | 3/4" M     | 630    | 1450        | V400 |
| 500        | 2,5                | 1" M       | 750    | 1340        | V500 |
| 600        | 2,5                | 1" M       | 750    | 1555        | V600 |
| 700        | 2,5                | 1" M       | 750    | 1755        | V700 |
| 800        | 2,5                | 1" M       | 750    | 1855        | V800 |
| 1000       | 1,5                | 1"1/2 M    | 850    | 2100        | VMIL |

### Flat\*



| volume (l) | set pressure (bar) | connection | Ø (mm) | height (mm) | code    |
|------------|--------------------|------------|--------|-------------|---------|
| 8          | 1                  | 3/8" M     | 387    | 100         | VC53108 |
| 10         | 1                  | 3/4" M     | 387    | 110         | VC53110 |
| 12         | 1                  | 3/4" M     | 387    | 140         | VC53112 |
| 18         | 1                  | 3/4" M     | 387    | 200         | VC53118 |

|    |   |        |     |     |         |
|----|---|--------|-----|-----|---------|
| 6  | 1 | 3/4" M | 324 | 100 | VC54106 |
| 8  | 1 | 3/4" M | 324 | 129 | VC54108 |
| 10 | 1 | 3/4" M | 324 | 139 | VC54110 |
| 12 | 1 | 3/4" M | 324 | 170 | VC54112 |

\* Working pressure: 3 bar.

## Closed tanks - NBR membrane - 10 bar

Carbon steel body - Working pressure: 10 bar - Max. temperature: +90°C - Max. glycol: 30%.



CE

| volume (l) | set pressure (bar) | connection | Ø (mm) | height (mm) | code   |
|------------|--------------------|------------|--------|-------------|--------|
| 80         | 2                  | 1" M       | 450    | 830         | VCE080 |
| 100        | 2                  | 1" M       | 450    | 910         | VCE100 |
| 200        | 2                  | 1" 1/2 M   | 550    | 1235        | VCE200 |
| 300        | 2                  | 1" 1/2 M   | 630    | 1365        | VCE300 |
| 500        | 2                  | 1" 1/2 M   | 750    | 1560        | VCE500 |



## Open tanks

Use: for solid fuel (coal, biomass, ...) boilers.



### Stainless steel

| volume (l) | connection | length (mm) | width (mm) | height (mm) | code |
|------------|------------|-------------|------------|-------------|------|
| 22         | 1/2" F     | 500         | 290        | 155         | VI22 |
| 30         | 1/2" F     | 500         | 290        | 215         | VI30 |
| 50         | 1/2" F     | 500         | 350        | 300         | VI50 |

### Galvanised steel

| volume (l) | connection | length (mm) | width (mm) | height (mm) | code   |
|------------|------------|-------------|------------|-------------|--------|
| 20         | 1" F       | 500         | 260        | 160         | VGR020 |
| 30         | 1" F       | 500         | 380        | 150         | VGR030 |
| 50         | 1" F       | 500         | 380        | 255         | VGR050 |

### Polypropylene

Standard (3 inserts)

| volume (l) | connection | length (mm) | width (mm) | height (mm) | code |
|------------|------------|-------------|------------|-------------|------|
| 22         | 3/4" F     | 540         | 290        | 200         | VP22 |
| 33         | 3/4" F     | 540         | 290        | 300         | VP33 |
| 45         | 3/4" F     | 540         | 290        | 395         | VP45 |

Universal (4 inserts)

| volume (l) | connection | length (mm) | width (mm) | height (mm) | code  |
|------------|------------|-------------|------------|-------------|-------|
| 22         | 3/4"       | 540         | 290        | 225         | VP22U |

## Tank accessories

### Equipped wall brackets

(for tanks up to 25 l)

Includes:

- A. tank union fitting
- B. air vent 3/8" F
- C. safety valve 1/2"
- D. manometer
- E. heating circuit outlet 3/4" M

code

ZSMCI

### Wall brackets

(for tanks up to 25 l)

With manometer outlet

code

ZSMI

Without manometer outlet

code

ZSM

For solar heating

code

ZSMSO

Includes:

- A. tank union fitting
- B. air vent 3/8" F
- C. safety valve 1/2" with manometer
- D. heating circuit outlet 3/4" M

code

ZSMC

### Quick union fitting

(with built-in check valve)

code

RDV20MF

### Wall support

(for tanks up to 25 l)

code

SUPVAS

### Pressure controller

(0 to 4 bar)

code

ZCP

### Square for tank

(for tanks up to 25 l)

code

ZSEQ



## Automatic air vents

### ■ Compact



Brass - Check valve not included.

| Ø      | pack | code   |
|--------|------|--------|
| 3/8" M | 10   | 41013V |
| 1/2" M | 10   | 41014V |

Check valve for air vents.



| Ø    | pack | code   |
|------|------|--------|
| 3/8" | 10   | 39903V |
| 1/2" | 10   | 39904V |

### ■ Standard



Brass - Check valve not included.

| Ø      | pack | code   |
|--------|------|--------|
| 3/8" M | 10   | 42003V |
| 1/2" M | 10   | 42004V |

Check valve for air vents.



| Ø    | pack | code   |
|------|------|--------|
| 3/8" | 10   | 39903V |
| 1/2" | 10   | 39904V |

### ■ Solar



Brass - Max. temperature: +180°C -  
Shut-off valve not included.

| Ø      | pack | code    |
|--------|------|---------|
| 3/8" M | 10   | PRHT12V |
| 1/2" M | 10   | PRHT15V |

### Shut-off valve

Brass - Max. temperature: +180°C.



| Ø    | code     |
|------|----------|
| 3/8" | ZVS12HTV |
| 1/2" | ZVS15HTV |

### ■ Heavy duty



Cast iron - Max. pressure: 10 bar -  
Max. temperature: +120°C - Max. glycol: 50%.

| Ø    | code |
|------|------|
| 3/4" | PF20 |

## Dirt separators

### For domestic use

Carbon steel.



| volume (l) | Ø     | code  |
|------------|-------|-------|
| 4          | 1"    | PID05 |
| 10         | 1"1/4 | PID07 |

### For collective use

Carbon steel - Threaded male connections  
for DN50, flanged PN16 above.



| volume (l) | DN  | code  |
|------------|-----|-------|
| 80         | 50  | PD050 |
| 100        | 65  | PD065 |
| 130        | 80  | PD080 |
| 200        | 100 | PD100 |
| 300        | 125 | PD125 |

## Safety valves

### ■ Brass



| pre-set (bar) | Ø       | pack | code   |
|---------------|---------|------|--------|
| 1,5           | 1/2" FF | 10   | 23100V |
| 2             | 1/2" FF | 10   | 23121V |
| 2,5           | 1/2" FF | 10   | 23120V |
| 3             | 1/2" FF | 10   | 23130V |
| 4             | 1/2" FF | 10   | 23140V |
| 2,5           | 3/4" FF | 10   | 23220V |
| 3             | 3/4" FF | 10   | 23230V |
| 4             | 3/4" FF | 10   | 23240V |

| pre-set (bar) | Ø       | pack | code   |
|---------------|---------|------|--------|
| 3             | 1/2" MF | 10   | 23030V |

With manometer (mandatory packing: 10 pcs)

| pre-set (bar) | Ø       | pack | code   |
|---------------|---------|------|--------|
| 3             | 1/2" FF | 10   | 23132V |

Sanitary

| pre-set (bar) | Ø       | pack | code   |
|---------------|---------|------|--------|
| 6             | 1/2" FF | 10   | 23160V |
| 7             | 1/2" FF | 10   | 23170V |
| 8             | 1/2" FF | 10   | 23180V |
| 10            | 1/2" FF | 10   | 23110V |
| 6             | 3/4" FF | 10   | 23260V |
| 7             | 3/4" FF | 10   | 23270V |
| 8             | 3/4" FF | 10   | 23280V |
| 10            | 3/4" FF | 10   | 23210V |

### ■ Bronze

Max. temperature: +120°C.



| pre-set (bar) | discharge capacity |         |         | code  |
|---------------|--------------------|---------|---------|-------|
|               | kW                 | kcal/h  | Ø       |       |
| 3             | 169                | 146 000 | 1/2" FF | S15G  |
| 3             | 269                | 232 000 | 3/4" FF | S20G3 |
| 4             | 337                | 290 000 | 3/4" FF | S20G4 |
| 5             | 400                | 344 000 | 3/4" FF | S20G5 |

|   |     |         |       |       |
|---|-----|---------|-------|-------|
| 3 | 503 | 433 000 | 1" FF | S26G3 |
| 4 | 627 | 540 000 | 1" FF | S26G4 |
| 5 | 748 | 643 000 | 1" FF | S26G5 |

|   |      |           |                |       |
|---|------|-----------|----------------|-------|
| 3 | 656  | 565 000   | 1"1/4 FF       | S33G3 |
| 4 | 822  | 707 000   | 1"1/4 FF       | S33G4 |
| 3 | 813  | 700 000   | 1"1/2 FF       | S40G3 |
| 4 | 1017 | 875 000   | 1"1/2 FF       | S40G4 |
| 3 | 998  | 858 000   | 2" F - 2"1/2 F | S50G3 |
| 4 | 1227 | 1 056 000 | 2" F - 2"1/2 F | S50G4 |

Sanitary

| pre-set (bar) | Ø       | code    |
|---------------|---------|---------|
| 7             | 1/2" FF | S15GS07 |
| 10            | 1/2" FF | S15GS10 |
| 7             | 3/4" FF | S20GS07 |
| 10            | 3/4" FF | S20GS10 |

Sanitary

| pre-set (bar) | Ø        | code    |
|---------------|----------|---------|
| 7             | 1" FF    | S26GS07 |
| 10            | 1" FF    | S26GS10 |
| 7             | 1"1/4 FF | S33GS07 |
| 7             | 1"1/2 FF | S40GS07 |
| 7             | 2" FF    | S50GS07 |

### ■ High temperature - Solar heating

Brass body - Max. temperature: +110°C.

| pre-set (bar) | Ø             | code   |
|---------------|---------------|--------|
| 3             | 1/2" F-3/4" F | 27030V |
| 6             | 1/2" F-3/4" F | 27060V |



Funnel

| Carbon steel | Ø     | code |
|--------------|-------|------|
| 250 x 100 mm | 2"    | ZE50 |
| 400 x 100 mm | 2"1/2 | ZE65 |

Bronze body - Max. temperature: +160°C -  
Max. power: 100 kW.

| pre-set (bar) | Ø       | code     |
|---------------|---------|----------|
| 6             | 3/4" FF | SHT20G6  |
| 10            | 3/4" FF | SHT20G10 |



### Differential valve

Brass body - With free nuts - Max. temperature: +110°C - Max. pressure: 10 bar - Max. glycol: 30% -  
Adjustable 0,1 to 0,6 bar differential.

| Ø    | code |
|------|------|
| 3/4" | SDD  |



## ■ Dry - ABS plastic box

### Ø 50 - Axial



| pressure (bar) | Ø connection | code     |
|----------------|--------------|----------|
| 0 - 4          | 1/4"         | MA04     |
| 0 - 6          | 1/4"         | 413006TH |
| 0 - 10         | 1/4"         | MA10     |

### Ø 50 - Radial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 4          | 1/4"         | MR04   |
| 0 - 6          | 1/4"         | 413106 |
| 0 - 10         | 1/4"         | MR10   |

### Ø 80 - Radial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 4          | 1/2"         | M80R04 |
| 0 - 10         | 1/2"         | M80R10 |

### Ø 63 - Axial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 6          | 1/4"         | M63A06 |
| 0 - 10         | 1/4"         | M63A10 |

### Ø 63 - Radial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 6          | 1/4"         | M63R06 |
| 0 - 10         | 1/4"         | M63R10 |

### Ø 100 - Radial



| pressure (bar) | Ø connection | code    |
|----------------|--------------|---------|
| 0 - 6          | 1/2"         | M100R06 |
| 0 - 10         | 1/2"         | M100R10 |

## ■ Glycerin filled - Stainless steel box

Brass connection - Max. temperature: +60°C - Class 1,6 - Polycarbonate glass.

### Ø 50 - Axial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 2,5        | 1/4"         | 413203 |
| 0 - 6          | 1/4"         | 413206 |
| 0 - 10         | 1/4"         | MA10G  |
| 0 - 16         | 1/4"         | 413216 |

### Ø 50 - Radial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 2,5        | 1/4"         | 413303 |
| 0 - 6          | 1/4"         | 413306 |
| 0 - 10         | 1/4"         | MR10G  |
| 0 - 16         | 1/4"         | 413316 |

### Ø 63 - Axial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 2,5        | 1/4"         | 413403 |
| 0 - 6          | 1/4"         | 413406 |
| 0 - 10         | 1/4"         | 413410 |
| 0 - 16         | 1/4"         | 413416 |
| 0 - 25         | 1/4"         | 413425 |

### Ø 63 - Radial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 2,5        | 1/4"         | 413503 |
| 0 - 6          | 1/4"         | 413506 |
| 0 - 10         | 1/4"         | 413510 |
| 0 - 16         | 1/4"         | 413516 |
| 0 - 25         | 1/4"         | 413525 |

## ■ Hydrometer

### Ø 63 - Radial



| pressure (mCe) | Ø connection | code |
|----------------|--------------|------|
| 0 - 10         | 3/8"         | H10  |
| 0 - 20         | 3/8"         | H20  |

## ■ Thermomanometer

### Ø 80

Temperature range: 0°C/+120°C - With socket for draining without dismantling.



| pressure (bar) | Ø connection | code |
|----------------|--------------|------|
| 0 - 4          | 1/2"         | MTA  |
| 0 - 4          | 1/2"         | MTR  |

Axial  
Radial

## ■ Manometer holder valves



| Ø    | code  |
|------|-------|
| 1/4" | ZRI08 |
| 3/8" | ZRI12 |
| 1/2" | ZRI15 |



| Ø    | code    |
|------|---------|
| 1/4" | 1306002 |
| 3/8" | 1306003 |
| 1/2" | 1306004 |

## ■ Push-button valve



| Ø    | code    |
|------|---------|
| 1/4" | 9880302 |
| 1/2" | 9880304 |



## ■ Coil siphon

| Ø           | code    |
|-------------|---------|
| M1/4"-F1/4" | 9880202 |
| M1/2"-F1/2" | 9880204 |



## ■ Bi-metal

### With spring tie

For pipe up to 1".

| Ø dial | temperature | pack | code |
|--------|-------------|------|------|
| 63     | 0°C/+120°C  | 50   | TR   |



### With copper tie

For pipe up to 1"1/2.

| Ø dial | temperature | pack | code |
|--------|-------------|------|------|
| 63     | 0°C/+120°C  | 50   | TB   |

### With plunger



| Ø dial | temperature | Ø connection | plunger length (mm) | pack | code  |
|--------|-------------|--------------|---------------------|------|-------|
| 63     | 0°C/+120°C  | 1/2"         | 45                  | 50   | T063A |
| 80     | 0°C/+120°C  | 1/2"         | 45                  | 50   | T080A |
| 100    | 0°C/+120°C  | 1/2"         | 45                  | 50   | T100A |



| Ø dial | temperature | Ø connection | plunger length (mm) | pack | code      |
|--------|-------------|--------------|---------------------|------|-----------|
| 63     | 0°C/+120°C  | 1/2"         | 100                 | 50   | T063AL100 |
| 100    | 0°C/+120°C  | 1/2"         | 100                 | 50   | T100AL100 |
| 100    | 0°C/+120°C  | 1/2"         | 200                 | 50   | T100AL200 |



| Ø dial | temperature | Ø connection | plunger length (mm) | pack | code  |
|--------|-------------|--------------|---------------------|------|-------|
| 80     | -30°C/+50°C | 1/2"         | 100                 | 50   | T3050 |



### Quick reactivity

| Ø dial | temperature | Ø connection | plunger length (mm) | code |
|--------|-------------|--------------|---------------------|------|
| 60     | 0°C/+100°C  | 3/8"         | 45                  | TRI  |



### Gas & smoke

| Ø dial | temperature | plunger length (mm) | code |
|--------|-------------|---------------------|------|
| 80     | 0°C/+500°C  | 150                 | TGAZ |

## ■ Boilers

Temperature range: 0°C/+130°C - Brass case - Ø 1/2".

### Straight

| height (mm) | Ø  | plunger length (mm) | code   |
|-------------|----|---------------------|--------|
| 160         | 20 | 45                  | TV160D |
| 260         | 25 | 60                  | TV260D |



### Angle

| height (mm) | Ø  | plunger length (mm) | code   |
|-------------|----|---------------------|--------|
| 160         | 20 | 45                  | TV160E |
| 260         | 25 | 60                  | TV260E |



## ■ Industry

Easy reading - Glass pipe filled with alcohol - Ø 1/2".

### Plastic - Straight

Temperature range: 0°C/+120°C.

| height (mm) | plunger length (mm) | code        |
|-------------|---------------------|-------------|
| 150         | 63                  | TI150DP     |
| 200         | 63                  | TI200DP     |
| 200         | 100                 | TI200DL100P |



### Plastic - Angle

Temperature range: 0°C/+120°C.

| height (mm) | plunger length (mm) | code        |
|-------------|---------------------|-------------|
| 150         | 63                  | TI150EP     |
| 200         | 63                  | TI200EP     |
| 200         | 100                 | TI200EL100P |



Temperature range: -30°C/+50°C.

| height (mm) | plunger length (mm) | code            |
|-------------|---------------------|-----------------|
| 150         | 63                  | TI150D3050P     |
| 200         | 63                  | TI200D3050P     |
| 200         | 100                 | TI200DL1003050P |

Temperature range: -30°C/+50°C.

| height (mm) | plunger length (mm) | code            |
|-------------|---------------------|-----------------|
| 150         | 63                  | TI150E3050P     |
| 200         | 63                  | TI200E3050P     |
| 200         | 100                 | TI200EL1003050P |

### Brass - Straight

Temperature range: 0°C/+120°C.

| height (mm) | plunger length (mm) | code       |
|-------------|---------------------|------------|
| 150         | 63                  | TI150D     |
| 200         | 63                  | TI200D     |
| 200         | 100                 | TI200DL100 |



### Brass - Angle

Temperature range: 0°C/+120°C.

| height (mm) | plunger length (mm) | code       |
|-------------|---------------------|------------|
| 150         | 63                  | TI150E     |
| 200         | 63                  | TI200E     |
| 200         | 100                 | TI200EL100 |



Temperature range: -30°C/+50°C.

| height (mm) | plunger length (mm) | code           |
|-------------|---------------------|----------------|
| 150         | 63                  | TI150D3050     |
| 200         | 63                  | TI200D3050     |
| 200         | 100                 | TI200DL1003050 |

Temperature range: -30°C/+50°C.

| height (mm) | plunger length (mm) | code           |
|-------------|---------------------|----------------|
| 150         | 63                  | TI150E3050     |
| 200         | 63                  | TI200E3050     |
| 200         | 100                 | TI200EL1003050 |

## Accessories for thermometers

**Tee**  
(for 63 mm plunger thermometer)

| Ø      | code    |
|--------|---------|
| 1"     | 130RT26 |
| 1"1/4" | 130RT33 |
| 1"1/2" | 130RT40 |
| 2"     | 130RT50 |



\* Red handle  
Blue handle  
Blue handle

\* with antithermo-siphon check valve

## Valves with thermometer

| inlet          | outlet         | code   |
|----------------|----------------|--------|
| 1"1/2 free nut | 1" M           | VTR40  |
| 1" M           | 1"1/2 free nut | VTB40M |
| 1" M           | 1" M           | VTB26  |

## Thermowells

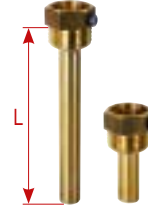
Copper tube with M 1/2" NPT brass fitting.

| length (mm) | Ø int./Ø ext. | code      |
|-------------|---------------|-----------|
| 47          | 7 x 8         | ZDG555001 |
| 47          | 10 x 11       | ZDG555006 |
| 97          | 7 x 8         | ZDG555002 |
| 97          | 10 x 11       | ZDG555007 |
| 97          | 14,7 x 16     | ZDG555034 |
| 117         | 10 x 11       | ZDG555008 |
| 117         | 14,7 x 16     | ZDG555035 |
| 147         | 10 x 11       | ZDG555009 |
| 187         | 10 x 11       | ZDG555010 |
| 197         | 7 x 8         | ZDG555027 |
| 277         | 10 x 11       | ZDG555011 |



Brass 1/2" with blocking screw.

| length (mm) | Ø int./Ø ext. | code     |
|-------------|---------------|----------|
| 45          | 9 x 11        | ZDG15045 |
| 100         | 9 x 11        | ZDG15100 |



# Solid fuel boiler equipment

## Draught regulator

### Calorstat

Temperature range: +30°C/+90°C -  
Double sight according to horizontal & vertical  
position - 3/4" connection -  
Lever 140 mm - Chain 1,2 m -  
Lifting torque 10Nm.

| code |
|------|
| R85  |



## Draught stabilizers

### Moderator (Georgin)

| Ø          | steel code | epoxy paint code |
|------------|------------|------------------|
| 97 to 140  | SB1        | SB1N             |
| 140 to 200 | SB2        | SB2N             |
| 200 to 280 | SB3        | SB3N             |
| 280 to 344 | SM4        | -                |
| 400 to 448 | SM5        | -                |



### Regulator

Cast aluminium.

| Ø          | code |
|------------|------|
| 111 to 139 | SR1  |
| 139 to 180 | SR2  |
| 180 to 220 | SR3  |



## Thermic valves

### Thermovar

| Ø      | Kvs | opening temperature setting | code  |
|--------|-----|-----------------------------|-------|
| 1"     | 9   | 45°C                        | T2645 |
| 1"1/4" | 12  | 45°C                        | T3345 |
| 1"     | 9   | 61°C                        | T2661 |
| 1"1/4" | 12  | 61°C                        | T3361 |
| 1"     | 9   | 72°C                        | T2672 |
| 1"1/4" | 12  | 72°C                        | T3372 |



### Thermobac

Check valve to be added to Thermovar in some installations.

| Ø      | code  |
|--------|-------|
| 1"     | CTB26 |
| 1"1/4" | CTB33 |



### Thermovar set

For max. 65 Kw boilers -  
Max. temperature: +110°C - Supplied with insulation.

| Ø      | opening temperature setting | code  |
|--------|-----------------------------|-------|
| 1"1/4" | 61°C                        | TC61L |
| 1"1/4" | 72°C                        | TC72L |



### Pump actuator

| code    |
|---------|
| ZMCTC-2 |



## Mixing valves

Max. temperature: +110°C - Max. pressure: 10 bar - Rotation 90° - Brass stem - Tightness with 2 EPDM o-rings - Can be equipped with any electric actuator - Brass: recommended for heating floor & installations with plastic & multilayer pipes - Excluded from 2014/68/EU Directive (art. 4, §3).

### ■ Threaded

#### Cast iron



| Ø    | 3 way |       |        |        |       |
|------|-------|-------|--------|--------|-------|
|      | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"    |
| kvs  | 13    | 17    | 24     | 31     | 41    |
| code | V3V20 | V3V26 | V3V33  | V3V40  | V3V50 |

| Ø    | 4 way |       |        |        |       |
|------|-------|-------|--------|--------|-------|
|      | 3/4"  | 1"    | 1"1/4" | 1"1/2" | 2"    |
| kvs  | 13    | 17    | 24     | 31     | 41    |
| code | V4V20 | V4V26 | V4V33  | V4V40  | V4V50 |

#### Brass female



| Ø    | 3 way  |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|
|      | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
| kvs  | 2,5    | 6,3    | 8      | 15     | 24     | 40     |
| code | VC3V15 | VC3V20 | VC3V26 | VC3V33 | VC3V40 | VC3V50 |

| Ø    | 4 way  |        |        |        |        |        |
|------|--------|--------|--------|--------|--------|--------|
|      | 1/2"   | 3/4"   | 1"     | 1"1/4" | 1"1/2" | 2"     |
| kvs  | 2,5    | 6,3    | 8      | 15     | 24     | 40     |
| code | VC4V15 | VC4V20 | VC4V26 | VC4V33 | VC4V40 | VC4V50 |

#### Brass male



| Ø    | 3 way   |         |         | 4 way   |         |         |
|------|---------|---------|---------|---------|---------|---------|
|      | 3/4"    | 1"      | 1"1/4"  | 3/4"    | 1"      | 1"1/4"  |
| kvs  | 2,5     | 6,3     | 8       | 2,5     | 6,3     | 8       |
| code | VC3V20M | VC3V26M | VC3V33M | VC4V20M | VC4V26M | VC4V33M |

### ■ Threaded - For solar, solid fuel boiler & heat pump

The valve gives priority to the cheapest energy before switching gradually to the most expensive one - May be equipped with SME actuators & Automix regulation - To be installed with a mixing water tank.



#### Brass female

| Ø    | 4 way   |         |         |         |          |
|------|---------|---------|---------|---------|----------|
|      | 3/4"    | 3/4"    | 1"      | 1"      | 1"1/4"   |
| kvs  | 4       | 6,3     | 6,3     | 10      | 10       |
| code | VMB2004 | VMB2006 | VMB2606 | VMB2610 | VMB3310M |

\* male

#### Insulation for mixing valves



For F1/2", F3/4", M3/4" & M1"  
For F1", F1"1/4" & M1"

|      |           |
|------|-----------|
| code | CIS187107 |
| code | CIS187108 |

### ■ Electric actuators for threaded mixing valves

3 positions - Direct mounting on Thermador mixing valves - IP40.

#### 230 V / 50 Hz

##### SME 130

5 Nm - Complete opening: 140 s - 1,5 m wire.

##### SME 20S with auxiliary contact

10 Nm - Complete opening: 140 s - 1,5 m wire.

##### SME 23 for thermostat regulation

10 Nm - Complete opening: 670 s - 1,5 m wire.

##### SME 96L

15 Nm - Complete opening: 280 s.

|      |        |
|------|--------|
| code | SME130 |
| code | SME20S |
| code | SME23  |
| code | SME96L |

#### 24 V

##### SME 24

SME 212 with connection for Automix 30 regulator (to be used with Automix 30 only) - 5 Nm - Complete opening: 140 s - 1,5 m wire.

##### SME 140 signal 0-10V

|      |         |
|------|---------|
| code | SME24   |
| code | SME212  |
| code | SME140V |



#### Mounting set

For:

Esbe/Danfoss  
Centra (DR & ZR)  
Oventrop/Meibes/Wita  
VCI/VBG31/VBF21



|      |        |
|------|--------|
| code | MSNRE6 |
| code | MSNRC  |
| code | MSNRO  |
| code | MSNRL  |



## ■ Flanged PN6



Cast iron

|      | 3 way   |         |         |         |         |         |
|------|---------|---------|---------|---------|---------|---------|
| Ø    | 50      | 65      | 80      | 100     | 125     | 150     |
| kvs  | 65      | 100     | 185     | 310     | 510     | 820     |
| code | VB3V050 | VB3V065 | VB3V080 | VB3V100 | VB3V125 | VB3V150 |

|      | 4 way   |         |         |         |         |         |
|------|---------|---------|---------|---------|---------|---------|
| Ø    | 50      | 65      | 80      | 100     | 125     | 150     |
| kvs  | 65      | 100     | 185     | 310     | 510     | 820     |
| code | VB4V050 | VB4V065 | VB4V080 | VB4V100 | VB4V125 | VB4V150 |

Set of flanges PN6 with gaskets and bolts

| Ø    | 50      | 65      | 80      | 100     | 125     | 150     |
|------|---------|---------|---------|---------|---------|---------|
| code | ZCBP050 | ZCBP065 | ZCBP080 | ZCBP100 | ZCBP125 | ZCBP150 |

## ■ Electric actuator for flanged mixing valves



Opening/closing: 120s - 230V-50Hz -  
Max. torque: 20Nm - IP44.

|      |
|------|
| code |
| SMEB |

## ■ Regulation devices

Based on outdoor temperature - Includes: regulator, mounting accessories, power adaptor, room probe with radio receiver, external probe (15m wire), starting probe & antenna.

RA130

|       |
|-------|
| code  |
| RA130 |

Option

Circulator command

|          |
|----------|
| code     |
| ZKCRA130 |

Based on outdoor temperature - To be used with threaded mixing valves only - Includes: regulator, water probe, external probe (20 m), power supply, actuator, connectors & mounting pad.

Automix 10

Built-in regulating functions

|      |
|------|
| code |
| RA10 |

Options

Room thermostat  
Remote control

|        |
|--------|
| code   |
| ZK10RB |
| ZK10RC |

Based on indoor temperature - Radio transmission between transmitter & actuated mixing valve - Night & vacation energy saving - Includes: regulator, radio receiver, power supply, actuator & water probe.

Automix 20

|      |
|------|
| code |
| RA20 |

Based on outdoor temperature - 2 circuits - Digital programmer - Includes: regulator, water probe, external probe (20m), power supply, actuator, connectors & antenna.

Automix 40

|      |
|------|
| code |
| RA40 |

Options

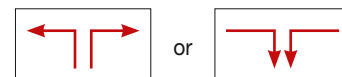
Room probe - 1<sup>st</sup> circuit  
Actuator & starting probe - 2<sup>nd</sup> circuit  
Room probe - 2<sup>nd</sup> circuit

|          |
|----------|
| code     |
| ZSARA40  |
| ZK2CRA40 |
| ZSA2RA40 |

## ■ Diverting valves

3 way valve - 3 thread 230V actuator, with 60° rotating cycles - Position indicator on the actuator - Operating time: 8 s. - Temperature: 0°C/+90°C - Max. pressure: 10 bar - IP40 - Max. glycol: 50% - Supplied with quick connector & 1 m wire.

| Ø    | Kv  | Δps (bar) | code     |
|------|-----|-----------|----------|
| 1" M | 7,5 | 1         | VDB3V26M |



3 way valve, normally closed, spring return - 2 thread 230V actuator - Opening time: 18 s - Closing time: 5 s. - Temperature: +2°C/+93°C - Max. pressure: 21 bar - IP20 - Max. glycol: 50%.

| Ø    | Kv  | Δps (bar) | code    |
|------|-----|-----------|---------|
| 1" F | 6,9 | 1,3       | VDL3V26 |



**NEW**

**NEW**

## Standard mechanical



Shut-off 16 (2,5) A 250V - IP20.

Basic  
With season change switch

|       |
|-------|
| code  |
| TA2   |
| TA2EH |

## Programmable



Heating & cooling - 1/2 hour period setting -  
Shut-off 5A (1A) - IP20.

Wire battery  
mains  
Radio transmission battery  
mains

|      |
|------|
| code |
| TAFB |
| TAFS |
| TARB |
| TARS |

## Standard digital



Temperature setting: -5°C/+30°C -  
ON/OFF regulation -  
Shut-off 5 (2) A - IP30.

Wire battery  
Radio transmission battery

|       |
|-------|
| code  |
| TASF  |
| TASOR |

## Programmable +



Temperature setting: -5°C/+30°C - 3 modifiable  
comfort ranges / day, weekly programming -  
Boost mode for comfort setting during 1 h -  
Shut-off 5 (2) A - IP30.

Wire battery  
Radio transmission battery

|       |
|-------|
| code  |
| TAPF  |
| TAPOR |

## In tight container



Changeover contact 16 (2,5) A 250V -  $\Delta t 2^\circ \pm 1^\circ K$  -  
IP54.

Temperature setting: -5°C/+35°C

|      |
|------|
| code |
| TAE2 |



Changeover contact 16 (2,5) A 250V -  $\Delta t 3^\circ \pm 1^\circ K$ .

Temperature setting: 0/+60°C -  
Probe  $\varnothing 6 \times 119$  mm -  
Capillary 0,90 m - IP54.

|       |
|-------|
| code  |
| TAC32 |

Temperature setting: -35°C/+35°C -  
Probe  $\varnothing 6 \times 140$  mm -  
Capillary 1 m - IP55.

|       |
|-------|
| code  |
| TAC33 |

# Aquastats

## With spring



Manual reset - Pre-set +60°C -  
Temperature setting: -40°C/+70°C -  
Changeover contact 10 (2,5) A 250V - IP40.

**Aquanorm**

|      |
|------|
| code |
| AARM |



Temperature setting: -20°C/+90°C -  $\Delta t 8^\circ \pm 2^\circ K$  - IP20.

**Standard external setting**

Changeover contact 16 (2,5) A 250V.

|      |
|------|
| code |
| AAR  |

**Setting under protection housing**

Dry contact 16 (2,5) A 250V.

|      |
|------|
| code |
| AARC |

## With plunger



Temperature setting: 0/+90°C -  $\Delta t 6^\circ \pm 2^\circ K$  -  
1/2" fitting - Changeover contact 10 (2,5) A 250V -  
IP40.

Sensor 100 mm  
Sensor 200 mm

|       |
|-------|
| code  |
| ATC2  |
| ATC21 |



**Aquastat & safety limiter**

1/2" fitting - Sensor 100 mm - IP40.  
Aquastat: temperature setting 0/+90°C -  $\Delta t 4^\circ \pm 1^\circ K$  -  
Changeover contact 10 (2,5) A 250V -  
Safety limiter: temperature setting  
+90°C/+110°C - Pre-set +110°C -  
Contact 10 (2,5) A 250V.

|       |
|-------|
| code  |
| ATLSC |

## Remote sensors

### Control

| temperature setting | capillary length (mm) | sensor                  | code     |
|---------------------|-----------------------|-------------------------|----------|
| 0°C/+90°C           | 1500                  | $\varnothing 6,5$ - L95 | TH549074 |
| -30°C/+90°C         | 1500                  | $\varnothing 6,5$ - L95 | TH549170 |
| 0°C/+40°C           | 1000                  | $\varnothing 6,5$ - L95 | TH549177 |
| 0°C/+310°C          | 1500                  | $\varnothing 3$ - L195  | TH549178 |

### Safety

Manual resetting - Pre-set 110°.

| temperature setting | capillary length (mm) | sensor                  | code     |
|---------------------|-----------------------|-------------------------|----------|
| -90°C/+110°C        | 1500                  | $\varnothing 6,5$ - L95 | TH542286 |

### With adjustment stop

| temperature setting | capillary length (mm) | sensor                  | code     |
|---------------------|-----------------------|-------------------------|----------|
| 0°C/+90°C           | 1500                  | $\varnothing 6,5$ - L95 | TH540359 |





## Expansion tanks

### Solar expansion tank - White

Preset pressure: 2,5 bar -  
 Max. working pressure: 10 bar -  
 TS: -10°C/+99°C (temporarily: +110°C) -  
 Butyl membrane - Connection M 3/4"  
 up to 50 l, 1" M above - Max. glycol: 50%.



\* except 12 l

| Volume (l) | code  |
|------------|-------|
| 12         | V012S |
| 18         | V018S |
| 24         | V024S |
| 35**       | V035S |
| 80**       | V080S |
| 105**      | V105S |
| 150**      | V150S |
| 200**      | V200S |
| 250**      | V250S |
| 300**      | V300S |

\*\* on base

### Solar expansion tank - Red

Preset pressure: 2,5 bar - Max. working pressure: 6 bar - Testing pressure: 9,6 bar -  
 TS: -10°C/+110°C - Nitrile membrane - Connection M 3/4".



| Volume (l) | code |
|------------|------|
| 18         | V718 |
| 25         | V725 |
| 40         | V740 |
| 60         | V760 |

## Circulators

### Solar circulators

Insulation class: F - According to European Directive ErP 2009/125/EC.



EVOTRON SOL 40

| length (mm) | Ø     | code         |
|-------------|-------|--------------|
| 130         | 1"1/2 | EV40130SOL   |
| 180         | 1"1/2 | EV40180SOL   |
| 130         | 1"    | EV4013026SOL |

EVOTRON SOL 60

| length (mm) | Ø     | code         |
|-------------|-------|--------------|
| 180         | 1"1/2 | EV60180SOL   |
| 130         | 1"    | EV6013026SOL |
| 180         | 1"1/2 | EV80180SOL   |
| 130         | 1"    | EV8013026SOL |

EVOTRON SOL 80



## Accessories

### Flowmeter

3 valves (fill-in, draining and flow-regulation) -  
 Max. temperature: +110°C - Connexion 1".



| code   |
|--------|
| ZDEBIT |

### Antithermo-siphon check valve

Declutchable - Max. temperature: +110°C -  
 Connexion free nut 1" and Male 3/4".



| code  |
|-------|
| ZCLAD |

### Solar controller

Easy installing & easy use - Supplied with 3 probes (1 sensor probe 1.5 m, 2 sensor probes 2.5 m, 4th optional) -  
 3 mechanical relay outlets - 4 probe fittings - Class 2 - IP20 - Dimensions 110x155x45 - Screen 84x45 -  
 Rail DIN mounting 3 access levels: user, professional settings, wiring - 13 combinations: ecological, economical &  
 vacation modes - Built-in clock: boost or programmable mode; anti-bacterial, temperature & anti-frost protections.



Complete controller

| code |
|------|
| RS13 |

Sensor probe

Tank probe

Thermowell 1/2"

Thermowell 3/4"

| code   |
|--------|
| SRSC   |
| SRSB   |
| DGRS15 |
| DGRS20 |

### Solar panel connections, see page 153



### Mixing valves, see page 172





## Mixing water tanks for heat pumps

Reversible insulated tank (to be installed between the heat pump and the boiler, at any side) - Supplied with 4 caps up to 50 l - Carbon steel body - Expanded polyurethane insulation - Threaded connections.



### ■ Wall mounting

#### 2 x 2 connections

| volume (l) | height (mm) | Ø (mm) | center distance connection (mm) | Ø connections | ErP class | code      |
|------------|-------------|--------|---------------------------------|---------------|-----------|-----------|
| 8          | 382         | 254    | 126                             | 1"            | B         | BMEL08SK  |
| 12         | 526         | 254    | 270                             | 1"            | B         | BMEL12SKE |
| 25         | 788         | 290    | 450                             | 1 1/4"        | C         | BMEL25SKE |
| 50         | 1000        | 343    | 600                             | 1 1/4"        | C         | BMEL50SKE |

#### 2 x 4 connections

| volume (l) | height (mm) | Ø (mm) | center distance connection (mm) | Ø connections | ErP class | code       |
|------------|-------------|--------|---------------------------------|---------------|-----------|------------|
| 12         | 526         | 254    | 90                              | 1"            | B         | BMEL12SK   |
| 25         | 788         | 290    | 150                             | 1 1/4"        | C         | BMEL25SK   |
| 50         | 1000        | 343    | 200                             | 1 1/4"        | C         | BMEL50SK   |
| 100        | 870         | 450    | 175                             | 1 1/4"        | C         | BMEL100SKM |

### ■ Ground standing

#### 2 x 4 connections

| volume (l) | height (mm) | Ø (mm)      | center distance connection (mm) | Ø connections | ErP class | code      |
|------------|-------------|-------------|---------------------------------|---------------|-----------|-----------|
| 100        | 954         | 175         | 126                             | 1 1/4"        | C         | BMEL100SK |
| 200        | 1438        | 330         | 270                             | 1 1/4"        | C         | BMEL200SK |
| 300        | 1515        | 275/300     | 450                             | 1 1/4"        | C         | BMEL300SK |
| 500        | 1816        | 350/380/350 | 600                             | 2"            | C         | BMEL500SK |

### Hydraulic insulation

Carbon steel body - 3/8"F for automatic air vent - 3/8"F for draining valve - 1"F connections.

| volume (l) | code    |
|------------|---------|
| 2          | BDH026F |



### Injection tank

For heating and air conditioning: anti-frost and glycol filling - 3/4" & 1" MM connections - Supplied with funnel.

| volume (l) | Ø             | code  |
|------------|---------------|-------|
| 12         | 3/4" M - 1" M | BI12J |
| 25         | 3/4" M - 1" M | BI25J |

## Resistors & heating water heaters



### Resistors

Incoloy thermoplungers - 1 1/2" connection - For 100 to 500 l tanks - Control & safety thermostats (manual reset) - 2 m wire - IP65 - ⚠️ **Not suitable for glycol.**

Thermostats 230V +30/+70°C, safety +90°C.

| power (kW) | max. power (W/cm²) | plunger length (mm) | code      |
|------------|--------------------|---------------------|-----------|
| 2          | 9,1                | 320                 | RES2000TM |
| 3          | 13,5               | 320                 | RES3000TM |
| 6          | 12,6               | 380                 | RES6000TM |

Thermostats 3~400V +30/+75°C, safety +98°C.

| power (kW) | max. power (W/cm²) | plunger length (mm) | code      |
|------------|--------------------|---------------------|-----------|
| 2          | 10,1               | 229                 | RES2000TT |
| 3          | 13,1               | 314                 | RES3000TT |
| 4          | 11,4               | 399                 | RES4000TT |
| 5          | 10,6               | 400                 | RES5000TT |
| 6          | 15,3               | 400                 | RES6000TT |
| 9          | 11,2               | 690                 | RES9000TT |

### Heating & sanitary water heaters

Stainless steel 304 body - Insulated body - Stainless steel 316L resistors - Horizontal mounting - Armaflex insulation - 1" M connections - Control & safety thermostats (manual reset) - Wall support - 2 m wire - IP55 - ⚠️ **Not suitable for glycol.**

Thermostats 230V, +30/+75°C, safety +98°C.

| power (kW) | max. power (W/cm²) | code     |
|------------|--------------------|----------|
| 3          | 13,5               | RB03000M |
| 6          | 14,7               | RB06000M |

Thermostats 3~400V, +30/+75°C, safety +98°C.

| power (kW) | max. power (W/cm²) | code     |
|------------|--------------------|----------|
| 3 x 1      | 13,1               | RB03000T |
| 3 x 2      | 14,7               | RB06000T |
| 3 x 3      | -                  | RB09000T |



**NEW**





## Heating or cold water storage tanks

Indoor or outdoor installation - Carbon steel coated body - Rigid polyurethane foam insulation with low heat loss - White galvanized metal sheath - 1"1/2 outlet for additional electric resistor - Max. pressure 10 bar - Temperature range -10°C/+90°C. ErP C class.



| capacity (l) | code       |
|--------------|------------|
| 200          | BREV0200HE |
| 300          | BREV0300HE |
| 500          | BREV0500HE |
| 800          | BREV0800HE |

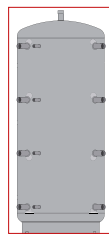
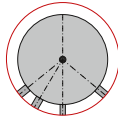
| capacity (l) | code       |
|--------------|------------|
| 1000*        | BREV1000HE |
| 1500*        | BREV1500HE |
| 2000*        | BREV2000HE |

\* please consult for specific freight charges

## Storage & exchanger tanks

### Heating water storage tanks

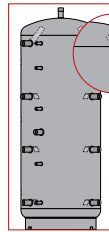
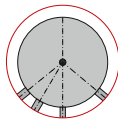
For discontinuous heating boilers (such as wood boilers) - Carbon steel body - 50 mm injected foam or 100 mm soft polyester insulation, white plastic coated - 1"1/2 outlet for additional electric resistor for PLUS range - Storage: max. pressure 3 bar, max. temperature +99°C - Exchanger: max. pressure 12 bar, max. temperature +110°C - ErP E class (except 500 l: C class).



STANDARD without exchanger

| capacity (l) | code    |
|--------------|---------|
| 500          | B0500HE |
| 800          | B0800HE |
| 1000*        | B1000HE |

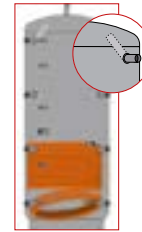
\* please consult for specific freight charges



PLUS without exchanger

| capacity (l) | code      |
|--------------|-----------|
| 500          | BS0500VHE |
| 800          | BS0800VHE |
| 1000*        | BS1000VHE |
| 1500*        | BS1500VHE |
| 2000*        | BS2000VHE |

\* please consult for specific freight charges



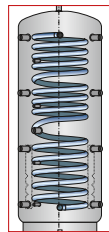
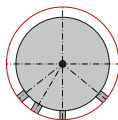
PLUS with carbon steel pipe exchanger

| capacity (l) | code       |
|--------------|------------|
| 500          | BS0500SEHE |
| 800          | BS0800SEHE |
| 1000*        | BS1000SEHE |
| 1500*        | BS1500SEHE |

\* please consult for specific freight charges

### Heating water storage & sanitary hot water production tanks

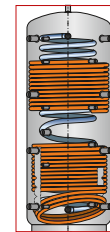
Up to 3 different heating sources, with an additional electric supply - Used for solid fuel boilers, biomass & solar heating system - Carbon steel body & exchanger - Stainless steel 316L pipe for instant sanitary hot water production - 50 mm injected foam or 100 mm soft polyester insulation - Grey PVC sheath - 1"1/2 outlet for additional electric resistor - Storage: max. pressure 3 bar, max. temperature +99°C - Stainless steel exchanger: max. pressure 6 bar - Carbon steel exchanger: max. pressure 12 bar, max. temperature +110°C - ErP C class.



Without exchanger

| capacity (l) | code       |
|--------------|------------|
| 570          | BSES0600HE |
| 800          | BSES0800HE |
| 1000*        | BSES1000HE |
| 1500*        | BSES1500HE |
| 2000*        | BSES2000HE |

\* please consult for specific freight charges



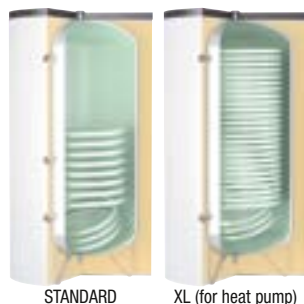
With 2 carbon steel pipe exchangers

| capacity (l) | code      |
|--------------|-----------|
| 570          | BSE0600HE |
| 800          | BSE0800HE |
| 1000*        | BSE1000HE |
| 1500*        | BSE1500HE |
| 2000*        | BSE2000HE |

\* please consult for specific freight charges

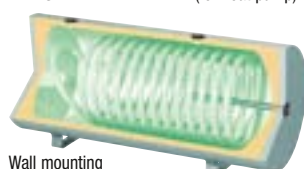
## Sanitary hot water tanks

Polywarm® carbon steel coated body & coil - 50 mm thickness polyurethane insulation up to 500 l, 100% recyclable polyester fiber insulation above - White PVC sheath - Cathodic protection: magnesium anode - 1"1/2 outlet for additional electric resistor - 1/2" outlet for probe or thermometer - STANDARD & XL: storage max. pressure 10 bar & max. temperature +90°C; exchanger max. pressure 12 bar & max. temperature +110°C - Wall mounting: storage max. pressure 6 bar & max. temperature +90°C; exchanger max. pressure 12 bar & max. temperature +110°C. ErP C class.



STANDARD

XL (for heat pump)



Wall mounting  
1"1/4 outlet for electric resistor

| capacity (l) | STANDARD code | XL code    | Wall mounting code |
|--------------|---------------|------------|--------------------|
| 80           | -             | -          | BECS0080MHE        |
| 100          | -             | -          | BECS0100MHE        |
| 150          | -             | -          | BECS0150MHE        |
| 200          | BECS0200HE    | BECS02XLHE | BECS0200MHE        |
| 300          | BECS0300HE    | BECS03XLHE | BECS0300MHE        |
| 500          | BECS0500HE    | BECS05XLHE | -                  |
| 800          | BECS0800HE    | -          | -                  |
| 1000*        | BECS1000HE    | -          | -                  |
| 1500*        | BECS1500HE    | -          | -                  |

\* please consult for specific freight charges

**NEW**

## Fan coil units

Thick housing with RAL 9002 white epoxy painting - Long lasting copper battery, 24 bar & 120°C tested - 6 speed (3 connected) motorised fan, 230V AC, silent bloc with self-lubricating bearings, IP42 & thermal built-in protection - Static & dynamic balanced turbine - Easy maintenance EU-G3-M1 air filter - Under battery condensate container - ABS airing grid - Hot water 70/60°C, cold water 7/12°C.

### Vertical with underneath intake

standard

with built-in thermostat

| max. air flow (m³/h) | hot max. power (kW) | cold max. power (kW/h) | code    | code     |
|----------------------|---------------------|------------------------|---------|----------|
| 370                  | 3,74                | 1,50                   | VCVA013 | VCVAR013 |
| 400                  | 4,91                | 2,00                   | VCVA023 | VCVAR023 |
| 500                  | 5,98                | 2,53                   | VCVA033 | VCVAR033 |
| 550                  | 6,71                | 3,02                   | VCVA043 | VCVAR043 |
| 670                  | 8,16                | 3,75                   | VCVA053 | VCVAR053 |
| 720                  | 9,44                | 4,25                   | VCVA063 | VCVAR063 |
| 1 000                | 12,00               | 5,52                   | VCVA073 | VCVAR073 |
| 1 050                | 13,30               | 6,42                   | VCVA083 | VCVAR083 |
| 1 280                | 15,50               | 7,53                   | VCVA093 | VCVAR093 |
| 1 500                | 19,79               | 9,82                   | VCVA103 | VCVAR103 |
| 1 910                | 21,10               | 9,60                   | VCVA113 | VCVAR113 |
| 1 940                | 23,20               | 10,71                  | VCVA123 | VCVAR123 |

### Vertical with front side intake

standard

with built-in thermostat

| max. air flow (m³/h) | hot max. power (kW) | cold max. power (kW/h) | code    | code     |
|----------------------|---------------------|------------------------|---------|----------|
| 370                  | 3,74                | 1,50                   | VCVB013 | VCVBR013 |
| 400                  | 4,91                | 2,00                   | VCVB023 | VCVBR023 |
| 500                  | 5,98                | 2,53                   | VCVB033 | VCVBR033 |
| 550                  | 6,71                | 3,02                   | VCVB043 | VCVBR043 |
| 670                  | 8,16                | 3,75                   | VCVB053 | VCVBR053 |
| 720                  | 9,44                | 4,25                   | VCVB063 | VCVBR063 |
| 1 000                | 12,00               | 5,52                   | VCVB073 | VCVBR073 |
| 1 050                | 13,30               | 6,42                   | VCVB083 | VCVBR083 |
| 1 280                | 15,50               | 7,53                   | VCVB093 | VCVBR093 |
| 1 500                | 19,79               | 9,82                   | VCVB103 | VCVBR103 |
| 1 910                | 21,10               | 9,60                   | VCVB113 | VCVBR113 |
| 1 940                | 23,20               | 10,71                  | VCVB123 | VCVBR123 |

### Horizontal

back side intake

underneath intake

| max. air flow (m³/h) | hot max. power (kW) | cold max. power (kW/h) | code    | code    |
|----------------------|---------------------|------------------------|---------|---------|
| 370                  | 3,74                | 1,50                   | VCHA013 | VCHB013 |
| 400                  | 4,91                | 2,00                   | VCHA023 | VCHB023 |
| 500                  | 5,98                | 2,53                   | VCHA033 | VCHB033 |
| 550                  | 6,71                | 3,02                   | VCHA043 | VCHB043 |
| 670                  | 8,16                | 3,75                   | VCHA053 | VCHB053 |
| 720                  | 9,44                | 4,25                   | VCHA063 | VCHB063 |
| 1 000                | 12,00               | 5,52                   | VCHA073 | VCHB073 |
| 1 050                | 13,30               | 6,42                   | VCHA083 | VCHB083 |
| 1 280                | 15,50               | 7,53                   | VCHA093 | VCHB093 |
| 1 500                | 19,79               | 9,82                   | VCHA103 | VCHB103 |
| 1 910                | 21,10               | 9,60                   | VCHA113 | VCHB113 |
| 1 940                | 23,20               | 10,71                  | VCHA123 | VCHB123 |

### Uncased

vertical

horizontal

| max. air flow (m³/h) | hot max. power (kW) | cold max. power (kW/h) | code    | code    |
|----------------------|---------------------|------------------------|---------|---------|
| 370                  | 3,74                | 1,50                   | VNVA013 | VNHA013 |
| 400                  | 4,91                | 2,00                   | VNVA023 | VNHA023 |
| 500                  | 5,98                | 2,53                   | VNVA033 | VNHA033 |
| 550                  | 6,71                | 3,02                   | VNVA043 | VNHA043 |
| 670                  | 8,16                | 3,75                   | VNVA053 | VNHA053 |
| 720                  | 9,44                | 4,25                   | VNVA063 | VNHA063 |
| 1 000                | 12,00               | 5,52                   | VNVA073 | VNHA073 |
| 1 050                | 13,30               | 6,42                   | VNVA083 | VNHA083 |
| 1 280                | 15,50               | 7,53                   | VNVA093 | VNHA093 |
| 1 500                | 19,79               | 9,82                   | VNVA103 | VNHA103 |
| 1 910                | 21,10               | 9,60                   | VNVA113 | VNHA113 |
| 1 940                | 23,20               | 10,71                  | VNVA123 | VNHA123 |



**NEW**

## Accessories for fan coil units

**Electronic remote control**  
For without built-in thermostat types



|       |
|-------|
| code  |
| CADVC |

**Remote control room probe**  
To be combined with remote control



|      |
|------|
| code |
| SAVC |



**3/4" 3 way valve set**

|       |
|-------|
| code  |
| KV3VC |

**Digital remote control**  
For without built-in thermostat types



|      |
|------|
| code |
| TAE  |

**Control interface for 4 fan coil units**  
To be combined with remote control



|      |
|------|
| code |
| R4VC |



**Under valves & pipes condensate container**  
For vertical types

|      |
|------|
| code |
| BCVC |

**Feet**  
For vertical with underneath intake types



|         |
|---------|
| code    |
| PIEDSVC |

**NEW**

## Mobile heating units

**Electric**

Includes wire, adjustable thermostat, fan & overheat thermal protection - 230V AC.



| heating power (W) | air flow (m³/h) | surface (m²) | code   |
|-------------------|-----------------|--------------|--------|
| 2 000             | 171             | 25           | AME02C |
| 3 000             | 305             | 30           | AME03  |
| 3 000             | 550             | 40           | AME03T |

**Gas (butane or propane)**

Includes pipe, overheat thermal protection, gas shut-off safety, flexible hose & gas pressure regulator - Gas cylinder: not supplied - 230V AC.



| heating power (W) | air flow (m³/h) | surface (m²) | code  |
|-------------------|-----------------|--------------|-------|
| 15 000            | 320             | 150          | AMG15 |
| 30 000            | 650             | 300          | AMG30 |

**Gas oil**

Includes pipe, adjustable thermostat, overheat thermal protection, automatic shut-off safety, galvanised carbon steel tank & wheels - 230V AC.



| heating power (W) | air flow (m³/h) | surface (m²) | code  |
|-------------------|-----------------|--------------|-------|
| 30 000            | 850             | 300          | AMF30 |

## Hot water air heater - ProH<sub>2</sub>O



Compact - Water coil (tested 30 bar) - Motorised fan IP54 with gland pack - Wall or suspended installation - Right side water connection - 230V AC - 1 speed fan - Galvanised steel housing - Supply grid with carbon steel adjustable blades - Copper heat exchanger with aluminium blades.



Other types on request

| type | sound pressure (Lp dB(A) at 5m) | power consumption (W) | current consumption (A) | dimension (mm)        | code |
|------|---------------------------------|-----------------------|-------------------------|-----------------------|------|
| AW22 | 35                              | 1 x 90                | 1 x 0,42                | L 520 x H 440 x l 350 | AW22 |
| AW23 | 36                              | 1 x 95                | 1 x 0,44                | L 520 x H 440 x l 350 | AW23 |
| AW32 | 38                              | 1 x 140               | 1 x 0,65                | L 620 x H 540 x l 350 | AW32 |

| type | water regime +90/+70°C |                      |                  | water regime +70/+60°C |                      |                  | water regime +50/+45°C |                      |                  |
|------|------------------------|----------------------|------------------|------------------------|----------------------|------------------|------------------------|----------------------|------------------|
|      | power (kW)             | air temperature (°C) | water flow (l/h) | power (kW)             | air temperature (°C) | water flow (l/h) | power (kW)             | air temperature (°C) | water flow (l/h) |
| AW22 | 16,3                   | 42                   | 702              | 12,6                   | 36                   | 1 080            | 8,2                    | 29                   | 1 404            |
| AW23 | 20,9                   | 52                   | 898              | 16,1                   | 43                   | 1 381            | 10,5                   | 34                   | 1 796            |
| AW32 | 26,7                   | 44                   | 1 146            | 20,5                   | 37                   | 1 763            | 13,3                   | 30                   | 2 292            |

Power & air temperature are given for a 15°C recovery temperature.



**Suspended support set**

| code |
|------|
| KS   |



**Dual deflection grid**

For AW22 & AW23 types  
For AW32 type

| code |
|------|
| GDD2 |
| GDD3 |



**Wall support set**

For AW22 & AW23 types  
For AW32 type

| code  |
|-------|
| KMF2  |
| KMF36 |



**Venturi jet grid**

For AW22 & AW23 types  
For AW32 type

| code |
|------|
| GJV2 |
| GJV3 |



**Vertical metal beam support set**

| code   |
|--------|
| KPM234 |



**Weekly programmable thermostat**

| code |
|------|
| TAP  |



**Control panel**

1 zone  
1 zone, programmable

| code     |
|----------|
| BCTAW900 |
| BCPAW900 |



**Monophased 20A proximity switch**

| code |
|------|
| IPM  |



Other types on request

## Streamlined destratification fan with thermostat - DS



Ridge heat recovery - Dual deflection supply grid - De-stratification built-in thermostat, adjustable 0 to +40°C - Compact - Ceiling installation with 4 chains, horizontal position, at 2/3 building height - Galvanised steel - IP55 electrical connection - Direct coupling motor fan with aluminium blades.

| type   | flow (m <sup>3</sup> /h) | installation height (m) | sound pressure (Lp dB(A) at 5m) | power consumption (W / A) | dimension (mm)        | code   |
|--------|--------------------------|-------------------------|---------------------------------|---------------------------|-----------------------|--------|
| DS4000 | 3 600                    | 4 to 7                  | 42                              | 165 / 0,8                 | H 500 x L 500 x l 270 | DS4000 |
| DS6000 | 5 500                    | 5 to 8                  | 41                              | 100 / 0,46                | H 550 x L 550 x l 380 | DS6000 |
| DS8000 | 7 200                    | 5 to 9                  | 44                              | 184 / 1,6                 | H 600 x L 600 x l 380 | DS8000 |



**Speed variator**

For DS4000 & DS6000 types  
For DS8000 type

| code  |
|-------|
| SX    |
| SX550 |



**Monophased 20A proximity switch**

| code |
|------|
| IPM  |

**Air curtains on request**





Other types on request

## Commercial use air fan - Minimax

Commercial use fan - Air outlet aligned with air inlet - Proximity switch in series - Compact - 2 operating speeds - Extraction or insufflation - Indoor or outdoor all position installation - Wall or ceiling installation, without additional accessories - Low noise - Galvanised steel, 10/10 thickness - Removable rain-protection cover - Direct coupling motor with built-in thermal protection - Low consumption on request.



| flow (m³/h) | available pressure (Pa) | power consumption (W) | outlet/inlet (mm) | dimension (mm)        | code     |
|-------------|-------------------------|-----------------------|-------------------|-----------------------|----------|
| 200         | 235                     | 39                    | 125               | L 390 x l 200 x H 350 | CM125    |
| * 200       | 235                     | 39                    | 125               | L 390 x l 200 x H 350 | CMISO125 |
| 270         | 300                     | 52                    | 160               | L 390 x l 200 x H 350 | CM160    |
| * 270       | 300                     | 52                    | 160               | L 390 x l 200 x H 350 | CMISO160 |
| 540         | 350                     | 155                   | 200               | L 350 x l 295 x H 400 | CM200    |
| * 540       | 350                     | 155                   | 200               | L 350 x l 295 x H 400 | CMISO200 |
| 1 000       | 500                     | 155                   | 250               | L 470 x l 335 x H 450 | CM250    |
| * 1 000     | 500                     | 155                   | 250               | L 470 x l 360 x H 450 | CMISO250 |

\* 25 mm mineral wool insulation.

## Dual flow high efficiency air fan - Neotime

Compact for ceiling easy installation (includes supports) - Indoor installation - 230 V AC - Carbon steel housing - High density 25 mm mineral wool insulation - Electrical housing with connection and control - Proximity switch - Inclined condensate tank - All or nothing bypass (summer/winter use with thermostat) - Inlet and outlet air strainers - Direct driven EC motors with thermal protection - Programmable built-in timers for 2 flow use - Flow control switch on each fan.



Other types on request

| flow (m³/h) | available pressure (Pa) | power consumption (W) | outlet/inlet (mm) | dimension (mm)          | code   |
|-------------|-------------------------|-----------------------|-------------------|-------------------------|--------|
| 600         | 1 000                   | 2 x 169               | 250               | L 1700 x l 780 x H 330  | CN0600 |
| 900         | 700                     | 2 x 220               | 315               | L 2020 x l 965 x H 415  | CN0900 |
| 1 300       | 400                     | 2 x 400               | 355               | L 2195 x l 1220 x H 415 | CN1300 |
| 1 800       | 400                     | 2 x 400               | 400               | L 2275 x l 1220 x H 495 | CN1800 |
| 2 500       | 380                     | 2 x 400               | 400               | L 2395 x l 1740 x H 495 | CN2500 |

## Accessories for air fan

### Electronically variable speed controller



| code  |
|-------|
| SXSF1 |

### Differential pressostat (non mounted)



| code |
|------|
| AMDD |



### Soft cuff

| mm  | code  |
|-----|-------|
| 125 | MS125 |
| 160 | MS160 |
| 200 | MS200 |
| 250 | MS250 |
| 315 | MS315 |
| 355 | MS355 |
| 400 | MS400 |

### 3 position speed selector



| code  |
|-------|
| SCSF2 |

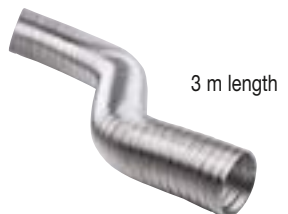
## Aluminium ducts

### Soft & sleek



| Ø   | code     |
|-----|----------|
| 100 | CAS10010 |
| 125 | CAS12510 |
| 150 | CAS15010 |
| 160 | CAS16010 |
| 200 | CAS20010 |

### Compact flexible & sleek



| Ø   | code     |
|-----|----------|
| 100 | CAF10003 |
| 125 | CAF12503 |
| 150 | CAF15003 |
| 160 | CAF16003 |
| 200 | CAF20003 |



### Soft & insulated

| Ø   | code         |
|-----|--------------|
| 100 | CASLV2510010 |
| 125 | CASLV2512510 |
| 150 | CASLV2515010 |
| 160 | CASLV2516010 |
| 200 | CASLV2520010 |
| 250 | CASLV2525010 |
| 305 | CASLV2531510 |
| 100 | CASLV5010005 |
| 125 | CASLV5012505 |
| 150 | CASLV5015005 |
| 160 | CASLV5016005 |
| 200 | CASLV5020005 |

5 m length  
50 mm insulation

## Accessories for soft PE+ & aluminium ducts



**Mandatory packing 10 pcs**



### Monothread gear clamp

| Ø   | code   |
|-----|--------|
| 80  | STM080 |
| 100 | STM100 |
| 125 | STM125 |
| 150 | STM150 |
| 160 | STM160 |
| 200 | STM200 |
| 250 | STM250 |
| 315 | STM315 |



### Reduction male/female (scoring fitting)

| Ø          | code      |
|------------|-----------|
| 100-80     | RMF10080  |
| 125-100    | RMF125100 |
| 125-100-80 | RMF12580  |
| 150-125    | RMF150125 |
| 160-125    | RMF160125 |
| 200-160    | RMF200160 |



### Coupling sleeve

| Ø   | code |
|-----|------|
| 80  | M080 |
| 100 | M100 |
| 125 | M125 |
| 150 | M150 |
| 160 | M160 |
| 200 | M200 |

**Mandatory packing 100 pcs**



### Nylon gear clamp

| Ø       | code      |
|---------|-----------|
| 80-125  | STN080125 |
| 125-160 | STN125160 |



### Metal roof outlet cap

| Ø   | code    |
|-----|---------|
| 125 | CTTM125 |
| 160 | CTTM160 |
| 200 | CTTM200 |
| 250 | CTTM250 |
| 315 | CTTM315 |
| 355 | CTTM355 |
| 400 | CTTM400 |



### Coupling sleeve w/ gasket

| Ø   | code    |
|-----|---------|
| 250 | MMGJ250 |
| 315 | MMGJ315 |



### Reinforced adhesive tape

| code         |        |
|--------------|--------|
| 50 m x 50 mm | BANR50 |



### Aluminium adhesive tape

| code         |       |
|--------------|-------|
| 50 m x 50 mm | BAN50 |

## High density PE ducts

For dual flow ventilation - Semi-rigid PEHD duct - Gaskets connection (no adhesive tape nor putty) - Antibacterian & antistatic - Socket mounting - Max. pressure: 2500 Pa - Temperature range: -25°C/+60°C.

### Duct

| Ø  | code     |
|----|----------|
| 75 | CPH07520 |
| 90 | CPH09020 |
| 75 | CPH07550 |
| 90 | CPH09050 |

Length 20 m  
Length 50 m



### Rigid elbow 90°

| Ø  | code     |
|----|----------|
| 75 | COUPH075 |
| 90 | COUPH090 |



### Elbow double adaptor (for Ø 125 air extract unit)

| Ø              | code        |
|----------------|-------------|
| 2 x Ø75 & Ø125 | ACDPH075125 |
| 2 x Ø90 & Ø125 | ACDPH090125 |



### "Clip" mounting flange

| Ø  | code     |
|----|----------|
| 75 | FIXPH075 |



### Nipple

| Ø  | code   |
|----|--------|
| 75 | MPH075 |
| 90 | MPH090 |



### Gasket

| Ø  | code |
|----|------|
| 75 | J075 |
| 90 | J090 |



### Connection for plenum

| Ø  | code  |
|----|-------|
| 75 | PF075 |
| 90 | PF090 |



### Distribution plenum chamber

| code                                |        |
|-------------------------------------|--------|
| 1 inlet Ø160 & 5 outlets Ø75 or 90  | P05090 |
| 1 inlet Ø160 & 10 outlets Ø75 or 90 | P10090 |



### Cap

| Ø  | code    |
|----|---------|
| 75 | BCPH075 |
| 90 | BCPH090 |

## Network accessories

### Manually adjustable air extract units



### Plastic air extract & air intake

| Ø   | code   |
|-----|--------|
| 80  | BRP080 |
| 100 | BRP100 |
| 125 | BRP125 |
| 160 | BRP160 |
| 200 | BRP200 |



### Metal air extract & air intake

| Ø   | code   |
|-----|--------|
| 100 | BRM100 |
| 125 | BRM125 |
| 160 | BRM160 |
| 200 | BRM200 |



### Stainless steel air extract & air intake

| Ø   | code    |
|-----|---------|
| 100 | BTRX100 |
| 125 | BTRX125 |
| 160 | BTRX160 |
| 200 | BTRX200 |



### Plastic air extract & air intake

| Ø   | code  |
|-----|-------|
| 80  | BR080 |
| 125 | BR125 |



### Metal air intake

| Ø   | code    |
|-----|---------|
| 100 | BTRI100 |
| 125 | BTRI125 |
| 160 | BTRI160 |
| 200 | BTRI200 |



### Metal socket

| Ø   | code      |
|-----|-----------|
| 100 | MTG100100 |
| 125 | MTG125100 |
| 160 | MTG160100 |
| 200 | MTG200100 |



## ■ Ceiling diffuser



**Aluminium circular**  
(w/ adjustable ABS central cone)

| Ø   | ext. dimension (mm) | flow (m³/h) | code    |
|-----|---------------------|-------------|---------|
| 160 | 288                 | 200-600     | BTOR160 |
| 200 | 370                 | 200-900     | BTOR200 |
| 250 | 461                 | 300-1200    | BTOR250 |



## ■ Wall deflection grid

**Dual deflection**

| dimension mm | flow (m³/h) | code        |
|--------------|-------------|-------------|
| 300 x 100    | 60-360      | GSDABLC3010 |
| 400 x 100    | 100-500     | GSDABLC4010 |
| 300 x 150    | 120-620     | GSDABLC3015 |
| 400 x 150    | 160-860     | GSDABLC4015 |
| 400 x 200    | 220-1220    | GSDABLC4020 |

## ■ Plenum



**ABS w/ rear outlet & adjustable flow** (for deflection grid)

| dimension mm    | Ø (mm)      | code     |
|-----------------|-------------|----------|
| 300 x 100 x 110 | 160-200     | PGPA3010 |
| 400 x 100 x 110 | 160-200     | PGPA4010 |
| 300 x 150 x 110 | 160-200     | PGPA3015 |
| 400 x 150 x 110 | 160-200-250 | PGPA4015 |
| 400 x 200 x 110 | 200-250     | PGPA4020 |

## ■ Aluminium ventilation grids w/ mosquito net

**White pre-lacquered rectangle**

| dimension mm | flow section (cm²) | code           |
|--------------|--------------------|----------------|
| 290 x 50     | 45                 | GABLAM2905F45  |
| 200 x 100    | 50                 | GABLAM2010F50  |
| 300 x 100    | 85                 | GABLAM3010F85  |
| 240 x 140    | 130                | GABLAM2414F130 |

**Anodised rectangle**

| dimension mm | flow section (cm²) | code           |
|--------------|--------------------|----------------|
| 290 x 50     | 45                 | GAGRAM2905F45  |
| 200 x 100    | 50                 | GAGRAM2010F50  |
| 300 x 100    | 85                 | GAGRAM3010F90  |
| 240 x 140    | 130                | GAGRAM2414F130 |

**Anodised rectangle for outdoor**

| dimension mm | flow section (cm²) | code            |
|--------------|--------------------|-----------------|
| 400 x 390    | 560                | GAGRAV4039F560  |
| 600 x 590    | 1440               | GAGRAV6059F1440 |

**White pre-lacquered square**

| dimension mm | flow section (cm²) | code           |
|--------------|--------------------|----------------|
| 150 x 150    | 60                 | GABLAM1515F60  |
| 200 x 200    | 120                | GABLAM2020F120 |
| 250 x 250    | 210                | GABLAM2525F210 |

**Anodised square**

| dimension mm | flow section (cm²) | code           |
|--------------|--------------------|----------------|
| 150 x 150    | 60                 | GAGRAM1515F60  |
| 200 x 200    | 135                | GAGRAM2020F135 |
| 250 x 250    | 240                | GAGRAM2525F240 |

## ■ Flow regulator

**Adjustable**

| dimension mm | flow section (cm²) | code      |
|--------------|--------------------|-----------|
| 80           | 15-50              | RDR08030  |
| 100          | 15-50              | RDR10030  |
| 100          | 50-100             | RDR10075  |
| 125          | 15-50              | RDR12530  |
| 125          | 50-100             | RDR12575  |
| 125          | 100-180            | RDR125120 |

## ■ Self-adjusting extract unit

**Single flow**

| flow (m³/h) | code  |
|-------------|-------|
| 15          | BTA15 |
| 30          | BTA30 |
| 45          | BTA45 |
| 60          | BTA60 |
| 75          | BTA75 |
| 90          | BTA90 |

**Cuff w/ gasket**

| Ø (mm) | code  |
|--------|-------|
| 100    | MJ100 |
| 116    | MJ116 |
| 125    | MJ125 |

# Air conditioning & comfort

4 modes: automatic, cold, ventilation, dehumidification - Automatic condensates venting - Infra-red remote control - 3 air flows - Two-pin power socket - Ø 140 mm & 1,5 long semi-flexible outer pipe for hot air venting - White & black ABS cover - R410A refrigerant - 3 speed rotation - Scroll rotary compressor - Programmable with sleep mode - 4 anti-dust washable air filters & 1 active carbon filter - Anti-bacterious condensates case - 230V AC - Energy class A - Insulation class II - Sound pressure: 46 Lp at 3m dB (A) - Temperature range: +18°C/+35°C - Dimension (mm): L 480 x H 744 x I 313 - Weight: 25-26 kg - Window set for release - Condensate case continuous drainage function for very wet climate.

⚠ Seasonal products: please consult for availability.



**Mobile air conditioner**

| flow (m³/h) | power: cold (W) | power consumption (W) | power: hot (W) | volume m³ (m²) | code    |
|-------------|-----------------|-----------------------|----------------|----------------|---------|
| 350         | 3 000           | 1 150                 | -              | 110 (45)       | CM3001  |
| 370         | 3 300           | 1 270                 | -              | 130 (55)       | CM3501  |
| *370        | 3 300           | 1 270                 | 2 800          | 130 (55)       | CMR3501 |

\* hot mode.



**Door leaf window set**

| code |
|------|
| KCM  |

Big diameter (500 mm) for steady & powerful blowing (8 100 m³/h) - Black & chrome attractive design - Robust carbon steel tubes - 360° direction - 3 speed motor - 230V AC - I insulation class - Rotary switch - 1,9 m wire - 85-110 W power consumption - Rotating speed 1210 rpm.

**Heavy duty fan**

| code   |
|--------|
| VS8100 |

**NEW**



Sold by coil of 150 m or by multiple of 10 m - The heat emission intensity varies according to indoor or outdoor temperature (depending on the application) - Every meter marked - 230V.



## Anti-frost protection

Self-regulating  
temperature: +55°C.

| material                         | output power at 10°C | 150 m coil code | multiple of 10 m code |
|----------------------------------|----------------------|-----------------|-----------------------|
| Metal braid                      | 12 W/m               | 5BMS            | 5BMSM                 |
| Metal braid & polyolefine sheath | 12 W/m               | 5BMX            | 5BMXM                 |
| Metal braid & polyolefine sheath | 20 W/m               | 10BMX           | 10BMXM                |

## Temperature control

Self-regulating  
temperature: +65°C.

| material                         | output power at 10°C | 150 m coil code | multiple of 10 m code |
|----------------------------------|----------------------|-----------------|-----------------------|
| Metal braid                      | 31 W/m               | 20BMS           | 20BMSM                |
| Metal braid & polyolefine sheath | 31 W/m               | 20BMX           | 20BMXM                |

## Roof snow removal & ramp protection

Electric protection: IPX7 -  
Self-regulating  
temperature: +65°C.

| material                                | output power at 10°C | 150 m coil code | multiple of 10 m code |
|---|----------------------|-----------------|-----------------------|
| Metal braid & fluorised polymere sheath | 31 W/m               | 20BMF           | 20BMFM                |

## Single connection

1 cable connection - IP68.

code

AUT1



**Pipe clamps**  
(sold by 100)

code

COL

## Y - connection

2 cable connection - IP65.

code

AUT2



**Gutter clips**  
(sold by 50)

code

CLIP

## Connection set

Rubber pieces & gland-pack  
for connection or termination.

code

AUTOKIT



**Fiber glass self-adhesive tape**  
50 m x 12 mm

code

FIB

## Terminations (sold by 5)

code

MANTER



**Aluminium self-adhesive tape**  
50 m x 50 mm

code

ALU

## Thermostats with 3 m contact probe

Anti-frost protection  
(for 5BMS & 5BMX)  
0°C/+40°C (16A)

code

TH40



Temperature control (for 20BMS & 20BMX) +10°C/+110°C (10A)

code

TH110

## Thermostat - Humidostat sets

Includes thermostat, sensor and probe (for 20BMF)

code

THT

Roof snow removal



Ramp, slab and road protection

code

THS

## Ready-to-use cable set

Anti-frost protection - Includes electric plug & thermostat for shut-off above +5/+8°C (energy saving) - 230 V - Under tension max. use temperature: +50°C - T6 (85°) acc. to EN 50014 - Min. installation temperature: -20°C - Non-heated section: 2 m - IP54.

code

CAB5

CAB10

CAB15





# Plumbing

- **Water heater safety**
  - Sanitary expansion tanks ..... page 186
  - Hammer arresters ..... page 186
  - Sanitary safety valves ..... page 187
  - Boiler accessories ..... page 187
- **Leakage detectors** ..... page 187
- **Pressure reducing valves** ..... page 188
- **Balancing & disinfection valves** ..... page 188
- **Thermostatic mixing valves** ..... page 189
- **Washing machine & toilet supplies** ..... pages 190 to 191
- **Water meters** ..... pages 192 to 193
- **Water filtration**
  - Domestic water filtration ..... pages 194 to 196
  - Liquids filtration ..... pages 197 to 198
  - Domestic water filtration ..... page 198



## Sanitary expansion tanks

### Standard

**ERC VAREM**

Food quality & safety butyl membrane - Stainless steel fitting -  
Max. pressure: 8 bar - Max. temperature: +99°C.



| Volume (l) | water heater tank volume (l) | Ø connection | pre-set (bar) | code    |
|------------|------------------------------|--------------|---------------|---------|
| 5          | 75                           | 3/4" M       | 3             | VEX05   |
| 8          | 100                          | 3/4" M       | 3             | VEX08   |
| 12         | 150                          | 3/4" M       | 3             | VEX11   |
| 12*        | 150                          | 3/4" M       | 3             | VEX11FM |
| 18*        | 200                          | 3/4" M       | 3             | VEX18   |
| 25*        | 300                          | 3/4" M       | 3             | VEX25   |



### High capacity

**ERC VAREM**

Food quality & safety butyl removable membrane -  
Stainless steel connection -  
Max. pressure: 10 bar - Max. temperature: +99°C.



| Volume (l) | height (cm) | Ø connection | pre-set (bar) | code   |
|------------|-------------|--------------|---------------|--------|
| 60         | 693         | 1"           | 2             | VEX060 |
| 100        | 760         | 1"           | 2             | VEX100 |
| 200        | 1080        | 1"1/2        | 2             | VEX200 |
| 300        | 1180        | 1"1/2        | 2             | VEX300 |



### Vexbal connection set

For 5 l to 12 l tanks - Includes wall bracket, flexible hose 50 cm & tee.

| code  |
|-------|
| ZKVEX |



### Square for expansion tank

(up to 25 l)  
Threaded 3/4"

| code |
|------|
| ZSEQ |



### Expansion tank fitting

3/4" MMF

| code   |
|--------|
| ZTMMFN |

## Hammer arresters

### With membrane



Max. pressure: 10 bar  
Test pressure: 15 bar  
Pre-set: 3 bar  
Max. temperature: +99°C  
Butyl membrane - Stainless steel 304 body.



| Volume (l) | Ø connection | code |
|------------|--------------|------|
| 0,16       | 1/2" M       | Z160 |
| 0,5        | 1/2" M       | Z050 |
| 2          | 1/2" M       | Z200 |



### With spring

Brass body

| Ø     | female code | male code |
|-------|-------------|-----------|
| 1/2"  | ABR15       | ABR15M    |
| 3/4"  | ABR20       | ABR20M    |
| 1"    | ABR26       | ABR26M    |
| 1"1/4 | ABR33       | ABR33M    |
| 1"1/2 | ABR40       | ABR40M    |
| 2"    | ABR50       | ABR50M    |



### Sanitary hot water production & storage tanks, see page 177



### Sanitary circulators, see page 164



## Sanitary safety valves

### ■ With built-in check valve

Nickel-plated brass.

#### Standard



| Ø    | pack | pre-set (bar) | code  |
|------|------|---------------|-------|
| 1/2" | 20   | 7             | GTH15 |
| 3/4" | 20   | 7             | GTH20 |

#### With lever



| Ø       | pack | pre-set (bar) | code   |
|---------|------|---------------|--------|
| 1/2"*   | 25   | 8,5           | GTH15L |
| 3/4"*** | 20   | 8,5           | GTH20L |

\* To be ordered by multiple of 25 pieces.

\*\* While stocks last.

### ■ Brass



| Ø    | pack | pre-set (bar) | code   |
|------|------|---------------|--------|
| 1/2" | 10   | 6             | 23160V |
| 1/2" | 10   | 7             | 23170V |
| 1/2" | 10   | 8             | 23180V |
| 1/2" | 10   | 10            | 23110V |
| 3/4" | 10   | 6             | 23260V |
| 3/4" | 10   | 7             | 23270V |
| 3/4" | 10   | 8             | 23280V |
| 3/4" | 10   | 10            | 23210V |

Pre-set 2,5 to 5 bar, see page 170



### ■ Bronze



| Ø      | pre-set (bar) | code    |
|--------|---------------|---------|
| 1/2"   | 7             | S15GS07 |
| 1/2"   | 10            | S15GS10 |
| 3/4"   | 7             | S20GS07 |
| 3/4"   | 10            | S20GS10 |
| 1"     | 7             | S26GS07 |
| 1"     | 10            | S26GS10 |
| 1 1/4" | 7             | S33GS07 |
| 1 1/2" | 7             | S40GS07 |
| 2"     | 7             | S50GS07 |

## Boiler accessories

### Electrical insulation fitting

3 piece fitting - Direct mounting on 3/4" M/F water heater.



| Ø               | pack | code        |
|-----------------|------|-------------|
| 3/4" MF         | 50   | ZRICE       |
| 3/4" M - 1/2" F | 1    | ZRICE2015MF |



### Siphon for safety device

| code  |
|-------|
| ZES26 |

### Free flow 2 handle mixers

For water heater max. 50 l - Includes 2 chrome-plated pipes.



| code |
|------|
| MEL  |



Includes 2 flexible hoses.

| code  |
|-------|
| MELSE |

## Leakage detectors



Sound alarm in case of water leakage, open valve, forgotten watering, defective toilet flush - 230V - Detected leakage min. flow: 30 l/h.



### Standard

| Ø    | code   |
|------|--------|
| 3/4" | 471420 |



### Actuated

With solenoid valve - Shut-off after 2 min.

| Ø    | code   |
|------|--------|
| 3/4" | 471421 |

## Standard - Brass



Nickel-plated CW617N brass - With manometer 1/4" outlet - Pre-set pressure: 3 bar - Max. upstream pressure: 15 bar - Downstream adjustable pressure: 1 to 4 bar.



| Ø    | pack* | code  |
|------|-------|-------|
| 1/2" | 4/44  | RPI15 |
| 3/4" | 4/44  | RPI20 |

\* Mandatory packing: 4pcs.

## Heavy duty - Brass



Nickel-plated CW617N brass - With manometer 1/4" outlets - Pre-set pressure: 3 bar - Max. upstream pressure: 25 bar - Downstream adjustable pressure: 1 to 6 bar.



### Female - Female

| Ø     | pack | face to face (mm) | code   |
|-------|------|-------------------|--------|
| 1/2"  | 34   | 77                | RPI15H |
| 3/4"  | 34   | 85                | RPI20H |
| 1"    | 18   | 91                | RPI26H |
| 1"1/4 | 9    | 118               | RPI33H |
| 1"1/2 | 9    | 126               | RPI40H |
| 2"    | 8    | 142               | RPI50H |



### Male union fittings

| Ø    | pack | face to face with fittings (mm) | code    |
|------|------|---------------------------------|---------|
| 1/2" | 34   | 123                             | RPI15HM |
| 3/4" | 24   | 135                             | RPI20HM |
| 1"   | 18   | 156                             | RPI26HM |

Supplied with union fittings

## Heavy duty - Bronze



Stainless steel seat - Built-in filter - Downstream adjustable pressure: 1 to 7 bar.

### Male union fittings

Max. upstream pressure: 25 bar - With manometer outlets.



| Ø     | face to face with fittings (mm) | code   |
|-------|---------------------------------|--------|
| 1/2"  | 135                             | R68115 |
| 3/4"  | 160                             | R68120 |
| 1"    | 178                             | R68126 |
| 1"1/4 | 226                             | R68133 |
| 1"1/2 | 226                             | R68140 |
| 2"    | 260                             | R68150 |



### Flanged PN16

Max. upstream pressure: 16 bar - Includes manometers.

| DN | face to face (mm) | code   |
|----|-------------------|--------|
| 50 | 230               | 246827 |
| 65 | 290               | 246828 |
| 80 | 310               | 246829 |

# Balancing & disinfection valves



## Balancing



Setpoint temperature, adjustable +36°C to +63°C - Pre-set temperature: +57°C.



| Ø  | threaded | code  |
|----|----------|-------|
| 15 | 3/4"     | VTH15 |
| 20 | 1"       | VTH20 |

## Balancing & disinfection

Includes 2 thermostatic cartridges - Setpoint temperature, adjustable +36°C to +60°C - Automatic opening for thermic disinfection, adjustable +70°C to +75°C (pre-set: +70°C) - Connections for valve & thermometer.



| Ø  | threaded | code   |
|----|----------|--------|
| 15 | 3/4"     | VTH15D |
| 20 | 1"       | VTH20D |

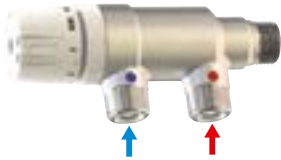


## Standard

Max. pressure: 5 bar - Max. temperature: +95°C - TS: +30°C/+65°C -  
Built-in anti-scalding safety device -  
Flow rate (at 1 bar): 1,5 Kv (m³/h).



| Ø    | code  |
|------|-------|
| 3/4" | MTB20 |



## Under basin

Nickel-plated - Max. pressure: 5 bar - Max. temperature: +80°C -  
TS: +34°C/+40°C - Built-in anti-scalding safety device -  
Flow rate (at 1 bar): 1,5 Kv (m³/h).



| Ø    | code  |
|------|-------|
| 1/2" | MT100 |



## High flow

Nickel-plated brass & dezincification resistant alloy body - Male union connections -  
Max. pressure: 5 bar - Max. temperature: +85°C - TS: +30°C/+50°C -  
Pre-set temperature: +45°C - Built-in anti-scalding safety device -  
Flow rate (at 1 bar): 2,2 Kv (m³/h).



| Ø    | code     |
|------|----------|
| 3/4" | MTY49A20 |



## Solar

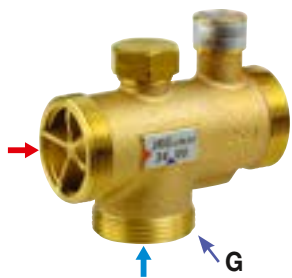
Nickel-plated brass & dezincification resistant alloy body - Male union connections -  
Max. pressure: 10 bar - Max. temperature: +110°C - TS: +30°C/+65°C -  
Adjustable setting temperature - Built-in anti-scalding safety device -  
Flow rate (at 1 bar): 1,8 Kv (m³/h).



| Ø    | code     |
|------|----------|
| 3/4" | MTP04A20 |

## Heavy duty - Bronze

Union connections (supplied without fittings)



| flow (m³/h, Δp 1) | temperature range | Ø fitting (R) | threaded body (G) | code      |
|-------------------|-------------------|---------------|-------------------|-----------|
| 1,440             | 20 - 30°C         | 1/2"          | 1"1/8             | JRG341525 |
|                   | 30 - 45°C         |               |                   | JRG341540 |
|                   | 36 - 53°C         |               |                   | JRG341548 |
|                   | 45 - 65°C         |               |                   | JRG341555 |
| 2,500             | 20 - 30°C         | 3/4"          | 1"1/4             | JRG342025 |
|                   | 30 - 45°C         |               |                   | JRG342040 |
|                   | 36 - 53°C         |               |                   | JRG342048 |
|                   | 45 - 65°C         |               |                   | JRG342055 |
| 4,000             | 20 - 30°C         | 1"            | 1"1/2             | JRG342625 |
|                   | 30 - 45°C         |               |                   | JRG342640 |
|                   | 36 - 53°C         |               |                   | JRG342648 |
|                   | 45 - 65°C         |               |                   | JRG342655 |

| flow (m³/h, Δp 1) | temperature range | Ø fitting (R) | threaded body (G) | code      |
|-------------------|-------------------|---------------|-------------------|-----------|
| 8,000             | 20 - 30°C         | 1"1/4         | 2"                | JRG343325 |
|                   | 30 - 45°C         |               |                   | JRG343340 |
|                   | 36 - 53°C         |               |                   | JRG343348 |
|                   | 45 - 65°C         |               |                   | JRG343355 |
| 12,200            | 20 - 30°C         | 1"1/2         | 2"1/4             | JRG344025 |
|                   | 30 - 45°C         |               |                   | JRG344040 |
|                   | 36 - 53°C         |               |                   | JRG344048 |
|                   | 45 - 65°C         |               |                   | JRG344055 |
| 16,200            | 20 - 30°C         | 2"            | 2"3/4             | JRG345025 |
|                   | 30 - 45°C         |               |                   | JRG345040 |
|                   | 36 - 53°C         |               |                   | JRG345048 |
|                   | 45 - 65°C         |               |                   | JRG345055 |

## 3 fitting set (supplied with gaskets)

### Bronze - Threaded



| Ø R   | code     |
|-------|----------|
| 1/2"  | ZRBJRG15 |
| 3/4"  | ZRBJRG20 |
| 1"    | ZRBJRG26 |
| 1"1/4 | ZRBJRG33 |
| 1"1/2 | ZRBJRG40 |
| 2"    | ZRBJRG50 |

### Brass - Welding

| Ø  | code     |
|----|----------|
| 18 | ZRSJRG15 |
| 22 | ZRSJRG20 |
| 28 | ZRSJRG26 |
| 35 | ZRSJRG33 |
| 45 | ZRSJRG40 |
| 54 | ZRSJRG50 |

## Flanged (supplied with gaskets)



| flow (m³/h, Δp 1) | temperature range | DN | code       |
|-------------------|-------------------|----|------------|
| 28,800            | 20 - 30°C         | 65 | JRG34B6525 |
|                   | 30 - 45°C         |    | JRG34B6540 |
|                   | 36 - 53°C         |    | JRG34B6548 |
|                   | 45 - 65°C         |    | JRG34B6555 |

| flow (m³/h, Δp 1) | temperature range | DN | code       |
|-------------------|-------------------|----|------------|
| 45,000            | 20 - 30°C         | 80 | JRG34B8025 |
|                   | 30 - 45°C         |    | JRG34B8040 |
|                   | 36 - 53°C         |    | JRG34B8048 |
|                   | 45 - 65°C         |    | JRG34B8055 |

## ■ Toilet pipes & bellows

### Extensible

PVC bellow with weaved spiral (carbon steel thread) -  
Inlet: soft PVC universal fitting adaptable for Ø 80 to 105 mm -  
Outlet: PVC male end for Ø 90 to 100 mm; with glue -  
Extension: straight 250/540 mm, elbow 350/650 mm.

|          | pack | code     |
|----------|------|----------|
| straight | 15   | PIPEXT   |
| elbow    | 12   | PIPEC650 |

### Extensible with rim fitting

PVC bellow with weaved spiral (carbon steel thread) -  
Inlet: soft PVC universal fitting adaptable for Ø 80 to 105 mm -  
Outlet: rim fitting for Ø 90 to 100 mm; without glue -  
Extension 250/540 mm.

| pack | code    |
|------|---------|
| 15   | PIPEXTJ |

### Soft

PVC bellow with reinforced fitting: naked internal face - Inlet: soft PVC universal fitting adaptable for Ø 80 to 105 mm -  
Outlet: PVC male end for Ø 90 to 100 mm -  
Temperature: -10°C to +60°C.

| length (mm) | pack | code   |
|-------------|------|--------|
| 400         | 15   | PIP400 |
| 540         | 15   | PIP540 |

### Elbow

PVC & PP - Outlet Ø 100 -  
Toilet outlet Ø 85 to 107 mm.

| length (mm) | Ø | pack | code    |
|-------------|---|------|---------|
| 120         | F | 12   | PIPF120 |
| 120         | M | 12   | PIPM120 |
| 350         | M | 12   | PIPM350 |

| length (mm) | Ø | pack | code    |
|-------------|---|------|---------|
| 120         | F | 12   | PIFP120 |
| 120         | M | 12   | PIPM120 |
| 350         | M | 12   | PIPM350 |

### Coil

Reinforced ABS bellow - Sleak interior Ø 25 & 32 mm -  
Max. temperature: +60°C.

| Ø       | coil length (m) | code     |
|---------|-----------------|----------|
| 25 x 32 | 20              | GTL32020 |
| 32 x 40 | 20              | GTL40020 |

### Free nut end fitting

| Ø          | coil length (m) | code    |
|------------|-----------------|---------|
| 32 x 1"1/4 | 10              | ET114   |
| 40 x 1"1/4 | 10              | ET40114 |
| 40 x 1"1/2 | 10              | ET112   |

## ■ PVC bellows for siphon

### Weaved spiral (conical end) bellow

Direct mounting on standard siphons -  
Extension 300/600 mm.

| Ø       | code   |
|---------|--------|
| 32 x 32 | RECM32 |
| 40 x 40 | RECM40 |

### Weaved spiral (flat end) bellow

Extension 300/600 mm.

| Ø  | free nut | code  |
|----|----------|-------|
| 32 | 1"1/4    | REC32 |
| 40 | 1"1/2    | REC40 |

### Siphon mounted bellow

| Ø       | free nut | length (mm) | code       |
|---------|----------|-------------|------------|
| 25 x 32 | 1"1/4    | 750         | GTL32 0750 |
| 32 x 40 | 1"1/2    | 750         | GTL40 0750 |

### Straight

PVC & PP - Outlet Ø 100 -  
Toilet outlet Ø 85 to 107 mm.

| length (mm) | Ø | pack | code     |
|-------------|---|------|----------|
| 160         | M | 12   | PIPMD160 |

| length (mm) | Ø | pack | code     |
|-------------|---|------|----------|
| 160         | F | 12   | PIPDF160 |

### Female end fitting

| Ø       | pack | code    |
|---------|------|---------|
| 32 x 32 | 10   | E32FL   |
| 40 x 32 | 10   | E4032FL |
| 40 x 40 | 10   | E40FL   |

### Male end fitting

| Ø       | pack | code    |
|---------|------|---------|
| 32 x 32 | 10   | E32ML   |
| 40 x 32 | 10   | E4032ML |
| 40 x 40 | 10   | E40ML   |

## ■ Extensible LATOREX bellows

### Extensible bellow

Extension 300/600 mm -  
Perfect tightness.

| Ø  | pack | code  |
|----|------|-------|
| 40 | 50   | LAT40 |

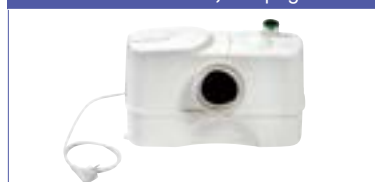
### Union fitting

| Ø     | pack | code    |
|-------|------|---------|
| 1"1/4 | 10   | LATE114 |
| 1"1/2 | 10   | LATE112 |

### Male fitting

| Ø  | pack | code    |
|----|------|---------|
| 32 | 10   | LAT32ML |
| 40 | 10   | LAT40ML |

Toilet macerators, see page 247





## Valves for washing machines & toilet flush tanks



**Sanitary valve with gland pack**

| Ø    | pack | code    |
|------|------|---------|
| 3/8" | 10   | 1341003 |



**Sanitary valve for copper pipe**

| Ø           | pack | code   |
|-------------|------|--------|
| 1/2" - 3/8" | 1    | 640043 |
| 1/2" - Ø 10 | 1    | 640410 |



**Sanitary valve set**

| Ø                | pack | code    |
|------------------|------|---------|
| 1/2" - 3/4" - 10 | 1    | 1336045 |



**Washing machine valve - Standard**

| Ø           | pack  | code    |
|-------------|-------|---------|
| 1/2" - 3/4" | 10/50 | 1325004 |



**Washing machine valve - Self-drilling**

| Ø               | pack  | code    |
|-----------------|-------|---------|
| 10 to 14 - 3/4" | 10/50 | 1330005 |



**Washing machine valve - Vertical double outlet**

| Ø                  | pack | code    |
|--------------------|------|---------|
| 1/2" - 3/4" - 3/4" | 10   | 1328004 |



**Wall valve connection - 1/2"**

| Ø         | pack | code    |
|-----------|------|---------|
| 14 - 1/2" | 10   | 1312004 |



**Screw driving ball valve**

Male/male with flat bearings



| Ø           | pack | code   |
|-------------|------|--------|
| 3/8"        | 10   | 688033 |
| 3/8" - 1/2" | 10   | 688043 |
| 1/2"        | 10   | 688044 |



**Sanitary valve - Straight**

| Ø           | pack   | code   |
|-------------|--------|--------|
| 3/8" - 3/8" | 10/200 | 679003 |



**Sanitary valve - Angle**

| Ø           | pack   | code   |
|-------------|--------|--------|
| 3/8" - 3/8" | 10/200 | 689003 |



**Washing machine ball valve**

| Ø           | pack   | code   |
|-------------|--------|--------|
| 1/2" - 3/4" | 10/200 | 685045 |



**Washing machine ball valve with rose**

| Ø           | pack   | code   |
|-------------|--------|--------|
| 1/2" - 3/4" | 10/200 | 684045 |



**Washing machine valve - Y double outlet**

| Ø           | pack | code    |
|-------------|------|---------|
| 1/2" - 1/2" | 10   | 1334004 |

**Wall valve connection - 1/2" with nut**

| Ø         | pack | code    |
|-----------|------|---------|
| 12 - 1/2" | 10   | 1311412 |
| 14 - 1/2" | 10   | 1311414 |

## Washing machine bellows

### Alimentation set

Max. pressure: 20 bar -  
Temperature range: 0°C/+25°C - Ø 10 mm.



Elbow outlet  
FF 3/4"

| length (mm) | code    |
|-------------|---------|
| 1500        | 1371001 |
| 2000        | 1371002 |
| 2500        | 1371003 |



Straight outlet  
FM 3/4"

| length (mm) | code    |
|-------------|---------|
| 2000        | 1371004 |



Straight outlet  
FF 3/4"

| length (mm) | code    |
|-------------|---------|
| 1500        | 1373001 |
| 2000        | 1373002 |
| 2500        | 1373003 |



### Drainage set

Temperature range: 0°C/+60°C.

Ø 19x24 mm -  
Removable crock  
& rubber end.

| length (mm) | code    |
|-------------|---------|
| 1500        | 1372001 |
| 2000        | 1372002 |
| 2500        | 1372003 |



Ø 19x28 mm -  
Extensible -  
Elbow outlet.

| length (mm) | code    |
|-------------|---------|
| 600-2000    | 1374001 |



Ø 19x28 mm -  
Extensible -  
Elbow outlet.

| length (mm) | code    |
|-------------|---------|
| 600-2000    | 1375001 |

## Washing machine siphons

PVC pipe - ABS body & elbow - Polypropylene cap - NBR gasket - Pipe Ø 40 mm -  
Temperature: 0°C to +90°C.



**Horizontal male**

| pack | code    |
|------|---------|
| 25   | 1370001 |



**Funnel**

| pack | code    |
|------|---------|
| 100  | 1370003 |



**Vertical male**

| pack | code    |
|------|---------|
| 30   | 1370002 |

Use: water distribution - Excluded from 2014/68/UE directive (article 1, § 2b) - EU approved -  
 Acc. to MID 2004/22/EC - Brass body - Magnetic transmission - Dry dial - Max. pressure: 16 bar - Cold water:  
 0°C/+30°C - Hot water: +30°C/+90°C - REED contact for pulse transmitter types (please advise  
 the required number of pulses at the order).



## ■ Single jet



### Cold water - MID R100

| bore | Ø    | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code    |
|------|------|-------------|---------------------|------------------|---------|
| 15   | 3/4" | 110         | 2,5                 | 3,1              | 1701015 |
| 20   | 1"   | 130         | 4                   | 5                | 1701020 |



### Hot water - MID R100

| bore | Ø    | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code    |
|------|------|-------------|---------------------|------------------|---------|
| 15   | 3/4" | 110         | 2,5                 | 3,1              | 1702015 |
| 20   | 1"   | 130         | 4                   | 5                | 1702020 |



### Cold water - MID R160

| bore | Ø    | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code    |
|------|------|-------------|---------------------|------------------|---------|
| 15   | 3/4" | 110         | 2,5                 | 3,1              | 1740015 |
| 20   | 1"   | 130         | 4                   | 5                | 1740020 |



### Hot water - MID R160

| bore | Ø    | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code    |
|------|------|-------------|---------------------|------------------|---------|
| 15   | 3/4" | 110         | 2,5                 | 3,1              | 1746015 |
| 20   | 1"   | 130         | 4                   | 5                | 1746020 |

## ■ Single jet - Pulse transmitter



### Cold water - MID R100

| bore | Ø    | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code 1x11 |
|------|------|-------------|---------------------|------------------|-----------|
| 15   | 3/4" | 110         | 2,5                 | 3,1              | 1714015   |
| 20   | 1"   | 130         | 4                   | 5                | 1714020   |



### Hot water - MID R100

| bore | Ø    | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code 1x11 |
|------|------|-------------|---------------------|------------------|-----------|
| 15   | 3/4" | 110         | 2,5                 | 3,1              | 1727015   |
| 20   | 1"   | 130         | 4                   | 5                | 1727020   |



### Cold water - MID R160

| bore | Ø    | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code 1x11 |
|------|------|-------------|---------------------|------------------|-----------|
| 15   | 3/4" | 110         | 2,5                 | 3,1              | 1719015   |
| 20   | 1"   | 130         | 4                   | 5                | 1719020   |



### Hot water - MID R160

| bore | Ø    | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code 1x11 |
|------|------|-------------|---------------------|------------------|-----------|
| 15   | 3/4" | 110         | 2,5                 | 3,1              | 1729015   |
| 20   | 1"   | 130         | 4                   | 5                | 1729020   |

### Woltmann & irrigation water meters, see page 96



## Multi jet

### Cold water - MID R100



| bore | Ø     | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code    |
|------|-------|-------------|---------------------|------------------|---------|
| 15   | 3/4"  | 170         | 2,5                 | 3,1              | 1770015 |
| 20   | 1"    | 190         | 4                   | 5                | 1770020 |
| 25   | 1"1/4 | 260         | 6,3                 | 7,8              | 1770025 |
| 30   | 1"1/2 | 260         | 10                  | 12,5             | 1770030 |
| 40   | 2"    | 300         | 16                  | 20               | 1770040 |
| 50   | 2"1/2 | 300         | 25                  | 31,2             | 1770050 |

### Cold water - MID R160



| bore | Ø     | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code    |
|------|-------|-------------|---------------------|------------------|---------|
| 15   | 3/4"  | 170         | 2,5                 | 3,1              | 1771015 |
| 20   | 1"    | 190         | 4                   | 5                | 1771020 |
| 25   | 1"1/4 | 260         | 6,3                 | 7,8              | 1771025 |
| 30   | 1"1/2 | 260         | 10                  | 12,5             | 1771030 |
| 40   | 2"    | 300         | 16                  | 20               | 1771040 |
| 50   | 2"1/2 | 300         | 25                  | 31,2             | 1771050 |

### Hot water - MID R50



| bore | Ø     | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code    |
|------|-------|-------------|---------------------|------------------|---------|
| 15   | 3/4"  | 165         | 2,5                 | 3,1              | 1707115 |
| 20   | 1"    | 190         | 4                   | 5                | 1707120 |
| 25   | 1"1/4 | 260         | 6,3                 | 7,8              | 1707125 |
| 30   | 1"1/2 | 260         | 10                  | 12,5             | 1707130 |
| 40   | 2"    | 300         | 16                  | 20               | 1707140 |
| 50   | 2"1/2 | 300         | 25                  | 31,2             | 1707150 |

## Multi jet - Pulse transmitter

### Cold water - MID R100



| bore | Ø     | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code 1x11 | code 1x10l | code 1x100l |
|------|-------|-------------|---------------------|------------------|-----------|------------|-------------|
| 15   | 3/4"  | 165         | 2,5                 | 3,1              | 1776015   | 1776016    | -           |
| 20   | 1"    | 190         | 4                   | 5                | 1776020   | 1776021    | -           |
| 25   | 1"1/4 | 260         | 6,3                 | 7,8              | 1776025   | 1776026    | -           |
| 30   | 1"1/2 | 260         | 10                  | 12,5             | 1776030   | 1776031    | 1776032     |
| 40   | 2"    | 300         | 16                  | 20               | 1776040   | 1776041    | 1776042     |
| 50   | 2"1/2 | 300         | 25                  | 31,2             | 1776050   | 1776051    | 1776052     |

### Cold water - MID R160



| bore | Ø     | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code 1x11 | code 1x10l | code 1x100l |
|------|-------|-------------|---------------------|------------------|-----------|------------|-------------|
| 15   | 3/4"  | 165         | 2,5                 | 3,1              | 1777015   | 1777016    | -           |
| 20   | 1"    | 190         | 4                   | 5                | 1777020   | 1777021    | -           |
| 25   | 1"1/4 | 260         | 6,3                 | 7,8              | 1777025   | 1777026    | -           |
| 30   | 1"1/2 | 260         | 10                  | 12,5             | 1777030   | 1777031    | 1777032     |
| 40   | 2"    | 300         | 16                  | 20               | 1777040   | 1777041    | 1777042     |
| 50   | 2"1/2 | 300         | 25                  | 31,2             | 1777050   | 1777051    | 1777052     |

### Hot water - MID R50



| bore | Ø     | length (mm) | nominal flow (m³/h) | max. flow (m³/h) | code 1x11 | code 1x10l | code 1x100l |
|------|-------|-------------|---------------------|------------------|-----------|------------|-------------|
| 15   | 3/4"  | 165         | 2,5                 | 3,1              | 1725015   | 1725016    | -           |
| 20   | 1"    | 190         | 4                   | 5                | 1725020   | 1725021    | -           |
| 25   | 1"1/4 | 260         | 6,3                 | 7,8              | 1725025   | 1725026    | -           |
| 30   | 1"1/2 | 260         | 10                  | 12,5             | 1725030   | 1725031    | 1725032     |
| 40   | 2"    | 300         | 16                  | 20               | 1725040   | 1725041    | 1725042     |
| 50   | 2"1/2 | 300         | 25                  | 31,2             | 1725050   | 1725051    | 1725052     |

## Accessories

### Pulse transmitter



| code    |
|---------|
| 9811018 |



### Valve with probe holder outlet

| Ø    | 1/2"    | 3/4"    | 1"      |
|------|---------|---------|---------|
| code | 9811004 | 9811005 | 9811006 |

### Free nut with sealing hole & gasket (sold by single piece)



| Ø F  | 1/2"    | 3/4"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      | 2"1/2   |
|------|---------|---------|---------|---------|---------|---------|---------|---------|
| Ø M  | 3/8"    | 1/2"    | 3/4"    | 3/4"    | 1"      | 1"1/4   | 1"1/2   | 2"      |
| bore | -       | 15      | 15      | 20      | 25      | 30      | 40      | 50      |
| pack | 10      | 10      | 10      | 10      | 1       | 1       | 1       | 1       |
| code | 9811093 | 9811054 | 9811094 | 9811065 | 9811076 | 9811087 | 9811098 | 9811099 |



## Domestic water filtration

### ■ Solo & Duo BX filtration sets



#### Solo A - I

Anti-impurity. 3 pieces - 3/4" -  
Includes: 1 filter Senior Single 3P - AFP - BX - AS,  
1 cartridge RL 10 BX 50 µ, 1 wall support with screws,  
1 key, 2 nipples MM 3/4", 1 spare gasket - Food quality  
& safety - Max. pressure: 4 bar - Optimal flow: 1600 l/h -  
Working temperature: +20°C.

|        |
|--------|
| code   |
| 491141 |



#### Duo

3 pieces - 3/4". Includes:  
1 filter Duplex 3/4" with proportional system, 1 cartridge RL  
10 BX 50 µ, 1 polyphosphates cartridge HA 10 BX, 1 wall  
support with screws, 1 key, 2 nipples MM 3/4", 2 spare  
gaskets - Food quality & safety - Max. pressure: 4 bar -  
Optimal flow: 1400 l/h - Mounting on cold water inlet only.

|        |
|--------|
| code   |
| 491151 |



#### Solo A - C

Anti-calcareous - 3 pieces - 3/4" -  
Includes: 1 filter 3 pieces 3/4"  
with proportional system, 1 polyphosphates cartridge  
HA 10 BX, 1 wall support with screws, 1 key, 2 nipples  
MM 3/4", 1 spare gasket - Food quality & safety -  
Max. pressure: 4 bar - Optimal flow: 1400 l/h -  
Mounting on cold water inlet only.

|        |
|--------|
| code   |
| 491646 |

### ■ Spare BX cartridges

#### RL 10 BX - 50 µ

Food use -  
Max. temperature: +40°C -  
Optimal flow: 1600 l/h.

|        |
|--------|
| code   |
| 493822 |

#### HA 10 BX

Contains polyphosphate  
to eliminate calcareous deposit.

|        |
|--------|
| code   |
| 493834 |

### ■ Casing for BX cartridges

Food quality & safety - Max. temperature: +45°C at 2 bar -  
Working pressure: 4 bar at +20°C - Brass female inserts.



#### Senior Single 3P - AFO - BX

3 pieces - 3/4" -  
For 10" BX cartridges.

|        |
|--------|
| code   |
| 491140 |

#### Senior Single 3P - BFO - BX

3 pieces - 1" -  
For 10" BX cartridges.

|        |
|--------|
| code   |
| 491145 |



#### Senior Duplex 3P - AFO - BX

3 pieces - 3/4" -  
For 10" BX cartridges.

|        |
|--------|
| code   |
| 491150 |



#### Senior Triplex 3P - AFO - BX

3 pieces - 3/4" -  
For 10" BX cartridges.

|        |
|--------|
| code   |
| 491170 |



#### Master Single 3P - BFO - BX

3 pieces - 1" -  
For 20" BX cartridges.

|        |
|--------|
| code   |
| 491155 |



#### Master Duplex 3P - AFO - BX

3 pieces - 3/4" -  
For 20" BX cartridges.

|        |
|--------|
| code   |
| 491160 |

### ■ Brass nipples with o-ring

(sold by 2)



MM 3/4"  
MM 1"

|        |
|--------|
| code   |
| 938080 |
| 938081 |

## ■ BX cartridges

Water & aggressive liquids filtration - Polypropylene fiber on polypropylene support - Max. temperature: +40°C - Does not fit on 1"1/2 & 2" brass heads.



- FA 10 BX - 1 to 3 μ
- FA 10 BX - 5 μ
- FA 10 BX - 10 μ
- FA 10 BX - 25 μ
- Set 3 FA 10 BX - 25 μ
- FA 10 BX - 50 μ
- FA 10 BX - 100 μ
- FA 20 BX - 5 μ
- FA 20 BX - 25 μ
- FA 20 BX - 50 μ
- FA 20 BX - 100 μ

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 1 000              | 493812 |
|        |                    | 493813 |
|        |                    | 493814 |
|        |                    | 493815 |
|        |                    | 493461 |
| 20"    | 2 000              | 493816 |
|        |                    | 493817 |
|        |                    | 493818 |
|        |                    | 493819 |
|        |                    | 493821 |

Food use - ACS agreement - Water filtration - Washable - Polyester net on polypropylene support - Max. temperature: +40°C.

- RL 10 BX - 50 μ
- RL 20 BX - 50 μ

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 1 600              | 493822 |
| 20"    | 3 000              | 493823 |

Food use - ACS agreement - Water & aggressive liquids filtration - Washable - Polypropylene pleated fabric on polypropylene support - Max. temperature: +40°C.



- RS 10 BX - 50 μ
- RS 20 BX - 50 μ

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 2 200              | 493826 |
| 20"    | 3 800              | 493827 |

Container filled with polyphosphate - Cold water (max. +20°C) - Do not fit on 1"1/2 & 2" brass heads.



- HA 10 BX
- HA 20 BX

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 1 400              | 493834 |
| 20"    | 2 800              | 493835 |

- Set 2 FA 10 BX + 1 HA 10 BX

| code   |
|--------|
| 493451 |

Food use - Water & aggressive liquids filtration - Washable - Stainless steel 304 pleated fabric on polypropylene support - Max. temperature: +40°C.



- SA 10C BX - 50 μ
- SA 20C BX - 50 μ

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 2 200              | 493830 |
| 20"    | 3 800              | 493831 |

Food use - Drinkable water filtration - Ceramic cartridge - Very thin filtration & bacteria / micro-organisms elimination - Working temperature: +35°C.



- AB 10 BX - 0,45 μ

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 300                | 493798 |

Food use - Water with chemical products filtration - Activated carbon & polyester fiber.



- CA 10 BX - 25 μ
- CA 20 BX - 25 μ

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 600                | 493836 |
| 20"    | 1 200              | 493837 |

## ■ Polyphosphate doses for calcareous water filtration



### Dosal

Uses 3 to 5 g polyphosphate per m<sup>3</sup> - Fittings F 3/4" - M 3/4" - 150 g polyphosphate - Max. pressure: 4 bar at +20°C - Mounting on cold water inlet.

| code   |
|--------|
| 491630 |



### Dosadrop Mignon L 3P

Mounting on cold water inlet (+20°C) - Anti-calcareous - Proportional dosing - Food use - Max. pressure: 4 bar - Fitting F 1/2".

| code   |
|--------|
| 491637 |



### HA - M - SX

Cartridge for Dosadrop Mignon L 3P

| code   |
|--------|
| 493799 |



### Polyphosphate

25 kg  
1,5 kg

| code   |
|--------|
| 494250 |
| 494015 |

### pH test

| code   |
|--------|
| 494010 |

## ■ Filters accessories



- L key** For Mignon 3 P
- U key** For 2 P & 3 P filters

| code   |
|--------|
| 494300 |
| 494317 |



- Single filter wall support**  
Screws included
- Duplex filter wall support**  
Screws included

| code   |
|--------|
| 494325 |
| 494330 |



### By-pass 3/4" for Duplex, Biplax & Duo

| code   |
|--------|
| 494350 |



### Triplex filter wall support

Screws included

| code   |
|--------|
| 494332 |



## Biplex SX filtration set

Includes: 1 filter Senior Duplex 3/4" with proportional system, 1 cartridge FA 10 SX 25 µ, 1 cartridge HA 10 SX, 1 wall support with screws, 1 key - Food quality & safety - Max. pressure: 4 bar - Optimal flow: 1400 l/h - Mounting on cold water inlet only (max. +20°C).

### Biplex SX 3/4"

|        |
|--------|
| code   |
| 491161 |

## Casing for SX cartridges

Food quality & safety - Max. temperature: +45°C at 2 bar - Max. pressure: 4 bar at +20°C - Brass female inserts.



### Mignon Single S - 3P - MFO

3 pieces - 1/2" - For 5" SX cartridges.

|        |
|--------|
| code   |
| 491101 |



### Senior Single 3P - AFO - SX

3 pieces - 3/4" - For 10" SX cartridges.

|        |
|--------|
| code   |
| 491120 |



### Junior Single 3P - AFO - SX

3 pieces - 3/4" - For 7" SX cartridges.

|        |
|--------|
| code   |
| 491113 |



### Senior Single 3P - BFO - SX

3 pieces - 1" - For 10" SX cartridges.

|        |
|--------|
| code   |
| 491125 |



### Senior HOT 3P - AFP - SX

3 pieces - 3/4" - Special hot water up to 80°C - For FA 10 HOT & CPP 110 cartridges.

|        |
|--------|
| code   |
| 491121 |



### Senior Duplex 3P - AFO - SX

3 pieces - 3/4" - For 10" SX cartridges.

|        |
|--------|
| code   |
| 491135 |

### Senior Triplex 3P - AFO - SX

3 pieces - 3/4" - For 10" SX cartridges.

|        |
|--------|
| code   |
| 491180 |

## SX cartridges

Water & aggressive liquids filtration - Polypropylene.



Max. temperature: +40°C

|                              | height | optimal flow (l/h) | code   |
|------------------------------|--------|--------------------|--------|
| <b>FA Mignon SX - 5 µ</b>    | 5"     | 300                | 493800 |
| <b>FA Mignon SX - 25 µ</b>   | 5"     | 300                | 493801 |
| <b>FA 7 SX - 5 µ</b>         | 7"     | 700                | 493802 |
| <b>FA 7 SX - 25 µ</b>        | 7"     | 700                | 493803 |
| <b>FA 10 SX - 1 to 3 µ</b>   | 10"    | 1 000              | 493902 |
| <b>FA 10 SX - 5 µ</b>        | 10"    | 1 000              | 493804 |
| <b>FA 10 SX - 10 µ</b>       | 10"    | 1 000              | 493839 |
| <b>FA 10 SX - 25 µ</b>       | 10"    | 1 000              | 493805 |
| <b>Set 3 FA 10 SX - 25 µ</b> | 10"    | 1 000              | 493460 |



Food use - Water with chemical products filtration - Activated carbon & polyester fiber.

### CA 10 SX - 25 µ

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 600                | 493806 |



Food use - ACS agreement - Washable - Pleated polyester fabric - Especially used for swimming pools - Usable for air filtration - Max. temperature: +40°C.

### TS 10 SX - 50 µ

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 2 200              | 493807 |



Food use - ACS agreement - Washable - Polyester net - Max. temperature: +40°C.

### RL 10 SX - 50 µ

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 1 500              | 493808 |



Container filled with polyphosphate - For 10" filters - Cold water (max. +20°C).

### HA 10 SX

| height | optimal flow (l/h) | code   |
|--------|--------------------|--------|
| 10"    | 1 400              | 493811 |

Max. temperature: +80°C

|                            |     |       |        |
|----------------------------|-----|-------|--------|
| <b>FA 10 HOT SX - 25 µ</b> | 10" | 1 000 | 493951 |
|----------------------------|-----|-------|--------|

Potable water filtration & reversed osmose systems pre-filtration - ACS agreement - Polypropylene - Max. temperature: +80°C.



|                          | height | optimal flow (l/h) | code   |
|--------------------------|--------|--------------------|--------|
| <b>CPP 110SX - 1 µ</b>   | 10"    | 1 500              | 493760 |
| <b>CPP 110 SX - 5 µ</b>  | 10"    | 1 500              | 493761 |
| <b>CPP 110 SX - 25 µ</b> | 10"    | 1 500              | 493763 |



### Set 2 FA 10 SX + 1 HA SX

|        |
|--------|
| code   |
| 493450 |

## Liquids filtration

**NEW**

### Complete filters - Smart line - Domestic use

Max. temperature: +50°C - Max. pressure: 8 bar - Includes 1 filter 25 µ or filled CTN cartridge, bracket & key - ACS: pending.



SL 240 3/4"  
SL 240 1"

| flow (l/h)<br>for Δp = 0,2 bar | code     |
|--------------------------------|----------|
| 3 000                          | 506010JE |
| 3 500                          | 506011   |



SL 240 TE-CTN 3/4"  
SL 240 TE-CTN 1"

| flow (l/h)<br>for Δp = 0,2 bar | code     |
|--------------------------------|----------|
| 500                            | 506015JE |
| 500                            | 506016JE |

### Complete filters - Domestic use

Max. temperature: +50°C - Max. pressure: 10 bar - Includes 1 filter 25 µ - NW 25/32: includes union fitting & key.



NW 18 3/4"

| flow (l/h)<br>for Δp = 0,2 bar | code     |
|--------------------------------|----------|
| 3 500                          | 506018JE |



NW 25 3/4"  
NW 25 1"

| flow (l/h)<br>for Δp = 0,2 bar | code   |
|--------------------------------|--------|
| 5 500                          | 506025 |
| 5 500                          | 506026 |



NW 32 1"1/4

| flow (l/h)<br>for Δp = 0,2 bar | code   |
|--------------------------------|--------|
| 6 500                          | 506032 |

### Double function filters - Domestic use

25 µ mechanical filtration & water treatment with refillable cartridge (activated carbon or polyphosphates) - Use filter sleeves for NW 25 - Includes empty CTN cartridge, 2 fittings 3/4" & 2 fittings 1".



TIO 1"

| code   |
|--------|
| 506027 |



CTN cartridge filled with activated carbon  
Empty CTN cartridge

| code   |
|--------|
| 493960 |
| 493961 |



Same as NW 25 DUO, except supplied with CTN refillable empty cartridge.

NW 25 DUO-CTN

| code   |
|--------|
| 506091 |



Activated carbon  
3,4 l - For 60 m<sup>3</sup> water.

| code   |
|--------|
| 506700 |

### Complete filters - Industry

Protection of the installations with filtration of water suspension solid particles - Concentration of the biggest particles in the bottom end thanks to the centrifugal propeller - Easy replacement of the filter sleeve - High constant flow - Low loss factor: 0,2 bar - Max. temperature: +50°C - Pressure use: 10 bar - Includes 25 µ filter sleeve, 2 glycerine filled manometers & drain cock valve.

**NEW**



NW 280 1"  
NW 340 1"1/4  
NW 400 1"1/2

| flow (l/h)<br>for Δp = 0,2 bar | code   |
|--------------------------------|--------|
| 7 500                          | 506190 |
| 8 500                          | 506191 |
| 12 000                         | 506192 |

NW 500 2"

| flow (l/h)<br>for Δp = 0,2 bar | code   |
|--------------------------------|--------|
| 18 000                         | 506151 |



NW 650 2"1/2  
NW 800 3"

| flow (l/h)<br>for Δp = 0,2 bar | code   |
|--------------------------------|--------|
| 25 000                         | 506163 |
| 32 000                         | 506176 |

### Filters with water treatment device



NW 32 TE 1"1/4  
1,700 l, supplied empty.

NW 500 TE 2"  
4,850 l, supplied empty.

NW 25 TE-CTN 1"  
Supplied with CTN empty cartridge.

| code   |
|--------|
| 506085 |
| 506187 |
| 506081 |

### Wall brackets



Single

For NW 18/25/32 & TIO - Polypropylene.



Single

For NW 18/25/32 & TIO - Polypropylene.



Double

For NW 25/32 - Stainless steel.

| code   |
|--------|
| 506597 |

| code   |
|--------|
| 506598 |

| code   |
|--------|
| 506599 |

## Filter sleeves (sold by 5)



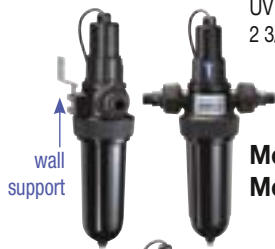
**NEW**

| Filtration  | For NW 18 | For NW 25,<br>TIO & SL240 | For NW 32 | For<br>NW 500/650/800<br>& NW 50/62/75 | <b>NEW</b><br>For NW 280 | <b>NEW</b><br>For NW 340 | <b>NEW</b><br>For NW 400 |
|-------------|-----------|---------------------------|-----------|--|--------------------------|--------------------------|--------------------------|
|             | code      | code                      | code      | code                                   | code                     | code                     | code                     |
| 1 μ         | -         | 506108                    | 506109    | 506119                                 | 506200                   | 506210                   | 506220                   |
| 5 μ         | 506096    | 506100                    | 506110    | 506120                                 | 506201                   | 506211                   | 506221                   |
| 10 μ        | 506097    | 506101                    | 506111    | 506121                                 | 506202                   | 506212                   | 506222                   |
| 25 μ        | 506098    | 506102                    | 506112    | 506122                                 | 506203                   | 506213                   | 506223                   |
| 50 μ        | 506095    | 506104                    | 506114    | 506124                                 | 506204                   | 506214                   | 506224                   |
| 100 μ       | 506099    | 506103                    | 506113    | 506123                                 | 506205                   | 506215                   | 506225                   |
| 150 μ nylon | -         | 506105                    | 506115    | 506125                                 | 506206                   | 506216                   | 506226                   |
| 300 μ nylon | -         | -                         | 506118    | 506300                                 | 506207                   | 506217                   | 506227                   |

## UV filters



UV 25 or 40 Watts lamp set - Max. flow: 2000 l/h - Max. pressure: 10 bar - Max. water temperature: +50°C - 2 3/4" fittings for inlet & 2 1" fittings for outlet.



**Mono-UV 25 W**  
**Mono-UV 40 W**

|        |
|--------|
| code   |
| 498210 |
| 498209 |



**Trio-UV 25 W**  
**Trio-UV 40 W**

Includes CTN cartridge filled with activated carbon - Filtration, purification & sterilisation.

|        |
|--------|
| code   |
| 498212 |
| 498213 |



**Duo-UV**

Includes 1 filter NW25 (25 μ).

|        |
|--------|
| code   |
| 498211 |



**25 W lamp set**  
**Quartz housing**

|        |
|--------|
| code   |
| 937748 |
| 937753 |



5° rotation to take out & replace the UV lamp

## Domestic water filtration



### Rinsable filters

Brass head - Stainless steel 316 cartridge - Filtration 89 μ - Drain valve - Max. pressure: 10 bar - Max. temperature: +30°C.



**MEC 316 3/4"**

Recommended flow 2,4 m<sup>3</sup>/h (max. 4,2 m<sup>3</sup>/h)

**MEC 316 1"**

Recommended flow 3,6 m<sup>3</sup>/h (max. 6 m<sup>3</sup>/h)

**MEC 316 1"1/4**

Recommended flow 5,4 m<sup>3</sup>/h (max. 7 m<sup>3</sup>/h)

|        |
|--------|
| code   |
| 491500 |
| 491501 |
| 491502 |

### Cartridges

**85 μ for MEC**

**89 μ for MEC**

**50 μ for MEC**



**Key for MEC/PLOT**

|        |
|--------|
| code   |
| 937994 |
| 937995 |
| 937988 |

|        |
|--------|
| code   |
| 494299 |

### Manuel self-cleaning filters

Brass head - Stainless steel 316 cartridge with built-in Turboclean turbine - Filtration 89 μ - Drain valve - Max. pressure: 10 bar - Max. temperature: +30°C.



**PLOT 3/4"**

Recommended flow 2,4 m<sup>3</sup>/h (max. 4,2 m<sup>3</sup>/h)

**PLOT 1"**

Recommended flow 3,6 m<sup>3</sup>/h (max. 6 m<sup>3</sup>/h)

**PLOT 1"1/4**

Recommended flow 5,4 m<sup>3</sup>/h (max. 7,8 m<sup>3</sup>/h)

**PLOT 1"1/2**

Recommended flow 7,2 m<sup>3</sup>/h (max. 9,6 m<sup>3</sup>/h)

|        |
|--------|
| code   |
| 491496 |
| 491497 |
| 491498 |
| 491499 |



**89 μ for PLOT**

|        |
|--------|
| code   |
| 939013 |



# TAPS



|                              |  |                  |
|------------------------------|--|------------------|
| <b>Professional line</b>     | <b>TheWa<sup>®</sup></b><br><small>PROFESSIONAL</small>  | pages 200 to 208 |
| <b>Consumer line</b>         |  <b>LAGGI</b> | pages 209 to 220 |
| <b>Budget</b>                |  | page 221         |
| <b>Spare parts - Display</b> |  | page 222         |

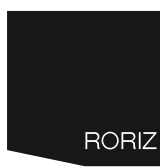
2018  
COLLECTION

# Professional line

Original European design & manufacturing

**TheWa**<sup>®</sup>  
PROFESSIONAL

**teka**



**vidral**



## Maji

### Basin mixer

- Ceramic cartridge Ø 35 mm
- Flexible hoses F3/8"
- CLIC CLAC brass drainage
- Total height 90 mm



|  | Code | Price € |
|--|------|---------|
|--|------|---------|

- Anthracite
- White
- Orange
- Green
- Red

|  |        |  |
|--|--------|--|
|  | MAJ15B |  |
|  | MAJ15W |  |
|  | MAJ15O |  |
|  | MAJ15G |  |
|  | MAJ15R |  |

### Shower mixer

- Ceramic cartridge Ø 35 mm
- Center distance 150±20 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"



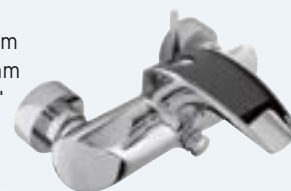
|  | Code | Price € |
|--|------|---------|
|--|------|---------|

- Anthracite

|  |        |  |
|--|--------|--|
|  | MAJ20B |  |
|--|--------|--|

### Bath/shower mixer

- Ceramic cartridge Ø 35 mm
- Center distance 150±20 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"
- Automatic change-over



|  | Code | Price € |
|--|------|---------|
|--|------|---------|

- Anthracite

|  |        |  |
|--|--------|--|
|  | MAJ30B |  |
|--|--------|--|

## Wossa



### Basin mixer

- Ceramic cartridge Ø 25 mm
- Flexible hoses F3/8"
- Brass drainage
- Metal base
- Total height 155 mm

|  | Code | Price € |
|--|------|---------|
|--|------|---------|

- Chrome
- White
- Black
- Blue
- Red
- Green

|  |        |  |
|--|--------|--|
|  | WOS15C |  |
|  | WOS15W |  |
|  | WOS15B |  |
|  | WOS15M |  |
|  | WOS15R |  |
|  | WOS15G |  |

### Shower mixer

- Ceramic cartridge Ø 25 mm
- Flexible hoses F3/8"



|  | Code | Price € |
|--|------|---------|
|--|------|---------|

- Chrome
- White
- Black

|  |        |  |
|--|--------|--|
|  | WOS20C |  |
|  | WOS20W |  |
|  | WOS20B |  |

### Bath/shower mixer

- Ceramic cartridge Ø 25 mm
- Center distance 150±20 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"
- Automatic change-over



|  | Code | Price € |
|--|------|---------|
|--|------|---------|

- Chrome
- White
- Black

|  |        |  |
|--|--------|--|
|  | WOS30C |  |
|  | WOS30W |  |
|  | WOS30B |  |

## Dour

### Basin mixer

- Ceramic cartridge Ø 25 mm
- Flexible hoses F3/8"
- CLIC CLAC brass drainage
- Total height 140 mm



| Code | Price € |
|------|---------|
|------|---------|



|       |  |
|-------|--|
| DOU15 |  |
|-------|--|

### Shower mixer

- Ceramic cartridge Ø 25 mm
- Center distance 150±20 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"



| Code | Price € |
|------|---------|
|------|---------|



|       |  |
|-------|--|
| DOU20 |  |
|-------|--|

### Bath/shower mixer

- Ceramic cartridge Ø 25 mm
- Center distance 150±20 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"
- Automatic change-over



| Code | Price € |
|------|---------|
|------|---------|



|       |  |
|-------|--|
| DOU30 |  |
|-------|--|

## Rano

### Basin mixer

- Ceramic cartridge Ø 25 mm
- Inclined jet 14°
- Total height 160 mm



| Code | Price € |
|------|---------|
|------|---------|



|       |  |
|-------|--|
| RAN15 |  |
|-------|--|

### Shower mixer

- Ceramic cartridge Ø 25 mm
- Flexible hose outlet M1/2"



| Code | Price € |
|------|---------|
|------|---------|



|       |  |
|-------|--|
| RAN20 |  |
|-------|--|

### Bath/shower mixer

- Ceramic cartridge Ø 25 mm
- Flexible hose outlet M1/2"
- Automatic change-over



| Code | Price € |
|------|---------|
|------|---------|



|       |  |
|-------|--|
| RAN30 |  |
|-------|--|

## Yaku

### Basin mixer

- Ceramic head 1/4 turn
- Flexible hoses F3/8"
- CLIC CLAC brass drainage
- Height under nozzle 130 mm
- Total height 140 mm



| Code | Price € |
|------|---------|
|------|---------|



|       |  |
|-------|--|
| YAK15 |  |
|-------|--|

### Shower mixer

- Ceramic head 1/4 turn
- Flexible hose outlet M1/2"



| Code | Price € |
|------|---------|
|------|---------|



|       |  |
|-------|--|
| YAK20 |  |
|-------|--|

### Bath/shower mixer

- Ceramic head 1/4 turn
- Flexible hose outlet M1/2"
- Manual change-over



| Code | Price € |
|------|---------|
|------|---------|



|       |  |
|-------|--|
| YAK30 |  |
|-------|--|

## Wata plus

### Basin mixer

- Ceramic cartridge Ø 35 mm
- Flexible hoses F3/8"
- Brass drainage
- Total height 134 & 179 mm



Chrome

normal

Code WPL15

medium

Code WPL17

Code

Price €

### Shower mixer

- Center distance 150±20 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"



Chrome

Code

Price €

WPL20

### Bath/shower mixer

- Center distance 150±20 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"



Chrome

Code

Price €

WPL30

## Madi

### Basin mixer

- Ceramic cartridge Ø 35 mm
- Flexible hoses F3/8"
- Mix drainage
- Total height 140 mm



Chrome

Code MAD15

Code

Price €

### Bath/shower mixer

- Ceramic cartridge Ø 35 mm
- Center distance 150±20 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"
- Semi-automatic change-over



Chrome

Code MAD30

Code

Price €

### Shower mixer

- Ceramic cartridge Ø 35 mm
- Center distance 150±20 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"



Chrome

Code MAD20

Code

Price €

### Bath/shower single-hole mixer

- Ceramic cartridge Ø 40 mm
- 2 flexible hoses
- Bath/shower change-over



Chrome

Code MAA32

Code

Price €

## Viz

### Basin mixer

- Ceramic cartridge Ø 35 mm
- Total height 140 mm
- Inclined jet 18°



Chrome

Code VIZ15

Code

Price €

### Shower/Bath & shower mixer

- Ceramic cartridge Ø 35 mm
- Flexible hose outlet M1/2"
- Fittings M1/2" - M3/4"
- Automatic change-over



Chrome

Code

Price €

Shower mixer

Code VIZ20

Bath & Shower mixer

Code VIZ30

## Voda

### Basin mixer

- Ceramic cartridge Ø 35 mm - Energy saving
- Flexible hoses F3/8"
- 10° angle jet
- Total height 130 mm



| Code | Price € |
|------|---------|
|------|---------|

VOD15

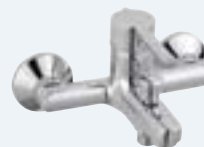
Chrome



### Shower mixer

| Code | Price € |
|------|---------|
|------|---------|

VOD20



### Bath & Shower mixer

| Code | Price € |
|------|---------|
|------|---------|

VOD30



### Bath/shower single hole mixer

| Code | Price € |
|------|---------|
|------|---------|

VOD32



### Bidet

| Code | Price € |
|------|---------|
|------|---------|

VOD40

## Akvo

### Basin mixer

- Flexible hoses F3/8"
- 1/2 turn ceramic heads
- 8° angle jet
- Total height 205 mm



| Code | Price € |
|------|---------|
|------|---------|

AKV15

**Akvo**

Chrome



### Shower mixer

| Code | Price € |
|------|---------|
|------|---------|

AKV20



### Bath/shower mixer

| Code | Price € |
|------|---------|
|------|---------|

AKV30

## Auga

### Basin mixer

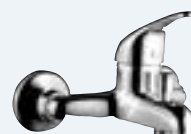
- Ceramic cartridge Ø 40 mm
- Flexible hoses F3/8"
- 20° angle jet
- Total height 120 mm



| Code | Price € |
|------|---------|
|------|---------|

AGA15

Chrome



### Bath/shower mixer

| Code | Price € |
|------|---------|
|------|---------|

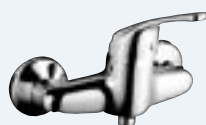
AGA30



### Bath/shower single hole mixer

| Code | Price € |
|------|---------|
|------|---------|

AGA32



### Shower mixer

| Code | Price € |
|------|---------|
|------|---------|

AGA20



### Bidet

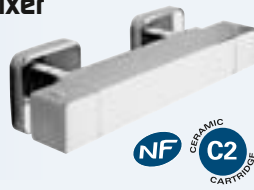
| Code | Price € |
|------|---------|
|------|---------|

AGA40

## Neru Plus

### Thermostatic shower mixer

- Center distance 150±20 mm
- Scalding protection
- Flow limiter
- Flexible hose outlet M1/2"
- Metal handles



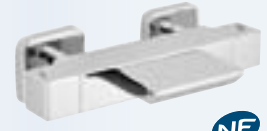
Code Price €

NPL50



### Thermostatic bath/shower mixer

- Center distance 150±20 mm
- Scalding protection
- Flexible hose outlet M1/2"
- Built-in ceramic switch
- Metal handles



Code Price €

NPL55



## Uji Plus

### Thermostatic shower mixer

- Center distance 150±20 mm
- Scalding protection
- Flow limiter
- Flexible hose outlet M1/2"
- Metal handles



Code Price €

UPL50



### Thermostatic bath/shower mixer

- Center distance 150±20 mm
- Scalding protection
- Flexible hose outlet M1/2"
- Built-in ceramic switch
- Metal handles



Code Price €

UPL55



## Wata Plus

### Thermostatic shower mixer

- Center distance 150±20 mm
- Scalding protection
- Flow limiter
- Flexible hose outlet M1/2"



Code Price €

WPL50



### Thermostatic bath/shower mixer

- Center distance 150±20 mm
- Scalding protection
- Flexible hose outlet M1/2"
- Built-in ceramic switch



Code Price €

WPL55



## Mizu

### Thermostatic shower mixer

- Center distance 150±20 mm
- Scalding protection
- Flow limiter
- Flexible hose outlet M1/2"



Code Price €

MIZ50



## Facility

### Thermostatic shower mixer

- Ceramic cartridge
- Thermostatic cartridge
- Cold body
- Anti-scald function



Code Price €

WPL52



### Thermostatic bath/shower mixer

- Center distance 150±20 mm
- Scalding protection
- Flexible hose outlet M1/2"
- Automatic change-over
- Flow limiter



Code Price €

MIZ55



### Thermostatic bath/shower mixer

- Ceramic cartridge
- Thermostatic cartridge
- Cold body
- Automatic change-over on handle
- Anti-scald function



Code Price €

WPL57



## Neru Plus

### Shower set

- Thermostatic mixer **NF**
- Cold body
- Shower head 250 x 250 mm
- Monojet ABS square shower
- Metal handle
- Built-in ceramic switch
- Brass pipe 30 x 15 mm
- Total height 1022 mm



Chrome

Code Price €

NER30

## Uden

### Shower set

- Universal connection
- Built-in change-over
- ABS shower head Ø 200 mm
- Monojet shower Ø 100 mm
- 150 cm shower flexible
- 60 cm connection flexible
- Manual change-over on flexible
- Adjustable brass pipe
- Total height 1050 mm



Chrome

Code Price €

UDE355BA

## Wata

### Shower set

- Thermostatic mixer **NF**
- Cold body
- Adjustable ABS shower head Ø 200 mm
- Monojet shower
- Built-in ceramic switch
- Telescopic adjustable brass pipe Ø 23 mm
- Height 800 to 1280 mm



Chrome

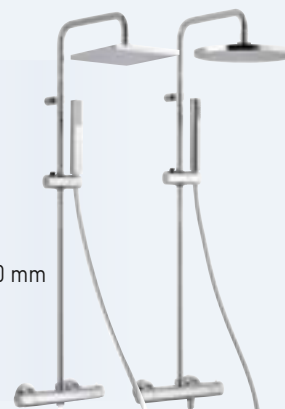
Code Price €

WAT39

### Shower set

- Thermostatic mixer **NF**
- Cold body
- Monojet ABS shower
- Metal handle
- Built-in ceramic switch
- Adjustable brass pipe Ø 20 mm
- Adjustable wall support
- Total height 1052 mm

Chrome



Code Price €

ABS Shower head 250 x 250 mm

WAT33

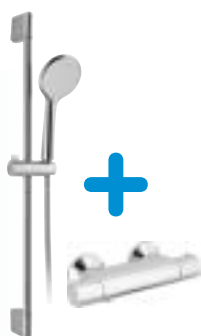
ABS Shower head Ø 250 mm

WAT31

## Opbun 1

### Shower set + thermostatic mixer

- Ceramic cartridge
- Thermostatic mixer **NF**
- Cold body
- Wall bar length 600 mm
- Metallized PVC flexible hose
- Shower head 3 jets



Chrome

Code Price €

OPBUN1

## Mizu

### Shower set

- Thermostatic mixer **NF**
- Monojet ABS shower
- Built-in ceramic switch
- Adjustable brass pipe Ø 21 mm
- Adjustable wall support
- Total height 1052 mm

Chrome



Code Price €

ABS Shower head 200 x 200 mm

MIZ31

ABS Shower head Ø 200 mm

MIZ27

## Nipi

### Thermostatic shower mixer

- Thermostatic cartridge
- Plate 160 x 200 mm
- Manual switch



|  |        | Code  | Price € |
|--|--------|-------|---------|
|  | 2 ways | NIP65 |         |
|  | 3 ways | NIP66 |         |

### Shower head

- Chrome-plated ABS
- Anti-calcareous soft pins
- Thickness 10 mm



| mm    | Code     | Price € |
|-------|----------|---------|
| Ø 200 | UDE106TD |         |
| Ø 250 | UDE101TD |         |

### ABS shower support

- Ø 34 mm
- Projection 44 mm



| Code     | Price € |
|----------|---------|
| UDE28SUP |         |

### ABS shower support

- Projection 70 mm
- Adjustable



| Code     | Price € |
|----------|---------|
| UDE29SUP |         |

### ABS shower support

- Dimension 35 x 30 mm
- Projection 42 mm



| Code     | Price € |
|----------|---------|
| UDE27SUP |         |

### Brass shower arm

- Length 350 mm
- Diameter Ø 18 mm
- M1/2"



| Code    | Price € |
|---------|---------|
| UDE35BR |         |

### Shower spray

- Ø 80 mm
- ABS monojet



| Code     | Price € |
|----------|---------|
| UDE201DO |         |

### Flexible hose

- Metal-coated PVC
- Connection FF1/2"
- Free nut / anti-twist



| L (cm) | Code     | Price € |
|--------|----------|---------|
| 60     | AGH31FLL |         |
| 150    | AGH32FLL |         |
| 175    | AGH33FLL |         |
| 200    | AGH34FLL |         |

### Brass shower arm

- Length 350 mm
- Diameter 22 x 22 mm
- M1/2"



| Code    | Price € |
|---------|---------|
| UDE40BR |         |

### Shower spray

- Ø 102 mm,
- ABS 3 jets
- Anti-calcareous



| Code     | Price € |
|----------|---------|
| UDE205DO |         |

### Flexible hose

- Metal double interlocking
- Connection FF1/2"



| L (cm) | Code     | Price € |
|--------|----------|---------|
| 150    | UDE25FLA |         |

## Uisse

### Thermostatic bath/shower mixer

- Thermostatic cartridge
- Manual switch
- Chrome



|                      |        | Code  | Price € |
|----------------------|--------|-------|---------|
| Round plate Ø 165 mm | 1 way  | UIS65 |         |
| Round plate Ø 165 mm | 2 ways | UIS66 |         |
| Plate 120 x 170 mm   | 1 way  | UIS67 |         |
| Plate 120 x 170 mm   | 2 ways | UIS68 |         |

### Shower head

- Chrome-plated ABS
- Anti-calcareous soft pins
- Thickness 10 mm



| mm        | Code     | Price € |
|-----------|----------|---------|
| 200 x 200 | UDE100TD |         |
| 250 x 250 | UDE107TD |         |



## Dolo

### High mixer with adjustable nozzle

- Ceramic cartridge Ø 40 mm
- Flexible hoses F3/8"
- 4° angle jet
- Height under nozzle 260 mm
- Total height 336 mm



Code Price €

Chrome

DOL10

## Uige

### High mixer with spray

- 2 jet spray
- Ceramic cartridge Ø 40 mm
- Flexible hoses F3/8"
- Straight jet
- Height under nozzle 125 mm
- Total height 434 mm



Code Price €

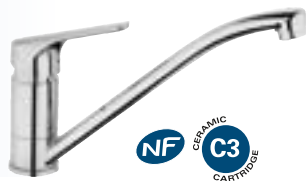
Chrome

UIG13

## Madi

### Mixer

- Ceramic cartridge Ø 35 mm
- Flexible hoses F1/2"
- 15° angle jet
- Height under nozzle 152 mm
- Total height 175 mm



Code Price €

Chrome

MAD10

## Auga

### Mixer with spray

- Adjustable nozzle
- Flexible hoses
- 2 jets : regular or spray
- Height under nozzle 250 mm



Code Price €

Chrome

AGA11

## Akvo

### High mixer

- 1/2 turn ceramic head
- Flexible hoses F3/8"
- 8° angle jet
- Height under nozzle 220 mm
- Total height 270 mm



Code Price €

Chrome

AKV10

## Tubig



### Flexible hose high mixer

- 1 jet flexible hose
- Silicone ECOLOR® sheath
- Ceramic cartridge Ø 25 mm
- Flexible hoses F3/8"
- Height under nozzle 267 mm
- Total height 481 mm

Code Price €

Chrome

TUB12C

Black

TUB12N

White

TUB12W

Purple

TUB12P

Orange

TUB12A

Blue

TUB12B

Lemon

TUB12Y

## Kome



### High mixer with spray

- 1 jet pull-out spray
- Ceramic cartridge Ø 40 mm
- Flexible hoses F3/8"
- Straight jet
- Height under nozzle 170 mm
- Total height 354 mm

### High mixer

- Ceramic cartridge Ø 40 mm
- Flexible hoses F3/8"
- 8° angle jet
- Height under nozzle 228 mm
- Total height 351 mm

Code Price €

Chrome with pull-out spray

KOM12

Chrome

KOM10

Chrome/Black

KOM12N

Chrome/White

KOM12W

Chrome/Purple

KOM12P

Chrome/Orange

KOM12A

Chrome/Blue

KOM12B

Chrome/Lemon

KOM12Y

## Voda

### Mixer

- Ceramic cartridge Ø 35 mm
- Flexible hoses F3/8"
- 10° angle jet
- Height under nozzle 140 mm
- Total height 160 mm



Code Price €

Chrome

VOD10

## Viz

### High mixer

- Adjustable nozzle
- Ceramic cartridge Ø 35 mm
- 18° angle jet
- Height under nozzle 220 mm



Code Price €

Chrome

VIZ10

## Abba

### Basin mixer

- Ceramic cartridge Ø 35 mm
- Long & soft handle, no sharp angle
- Height under nozzle 102 mm
- Total height 208 mm



Code Price €

Chrome

ABB80PMR

### Shower thermostatic mixer

- Thermostatic cartridge
- Long & soft handle, no sharp angle
- Cold body



Code Price €

Chrome

ABB81PMR

### Mixer

- Ceramic cartridge Ø 35 mm
- Adjustable nozzle
- Long & soft handle, no sharp angle
- Height under nozzle 140 mm
- Total height 166 mm



Code Price €

Chrome

ABB82PMR

## Wetter

### Basin tap

- Monofluid
- 15 s temporisation
- Min-max pressure 1-6 bar



Code Price €

Chrome

WET80TMP

### Basin tap

- Monofluid
- 15 s temporisation
- Min-max pressure 1-6 bar



Code Price €

Chrome

WET82TMP

### Basin tap & mixer

- Monofluid
- 15 s temporisation
- Min-max pressure 1-6 bar



Code Price €

Tap

WET84TMP

## Vatten

### Infrared high basin tap

- Monofluid
- 6V external lithium mixer battery (supplied)
- Auto-cleaning: every 24 h
- Safety 1: automatic shut-off 60 s
- Safety 2: shut-off if low battery
- External casing - IP67



Code Price €

Chrome

VAT70IR

### Infrared basin tap

- Monofluid
- 6V external lithium mixer battery (supplied)
- Auto-cleaning: every 24 h
- Safety 1: automatic shut-off 60 s
- Safety 2: shut-off if low battery
- External casing - IP67



Code Price €

Chrome

VAT72IR

# Consumer line

Trendy & high performance, elegant & reliable:  
a big variety of styles & uses



## Equs

### Basin high mixer

- Cartridge Ø 35
- Body 41 x 41 mm
- Metal handle
- Sold without drainage
- Height under nozzle 234 mm
- Projection 128 mm



| Code   | Price € |
|--------|---------|
| 613099 |         |

### Basin mixer

- Cartridge Ø 35
- Body 41 x 41 mm
- Metal handle
- Brass drainage
- Height under nozzle 68 mm
- Total height 178 mm
- Projection 106 mm



| Code   | Price € |
|--------|---------|
| 612099 |         |



### Shower mixer

| Code   | Price € |
|--------|---------|
| 614099 |         |



### Bath/shower mixer

| Code   | Price € |
|--------|---------|
| 611099 |         |

## Ginko

### Basin mixer

- Cartridge Ø 35
- Body 42 x 42 mm
- Metal handle
- Brass drainage
- Projection 183 mm



| Code   | Price € |
|--------|---------|
| 742099 |         |

## Izawa

### Basin mixer

- Ceramic cartridge Ø 25
- Body Ø 36
- Metal handle
- Height under nozzle 116 mm
- Projection 124 mm



### Izawa



| Code   | Price € |
|--------|---------|
| 582099 |         |

## Ophir

### Basin mixer

- Ceramic cartridge Ø 25 - Energy saving
- Body Ø 38
- Metal handle
- Ultra thin aerator with water saving function (40%)
- Height under nozzle 140 mm
- Projection 151 mm



| Code   | Price € |
|--------|---------|
| 662099 |         |



662089



662199



662119

## Mezzo

### Basin mixer

- Ceramic cartridge Ø 25 - Energy saving
- Body Ø 45
- Metal handle
- Ultra thin aerator with water saving function (40%)
- Height under nozzle 94 mm
- Projection 118 mm



| Code   | Price € |
|--------|---------|
| 672099 |         |



672019



672089

## Calla

### Basin mixer

- Cartridge Ø 35
- Body Ø 44
- Metal handle
- Height under nozzle 118 mm
- Projection 140 mm



Matt black

**Code**      **Price €**

112089

### Shower mixer



**Code**      **Price €**

114089

### Bath/shower mixer



**Code**      **Price €**

111089

## Scuba

### High basin mixer

- Cartridge Ø 35
- Body 42 x 42 mm
- Metal handle
- Sold without drainage\*
- Height under nozzle 248 mm
- Projection 105 mm



Chrome

**Code**      **Price €**

103099

### Basin mixer

- Cartridge Ø 35
- Body 42 x 42 mm
- Metal handle
- Height under nozzle 98 mm
- Total height 192 mm
- Projection 105 mm



Chrome

**Code**      **Price €**

102099

### Shower mixer



**Code**      **Price €**

104099

### Bath/shower mixer



**Code**      **Price €**

101099

## Jersey

### Basin mixer

- Ceramic cartridge Ø 25 - Energy saving
- Body Ø 45
- Metal handle
- Aerator with water saving function (40%)
- Height under nozzle 65 mm
- Projection 121 mm



Chrome

**Code**      **Price €**

652099

Matt black

652089

Brushed nickel

652179

## Sensis

### Infrared basin tap

- Works with 2 batteries (1,5 V AA, not included)
- Operates up to 28 cm away with angle from 0 to 30°
- Response time < 1 s
- Body Ø 55
- Height under nozzle 137 mm
- Projection 116 mm



Chrome

**Code**      **Price €**

858039

## Elliot

### Basin mixer

- Cartridge Ø 35
- Body Ø 42
- Height under nozzle 75 mm
- Total height 126 mm
- Projection 100 mm



White

**Code**      **Price €**

512119

Grey

512159

Black

512199

Beige

512169

### Shower mixer



**Code**      **Price €**

514159

### Bath/shower mixer



**Code**      **Price €**

511159

## Trapani

### Basin mixer

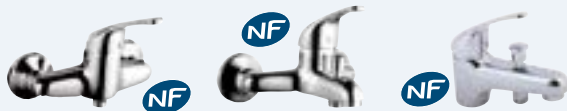
- Ceramic cartridge Ø 40
- Body Ø 47
- Metal handle
- Built-in flow limiter - Energy saving
- Height under nozzle 57 mm
- Total height 124 mm
- Projection 92 mm



NF

Chrome

| Code   | Price € |
|--------|---------|
| 462099 |         |



Shower mixer

464099

Bath/shower mixer

461099

Bath/shower single-hole mixer

666099

## Dobson

### Basin mixer

- Cartridge Ø 35
- Body Ø 42
- Height under nozzle 78 mm
- Total height 140 mm
- Projection 102 mm



Chrome

| Code   | Price € |
|--------|---------|
| 532099 |         |

## Barton

### Basin mixer

- Cartridge Ø 35
- Body Ø 40
- Height under nozzle 110 mm
- Total height 163 mm
- Projection 121 mm



Chrome

| Code   | Price € |
|--------|---------|
| 972099 |         |

## Art

### Basin mixer

- Cartridge Ø 25
- Body Ø 38
- Height under nozzle 83 mm
- Total height 131 mm
- Projection 118,5 mm



Chrome

| Code   | Price € |
|--------|---------|
| 830099 |         |

## Happy

### Basin mixer

- Cartridge Ø 35
- Body Ø 45
- Metal handle
- Height under nozzle 138 mm
- Projection 135 mm



Chrome

| Code   | Price € |
|--------|---------|
| 782099 |         |

## Swedge

### Basin mixer

- Cartridge Ø 35
- Body Ø 42
- Metal handle
- Free and adjustable nozzle
- Height under nozzle 110 mm
- Total height 197 mm
- Projection 120 mm



Chrome

| Code   | Price € |
|--------|---------|
| 132099 |         |

## Hope

### Basin mixer

- Cartridge Ø 35
- Body Ø 45
- Flow limiter
- Height under nozzle 86 mm
- Projection 108 mm



Chrome

| Code   | Price € |
|--------|---------|
| 152099 |         |

### Shower mixer



| Code   | Price € |
|--------|---------|
| 154099 |         |

### Bath/shower mixer



| Code   | Price € |
|--------|---------|
| 151099 |         |

## Pulse

### Basin mixer

- Cartridge Ø 35
- Body Ø 42
- Height under nozzle 78,5 mm
- Total height 134,5 mm
- Projection 162 mm



Chrome

| Code   | Price € |
|--------|---------|
| 829099 |         |

## Hook

### Basin mixer

- Cartridge Ø 35
- Height under nozzle 64 mm
- Total height 128 mm
- Projection 85 mm



Chrome

Code Price €

622099

### Shower mixer

Code Price €

624099

### Bath/shower mixer

Code Price €

621099

## Callisto

### Basin mixer

- Ceramic cartridge Ø 40
- Body Ø 54
- Metal handle
- Height under nozzle 50 mm
- Total height 140 mm
- Projection 126 mm



Brushed metal

Code Price €

802179

### Shower mixer

Code Price €

804179

### Bath/shower mixer

Code Price €

801179

## Amber

### Basin mixer

- Ceramic cartridge Ø 40
- Body Ø 45
- Metal handle
- Height under nozzle 110 mm
- Total height 166 mm



Chrome

Code Price €

762099

## Harlow

### Basin mixer

- Cartridge Ø 35
- Body Ø 42
- Height under nozzle 103 mm
- Total height 167 mm
- Projection 117 mm



Chrome

Code Price €

792099

## Romanz

### Basin mixer

- Cartridge Ø 40
- Body Ø 50
- Metal handle
- Projection 115 mm



Chrome

Code Price €

132009

Chrome/gold

132229

## Kilya

### Basin high mixer

- Cartridge Ø 40
- Body Ø 42
- Metal handle
- Sold without drainage\*
- Height under nozzle 200 mm
- Projection 101 mm



Chrome

Code Price €

813099

### Basin mixer

- Cartridge Ø 40
- Body Ø 45
- Metal handle
- Total height 186 mm
- Projection 115 mm



Chrome

Code Price €

812099

Black

812089



Shower mixer

Code Price €

814099

Bath/shower mixer

811099

## Adonis

### Basin mixer with adjustable nozzle

- 1/2 turn ceramic heads
- Brass crosspieces
- Height under nozzle 167 mm
- Projection 128 mm



Chrome



| Code   | Price € |
|--------|---------|
| 872099 |         |

### Bath/shower mixer

| Code   | Price € |
|--------|---------|
| 871099 |         |

## Téthys

### Basin mixer

- Cartridge Ø 40
- Body Ø 50
- Metal handle
- Height under nozzle 50 mm
- Total height 105 mm
- Projection 105 mm



Chrome



| Code   | Price € |
|--------|---------|
| 772099 |         |

### Shower mixer

| Code   | Price € |
|--------|---------|
| 774099 |         |

### Bath/shower mixer

| Code   | Price € |
|--------|---------|
| 771099 |         |



## Tellus

### Basin mixer

- Cartridge Ø 35
- Body Ø 45
- Metal handle
- Height under nozzle 54 mm
- Total height 140 mm
- Projection 129 mm



Chrome



| Code   | Price € |
|--------|---------|
| 712099 |         |

### Shower mixer

| Code   | Price € |
|--------|---------|
| 714099 |         |

### Bath/shower mixer

| Code   | Price € |
|--------|---------|
| 711099 |         |



## Léto

### Basin mixer

- Cartridge Ø 35
- Body Ø 45
- Metal handle
- ABS drainage
- Projection 112 mm



Chrome



| Code   | Price € |
|--------|---------|
| 852009 |         |

### Shower mixer

| Code   | Price € |
|--------|---------|
| 854009 |         |

### Bath/shower mixer

| Code   | Price € |
|--------|---------|
| 851009 |         |

### Bath/shower single-hole mixer

| Code   | Price € |
|--------|---------|
| 853009 |         |

### Bidet mixer

| Code   | Price € |
|--------|---------|
| 857009 |         |



## Thermosur 650

### Thermostatic mixers

- 1/2 turn ceramic heads
- Thermostatic cartridge with scalding protection
- Cold body with built-in change-over



| Chrome                        | Code   | Price € |
|-------------------------------|--------|---------|
| Shower                        | 884659 |         |
| Bath/shower 175 mm projection | 881659 |         |

## Thermosur 430

### Thermostatic mixers

- 1/2 turn (for shower mixer) & 1/4 turn (for bath/shower mixer) ceramic heads
- Thermostatic cartridge with scalding protection
- Metal crosspieces & built-in change-over for bath/shower mixer



| Chrome                        | Code   | Price € |
|-------------------------------|--------|---------|
| Shower 75 mm projection       | 884439 |         |
| Bath/shower 163 mm projection | 881439 |         |

## Thermosur 400

### Thermostatic mixers

- 1/4 turn ceramic heads
- Thermostatic cartridge with scalding protection



| Chrome                        | Code   | Price € |
|-------------------------------|--------|---------|
| Shower 75 mm projection       | 884499 |         |
| Bath/shower 175 mm projection | 881499 |         |

## Thermosur 350

### Thermostatic mixers

- 1/2 turn ceramic cartridge
- Thermostatic cartridge with scalding protection



| Chrome                        | Code   | Price € |
|-------------------------------|--------|---------|
| Shower                        | 884599 |         |
| Bath/shower 175 mm projection | 881599 |         |

## Thermosur 100

### Thermostatic mixers

- 1/2 turn ceramic cartridge
- Thermostatic cartridge with scalding protection



| Chrome                        | Code   | Price € |
|-------------------------------|--------|---------|
| Shower 75 mm projection       | 884009 |         |
| Bath/shower 105 mm projection | 881009 |         |

## Thermosur 450

### Thermostatic mixers

- 1/2 turn ceramic heads
- Thermostatic cartridge with scalding protection
- Cold body with built-in change-over



| Chrome                        | Code   | Price € |
|-------------------------------|--------|---------|
| Shower                        | 884459 |         |
| Bath/shower 175 mm projection | 881459 |         |

## Thermosur 420

### Thermostatic mixers

- 1/2 turn (for shower mixer) & 1/4 turn (for bath/shower mixer) ceramic heads
- Thermostatic cartridge with scalding protection
- Built-in change-over for bath/shower mixer



| Chrome                        | Code   | Price € |
|-------------------------------|--------|---------|
| Shower 75 mm projection       | 884429 |         |
| Bath/shower 158 mm projection | 881429 |         |

## Thermosur 390

### Thermostatic mixers

- Thermostatic cartridge with scalding protection
- Built-in change-over
- Double inlet for shower bar



| Chrome                  | Code   | Price € |
|-------------------------|--------|---------|
| Shower 74 mm projection | 884999 |         |

## Thermosur 200

### Thermostatic mixers

- 1/2 turn ceramic cartridge
- Thermostatic cartridge with scalding protection



| Chrome                        | Code   | Price € |
|-------------------------------|--------|---------|
| Shower 74 mm projection       | 884299 |         |
| Bath/shower 159 mm projection | 881299 |         |



## Baros

### Basin mixer

- Cold and hot water mixer
- Cartridge Ø 25
- Body 35 x 35 mm
- Metal handle



Chrome

Code Price €  
838299

## Scop

### Basin tap

- 1/2 turn ceramic head
- Metal crosspiece



Chrome

Code Price €  
838199

## Sanéos

### Basin tap

- Spring temporization
- Body Ø 35
- Metal tappet



Chrome

Code Price €  
858099

## Ru

### Basin tap

- Checks heads
- ABS crosspiece



Chrome

Code Price €  
838095

## Access01-PMR

### Basin mixer

- Cartridge Ø 35
- Body Ø 50
- Long lever
- Height under nozzle 55 mm
- Total height 204,5 mm
- Projection 152 mm



Chrome

Code Price €  
858209

### Shower thermostatic mixer

- Thermostatic cartridge with scalding protection
- Cold body
- Long lever
- Projection 64 mm



Chrome

Code Price €  
858409

### Bath/shower thermostatic mixer

- Cartridge Ø 35
- Thermostatic cartridge with scalding protection
- Built-in change-over
- Long lever
- Projection 148 mm



Chrome

Code Price €  
858109

### Sink mixer

- Cartridge Ø 35
- Body Ø 50
- Fountain nozzle
- Long lever
- Height under nozzle 133 mm
- Total height 305 mm
- Projection 200 mm



Chrome

Code Price €  
858509

## Access02-PMR

### Sink mixer

- Cartridge Ø 40
- Body Ø 52
- Flow limiter
- Height under nozzle 116 mm
- Projection 230 mm



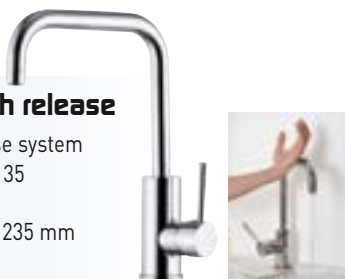
Chrome

Code Price €  
728099

## Tact

### High mixer Touch release

- Built-in touch release system
- Ceramic cartridge Ø 35
- Metal handle
- Height under nozzle 235 mm
- Total height 330 mm



Code Price €

Chrome

966099

## Mareeba

### High mixer with spray

- Cartridge Ø 35
- Body Ø 42 • Base Ø 53
- Free nozzle with independant handle
- Single jet spray
- Total height 470 mm
- Projection 159 mm



Code Price €

Chrome

878099

Brushed nickel

878179

## Ophir

### High mixer

- Flow limiter Ø 25 cartridge
- Body Ø 36
- Adjustable nozzle
- Height under nozzle 265 mm
- Projection 221 mm



Code Price €

Chrome

666099

Brushed nickel

666179

## Sonic

### High mixer with spray

- Cartridge Ø 35 • Body Ø 50
- Metal handle
- Free nozzle
- Extractible aerator with double clamp 1,50 m metal flexible spray
- Height under nozzle 280 mm
- Total height 480 mm
- Projection 220 mm



Code Price €

Chrome

827099

## Javea

### High mixer with spray

- Cartridge Ø 35
- Body Ø 46,5
- Metal handle
- Rubber spout
- Flexible hose, max. length 650 mm



Code Price €

Chrome

136099

## Gala

### High mixer with spray

- Ceramic cartridge Ø 35
- Body Ø 52 • Metal handle
- Free nozzle
- Height under nozzle 197 mm
- Total height 382 mm
- Projection 190 mm



Code Price €

Chrome

987099

## Soho

### High mixer with spray

- Cartridge Ø 35
- Body Ø 44 • Metal handle
- 2 jet pull-out with nylon flexible spray
- 360° adjustable nozzle
- Height under nozzle 130,5 mm
- Total height 525mm



Code Price €

Chrome

138099

Brushed nickel

138179

## Respekt-U

### High mixer

- Flow limiter cartridge
- Body Ø 48
- Adjustable aerator
- Height under nozzle 255 mm
- Projection 200 mm



Code Price €

Brushed nickel

105179

Black

105089

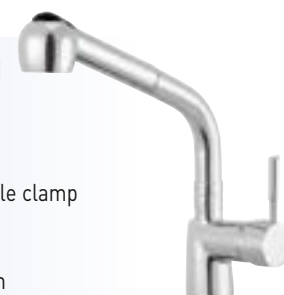
Anthracite

105159

## Zéphir

### High mixer with spray

- Cartridge Ø 40
- Body Ø 42
- Metal handle
- ABS 2 jet pull-out with double clamp 1,50 m metal flexible spray
- Free nozzle
- Height under nozzle 230 mm



Code Price €

Chrome

826099

## Fine

### High mixer

- Cartridge Ø 35
- Body Ø 45
- Metal handle
- Free nozzle
- Height under nozzle 270 mm



Code Price €

Chrome

887099

## Kiama

### High mixer

- Cartridge Ø 35
- Body Ø 50
- Free nozzle
- Height under nozzle 261 mm
- Total height 275 mm
- Projection 197 mm



Code Price €

Chrome

975099

## Alice

### High mixer

- Cartridge Ø 35
- Body Ø 53 • Metal handle
- Free nozzle
- Height under nozzle 230 mm
- Total height 400 mm
- Projection 210 mm



Code Price €

Chrome

147099

## Roma

### High mixer

- Ceramic cartridge Ø 35
- Body Ø 50
- Metal handle
- Free nozzle
- Height under nozzle 263 mm
- Total height 370 mm
- Projection 169 mm



Code Price €

Chrome

127099

## Roma

### High mixer with spray

- Cartridge Ø 35
- Body Ø 42,5
- Metal handle
- Free nozzle
- Height under nozzle 183 mm
- Total height 377 mm
- Projection 220 mm



Code Price €

Chrome

128099

## Palma

### High mixer

- Ceramic cartridge Ø 35
- Body Ø 40
- Metal handle
- Free nozzle
- Height under nozzle 284 mm
- Total height 366 mm
- Projection 210 mm



Code Price €

Chrome

687099

## Bristol

### High mixer with spray

- Ceramic cartridge Ø 40
- Body Ø 50
- Metal handle
- Height under nozzle 262 mm
- Total height 450 mm
- Projection 250 mm



Code Price €

Chrome

817099

## Mica

### High mixer with adjustable nozzle

- Ceramic cartridge Ø 40
- Body Ø 50
- Metal handle
- Height under nozzle 230 mm
- Total height 322 mm
- Projection 198 mm



Code Price €

Chrome

757099

## Farello

### High mixer with adjustable nozzle

- Cartridge Ø 40 • Body Ø 50
- Metal handle
- Free nozzle
- Height under nozzle 245 mm
- Height in low position 75 mm
- Total height 335 mm
- Projection 190 mm



Code Price €

Chrome

756099

## Somerset

### High mixer

- Ceramic cartridge Ø 35
- Body Ø 42
- Metal handle
- Free nozzle
- Height under nozzle 235 mm
- Total height 320 mm



Code Price €

Chrome

897099

## Talgon

### High mixer

- Body Ø 36
- Metal handle
- Free nozzle
- Height under nozzle 258 mm
- Total height 405 mm
- Projection 230 mm



Code Price €

Chrome

116099

## Arkéos

### High mixer

- 1/2 turn ceramic heads
- Brass crosspieces
- Free nozzle
- Height under nozzle 182 mm
- Total height 247 mm
- Projection 235 mm



Code Price €

- Antique copper 755149
- Antique bronze 755189

## Callisto

### High mixer

- Ceramic cartridge Ø 40
- Body Ø 48
- Metal handle
- Free nozzle
- Height under nozzle 220 mm
- Projection 180 mm



Code Price €

- Brushed metal 805179

## Happy

### High mixer

- Cartridge Ø 35
- Flow limiter aerator 7,5 to 9 l/min
- Body Ø 42
- ABS handle
- Free nozzle
- Height under nozzle 243 mm
- Total height 334 mm
- Projection 181 mm



Code Price €

- Chrome 787099

## Helix

### High mixer

- Ceramic cartridge Ø 40
- Body Ø 48
- Metal handle
- Free nozzle
- Height under nozzle 240 mm
- Total height 328 mm
- Projection 196 mm



Code Price €

- Chrome 705099

## Lyra

### Mixer

- Ceramic cartridge Ø 35
- Body Ø 50
- Metal handle
- Free nozzle
- Height under nozzle 130 mm
- Total height 176 mm
- Projection 202 mm



Code Price €

- Chrome 985099

## Swan

### High mixer

- Ceramic cartridge Ø 35
- Body Ø 49,5
- Metal handle
- Free nozzle
- Height under nozzle 236 mm
- Projection 175 mm



Code Price €

- Matt black 965089
- Brushed metal 965179

## Spirit

### High mixer

- Cartridge Ø 40
- Body Ø 50
- Metal handle
- Free nozzle
- Height under nozzle 220 mm
- Total height 340 mm



Code Price €

- Chrome 867099

## Bridge

### High mixer

- Cartridge Ø 40
- Body Ø 51
- Metal handle
- Free nozzle
- Height under nozzle 179 mm
- Total height 300 mm
- Projection 220 mm



Code Price €

- Chrome 145099

## Eros +

### High mixer

- 1/2 turn ceramic heads
- Brass crosspieces
- Free nozzle
- Height under nozzle 175 mm
- Projection 199 mm



Code Price €

- Chrome 835099

## Modena

### Mixer

- Ceramic cartridge Ø 35
- Body Ø 40
- Metal handle
- Free nozzle
- Height under nozzle 130 mm
- Total height 194 mm
- Projection 208 mm



Code Price €

- Chrome 165099

## Happy

### Mixer with spray

- Energy saving cartridge Ø 35
- Body Ø 45
- Flow limiter aerator 7,5 to 9 l/min
- Height under nozzle 175 mm
- Projection 209 mm



Code Price €

Chrome

786099

## Happy

### Mixer

- Energy saving cartridge Ø 35
- Body Ø 45
- Flow limiter aerator 7,5 to 9 l/min
- Metal handle
- Height under nozzle 175 mm
- Projection 210 mm



Code Price €

Chrome

785099

## Strada

### Mixer with spray

- Ceramic cartridge Ø 40
- Metal handle
- Free nozzle
- Height under nozzle 142 mm
- Projection 210 mm



Code Price €

Chrome

126099

## Strada

### Mixer

- Cartridge Ø 40
- Metal handle
- Free nozzle
- Height under nozzle 133 mm
- Projection 226 mm



Code Price €

Chrome

125099

## Andrews

### Mixer

- Flow limiter
- Metal handle
- Body Ø 43
- Cartridge Ø 35
- Height under nozzle 151 mm
- Projection 238 mm



Code Price €

Chrome

155099

## Saturnos

### Mixer with spray

- Cartridge Ø 40
- Body Ø 50
- Metal handle
- ABS 2 jet pull-out with double clamp 1,20 m metal flexible spray
- Free nozzle
- Height under nozzle 120 mm
- Projection 245 mm



Code Price €

Chrome

726099

White

726019

Matt black

726089

## Sawyer

### Mixer

- Ceramic cartridge Ø 40
- Body Ø 48
- Metal handle
- Height under nozzle 144 mm
- Projection 226 mm



Code Price €

Brushed metal

765179

## Saturnos

### Mixer

- Body Ø 45
- Metal handle
- Cartridge Ø 40 with flow and temperature limiter
- Free nozzle
- Height under nozzle 141 mm
- Projection 223 mm



Code Price €

Chrome

725099

Brushed stainless steel

725179

White

725019

Terre de France

725119

Antique bronze

725139

Beige granite

725159

## Linéa

### Mixer

- Cartridge Ø 40
- Body Ø 54
- Metal handle
- Cast free nozzle
- Height under nozzle 140 mm



Code Price €

Chrome

735099

Terre de France

735119

Antique bronze

735139

Beige granite

735159

## Léonard

### Mixer

- Flow limiter
- Body Ø 55
- Height under nozzle 155 mm
- Projection 222 mm



Code Price €

● Chrome

795099

## Calla

### Mixer

- Cartridge Ø 35
- Body Ø 41
- Metal handle
- Height under nozzle 118 mm
- Projection 249 mm



Code Price €

● Matt black

115089

## Léto

### Mixer with spray

- Cartridge Ø 40
- Body Ø 54
- Metal handle
- ABS 2 jet pull-out with double clamp 1,20 m metal flexible spray
- Height under nozzle 120 mm
- Projection 205 mm



Code Price €

● Chrome

856009

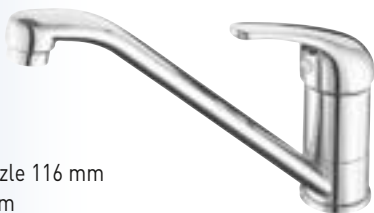
● Terre de France

856119

## Léto

### Mixer

- Cartridge Ø 35
- Body Ø 43
- Metal handle
- Free nozzle
- Height under nozzle 116 mm
- Projection 140 mm



Code Price €

● Chrome

855099

● Antique bronze

855139

## Ru

### High mixer

- Checks heads
- ABS crosspieces
- Free nozzle
- Height under nozzle 200 mm
- Total height 262 mm
- Projection 198 mm



Code Price €

● Chrome

855195

## Swedge

### Mixer

- Cartridge Ø 35
- Body Ø 45
- Metal handle
- Free and adjustable nozzle
- Height under nozzle 140 mm



Code Price €

● Chrome

135099

## Chester

### Mixer

- Cartridge Ø 35
- Body Ø 40
- Metal handle
- Free nozzle
- Height under nozzle 131 mm
- Projection 220 mm



Code Price €

● Chrome

175099

## Téthys

### Mixer

- Cartridge Ø 40
- Body Ø 50
- Metal handle
- Free nozzle
- Height under nozzle 130 mm



Code Price €

● Chrome

775099

● White

775019

● Terre de France

775119

● Black

775089

● Antique brass

775139

● Antique copper

775149

● Antique stone

775159

## Tellus

### High mixer

- Cartridge Ø 35
- Body Ø 45
- Metal handle
- Free nozzle
- Height under nozzle 179 mm



Code Price €

● Chrome

717099

## Adonis

### High mixer

- 1/2 turn ceramic heads
- Brass crosspieces
- Free nozzle
- Height under nozzle 196 mm
- Total height 251 mm



Code Price €

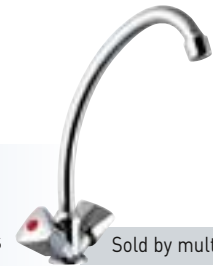
● Chrome

875099



### Sink mixer

- Checks head
- ABS crosspieces



Sold by multiple of 12 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

855199

### Basin mixer

- Checks head
- ABS crosspieces



Sold by multiple of 12 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

852099

### Shower mixer

- Checks head
- ABS crosspieces
- Center distance 150 ± 15 mm



Sold by multiple of 12 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

854099

### Bath/shower mixer

- Checks head
- ABS crosspieces
- Center distance 150 ± 15 mm



Sold by multiple of 12 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

851099

### Shower thermostatic mixer

- 1/4 turn heads
- Scalding protection
- Center distance 150 ± 15 mm



Sold by multiple of 6 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

884009

### Bidet mixer

- Adjustable aerator
- Projection 96 mm



| Code | Price € |
|------|---------|
|------|---------|

Chrome

857009

### Sink mixer

- Cartridge Ø 35
- Body Ø 40



Sold by multiple of 12 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

785000

### Basin mixer

- Cartridge Ø 35
- Body Ø 40
- ABS drainage



Sold by multiple of 12 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

782000

### Shower mixer

- Cartridge Ø 35
- Body Ø 40
- Center distance 150 ± 15 mm



Sold by multiple of 12 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

784000

### Bath/shower mixer

- Cartridge Ø 35
- Body Ø 40
- Center distance 150 ± 15 mm



Sold by multiple of 12 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

781000

### Bath/shower thermostatic mixer

- 1/2 turn ceramic heads
- Thermostatic cartridge with scalding protection
- Center distance 150 ± 15 mm



Sold by multiple of 6 pieces

| Code | Price € |
|------|---------|
|------|---------|

Chrome

881009





F 22/100  
M 24/100  
M 28/100



| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 064911 |  |
| 064921 |  |
| 064931 |  |



With anti-calcareous filter  
F 22/100  
M 24/100  
M 28/100

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 064951 |  |
| 064961 |  |
| 064971 |  |



**Offset fittings 40 mm**  
(sold by 2)  
M 1/2. Nut F 1/2  
MM 1/2 - 3/4

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 700182 |  |
| 700192 |  |



**Roses**  
(sold by 2)  
3/4

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 891590 |  |
|--------|--|



**Universal pull-out spray for sink mixers**  
ABS hose: 2 jets

- Chrome
- Terre de France
- White

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 051305 |  |
| 051313 |  |
| 051319 |  |



**Universal flexible hoses for sink mixer**

Nylon.  
Length 120 cm.  
F 15/21.

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 051330 |  |
|--------|--|



Metal.  
Chrome plated.  
Double clamp.  
Length 120 cm.  
F 15/21.

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 051301 |  |
|--------|--|



**Aerator**

With built-in flow limiter  
F 22/100  
F 22/100  
M 24/100  
M 24/100

| flow | Code   | Price |
|------|--------|-------|
| 61   | 064811 |       |
| 81   | 064821 |       |
| 61   | 064831 |       |
| 81   | 064841 |       |



**Cartridge for aerator**

28/100  
22/100 or 24/100

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 064941 |  |
| 064901 |  |



**Standard shafts**

(sold by 2)  
Height 70 mm. MM 1/2 - 3/4

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 700232 |  |
|--------|--|



**Wall crosspiece with rose**

MM 1/2 - 3/4. Length 113 mm

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 700161 |  |
|--------|--|



**Free nuts** (sold by 2)  
FF 1/2

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 700151 |  |
|--------|--|



**Universal ceramic 1/2 turn head with ABS cross-piece**

- 3/8
- 1/2
- 17/150
- 18/150
- 19/150
- 20/150
- 21/150
- 22/150

| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 700251 |  |
| 700261 |  |
| 700271 |  |
| 700281 |  |
| 700291 |  |
| 700301 |  |
| 700311 |  |
| 700321 |  |

**Universal drainage "Push-up"**

With chrome-plated brass extension M1".  
L: 100 mm - Ø 30 mm.  
For sink without overflow  
Ø 30 mm to Ø 40 mm.

With chrome-plated brass extension M1".  
L: 100 mm - Ø 30 mm.  
For sink with overflow  
Ø 30 mm to Ø 40 mm.



| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 051401 |  |
|--------|--|



| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 051411 |  |
|--------|--|

**Universal display**

Metal. Includes shower/bath nuts.  
H 46 x W 46 x L 100 cm or H 46 x W 46 x L 133 cm.  
Sold without taps.

| Code | Price |
|------|-------|
|------|-------|

|          |        |
|----------|--------|
| L 100 cm | 890301 |
| L 133 cm | 890302 |



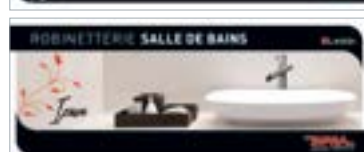
**Bathroom signs**

To be installed on support 50 x 20 cm



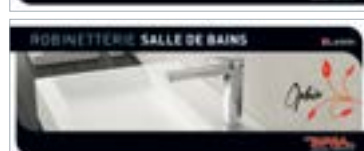
| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 000064 |  |
|--------|--|



| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 000097 |  |
|--------|--|



| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 000059 |  |
|--------|--|

**Kitchen signs**

To be installed on support 50 x 20 cm



| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 000065 |  |
|--------|--|



| Code | Price |
|------|-------|
|------|-------|

|        |  |
|--------|--|
| 000098 |  |
|--------|--|





# Pumps & Garden

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## ABS plastic quick fittings

blister packaging



**High flow fittings set**

Nozzle pipe Ø 19 mm

|        |
|--------|
| code   |
| 295881 |



**High flow fittings set**

Nozzle pipe Ø 25 mm

|        |
|--------|
| code   |
| 295891 |



**High flow automatic fitting**

Int. Ø 19 mm

|        |
|--------|
| code   |
| 295811 |



**High flow female adaptor**

Int. F1"-1"

|        |
|--------|
| code   |
| 295271 |



**High flow adapter**

M1"-M3/4"

|        |
|--------|
| code   |
| 295291 |



**High flow quick fitting**

F3/4"-pipe Ø 25 mm

|        |
|--------|
| code   |
| 295801 |



**High flow valve nozzle**

FF1"-3/4"-M3/4"

|        |
|--------|
| code   |
| 295871 |



**High flow pipe connection**

Ø 19 - Ø 25 mm

|        |
|--------|
| code   |
| 295821 |



**High flow repairing element**

Ø 25 mm

|        |
|--------|
| code   |
| 295831 |



**High flow coupling**

MM3/4"

|        |
|--------|
| code   |
| 295841 |



**High flow 3-way-junction**

MM3/4"

|        |
|--------|
| code   |
| 295851 |



**High flow watering hose**

M3/4"

|        |
|--------|
| code   |
| 295861 |



**Adaptor for nozzle valve**

For Ø 15 to 17 mm nozzle

|        |
|--------|
| code   |
| 295301 |



**Male coupling**

Int. M3/4"

|        |
|--------|
| code   |
| 295451 |



**Coupling**

|        |
|--------|
| code   |
| 295901 |



**3 way junction**

|        |
|--------|
| code   |
| 295911 |



**Valve nozzle**

F1/2"-3/4"  
F3/4"-1"

|        |
|--------|
| code   |
| 295251 |
| 295261 |



**Nipple**

Ø 15 mm  
Ø 19 mm

|        |
|--------|
| code   |
| 295701 |
| 295711 |



**Female coupling**

Ø 15 mm  
Ø 19 mm

|        |
|--------|
| code   |
| 295501 |
| 295511 |



**Male coupling**

M3/4"

|        |
|--------|
| code   |
| 295111 |



**Female coupling with aquastop**

Ø 15 mm  
Ø 19 mm

|        |
|--------|
| code   |
| 295601 |
| 295611 |



**Fittings set**

Includes: 1 valve nozzle F3/4"-1" + 1 quick fitting + 1 aquastop quick fitting

|        |
|--------|
| code   |
| 295001 |
| 295011 |



**2 way valve nozzle**

w/ shut-off valves F1/2"

|        |
|--------|
| code   |
| 295921 |



**Multijet water-hose nozzle**

|        |
|--------|
| code   |
| 298301 |



**3 way selector**

|        |
|--------|
| code   |
| 295211 |



**Multijet water-hose nozzle**

Includes: 1 valve nozzle F1/2"-3/4" + 1 quick fitting + 1 aquastop quick fitting

|        |
|--------|
| code   |
| 298311 |
| 298321 |



**3 way metal selector**

|        |
|--------|
| code   |
| 291441 |



**Sprinkler**

|        |
|--------|
| code   |
| 298651 |



**15 jet swinging sprinkler (150 m<sup>2</sup>)**

Adjustable swing angle


|        |
|--------|
| code   |
| 298601 |



**8 position sprinkler**

|        |
|--------|
| code   |
| 298701 |

12.5m MAX 210m<sup>2</sup> x 8



**Spray gun set**

Includes: 1 valve nozzle F1/2"-3/4"  
+ 1 quick fitting + 1 aquastop quick fitting

|        |
|--------|
| code   |
| 298351 |
| 298361 |

For pipe Ø 15 mm  
For pipe Ø 19 mm



**POUSS'EO jet**

2 jet spray gun

|        |
|--------|
| code   |
| 300001 |

x 2



**POUSS'EO multi**

8 jet spray gun

|        |
|--------|
| code   |
| 300011 |

x 8



**POUSS'EO ergo**

8 jet spray gun

|        |
|--------|
| code   |
| 300111 |

x 8



**TELESCOP'O**

6 jet spray telescopic gun

|        |
|--------|
| code   |
| 298531 |

70 to 105 cm



**TERRASS'O**

Hose with reel

|        |
|--------|
| code   |
| 006611 |

10 m



**COMPACT'O**

Wall automatic reel

|        |
|--------|
| code   |
| 006021 |
| 006031 |

20 m  
30 m



**3 jet rotary sprinkler**


|        |
|--------|
| code   |
| 298641 |



**19 jet swinging sprinkler (220 m<sup>2</sup>)**

Adjustable swing angle  
Brass outlets

|        |
|--------|
| code   |
| 298611 |



**3 arm sprinkler**

|        |
|--------|
| code   |
| 298711 |

12.5m MAX 210m<sup>2</sup> x 3



**BASIC'O jet**

2 jet spray gun

|        |
|--------|
| code   |
| 298401 |

x 2



**BASIC'O multi**

9 jet spray gun

|        |
|--------|
| code   |
| 298411 |

x 9



**METAL'EO jet**

Metal 2 jet spray gun

|        |
|--------|
| code   |
| 299001 |

x 2



**METAL'EO multi**

Metal 8 jet spray gun

|        |
|--------|
| code   |
| 299011 |


x 8



**MINUT'O**

Timer - 0 to 120 mm


|        |
|--------|
| code   |
| 006041 |



**TEMP'O 12**

Programmable timer - 12 pre-set programmes + solenoid valve + 2 AA batteries

|        |
|--------|
| code   |
| 006051 |



**Wall PVC hose rack**

25 m - Ø 15 pipe

|        |
|--------|
| code   |
| 006011 |



**Wall metal hose rack**

25 m - Ø 15 pipe

|        |
|--------|
| code   |
| 006111 |

**Watering box, see page 110**





blister packaging

## Brass fluted fittings

### 2 piece hose nozzle w/ captive gasket



| Ø    | 1/2"-13 | 3/4"-15 | 3/4"-19 | 1"-19  | 1"-25  | 1"1/4-30 |
|------|---------|---------|---------|--------|--------|----------|
| code | 290401  | 290501  | 290511  | 290611 | 290621 | 290731   |

### Male fitting



| Ø    | 1/2"-13 | 3/4"-15 | 3/4"-19 | 1"-25  | 1"1/4-30 |
|------|---------|---------|---------|--------|----------|
| code | 293401  | 293501  | 293511  | 293621 | 293731   |

### 3 piece w/ captive gasket



| Ø    | 1/2"-13 | 3/4"-15 | 3/4"-19 | 1"-25  | 1"1/4-30 |
|------|---------|---------|---------|--------|----------|
| code | 292401  | 292501  | 292511  | 292621 | 292731   |

### 2 piece elbow



| Ø    | 3/4"-15 | 1"-19  |
|------|---------|--------|
| code | 290001  | 290011 |

### Tee



| Ø    | 15     | 19     |
|------|--------|--------|
| code | 296001 | 296011 |

### Spare gaskets (sold by 10)



| Ø    | 1/2"-13 | 3/4"-15 | 3/4"-19 | 1"-19  | 1"-25  | 1"1/4-30 |
|------|---------|---------|---------|--------|--------|----------|
| code | 290139  | 290159  | 290199  | 290209 | 290259 | 290309   |

### Hose nozzle



| Ø    | 3/4"-20 | 1"-25  | 1"1/4-30 |
|------|---------|--------|----------|
| code | 263151  | 263161 | 263171   |

### Nipple



| Ø    | 15     | 19     | 25     |
|------|--------|--------|--------|
| code | 294001 | 294011 | 294021 |

### Elbow w / free nut



| Ø    | 1/2"-13 to 15 | 3/4"-15 to 19 |
|------|---------------|---------------|
| code | 290101        | 290201        |

### Water-hose nozzle



| Ø    | 15     | 19     |
|------|--------|--------|
| code | 298001 | 298021 |

### Y junction



F3/4" - M3/4"

code

297551

### Y junction w/shut-off valves



F3/4" - M3/4"

code

297001

## Brass quick fittings

Compatible with ABS plastic quick fittings (page 224 & 225).

### Coupling



| Ø    | 15     | 19     |
|------|--------|--------|
| code | 291101 | 291111 |

### Coupling w/ stop pipe



| Ø    | 15     | 19     |
|------|--------|--------|
| code | 291201 | 291211 |

### Hose coupling nipple



| Ø    | 15     | 19     |
|------|--------|--------|
| code | 291301 | 291311 |

### Adaptor male



| Ø    | 3/4"   |
|------|--------|
| code | 291021 |

### Elbow w/ free nut



| Ø    | 1/2"   | 3/4"   |
|------|--------|--------|
| code | 291241 | 291251 |

### Nipple



| Ø    | 15     | 19     |
|------|--------|--------|
| code | 291131 | 291231 |

### Adaptor female



| Ø    | 1/2"   | 3/4"   | 1"     |
|------|--------|--------|--------|
| code | 291041 | 291051 | 291061 |

### Y junction



code

291411

### Y junction w/shut-off valves



F3/4"

code

291431

### Double connection



code

291401

### Water-hose nozzle



code

291421

### Spare gaskets



(sold by 10)

code

291009



## Plastic couplings

blister packaging

|  |   |                                    |  |   |  |
|--|---|------------------------------------|--|---|--|
|  | <b>2 piece free nut</b><br>MF1"   | code<br>261061                     |  | <b>3 ways</b><br>M1" w/ gasket - F1" - F3/4"  | code<br>261001                                 |
|  | <b>Fitting</b><br>F1"1/4 - 32/25  | code<br>261071                     |  | <b>Elbow</b><br>F1" - M3/4"   | code<br>261011                                 |
|  | <b>Fitting</b><br>M1" - M3/4"   | code<br>261041                     |  | <b>Elbow</b><br>MF1"<br>MF1"1/2   | code<br>262111<br>261181                       |
|  | <b>Fitting</b><br>F1"1/4 - M3/4" - 38/25                                | code<br>261021                     |  | <b>Elbow</b><br>F1"1/4 w/ gasket - 30   | code<br>261191                                 |
|  | <b>Fitting</b><br>M1"1/2 w/ gasket - M1"1/4 - 50/40                     | code<br>261081                     |  | <b>Elbow</b><br>M1"1/4 - F1"<br>M1"1/4 - M1"  | code<br>262101<br>262171                       |
|  | <b>Fitting</b><br>F1" w/ gasket - 30/25<br>F1"1/2 w/ gasket - 24/32/40  | code<br>262091<br>261171           |  | <b>Elbow</b><br>M1"1/4 w/ gasket - 25   | code<br>262151                                 |
|  | <b>Check valve</b><br>MM1"  | code<br>262461                     |  | <b>Elbow</b><br>M1"1/4 w/ gasket - 30   | code<br>262161                                 |
|  | <b>Check valve</b><br>FM1"  | code<br>262561                     |  | <b>Elbow</b><br>MM1" w/ gasket - M3/4" - 25   | code<br>262141                                 |
|  | <b>Nipple</b><br>MM1" w/ gasket   | code<br>262061                     |  | <b>Elbow</b><br>M1"1/2 - F1"1/2 w/ gasket   | code<br>262181                                 |
|  | <b>Nipple</b><br>MM1"1/4  | code<br>262071                     |  | <b>Reduced nipple</b><br>F1" - M3/4"<br>F1"1/4 - M1"<br>F1"1/2 - M1"<br>F1"1/2 - M1"1/4 | code<br>261121<br>261131<br>261141<br>261151   |
|  | <b>Nipple</b><br>MM1"1/2  | code<br>262081                     |  | <b>Reduced nipple</b><br>M1"1/2 - M1"1/4<br>M2" - M1"1/2                                | code<br>262691<br>262701                       |
|  | <b>Reduced nipple</b><br>M1" - M1"1/2"<br>M1"1/4 - M1"                  | code<br>262661<br>262671           |  | <b>Socket</b><br>FF3/4"<br>FF1"<br>FF1"1/4<br>FF1"1/2                                   | code<br>262011DI<br>262021<br>262031<br>262041 |
|  | <b>Reduced nipple</b><br>M1" - F3/4"<br>M1"1/4 - F1"<br>M1"1/2 - F1"1/4 | code<br>261101<br>261111<br>261161 |  | <b>Elbow</b><br>M1" - Fluted M30  | code<br>262471                                 |
|  | <b>Fitting</b><br>M1" - M30/25/19                                       | code<br>262131                     |  | <b>Fluted fitting</b><br>F2" - Fluted M50   | code<br>262491                                 |
|  | <b>Fluted fitting</b><br>M1"1/4 - Fluted M38/32/25                      | code<br>262481                     |  | <b>Fluted fitting</b><br>M2" - Fluted M50   | code<br>262511                                 |
|  | <b>Elbow</b><br>F2" - Fluted M50  | code<br>262501                     |  | <b>Nipple</b><br>MM 25x25   | code<br>261371                                 |
|  | <b>Nipple</b><br>MM 20x20   | code<br>261361                     |  | <b>Nipple</b><br>MM 40x40   | code<br>261391                                 |
|  | <b>Nipple</b><br>MM 30x30   | code<br>261381                     |  |   |  |

**NEW**

## Gear clamps



### Stainless steel endless worm

8 mm wide, 3 m long & 8 heads, Ø 9 to 18 mm  
13 mm wide, 3 m long & 6 heads, Ø 24 mm

| code   |
|--------|
| 299101 |
| 299111 |



### PTFE band (sold by 10)

12 m long, 12 mm wide, 0,075 mm thick.

| code   |
|--------|
| 262204 |

### Zinc-plated carbon steel 9 mm - Plain worm (sold by 2)

| Ø    | 9/18   | 13/24  | 18/28  | 24/36  | 25/45  | 40/60  |
|------|--------|--------|--------|--------|--------|--------|
| code | 299092 | 299122 | 299112 | 299132 | 299142 | 299262 |



packaging



### Stainless steel 9 mm - Plain worm (sold by 2)

| Ø    | 9/18   | 13/24  | 18/28  | 24/36  | 25/45  | 40/60  |
|------|--------|--------|--------|--------|--------|--------|
| code | 299202 | 299212 | 299222 | 299232 | 299242 | 299462 |



### Stainless steel 12 mm - Plain worm (sold by 2)

| Ø    | 18/28  | 24/36  | 25/45  | 32/52  | 40/60  |
|------|--------|--------|--------|--------|--------|
| code | 299322 | 299332 | 299342 | 299352 | 299362 |



### Zinc-plated carbon steel 9 mm with tightened key - Plain worm (sold by 2)

| Ø    | 12/22  | 16/27  | 23/35  |
|------|--------|--------|--------|
| code | 299602 | 299612 | 299622 |

### Stainless steel double thread (sold by 2)

| Ø    | 15/18  | 17/21  | 20/23  | 24/27  | 27/31  | 31/35  | 33/37  | 38/43  | 43/48  | 49/55  |
|------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| code | 299512 | 299522 | 299582 | 299532 | 299592 | 299542 | 299547 | 299552 | 299562 | 299572 |



# Spid'O® specialities

## Rainwater pumps & manifolds



Pallet of 200 pcs

### E 160

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|------------------|-------------------|------------------|------------------|-----------------|-------------------------|----------|--------|
| 80               | 0,1               | 1~230            | 3                | 3               | 3                       | 3/4" M   | 002201 |

### EC 300

Pallet of 80 pcs

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|------------------|-------------------|------------------|------------------|-----------------|-------------------------|----------|--------|
| 350              | 0,5               | 1~230            | 3                | 10              | 3                       | 3/4" M   | 002800 |

### Sand Grey

Universal: can be mounted on any diameter of zinc, PVC or copper gutter (from Ø 80 to 110 mm) - Easy mounting: without any cutting or removing of gutter - Ready to be mounted: supplied with a drilled saw.

| code   |
|--------|
| 050646 |
| 050645 |

### Tank set

For 1000 l rainwater tank.  
Includes ball valve, fitting & PTFE band.

| Ø     | code   |
|-------|--------|
| M3/4" | 262361 |
| M1"   | 262361 |

## Pool pump



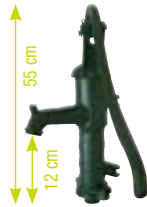
Pallet of 64 pcs

### ECC 150

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|--------|
| 320              | 0,4               | 1~230            | 7,5              | 6               | 002217 |

Vertical or horizontal position - Includes: support for horizontal position.

## Manual pumps



|             | max. flow (m³/h) | max. height (m) | suction Ø | code   |
|-------------|------------------|-----------------|-----------|--------|
| <b>MA 9</b> | 0,9 to 1,2       | 3 to 4          | 1"        | 002860 |



|                            | code   |
|----------------------------|--------|
| <b>Metal extension</b> M1" | 051160 |
| M1"1/4                     | 051175 |



|              | max. flow (m³/h) | max. height (m) | suction Ø | code   |
|--------------|------------------|-----------------|-----------|--------|
| <b>MA 12</b> | 1,2              | 6 to 7          | 1"1/4     | 002875 |



|                       | code   |
|-----------------------|--------|
| <b>Foot for MA 12</b> | 002876 |



|             | max. flow (m³/h) | max. height (m) | suction Ø         | code   |
|-------------|------------------|-----------------|-------------------|--------|
| <b>MA H</b> | 1,2 to 1,8       | 1               | 1 m steel plunger | 002880 |

Includes 2 m pipe, Ø 20 mm.

## Portable engine driven pumps (SP 95)



Pallet of 24 pcs

|              | power supply (hp) | max. flow (m³/h) | max. height (m) | max. suction (m) | fuel tank (l) | code   |
|--------------|-------------------|------------------|-----------------|------------------|---------------|--------|
| <b>T 414</b> | 2,1               | 10               | 36              | 5                | 1,3           | 002814 |

Inlet & outlet M1".



Pallet of 20 pcs

|              | power supply (hp) | max. flow (m³/h) | max. height (m) | max. suction (m) | fuel tank (l) | code   |
|--------------|-------------------|------------------|-----------------|------------------|---------------|--------|
| <b>T 420</b> | 2,2               | 18               | 25              | 5                | 1,3           | 002820 |

Inlet & outlet M1"1/2.



Pallet of 12 pcs

|              | power supply (hp) | max. flow (m³/h) | max. height (m) | max. suction (m) | fuel tank (l) | code   |
|--------------|-------------------|------------------|-----------------|------------------|---------------|--------|
| <b>T 435</b> | 5,6               | 25               | 6               | 6                | 3,6           | 002835 |

Inlet M1"1/2 & outlet M1"1/2 or M1".

## Gas oil transfer pump

For gas oil, fuel oil & biofuel.

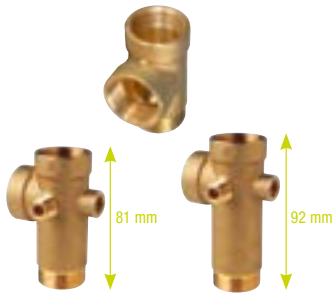


|              | power supply (W) | max. flow (m³/h) | voltage (V-50Hz) | max. pressure (bar) | code   |
|--------------|------------------|------------------|------------------|---------------------|--------|
| <b>TR 50</b> | 500              | 0,7              | 1~230            | 3,5                 | 002650 |

Includes 2 m suction set with M1" connections & check valve, gas oil nozzle, 4 m pipe with connections.



## Pumps accessories



|                      | ∅        | code     |
|----------------------|----------|----------|
| <b>3 way fitting</b> | 1" FF 1" | BB11-008 |

|                      | ∅                          | height (mm) | code     |
|----------------------|----------------------------|-------------|----------|
| <b>5 way fitting</b> | 1" FF 1" - F 1/4" - M 1/4" | 81          | RP5V     |
|                      | 1" FF 1" - F 1/4" - M 1/4" | 92          | BB11-007 |



|                   |  | code   |
|-------------------|--|--------|
| <b>Pre-filter</b> | For pumps - Sand & solid particles (250 μ) - Brass drainage - Brass 1" inlet x 1" outlet - Easy maintenance. | 260065 |



|                            |  | length (m) | ∅ pipe | ∅    | code   |
|----------------------------|--|------------|--------|------|--------|
| <b>Plastic suction set</b> | PVC pipe - Food quality & safety - Includes plastic check valves & strainer. | 4          | 22     | F 1" | 003000 |
|                            |  | 7          | 22     | F 1" | 003005 |



|                          |   | length (m) | ∅ pipe | ∅    | code   |
|--------------------------|---|------------|--------|------|--------|
| <b>Brass suction set</b> | PVC pipe - Food quality & safety - Includes brass check valve & stainless steel strainer. | 5          | 22     | F 1" | 003010 |
|                          |   | 7          | 22     | F 1" | 003020 |



|                          |  | length (m) | ∅ pipe | ∅       | code   |
|--------------------------|--|------------|--------|---------|--------|
| <b>Metal suction set</b> | PVC pipe - Food quality & safety - Includes brass fitting & check valve, stainless steel strainer, aluminium socket. | 7          | 25     | F 1"    | 003025 |
|                          |  | 7          | 30     | F 1"1/4 | 003030 |



|                               |   | length (m) | ∅ pipe | ∅       | code   |
|-------------------------------|---|------------|--------|---------|--------|
| <b>Universal drainage set</b> | For all drainage/sewage/dirty water pumps PVC pipe. | 5          | 25     | F 1"1/4 | 002200 |
|                               |   | 5          | 32     | F 1"1/2 | 002205 |



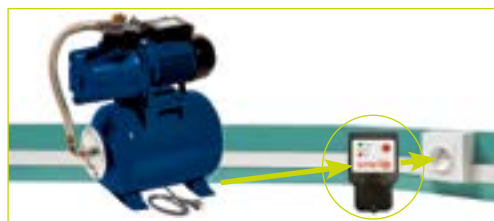
|                      |   | code   |
|----------------------|---|--------|
| <b>Hydrotech 200</b> | Lack of water & hammer protection - For 1-230V surface pumps - (max. power: 1,3 kW) - Max. pressure: 10 bar - Max. flow: 5 m³/h - Fittings MM 1". | 003190 |



|                    |   | code   |
|--------------------|---|--------|
| <b>Brio 2000 M</b> | Lack of water protection device - For surface & submersible pumps with pressure over 1,5 bar (max. power: 1,2 kW) - Max. pressure: 10 bar - Connections FM 1" - 1,5 m wire. | 003251 |

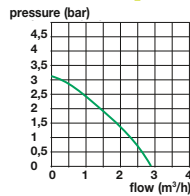


|            |  | code   |
|------------|--|--------|
| <b>HTX</b> | Lack of water protection device - Manual ressetting (restart) - For surface pumps (1-230V, 3 A to 8 A) - Temperature: 5°C to 45°C. | 003161 |





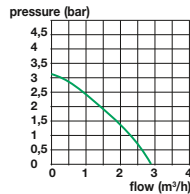
## Surface pumps



**Ecop 150**

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 600              | 0,8               | 1~230            | 2,8              | 32              | 5                | 002002 |

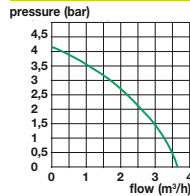
Pallet of 48 pcs  
sold by 2 pcs



**Ecop 140**

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 600              | 0,8               | 1~230            | 3,5              | 35              | 5                | 002020 |

Pallet of 40 pcs  
sold by 2 pcs

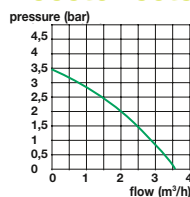


**Ecop 160**

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 1000             | 1,3               | 1~230            | 3,6              | 42              | 5                | 002040 |

Pallet of 30 pcs  
sold by 2 pcs

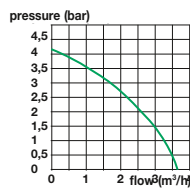
## Booster sets



**Ecop 140/20**

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | tank (l) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|----------|--------|
| 600              | 0,8               | 1~230            | 3,6              | 35              | 5                | 20       | 002161 |

Pallet of 18 pcs

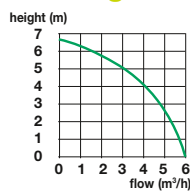


**Ecop 160/20**

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | tank (l) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|----------|--------|
| 1000             | 1,3               | 1~230            | 3,6              | 42              | 5                | 20       | 002120 |

Pallet of 18 pcs

## Drainage clear water pump

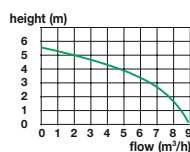


**Ecop 100 automatic**

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|--------|
| 250              | 0,3               | 1~230            | 6                | 6,8             | 002236 |

Pallet of 72 pcs  
sold by 4 pcs

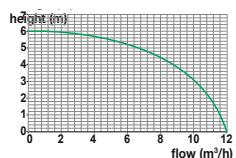
## Sewage pumps



**Ecop 105 automatic**

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|--------|
| 400              | 0,5               | 1~230            | 9                | 5,5             | 002237 |

Pallet of 72 pcs  
sold by 4 pcs



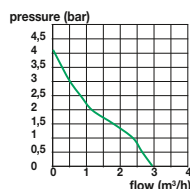
**Sewage 550 W**

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|--------|
| 550              | 0,7               | 1~230            | 12               | 6               | 002260 |

Pallet of 72 pcs  
sold by 4 pcs



## Surface pumps



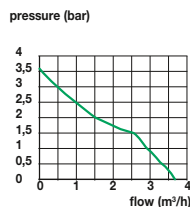
Pallet of 24 pcs

### Jetcom 550 pack

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 550              | 0,7               | 1~230            | 2,8              | 42              | 8                | 002056 |

Includes 4 m suction set, check valve, quick fittings F1" & F Ø15, aquastop quick fitting Ø 15, 20 m watering pipe, water-hose nozzle with quick connection.

**NEW**

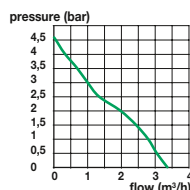


Pallet of 32 pcs

### JC 800P

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 800              | 1,1               | 1~230            | 3,6              | 37              | 7                | 002082 |

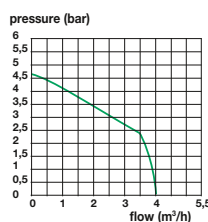
Includes 5 m suction set (with plastic check valve and strainer).



Pallet of 40 pcs

### Jetinox 800

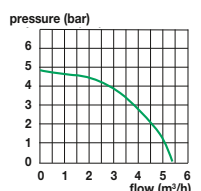
| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 800              | 1,1               | 1~230            | 3,3              | 46              | 9                | 002064 |



Pallet of 30 pcs

### AF 100

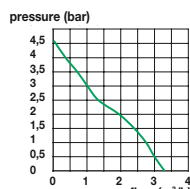
| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 1000             | 1,3               | 1~230            | 4                | 45              | 8                | 002034 |



Pallet of 18 pcs

### AMX 50/4

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 1100             | 1,5               | 1~230            | 5,4              | 48              | 8                | 002745 |



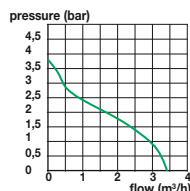
Pallet of 40 pcs

### K 800 automatic

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 800              | 1,1               | 1~230            | 3,3              | 46              | 9                | 002164 |

Includes automatic & lack of water protection device & built-in manometer.

**NEW**



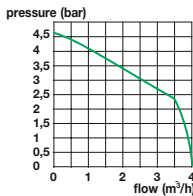
Pallet of 28 pcs

### JCA 800P2

| power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|-------------------|------------------|------------------|-----------------|------------------|--------|
| 800              | 1,1               | 1~230            | 3,5              | 40              | 7                | 002163 |



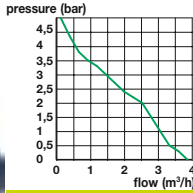
## Booster sets



BF 100/20: pallet of 18 pcs  
BF 100/50: pallet of 8 pcs

|                  | power supply |      | voltage  | max. flow | max. height | max. suction | tank (l) | code   |
|------------------|--------------|------|----------|-----------|-------------|--------------|----------|--------|
|                  | (W)          | (hp) | (V-50Hz) | (m³/h)    | (m)         | (m)          |          |        |
| <b>BF 100/20</b> | 1000         | 1,3  | 1~230    | 4         | 45          | 8            | 24       | 002142 |
| <b>BF 100/50</b> | 1000         | 1,3  | 1~230    | 4         | 45          | 8            | 50       | 002155 |

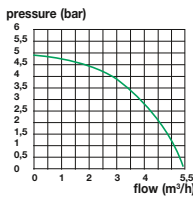
**NEW**



GSC 1100P/24: pallet of 15 pcs

|                      | power supply |      | voltage  | max. flow | max. height | max. suction | tank (l) | code   |
|----------------------|--------------|------|----------|-----------|-------------|--------------|----------|--------|
|                      | (W)          | (hp) | (V-50Hz) | (m³/h)    | (m)         | (m)          |          |        |
| <b>GSC 1100P/24</b>  | 1100         | 1,5  | 1~230    | 4,5       | 45          | 8            | 24       | 002143 |
| <b>GSC 1100F/50B</b> | 1100         | 1,5  | 1~230    | 4,5       | 45          | 7            | 50       | 002159 |

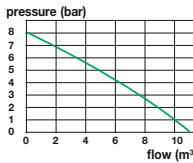
GSC 1100P/24 GSC 1100F/50B



Pallet of 14 pcs

|                 | power supply |      | voltage  | max. flow | max. height | max. suction | tank (l) | code   |
|-----------------|--------------|------|----------|-----------|-------------|--------------|----------|--------|
|                 | (W)          | (hp) | (V-50Hz) | (m³/h)    | (m)         | (m)          |          |        |
| <b>BMX 4/24</b> | 1100         | 1,5  | 1~230    | 5,4       | 48          | 8            | 24       | 002186 |

## Sewage pump

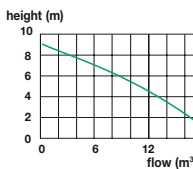


Pallet of 72 pcs

|                     | power supply |      | voltage | max. flow | max. height | max. suction level | outlet Ø | code   |
|---------------------|--------------|------|---------|-----------|-------------|--------------------|----------|--------|
|                     | (W)          | (hp) | (V-50H) | (m³/h)    | (m)         | (m)                |          |        |
| <b>Inox ECC 190</b> | 750          | 1,0  | 1~230   | 11        | 8           | 45                 | 1"1/2 F  | 002227 |

Passing through Ø 30 mm.

## Dirty water pump

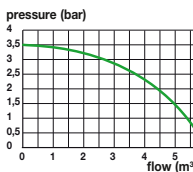


Pallet of 60 pcs

|                    | power supply |      | voltage  | max. flow | max. height | outlet Ø | code   |
|--------------------|--------------|------|----------|-----------|-------------|----------|--------|
|                    | (W)          | (hp) | (V-50Hz) | (m³/h)    | (m)         |          |        |
| <b>Inox EV 300</b> | 580          | 0,8  | 1~230    | 18        | 9           | 1"1/2 F  | 002244 |

Passing through Ø 35 mm.

## Well pump

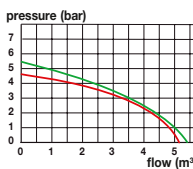


Pallet of 40 pcs

|               | power supply |      | voltage  | max. flow | max. height | max. submersion depth | pump Ø | outlet Ø | code   |
|---------------|--------------|------|----------|-----------|-------------|-----------------------|--------|----------|--------|
|               | (W)          | (hp) | (V-50Hz) | (m³/h)    | (m)         | (m)                   | (mm)   |          |        |
| <b>B 90/3</b> | 950          | 3,1  | 1~230    | 6         | 34          | 10                    | 157    | 1"1/4 M  | 002509 |

Includes 10 m rope.

## Borehole pumps Ø 4"



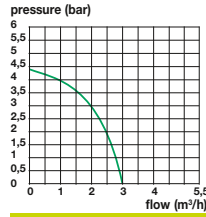
Pallet of 40 pcs

|                  | power supply |      | voltage  | max. flow | max. height | max. submersion depth | outlet Ø | code   |
|------------------|--------------|------|----------|-----------|-------------|-----------------------|----------|--------|
|                  | (W)          | (hp) | (V-50Hz) | (m³/h)    | (m)         | (m)                   |          |        |
| <b>Subinox 6</b> | 800          | 1,1  | 1~230    | 5,1       | 48          | 20                    | 1"1/4 F  | 002306 |
| <b>Subinox 7</b> | 900          | 1,2  | 1~230    | 5,1       | 51          | 20                    | 1"1/4 F  | 002307 |

Includes starting panel, electric cable & 20 m rope.



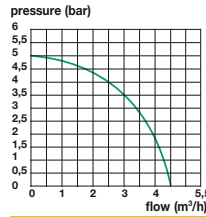
## Surface pumps



Pallet of 48 pcs

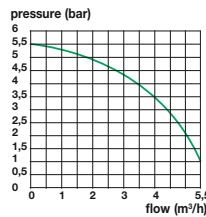
| power supply (W) | voltage (hp) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|--------------|------------------|----------|------------------|-----------------|------------------|--------|
| 550              | 0,7          | 1-230            | 2,4      | 2,9              | 42              | 9                | 002051 |

Includes 4 m suction set with check valve.



Pallet of 50 pcs

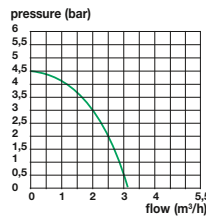
| power supply (W) | voltage (hp) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|--------------|------------------|----------|------------------|-----------------|------------------|--------|
| 1200             | 1,6          | 1-230            | 5,2      | 4,5              | 50              | 9                | 002074 |



Pallet of 50 pcs

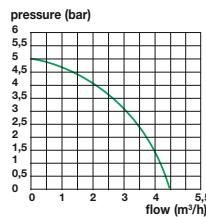
| power supply (W) | voltage (hp) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|--------------|------------------|----------|------------------|-----------------|------------------|--------|
| 1200             | 1,6          | 1-230            | 5,2      | 6                | 55              | 8                | 002756 |

## Booster sets



Pallet of 18 pcs

| power supply (W) | voltage (hp) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | tank (l) | code   |
|------------------|--------------|------------------|----------|------------------|-----------------|------------------|----------|--------|
| 800              | 1,1          | 1-230            | 3,5      | 3,3              | 46              | 9                | 22       | 002136 |

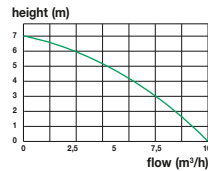


Pallet of 18 pcs

| power supply (W) | voltage (hp) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | tank (l) | code   |
|------------------|--------------|------------------|----------|------------------|-----------------|------------------|----------|--------|
| 1200             | 1,6          | 1-230            | 5,2      | 4,4              | 50              | 9                | 50       | 002156 |



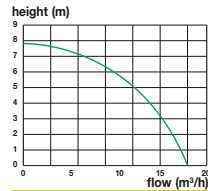
## Sewage pumps



Pallet of 96 pcs

|                    | power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|--------------------|------------------|-------------------|------------------|------------------|-----------------|----------|--------|
| <b>Maxinox 500</b> | 500              | 0,7               | 1~230            | 10,5             | 7               | 1"1/4 M  | 002213 |

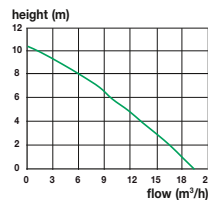
Passing through Ø 25 mm.



Pallet of 72 pcs

|                    | power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|--------------------|------------------|-------------------|------------------|------------------|-----------------|----------|--------|
| <b>Maxinox 700</b> | 700              | 0,9               | 1~230            | 18               | 8               | 1"1/2 M  | 002214 |

Passing through Ø 30 mm.

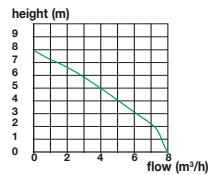


Pallet of 40 pcs

|                         | power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|-------------------------|------------------|-------------------|------------------|------------------|-----------------|-------------------------|----------|--------|
| <b>Inox ECC Pro 300</b> | 1200             | 1,6               | 1~230            | 19,5             | 10,5            | 55                      | 1"1/2 M  | 002253 |

With Vortex stainless steel impeller - Passing through Ø 40 mm.

**NEW**



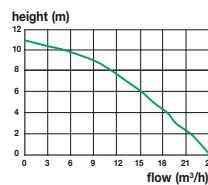
Pallet of 60 pcs

|                | power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|----------------|------------------|-------------------|------------------|------------------|-----------------|----------|--------|
| <b>KTP 500</b> | 480              | 0,65              | 1~230            | 9                | 8               | 1"1/4 F  | 002256 |

Passing through Ø 30 mm. Includes 10 m cable.



## Dirty water pump



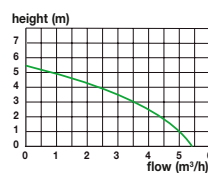
Pallet of 40 pcs

|                         | power supply (W) | power supply (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|-------------------------|------------------|-------------------|------------------|------------------|-----------------|-------------------------|----------|--------|
| <b>Inox ECC Pro 400</b> | 1500             | 2,0               | 1~230            | 24               | 11              | 55                      | 2" F     | 002254 |

With Vortex stainless steel impeller - Passing through Ø 40 mm.



## Borehole pump Ø 4"



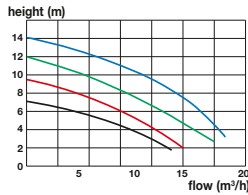
Pallet of 40 pcs

|                  | power supply (W) | power supply (hp) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max.submer. depth (m) | outlet Ø | code   |
|------------------|------------------|-------------------|------------------|----------|------------------|-----------------|-----------------------|----------|--------|
| <b>50/8 Auto</b> | 1100             | 1,5               | 1~230            | 4,8      | 6                | 57              | 20                    | 1" F     | 002518 |

Includes starting panel & lack of water protection, electric cable & 20 m rope.

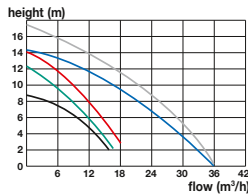


## Drainage pumps



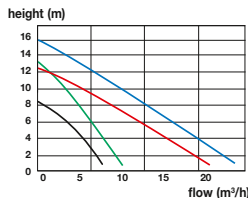
|                         | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|-------------------------|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| — DR Blue 40 automatic  | 300              | 1~230            | 2,3      | 10,8             | 7               | 77                      | 1"1/4 F  | 137004 |
| — DR Blue 50 automatic  | 370              | 1~230            | 2,8      | 14,4             | 9,5             | 77                      | 1"1/4 F  | 137005 |
| — DR Blue 75 automatic  | 550              | 1~230            | 4,1      | 14,4             | 12              | 77                      | 1"1/4 F  | 137007 |
| — DR Blue 100 automatic | 750              | 1~230            | 5,6      | 18               | 14,2            | 77                      | 1"1/4 F  | 137010 |

Max. particles 7 mm - Includes 10 m cable.



|                             | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|-----------------------------|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| — DR Blue Pro 50 automatic  | 370              | 1~230            | 2,8      | 14,4             | 8,7             | 77                      | 1"1/4 F  | 137205 |
| — DR Blue Pro 75 automatic  | 550              | 1~230            | 4,1      | 14,4             | 12,3            | 77                      | 1"1/4 F  | 137207 |
| — DR Blue Pro 75 T          | 550              | 3~400            | 1,6      | 14,4             | 12,3            | 77                      | 1"1/4 F  | 137208 |
| — DR Blue Pro 100 automatic | 750              | 1~230            | 5,6      | 18               | 14,6            | 77                      | 1"1/4 F  | 137210 |
| — DR Blue Pro 100 T         | 750              | 3~400            | 2,2      | 18               | 14,6            | 77                      | 1"1/4 F  | 137211 |
| — DR Blue Pro 150 automatic | 1100             | 1~230            | 7,5      | 36               | 14,4            | 77                      | 2" F     | 137215 |
| — DR Blue Pro 150 T         | 1100             | 3~400            | 3,2      | 36               | 14,4            | 77                      | 2" F     | 137216 |
| — DR Blue Pro 200 automatic | 1500             | 1~230            | 10       | 36               | 17              | 77                      | 2" F     | 137218 |
| — DR Blue Pro 200 T         | 1500             | 3~400            | 4,3      | 36               | 17              | 77                      | 2" F     | 137219 |

Max. particles 15 mm - Includes 10 m cable.

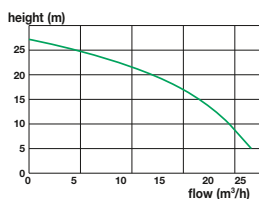


|                             | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | passing through (mm) | outlet Ø | code   |
|-----------------------------|------------------|------------------|----------|------------------|-----------------|----------------------|----------|--------|
| — DR Steel 25 M automatic   | 250              | 1~230            | 2,3      | 7,2              | 8,5             | 10                   | 1"1/4 F  | 137608 |
| — DR Steel 25 M auto. set** | 250              | 1~230            | 2,3      | 7,2              | 8,5             | 10                   | 1"1/4 F  | 137609 |
| — DR Steel 37 M automatic   | 370              | 1~230            | 3,1      | 9                | 13,6            | 10                   | 1"1/4 F  | 137610 |
| — DR Steel 55 M automatic   | 550              | 1~230            | 4,3      | 18,1             | 12,4            | 12                   | 1"1/2 F  | 137612 |
| — DR Steel 75 M automatic   | 750              | 1~230            | 5,6      | 19,9             | 16              | 12                   | 1"1/2 F  | 137614 |
| — DR Steel 75 M*            | 750              | 1~230            | 5,6      | 19,9             | 16              | 12                   | 1"1/2 F  | 137615 |
| — DR Steel 75 T             | 750              | 3~400            | 2,4      | 19,9             | 16              | 12                   | 1"1/2 F  | 137616 |

Max. particles 10 mm for DR 25 & DR 37, 12 mm for DR 55 & DR 75 - Includes 10 m cable.

\* Without level switch.

\*\* Includes DR Steel 25M automatic pump, 10 m pipe with quick fitting & case (may be used as a strainer while in use) - Dimensions (mm): L 60 x h 40 x H 35.

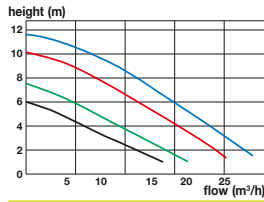


|                           | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|---------------------------|------------------|------------------|----------|------------------|-----------------|----------|--------|
| AP Blue Pro 200 automatic | 1500             | 1~230            | 10       | 25,2             | 25,2            | 1"1/2    | 137431 |
| AP Blue Pro 200 T         | 1500             | 3~400            | 4,3      | 25,2             | 25,2            | 1"1/2    | 137435 |

Max. particles 7 mm - Includes 10 m cable.



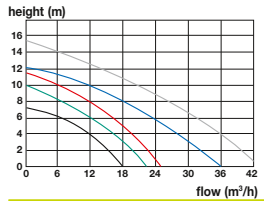
## Dirty water pumps



- DG Blue 40 automatic
- DG Blue 50 automatic
- DG Blue 75 automatic
- DG Blue 100 automatic

| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| 300              | 1~230            | 2,3      | 14,4             | 6               | 122                     | 1"1/2 F  | 137104 |
| 370              | 1~230            | 2,8      | 18               | 7,6             | 122                     | 1"1/2 F  | 137105 |
| 550              | 1~230            | 4,1      | 21,6             | 10,1            | 122                     | 1"1/2 F  | 137107 |
| 750              | 1~230            | 5,6      | 25,2             | 11,6            | 122                     | 1"1/2 F  | 137110 |

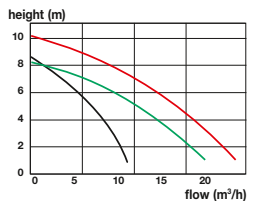
Passing through Ø 40 mm - Includes 10 m cable.



- DG Blue Pro 50 automatic
- DG Blue Pro 75 automatic
- DG Blue Pro 75 T
- DG Blue Pro 100 automatic
- DG Blue Pro 100 T
- DG Blue Pro 150 automatic
- DG Blue Pro 150 T
- DG Blue Pro 200 automatic
- DG Blue Pro 200 T

| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| 370              | 1~230            | 2,8      | 18               | 7               | 122                     | 1"1/2 F  | 137305 |
| 550              | 1~230            | 4,1      | 21,6             | 10,2            | 122                     | 1"1/2 F  | 137307 |
| 550              | 3~400            | 1,6      | 21,6             | 10,2            | 122                     | 1"1/2 F  | 137308 |
| 750              | 1~230            | 5,6      | 25,2             | 11,4            | 122                     | 1"1/2 F  | 137310 |
| 750              | 3~400            | 2,2      | 25,2             | 11,4            | 122                     | 1"1/2 F  | 137311 |
| 1100             | 1~230            | 7,5      | 36               | 12,3            | 122                     | 2" F     | 137315 |
| 1100             | 3~400            | 3,2      | 36               | 12,3            | 122                     | 2" F     | 137316 |
| 1500             | 1~230            | 10       | 43,2             | 15,3            | 122                     | 2" F     | 137318 |
| 1500             | 3~400            | 4,3      | 43,2             | 15,3            | 122                     | 2" F     | 137319 |

Passing through Ø 40 mm - Includes 10 m cable.



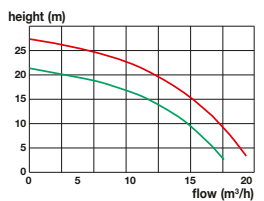
- DG Steel 25 M automatic\*
- DG Steel 55 M automatic
- DG Steel 75 M automatic
- DG Steel 75 T

| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | passing through (mm) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|----------------------|----------|--------|
| 370              | 1~230            | 3,1      | 10,8             | 8,7             | 25                   | 1"1/4 F  | 137600 |
| 550              | 1~230            | 4,3      | 19,9             | 8,1             | 40                   | 1"1/2 F  | 137602 |
| 750              | 1~230            | 5,6      | 21,7             | 10              | 40                   | 1"1/2 F  | 137604 |
| 750              | 3~400            | 2,3      | 21,7             | 10              | 40                   | 1"1/2 F  | 137606 |

Passing through Ø 40 mm (except DG 37: Ø 25 mm) - Includes 10 m cable.

\* Sewage only.

## Grinder dirty water pumps

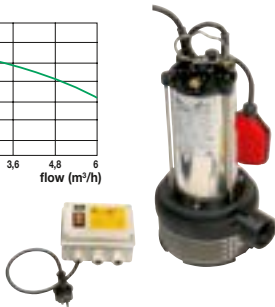
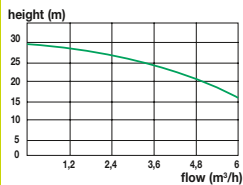


- GR Blue Pro 150 M\*
- GR Blue Pro 150 M automatic\*
- GR Blue Pro 150 T
- GR Blue Pro 150 T automatic
- GR Blue Pro 200 M\*
- GR Blue Pro 200 M automatic\*
- GR Blue Pro 200 T
- GR Blue Pro 200 T automatic

| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|----------|--------|
| 1,1              | 1~230            | 7,5      | 18               | 21,1            | 1"1/2    | 137520 |
| 1,1              | 1~230            | 7,5      | 18               | 21,1            | 1"1/2    | 137521 |
| 1,1              | 3~400            | 3,2      | 18               | 21,1            | 1"1/2    | 137525 |
| 1,1              | 3~400            | 3,2      | 18               | 21,1            | 1"1/2    | 137526 |
| 1,5              | 1~230            | 10       | 18               | 27              | 1"1/2    | 137530 |
| 1,5              | 1~230            | 10       | 18               | 27              | 1"1/2    | 137531 |
| 1,5              | 3~400            | 4,3      | 18               | 27              | 1"1/2    | 137535 |
| 1,5              | 3~400            | 4,3      | 18               | 27              | 1"1/2    | 137536 |

Includes 10 m cable.

\* Includes starting panel.

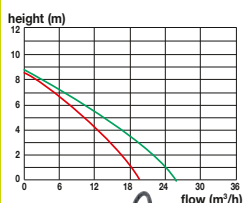


## Drainage pumps - High-head

|                                 | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|---------------------------------|------------------|------------------|----------|------------------|-----------------|----------|--------|
| <b>Semisom 130 H automatic*</b> | 1100             | 1~230            | 7,6      | 6                | 30              | 1"1/2 F  | 132001 |
| <b>Semisom 130 H M*</b>         | 1100             | 1~230            | 7,6      | 6                | 30              | 1"1/2 F  | 132002 |
| <b>Semisom 130 H T</b>          | 1100             | 3~400            | 2,9      | 6                | 30              | 1"1/2 F  | 132005 |

Max. particles 5 mm - Includes 10 m cable.

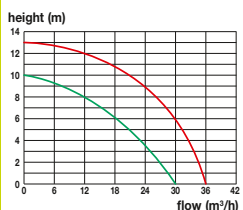
\* Includes starting panel.



## Dirty water pumps

|                                | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|--------------------------------|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| <b>Vertical outlet</b>         |                  |                  |          |                  |                 |                         |          |        |
| <b>Semisom 265 automatic</b>   | 550              | 1~230            | 4,2      | 12               | 8               | 200                     | 1"1/2 F  | 132038 |
| <b>Semisom 290 automatic</b>   | 550              | 1~230            | 4,2      | 12               | 8               | 200                     | 1"1/2 F  | 136038 |
| <b>Horizontal outlet</b>       |                  |                  |          |                  |                 |                         |          |        |
| <b>Semisom 290 automatic</b>   | 550              | 1~230            | 4,2      | 12               | 8               | 200                     | 1"1/2 F  | 136039 |
| <b>Semisom 290 M + SP*</b>     | 550              | 1~230            | 4,2      | 12               | 8               | 200                     | 1"1/2 F  | 136040 |
| <b>Semisom 290 M</b>           | 550              | 1~230            | 4,2      | 12               | 8               | 200                     | 1"1/2 F  | 136050 |
| <b>Semisom 290 T</b>           | 550              | 1~230            | 1,7      | 12               | 8               | 200                     | 1"1/2 F  | 136045 |
| <b>Semisom 290 T automatic</b> | 550              | 1~230            | 1,7      | 12               | 8               | 200                     | 1"1/2 F  | 136047 |

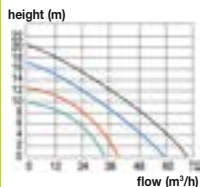
Passing through Ø 40 mm for Semisom 265 & Ø 50 mm for Semisom 290 - Includes 10 m cable. \* Includes starting panel.



|                                  | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|----------------------------------|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| <b>Vertical outlet</b>           |                  |                  |          |                  |                 |                         |          |        |
| <b>Semisom 490 automatic</b>     | 1100             | 1~230            | 7,3      | 29               | 10              | 200                     | 2" F     | 136073 |
| <b>Horizontal outlet</b>         |                  |                  |          |                  |                 |                         |          |        |
| <b>Semisom 490 automatic</b>     | 1100             | 1~230            | 7,3      | 29               | 10              | 200                     | 2" F     | 136079 |
| <b>Semisom 490 M + SP*</b>       | 1100             | 1~230            | 7,3      | 29               | 10              | 200                     | 2" F     | 136075 |
| <b>Semisom 490 M</b>             | 1100             | 1~230            | 7,3      | 29               | 10              | 200                     | 2" F     | 136081 |
| <b>Semisom 490 T</b>             | 1100             | 3~400            | 2,7      | 29               | 10              | 200                     | 2" F     | 136076 |
| <b>Semisom 490 T automatic</b>   | 1100             | 3~400            | 2,7      | 29               | 10              | 200                     | 2" F     | 136071 |
| <b>Semisom 590 M auto. + SP*</b> | 1500             | 1~230            | 10,5     | 36               | 13              | 200                     | 2" F     | 136101 |
| <b>Semisom 590 M + SP*</b>       | 1500             | 1~230            | 10,5     | 36               | 13              | 200                     | 2" F     | 136100 |
| <b>Semisom 590 T</b>             | 1500             | 3~400            | 4,1      | 36               | 13              | 200                     | 2" F     | 136105 |

Passing through Ø 50 mm - Includes 10 m cable.

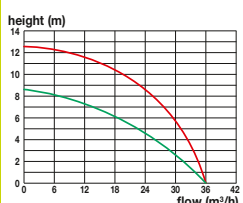
\* Includes starting panel.



|                          | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|--------------------------|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| <b>Semisom 500/50 M*</b> | 1100             | 1~230            | 9,2      | 30               | 9,5             | 275                     | 2" F     | 132100 |
| <b>Semisom 500/50 T</b>  | 1100             | 3~400            | 3,3      | 30               | 9,5             | 275                     | 2" F     | 132105 |
| <b>Semisom 800/50 M*</b> | 1500             | 1~230            | 11,4     | 30               | 12              | 275                     | 2"1/2 F  | 132110 |
| <b>Semisom 800/50 T</b>  | 1500             | 3~400            | 4        | 30               | 12              | 275                     | 2"1/2 F  | 132115 |
| <b>Semisom 900/50 M*</b> | 1500             | 1~230            | 11,4     | 48               | 16              | 275                     | 2"1/2 F  | 132120 |
| <b>Semisom 900/50 T</b>  | 1500             | 3~400            | 4        | 48               | 16              | 275                     | 2"1/2 F  | 132125 |
| <b>Semisom 1000/50 T</b> | 2200             | 3~400            | 5,9      | 54               | 19,5            | 275                     | 2"1/2 F  | 132135 |

Passing through Ø 50 mm - Includes 10 m cable.

\* Includes starting panel.

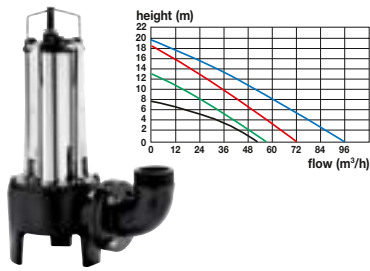


|                                 | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|---------------------------------|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| <b>Semisom 650 M*</b>           | 1500             | 1~230            | 12       | 36               | 8,5             | 275                     | 2"1/2 F  | 132082 |
| <b>Semisom 650 T</b>            | 1500             | 3~400            | 4,6      | 36               | 8,5             | 275                     | 2"1/2 F  | 132075 |
| <b>Semisom 650 T automatic</b>  | 1500             | 3~400            | 4,6      | 36               | 8,5             | 275                     | 2"1/2 F  | 132076 |
| <b>Semisom 650+ M</b>           | 1500             | 1~230            | 12       | 36               | 12,5            | 275                     | 2"1/2 F  | 132089 |
| <b>Semisom 650+ T</b>           | 1500             | 3~400            | 4,6      | 36               | 12,5            | 275                     | 2"1/2 F  | 132086 |
| <b>Semisom 650+ T automatic</b> | 1500             | 3~400            | 4,6      | 36               | 12,5            | 275                     | 2"1/2 F  | 132087 |

Passing through Ø 50 mm - Includes 10 m cable.

\* Includes starting panel.



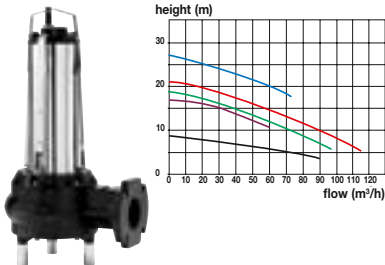


- Semisom 754/65 M\*
- Semisom 754/65 T
- Semisom 1100/65 T
- Semisom 1300/65 T
- Semisom 1500/65 T

|                     | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|---------------------|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| — Semisom 754/65 M* | 1200             | 1~230            | 7,7      | 42               | 7,3             | 275                     | 3" F     | 132140 |
| — Semisom 754/65 T  | 1200             | 3~400            | 3,3      | 42               | 7,3             | 275                     | 3" F     | 132145 |
| — Semisom 1100/65 T | 2200             | 3~400            | 6        | 48               | 12              | 275                     | 3" F     | 132155 |
| — Semisom 1300/65 T | 3400             | 3~400            | 8,1      | 54               | 17              | 275                     | 3" F     | 132165 |
| — Semisom 1500/65 T | 3400             | 3~400            | 9        | 78               | 17,5            | 275                     | 3" F     | 132175 |

Passing through Ø 65 mm - Includes 10 m cable.

\* Includes starting panel.



- Semisom 1504/80 T
- Semisom 1055/80 T
- Semisom 1675/80 T
- Semisom 2100/80 T
- Semisom 1200/80 T

|                     | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (mm) | outlet Ø | code   |
|---------------------|------------------|------------------|----------|------------------|-----------------|-------------------------|----------|--------|
| — Semisom 1504/80 T | 2600             | 3~400            | 8,1      | 84               | 8,7             | 275                     | 3"       | 132895 |
| — Semisom 1055/80 T | 4100             | 3~400            | 9,2      | 60               | 16,5            | 275                     | 3"       | 132805 |
| — Semisom 1675/80 T | 5500             | 3~400            | 12       | 96               | 18,3            | 275                     | 3"       | 132845 |
| — Semisom 2100/80 T | 7500             | 3~400            | 16       | 120              | 20,1            | 275                     | 3"       | 132885 |
| — Semisom 1200/80 T | 7500             | 3~400            | 16       | 72               | 25,7            | 275                     | 3"       | 132865 |

Passing through Ø 74 mm - Includes 10 m cable.

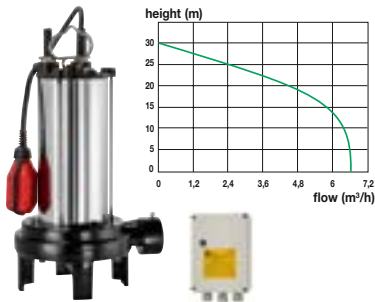


- Fork hook
- Foot pad\*
- Discharge flange

|                  | code   |
|------------------|--------|
| Fork hook        | 455028 |
| Foot pad*        | 455029 |
| Discharge flange | 455035 |



For non automatic pumps: level switches, see page 254.



## Grinder dirty water pumps



- Semisom 125 GR M aut.\*
- Semisom 125 GR M\*
- Semisom 125 GR T

|                          | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | code   |
|--------------------------|------------------|------------------|----------|------------------|-----------------|--------|
| — Semisom 125 GR M aut.* | 1800             | 1~230            | 9,2      | 6,5              | 31              | 132013 |
| — Semisom 125 GR M*      | 1800             | 1~230            | 9,2      | 6,5              | 31              | 132014 |
| — Semisom 125 GR T       | 1500             | 3~400            | 2,9      | 6,5              | 30              | 132015 |

Includes 10 m cable.

\* Includes starting panel.



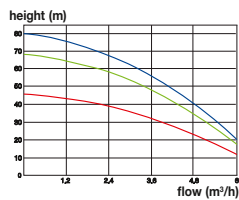
## Well pumps



- Turbosom 57 M\*
- Turbosom 77 M\*
- Turbosom 77 T

|                  | power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. submersion depth (m) | pump Ø (mm) | outlet Ø | code   |
|------------------|------------------|------------------|------------------|-----------------|---------------------------|-------------|----------|--------|
| — Turbosom 57 M* | 550              | 1~230            | 2,4              | 60              | 10                        | 136         | 1" F     | 151020 |
| — Turbosom 77 M* | 750              | 1~230            | 2,4              | 84              | 10                        | 136         | 1" F     | 151030 |
| — Turbosom 77 T  | 750              | 3~400            | 2,4              | 85              | 10                        | 136         | 1" F     | 151035 |

Supplied with 15 m cable and 15 m rope.



- SRM 4/100 automatic\*
- SRM 4/100 M\*
- SRM 6/100 automatic\*
- SRM 6/100 M\*
- SRT 6/100 T
- SRM 7/100 automatic\*
- SRM 7/100 M\*
- SRT 7/100 T

|                        | power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | max. submersion depth (m) | pump Ø (mm) | outlet Ø | code   |
|------------------------|------------------|------------------|------------------|-----------------|---------------------------|-------------|----------|--------|
| — SRM 4/100 automatic* | 650              | 1~230            | 6                | 46              | 30                        | 130         | 1"1/4 F  | 150603 |
| — SRM 4/100 M*         | 650              | 1~230            | 6                | 46              | 30                        | 130         | 1"1/4 F  | 150602 |
| — SRM 6/100 automatic* | 950              | 1~230            | 6                | 69              | 30                        | 130         | 1"1/4 F  | 150609 |
| — SRM 6/100 M*         | 950              | 1~230            | 6                | 69              | 30                        | 130         | 1"1/4 F  | 150608 |
| — SRT 6/100 T          | 950              | 3~400            | 6                | 69              | 30                        | 130         | 1"1/4 F  | 150610 |
| — SRM 7/100 automatic* | 1200             | 1~230            | 6                | 80              | 30                        | 130         | 1"1/4 F  | 150612 |
| — SRM 7/100 M*         | 1200             | 1~230            | 6                | 80              | 30                        | 130         | 1"1/4 F  | 150611 |
| — SRT 7/100 T          | 1200             | 3~400            | 6                | 80              | 30                        | 130         | 1"1/4 F  | 150613 |

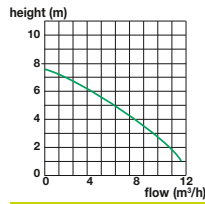
Supplied with 15 m cable and 15 m rope.

\* Includes starting panel.



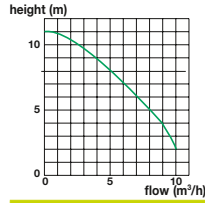


## Drainage pumps



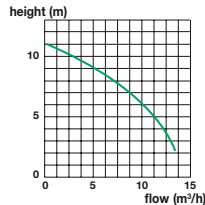
| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|----------|--------|
| 150              | 1-230            | 1,6      | 10               | 7,5             | 1"1/4 F  | 133096 |

Max. particles 10 mm - Includes 10 m cable.



| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|----------|--------|
| 480              | 1-230            | 2,9      | 10               | 11              | 1" F     | 133100 |
| 480              | 1-230            | 2,9      | 10               | 11              | 1" F     | 133099 |

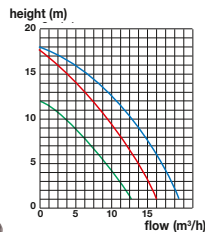
For complete drying surface - Max. particles 6 to 1 mm - Includes 10 m cable, gear clamp & 25 mm fitting.  
\* Pre-equipped for automatism with min. 1 mm suction height level switch.



| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|----------|--------|
| 480              | 1-230            | 2,9      | 13               | 11              | 2" M     | 133107 |

Max. particles 6 mm.

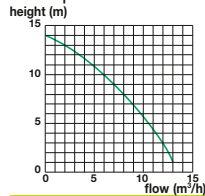
## Sandy & muddy water pumps



| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|----------|--------|
| 400              | 1-230            | 2,6      | 11               | 12              | 2" M     | 133101 |
| 400              | 1-230            | 2,6      | 11               | 12              | 2" M     | 133104 |
| 750              | 1-230            | 4,6      | 13               | 18              | 2" M     | 133106 |
| 750              | 1-230            | 4,6      | 18               | 18              | 3" M     | 133102 |

Max. particles 7 mm - Includes 10 m cable.

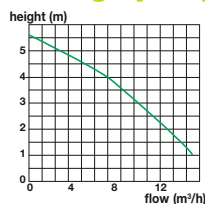
**NEW**



| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|----------|--------|
| 550              | 1-230            | 3,6      | 12               | 14              | 2" F     | 133110 |

Max. particles 10 mm - Includes 10 m cable.

## Sewage pump



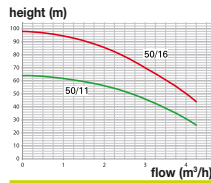
| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | outlet Ø | code   |
|------------------|------------------|----------|------------------|-----------------|----------|--------|
| 150              | 1-230            | 1,6      | 12,5             | 6               | 2" F     | 133097 |

Max. particles 35 mm - Includes 10 m cable.

**For non automatic pumps: level switches, see page 254.**

## Borehole pumps Ø 4"

TW SUB 50/11 M & T supplied with 30 m cable & 30 m nylon rope -  
 TW SUB 50/16 M & T supplied with 40 m cable & 40 m nylon rope - Made in Germany.



|                       | power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | outlet Ø | code*  | code** |
|-----------------------|------------------|------------------|------------------|-----------------|----------|--------|--------|
| <b>TW SUB 50/11 M</b> | 750              | 1-230            | 4,8              | 64              | 1"1/4 F  | 151622 | 151621 |
| <b>TW SUB 50/11 T</b> | 750              | 3-400            | 4,8              | 64              | 1"1/4 F  | 151628 | 151627 |
| <b>TW SUB 50/16 M</b> | 1100             | 1-230            | 4,8              | 97              | 1"1/4 F  | 151632 | 151631 |
| <b>TW SUB 50/16 T</b> | 1100             | 3-400            | 4,8              | 97              | 1"1/4 F  | 151638 | 151637 |

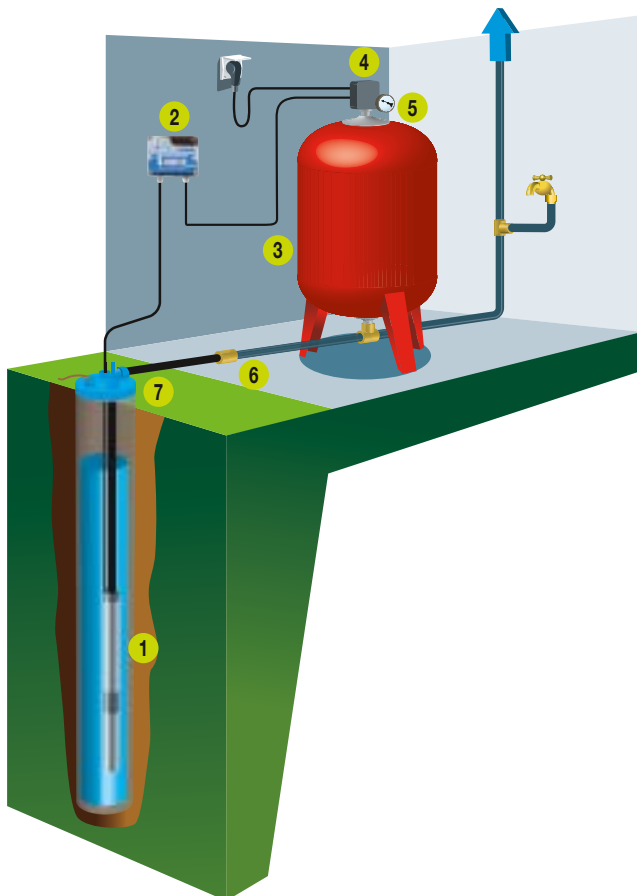
\* Includes starting panel in 1-230 V versions.

\*\* Includes control panel & lack of water protection in 1-230 V & 3-400 V versions.



## Set for borehole or well domestic installation

1800 to 3000 l/h flow for 4 to 5 people water use & 1000 m² watering.



### 30 m maximum depth

| Water level | Flow                                      |
|-------------|---|
| 15 m        | 1800 l/h at 4 bar - 3000 l/h at 3 bar     |
| 20 m        | 1800 l/h at 3,5 bar - 3000 l/h at 2,5 bar |
| 25 m        | 1800 l/h at 3 bar - 3000 l/h at 2 bar     |

|   |        |
|---|--------|
| <b>1 Pump 1-230 V (TW SUB 50/11 M)</b>              | code   |
| <b>2 Includes panel, 30 m cable &amp; 30 m rope</b> | 151621 |
| <b>or</b>   |        |
| <b>1 Pump 3-400 V (TW SUB 50/11 T)</b>              | code   |
| <b>2 Includes panel 30 m cable &amp; 30 m rope</b>  | 151627 |
| <b>+</b>  | code   |
| <b>3 Vertical tank 100 l</b>                        | 309100 |
| <b>4 Pressure switch XMP 6 PM</b>                   | 412506 |
| <b>5 Manometer 0-6 bar</b>                          | 413106 |
| <b>6 Check valve 1"1/4</b>                          | 305007 |
| <b>7 Tight cap 1"1/4</b>                            | 551502 |

### 40 m maximum depth

| Water level | Flow                                    |
|-------------|---|
| 25 m        | 3000 l/h at 4,5 bar - 3500 l/h at 3 bar |
| 30 m        | 3000 l/h at 4 bar - 3500 l/h at 2,5 bar |
| 40 m        | 3000 l/h at 3 bar - 3500 l/h at 1,5 bar |

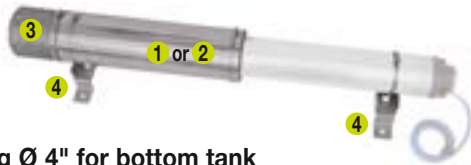
|   |        |
|---|--------|
| <b>1 Pump 1-230 V (TW SUB 50/16 M)</b>              | code   |
| <b>2 Includes panel, 40 m cable &amp; 40 m rope</b> | 151631 |
| <b>or</b>   |        |
| <b>1 Pump 3-400 V (TW SUB 50/16 T)</b>              | code   |
| <b>2 Includes panel 40 m cable &amp; 40 m rope</b>  | 151637 |
| <b>+</b>  | code   |
| <b>3 Vertical tank 200 l</b>                        | 309200 |
| <b>4 Pressure switch XMP 6 PM</b>                   | 412506 |
| <b>5 Manometer 0-6 bar</b>                          | 413106 |
| <b>6 Check valve 1"1/4</b>                          | 305007 |
| <b>7 Tight cap 1"1/4</b>                            | 551502 |



| <b>7 Borehole tight cap</b>       | code   |
|-----------------------------------|--------|
| 1"1/4 for borehole Ø 90 to 140 mm | 551502 |
| 2" for borehole Ø 125 to 175 mm   | 551503 |

Includes tight gaskets - Max. pump depth: 120 m - Max. weight: 500 kg.

## Borehole pumps accessories



Cooling housing Ø 4" for bottom tank

- 1 For TW SUB 50/11M, 50/11T & 50/16T
- 2 For TW SUB 50/16M
- 3 Strainer & gear clamp
- 4 Horizontal support set

| length (mm) | code     |
|-------------|----------|
| 400         | 454000   |
| 525         | 454005JE |
|             | 454025   |
|             | 454020   |



Suspension wire

| Ø    |                       | code   |
|------|-----------------------|--------|
| 4 mm | Stainless steel wire* | 550004 |
|      | Wire clamp            | 550010 |
| 6 mm | Stainless steel wire* | 549999 |
|      | Wire clamp            | 550015 |

\* Price/meter.



Franklin motors for Ø 4" pumps  
F304 stainless steel casing

| power supply (W) | 1~230 code | 3~400 code |
|------------------|------------|------------|
| 250              | 190012     | -          |
| 370              | 190023     | 190027     |
| 550              | 190032     | 190037     |
| 750              | 190043     | 190048     |
| 1100             | 190052     | 190058     |
| 1500             | 190062     | 190068     |
| 2200             | 190072     | 190077     |
| 3000             | -          | 190087     |

Includes 1,5 m cable up to 1500 W, 2,5 m above.



Starting panel for 1~230V

| µF   | code   |
|------|--------|
| 12,5 | 472011 |
| 16   | 472021 |
| 20   | 472031 |
| 30   | 472041 |
| 40   | 472051 |
| 50   | 472063 |
| 70   | 472071 |



Cable

| length (mm) | code   |
|-------------|--------|
| 1,5*        | 431518 |
| 1,5**       | 431519 |
| 2,5*        | 431523 |
| 2,5**       | 431532 |
| 5*          | 431531 |
| 15***       | 431716 |
| 30***       | 431731 |

\* Stainless steel 304 connection.

\*\* Stainless steel 316 connection.

\*\*\* Brass connection.

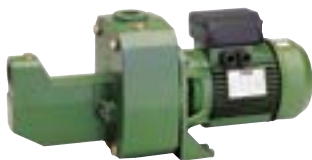
# DAB® pumps



## Self-priming pumps



|                  | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|------------------|------------------|----------|------------------|-----------------|------------------|--------|
| <b>Jet 82 M</b>  | 600              | 1~230            | 3,8      | 3,6              | 47              | 8                | 016080 |
| <b>Jet 82 T</b>  | 600              | 3~400            | 1,6      | 3,6              | 47              | 8                | 016085 |
| <b>Jet 102 M</b> | 750              | 1~230            | 5,1      | 3,6              | 54              | 8                | 016100 |
| <b>Jet 102 T</b> | 750              | 3~400            | 1,9      | 3,6              | 54              | 8                | 016105 |
| <b>Jet 112 M</b> | 1000             | 1~230            | 6,2      | 3,6              | 60              | 8                | 016112 |
| <b>Jet 112 T</b> | 1000             | 3~400            | 2,5      | 3,6              | 60              | 8                | 016113 |
| <b>Jet 132 M</b> | 1000             | 1~230            | 6,6      | 4,8              | 48              | 8                | 016132 |
| <b>Jet 132 T</b> | 1000             | 3~400            | 2,7      | 4,8              | 48              | 8                | 016133 |



|                  | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|------------------|------------------|----------|------------------|-----------------|------------------|--------|
| <b>Jet 151 M</b> | 1100             | 1~230            | 7,2      | 4,2              | 58              | 8                | 010150 |
| <b>Jet 151 T</b> | 1100             | 3~400            | 3        | 4,2              | 58              | 8                | 010155 |
| <b>Jet 251 M</b> | 1850             | 1~230            | 10       | 7,2              | 60              | 8                | 010250 |
| <b>Jet 251 T</b> | 1850             | 3~400            | 4        | 7,2              | 60              | 8                | 010255 |



|                          | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|--------------------------|------------------|------------------|----------|------------------|-----------------|------------------|--------|
| <b>Euro Inox 30/30 M</b> | 450              | 1~230            | 3,2      | 3,3              | 46,0            | 8                | 030080 |
| <b>Euro Inox 30/30 T</b> | 450              | 3~400            | 1,3      | 3,3              | 46,0            | 8                | 030085 |
| <b>Euro Inox 30/50 M</b> | 550              | 1~230            | 3,9      | 4,8              | 42,2            | 8                | 030100 |
| <b>Euro Inox 30/50 T</b> | 550              | 3~400            | 1,6      | 4,8              | 42,2            | 8                | 030105 |
| <b>Euro Inox 40/50 M</b> | 550              | 1~230            | 5,3      | 4,8              | 57,7            | 8                | 030110 |
| <b>Euro Inox 40/50 T</b> | 550              | 3~400            | 2,2      | 4,8              | 57,7            | 8                | 030115 |
| <b>Euro Inox 50/50 M</b> | 1000             | 1~230            | 6,3      | 4,8              | 72              | 8                | 030120 |
| <b>Euro Inox 50/50 T</b> | 1000             | 3~400            | 2,5      | 4,8              | 72              | 8                | 030125 |



**Multi Inox 3M**  
**Multi Inox 4M**  
**Multi Inox 5M**

| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|------------------|----------|------------------|-----------------|------------------|--------|
| 550              | 1~230            | 3,7      | 3,6              | 34,0            | 8                | 030163 |
| 750              | 1~230            | 4,5      | 5                | 46,0            | 8                | 030164 |
| 1000             | 1~230            | 5,5      | 5                | 58,0            | 8                | 030165 |

With stainless steel 304 impellers.

## Peripheral pumps



**KPS 30/16 M**  
**KPS 30/16 T**

| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | code   |
|------------------|------------------|----------|------------------|-----------------|--------|
| 300              | 1~230            | 2        | 1,8              | 32,5            | 031090 |
| 300              | 3~400            | 0,9      | 1,8              | 32,5            | 031095 |

## Booster sets



**Aquajet 82/20 M**  
**Aquajet 102/20 M**  
**Aquajet 102/60 M**

| power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | tank (l) | code   |
|------------------|------------------|----------|------------------|-----------------|------------------|----------|--------|
| 600              | 1~230            | 3,8      | 3,6              | 47              | 8                | 20       | 201029 |
| 750              | 1~230            | 5,1      | 3,6              | 54              | 8                | 20       | 201032 |
| 750              | 1~230            | 5,1      | 3,6              | 54              | 8                | 60       | 201026 |

Supplied mounted.

## E.sybox

Steady pressure booster set - Includes: self-priming pump, frequency regulator, pressure sensor, flow sensor, LCD screen & expansion tank.

- Economical: energy saving thanks to the frequency regulator - Silent.
- Compact: installation everywhere (even in tiny rooms) - 30% smaller than a traditional set - No additional tank.
- Convenient: easy maintenance & installation - Direct access to the pump stem, the filling cap & the expansion tank.
- Various connections.
- Wireless: up to 4 E.sybox connected.



**E.sybox mini**  
**E.sybox**

| power supply (W) | voltage (V-50Hz) | hp  | amp. (A) | max. flow (m³/h) | max. height (m) | max. suction (m) | code   |
|------------------|------------------|-----|----------|------------------|-----------------|------------------|--------|
| 850              | 1~230            | 1,1 | 7        | 4,2              | 55              | 8                | 209501 |
| 1550             | 1~230            | 2,1 | 10       | 7,2              | 62              | 8                | 209500 |



For E.sybox & E.sybox mini - Includes float valve, check valve, suction & discharge pipe.

**E.sytank**

| tank (l) | code   |
|----------|--------|
| 250      | 450160 |



**E.sydock**

| code   |
|--------|
| 450151 |



**Pack E.sytank mini**  
**Pack E.sytank**

| code   |
|--------|
| 209523 |
| 209522 |



**E.sywall**

| code   |
|--------|
| 450150 |



**2 fittings 1"**

| code   |
|--------|
| 453089 |



### Drainage pumps



|                       | power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | min. suction level (m) | outlet Ø | code   |
|-----------------------|------------------|------------------|------------------|-----------------|------------------------|----------|--------|
| <b>Verty Nova 200</b> | 220              | 1~230            | 6                | 6,2             | 3                      | 1" 1/4 M | 131003 |
| <b>Verty Nova 400</b> | 400              | 1~230            | 10               | 9               | 3                      | 1" 1/4 M | 131004 |

Built-in level switch - Max. particles 5 mm - Includes 10 m cable.



|                           | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (m) | outlet Ø | code   |
|---------------------------|------------------|------------------|----------|------------------|-----------------|------------------------|----------|--------|
| <b>Nova 180 automatic</b> | 220              | 1~230            | 1,1      | 5                | 5               | 77                     | 25 mm    | 131009 |
| <b>Nova 300 automatic</b> | 220              | 1~230            | 1,5      | 9                | 7,6             | 85                     | 1"1/4 F  | 131020 |

Max. particles 5 mm for Nova 180, 10 mm for Nova 300 - Includes 5 m cable.



|                        | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (m) | outlet Ø | code   |
|------------------------|------------------|------------------|----------|------------------|-----------------|------------------------|----------|--------|
| <b>Nova-up 300 MAE</b> | 210              | 1~230            | 1,5      | 9                | 7,6             | 86                     | 1" 1/4 M | 131123 |
| <b>Nova-up 600 MAE</b> | 520              | 1~230            | 3,4      | 12,9             | 9,8             | 150                    | 1" 1/4 M | 131133 |

Electronic level detection - 5 mm suction height - Max. particles 10 mm - Includes 10 mm cable - Vertical outlet.

|                              | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (m) | outlet Ø | code   |
|------------------------------|------------------|------------------|----------|------------------|-----------------|------------------------|----------|--------|
| <b>Nova-up 600 automatic</b> | 520              | 1~230            | 3,4      | 13               | 9,8             | 150                    | 1" 1/4 M | 131090 |

Max. particles 10 mm - Includes 10 m cable - Vertical outlet.



### Sewage pump



|                           | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (m) | outlet Ø | code   |
|---------------------------|------------------|------------------|----------|------------------|-----------------|------------------------|----------|--------|
| <b>Feka 600 automatic</b> | 550              | 1~230            | 4,3      | 12               | 7,4             | 175                    | 1" 1/4 F | 131102 |

Passing through 25 mm - Includes 5 m cable.



### Well pumps



|                          | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | min. suction level (m) | pump Ø (mm) | outlet Ø | code   |
|--------------------------|------------------|------------------|----------|------------------|-----------------|------------------------|-------------|----------|--------|
| <b>Divertron 1000</b>    | 550              | 1~230            | 3,8      | 4,2              | 34              | 15                     | 150         | 1" F     | 152599 |
| <b>Divertron 1000-X*</b> | 550              | 1~230            | 3,8      | 4,2              | 34              | 15                     | 150         | 1" F     | 152600 |
| <b>Divertron 1200</b>    | 750              | 1~230            | 4,8      | 4,2              | 43              | 15                     | 150         | 1" F     | 152601 |
| <b>Divertron 1200-X*</b> | 750              | 1~230            | 4,8      | 4,2              | 43              | 15                     | 150         | 1" F     | 152602 |

Built-in automatic device with lack of water protection & check valve - Includes 15 m cable.

\* For connection to rain water collecting tank.

|  | length (m)                                | code       |
|--|---|------------|
| <b>Suction set for rainwater collecting tank</b> | Includes strainer basket & floating ball. | 1,5 355253 |
|  |   | 3 355237   |
| <b>Rope</b>                                      |   | 20 550504  |

## Wastewater lifting stations

Acc. to EN 12050-2.

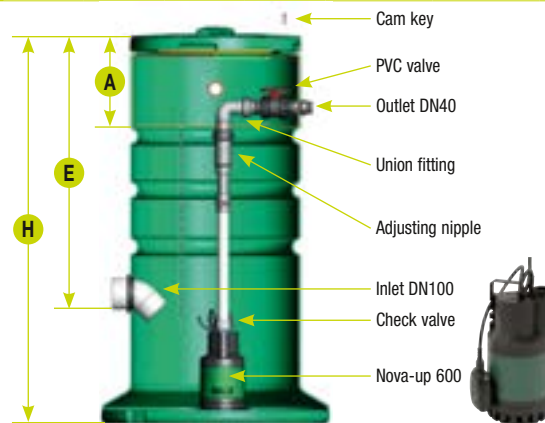


### Complete set for wastewater (after wastewater tank or sand filter)

Ø 600 underground installation high density polyethylene tank - 1/4 turn closing cover - Nova-up 600 pump, 1~230V-50Hz, passing through Ø 10 mm - 100 mm PVC inlet, 1"1/4 male threaded outlet, 50 mm PVC aerator, 50 mm PVC wire outlet - Check valve - 1"1/4 ball valve.



|                            | tank (l) | H (mm) | E (mm) | A (mm) | max. flow (m³/h) | max. height (m) | code   |
|----------------------------|----------|--------|--------|--------|------------------|-----------------|--------|
| <b>Altibox CE 650/600</b>  | 170      | 650    | 200    | 175    | 9                | 13,8            | 131550 |
| <b>Altibox CE 850/600</b>  | 210      | 850    | 400    | 270    | 9                | 13,8            | 131551 |
| <b>Altibox CE 1100/600</b> | 300      | 1100   | 660    | 270    | 9                | 13,8            | 131552 |
| <b>Altibox CE 1400/600</b> | 360      | 1400   | 950    | 270    | 9                | 13,8            | 131553 |
| <b>Altibox CE 1850/600</b> | 480      | 1850   | 1400   | 270    | 9                | 13,8            | 131554 |
| <b>Altibox CE 2500/600</b> | 650      | 2500   | 2050   | 270    | 9                | 13,8            | 131555 |



### Pre-equipped tank\*

| tank (l) | code   |
|----------|--------|
| 170      | 457706 |
| 210      | 457708 |
| 300      | 457711 |
| 360      | 457714 |
| 480      | 457718 |
| 650      | 457725 |



### Tank

| tank (l) | code   |
|----------|--------|
| 170      | 457006 |
| 210      | 457008 |
| 300      | 457011 |
| 360      | 457014 |
| 480      | 457018 |
| 650      | 457025 |

\* Without pump.



### Outlet flexible hose 1"1/4

|        |
|--------|
| code   |
| 453135 |

### Extension for Altibox 600 300 mm height.

|        |
|--------|
| code   |
| 452998 |



### Sawing set DN100

Includes hole saw, gasket & cap.

|        |
|--------|
| code   |
| 453067 |



### Tight connection set

For tight connection up to 5 connectors 1,5 to 6 mm².

|        |
|--------|
| code   |
| 432106 |

### Complete set for wastewater

Not for sewage & dirty water (toilets, etc...) - 30 l tank - Nova 300 automatic pump, 1~230V-50Hz, max. particles 5 mm - Float valve - Check valve - Dimension (mm): L 408 x l 310 x H 360.

|                       | power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | tank (l) | code   |
|-----------------------|------------------|------------------|------------------|-----------------|----------|--------|
| <b>Novabox 30/300</b> | 220              | 1~230            | 9                | 7,1             | 30       | 131450 |



## Sewage & dirty water lifting stations

Acc. to EN 12050-1 - With foot peg and guide bars.

### ■ Indoor & outdoor installation

#### 1 pump

Underground installation 270 l polyethylene tank - 12 screws closing cover - Composite guide bar device - 100 mm PVC inlet, 63 mm PVC outlet, 50 mm PVC aerator, 50 mm PVC wire outlet, 2 gland packs - Dimension (mm): L 800 x l 640 x H 940 - SEMISOM 290 automatic or 490 automatic pump, 1~230V-50Hz, with Vortex impeller, 10 m wire, passing through Ø 50 mm - 1 mounted 2" PVC ball check valve.

|   | power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | tank (l) | code   |
|---|------------------|------------------|------------------|-----------------|----------|--------|
| <b>Fekafos DSD 270 PP/290 automatic</b> | 550              | 1~230            | 12               | 8               | 270      | 145010 |
| <b>Fekafos DSD 270 PP/490 automatic</b> | 550              | 1~230            | 27               | 10,5            | 270      | 145011 |

#### 2 pumps

Underground installation 270 l polyethylene tank - 12 screws closing cover - Composite guide bar device - 100 mm PVC inlet, 63 mm PVC outlet, 63 mm PVC aerator, 50 mm PVC wire outlet - Dimension (mm): L 800 x l 640 x H 940 - DR2P control panel for 2 pumps to be mounted at installation - 2 level controls for pumps - 2 SEMISOM 290 pumps, 1~230V-50Hz, with Vortex impeller, 10 m wire, passing through Ø 50 mm - 2 mounted 2" cast iron ball check valves.

|                                | power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | tank (l) | code   |
|--------------------------------|------------------|------------------|------------------|-----------------|----------|--------|
| <b>Bifos DR2P 270 PP/290 M</b> | 550              | 1~230            | 12               | 8               | 270      | 145020 |

|  | height (mm) | code   |
|--|-------------|--------|
| <b>Extension for DSD &amp; DR2P</b> Includes bolts & screws. | 300         | 453018 |

### ■ Outdoor installation

Underground installation 270 l polyethylene tank - Ø 585 mm cover - 1/4 turn cover - Screws locking - Composite guide bar device - Foot peg welding without drilling - 2" cast iron check valve, 2" PVC valve - 180° inlet water from 200 to 500 mm, thanks to supplied drilling set - 100 mm PVC inlet, 63 mm PVC outlet, 50 mm PVC aerator, wire outlet - Dimension (mm): L 785 x l 590 x H 1025 - SEMISOM 290 automatic or 490 automatic pump, 1~230V-50Hz, with Vortex impeller, 10 m wire & control panel, passing through Ø 50 mm.

|   | power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | tank (l) | code   |
|---|------------------|------------------|------------------|-----------------|----------|--------|
| <b>Fekafos Enter 271 PP/290 automatic</b> | 550              | 1~230            | 12               | 8               | 270      | 145000 |
| <b>Fekafos Enter 271 PP/490 automatic</b> | 1100             | 1~230            | 29               | 10              | 270      | 145001 |

|                                    | height (mm) | code   |
|------------------------------------|-------------|--------|
| <b>Extension for Fekafos Enter</b> | 200         | 452991 |
|                                    | 400         | 452992 |

### ■ Accessories

|  | code   |
|--|--------|
| <b>Anti-smell cartridge</b> For lifting stations & septic tanks - 100 mm diameter - Bad smells remover & hydrogen sulphide filter. | 550400 |

|   | code   |
|---|--------|
| <b>Sawing set DN110</b> Includes Ø 114 mm hole saw, Ø 110 PVC elbow & gasket. | 412619 |

|  | code   |
|--|--------|
| <b>Connection set PVC 110/100</b> Includes FF Ø 110 nipple, M Ø 110 - F Ø 100 reduced nipple & 110 mm PVC Ø 100. | 453117 |





## ■ Toilet macerators

According to EN 12050-3 - IP44 - Connection set for outlet 22 to 40 mm - Tank adapted to 4,6 to 9 l water volume - Easy maintenance & access to motor, pump, macerator & pressure switch - Silent - Power supply 490 W - 1~230V-50Hz - 2,3 A - Max. flow 115 l/mm - Max. height 8 mm - Includes check valve - Dimension (mm): L 456 x l 178 - H 352.



### Genix 110 Genix 110 comfort\*

For 1 WC + 1 sink.

\* Lower sound rating: less than 60 dB.

### Genix 130 Genix 130 comfort\*

For 1 WC + 1 sink + 1 shower + 1 bidet.

\* Lower sound rating: less than 60 dB.

### Connection set

Includes 500 mm pipe, gear clamp & fitting.

|        |
|--------|
| code   |
| 131460 |
| 131461 |

|        |
|--------|
| code   |
| 131462 |
| 131463 |

|        |
|--------|
| code   |
| 451021 |

## ■ Greases separators

Restaurants & collective use - According to EN 1825-1 - High density polyethylene tank - Tight polyethylene cover - Ø 620 mm cover - 110 mm PVC inlet & outlet - Underground & above ground installation.



|                | max. meals/day |         | flow (l/s) | separator volume (l) | sludge trap volume (l) | dimension (mm)           | code   |
|----------------|----------------|---------|------------|----------------------|------------------------|--------------------------|--------|
|                | restaurant     | canteen |            |                      |                        |                          |        |
| <b>YGO500E</b> | 100            | 220     | 1          | 240                  | 100                    | L 1000 x l 1000 x H 1000 | 457340 |
| <b>YGO501E</b> | 150            | 330     | 1,5        | 510                  | 150                    | L 1200 x l 1200 x H 1230 | 457660 |
| <b>YGO502E</b> | 200            | 440     | 2          | 490                  | 200                    | L 1200 x l 1200 x H 1230 | 457690 |

### Extension 200 mm Extension 400 mm

|        |
|--------|
| code   |
| 453026 |
| 453027 |

## ■ Greases separators - Above ground installation

Restaurants & collective use - According to EN 1825-1 - High density polyethylene tank - Tight polyethylene cover - Ø 620 mm cover - 110 mm PVC inlet & outlet - 50 mm cable inlet for alarm installation - 80 mm PVC drainage outlet, symmetrical fitting & 110 mm PVC air vent for HG1002E & HG1004E.



|                | max. meals/day |         | flow (l/s) | separator volume (l) | sludge trap volume (l) | dimension (mm)          | code   |
|----------------|----------------|---------|------------|----------------------|------------------------|-------------------------|--------|
|                | restaurant     | canteen |            |                      |                        |                         |        |
| <b>HG0502E</b> | 209            | 443     | 2          | 480                  | 200                    | L 1635 x l 770 x H 1090 | 457350 |
| <b>HG1002E</b> | 209            | 443     | 2          | 480                  | 200                    | L 1635 x l 770 x H 1090 | 457351 |
| <b>HG0504E</b> | 417            | 886     | 4          | 1200                 | 400                    | L 1635 x l 770 x H 1090 | 457355 |
| <b>HG1004E</b> | 417            | 886     | 4          | 1200                 | 400                    | L 1635 x l 770 x H 1090 | 457356 |

## ■ Greases separators - Dishwashing

Restaurants & collective use.

### MINIGR

Stainless steel tank - 33/42 inlet & outlet with clamp - Tight stainless steel cover - Drainage with 1" valve & cap - 55 l volume - Max. flow 0,75 l/s - Dimension (mm): L 510 x l 410 x H 415.

|        |
|--------|
| code   |
| 456514 |

Restaurants & collective use.

### GM1 E

High density polyethylene tank - PVC inlet & outlet - Tight polyethylene cover - Stainless steel screws - 55 l volume - Max. flow 0,75 l/s - Dimension (mm): L 600 x l 435 x H 450.

|        |
|--------|
| code   |
| 456517 |

### Drainage valve

For polyethylene separator.

|        |
|--------|
| code   |
| 658450 |



## Liquid transfer pumps



For clear water, salty water, wine, vinegar, milk.

|                  | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | code   |
|------------------|------------------|------------------|----------|------------------|-----------------|--------|
| <b>BE - M 20</b> | 340              | 1-230            | 1,8      | 27               | 20              | 093020 |
| <b>BE - M 25</b> | 710              | 1-230            | 3,3      | 40               | 14              | 093025 |
| <b>BE - M 30</b> | 800              | 1-230            | 3,7      | 76               | 14              | 093030 |
| <b>BE - T 30</b> | 800              | 3-400            | 1,5      | 76               | 14              | 093035 |
| <b>BE - M 40</b> | 950              | 1-230            | 4        | 116              | 20              | 093040 |
| <b>BE - T 40</b> | 1000             | 3-400            | 3        | 116              | 20              | 093045 |
| <b>BE - M 50</b> | 2100             | 1-230            | 11       | 202              | 24              | 093050 |
| <b>BE - T 50</b> | 1900             | 3-400            | 5,1      | 202              | 24              | 093055 |



|                        | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | code   |
|------------------------|------------------|------------------|----------|------------------|-----------------|--------|
| <b>Marina 20 - 12V</b> | 350              | 12V DC           | 25       | 27               | 18              | 093070 |
| <b>Marina 20 - 24V</b> | 350              | 24V DC           | 13       | 27               | 18              | 093080 |



|                    | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | code   |
|--------------------|------------------|------------------|----------|------------------|-----------------|--------|
| <b>Novax - 20B</b> | 340              | 1-230            | 1,8      | 27               | 20              | 093058 |



|                                      | code   |
|--------------------------------------|--------|
| <b>Drill 20 for drilling machine</b> | 093100 |

With strainer basket.

## Oil transfer pumps



|                      | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | code   |
|----------------------|------------------|------------------|----------|------------------|--------|
| <b>Viscomat 70 M</b> | 1                | 1-230            | 4,6      | 1500             | 090100 |
| <b>Viscomat 70 T</b> | 1                | 3-400            | 2,2      | 1500             | 090105 |
| <b>Viscomat 90 M</b> | 1                | 1-230            | 6,2      | 3000             | 090110 |
| <b>Viscomat 90 T</b> | 1                | 3-400            | 5        | 3000             | 090115 |



## Gas oil transfer pumps



|                          | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. pressure (bar) | code   |
|--------------------------|------------------|------------------|----------|------------------|---------------------|--------|
| <b>Panther 56 Filter</b> | 370              | 1-230            | 2,2      | 3,5              | 1,7                 | 090012 |



|                          | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. pressure (bar) | code   |
|--------------------------|------------------|------------------|----------|------------------|---------------------|--------|
| <b>Panther 72 Filter</b> | 500              | 1-230            | 4,2      | 4,8              | 1,9                 | 090007 |



|                        | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. pressure (bar) | code   |
|------------------------|------------------|------------------|----------|------------------|---------------------|--------|
| <b>Cube 56/33</b>      | 370              | 1-230            | 2,2      | 50               | 1,7                 | 090009 |
| <b>Cube 70/33</b>      | 500              | 1-230            | 4,2      | 70               | 1,9                 | 090017 |
| <b>Cube 56/33 CFD*</b> | 370              | 1-230            | 2,2      | 50               | 1,7                 | 090019 |
| <b>Cube 70/33 CFD*</b> | 500              | 1-230            | 4,2      | 70               | 1,9                 | 090023 |



\* Includes CFD water absorber filter.

|                              | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. pressure (bar) | code   |
|------------------------------|------------------|------------------|----------|------------------|---------------------|--------|
| <b>Station ST Panther 56</b> | 370              | 1-230            | 2,2      | 50               | 1,7                 | 090002 |
| <b>Station 56/33 Diesel</b>  | 370              | 1-230            | 2,2      | 50               | 1,7                 | 090003 |



|                              | power supply (W) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. pressure (bar) | code   |
|------------------------------|------------------|------------------|----------|------------------|---------------------|--------|
| <b>Station P56 Filter GO</b> | 370              | 1-230            | 2,2      | 50               | 1,7                 | 090064 |
| <b>Station P72 Filter GO</b> | 500              | 1-230            | 4,2      | 70               | 1,9                 | 090065 |





**Carry 3000 12V**  
**Carry 3000 24V**

| power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. pressure (bar) | code   |
|------------------|------------------|------------------|---------------------|--------|
| 260              | 12V DC           | 2,4              | 1,9                 | 090021 |
| 260              | 24V DC           | 2,4              | 1,9                 | 090031 |



**Battery set 3000 12V**  
**Battery set 3000 24V**

| power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. pressure (bar) | code   |
|------------------|------------------|------------------|---------------------|--------|
| 260              | 12V DC           | 2,4              | 1,9                 | 090041 |
| 260              | 24V DC           | 2,4              | 1,9                 | 090051 |



**Panther 56 DC 12V**  
**Panther 72 DC 24V**

| power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. pressure (bar) | code   |
|------------------|------------------|------------------|---------------------|--------|
| 370              | 12V DC           | 3,5              | 1,7                 | 090014 |
| 500              | 24V DC           | 4,8              | 1,9                 | 090015 |



**Piusibox 12V**  
**Piusibox 24V**

| power supply (W) | voltage (V-50Hz) | max. flow (m³/h) | max. pressure (bar) | code   |
|------------------|------------------|------------------|---------------------|--------|
| 260              | 12V DC           | 2,4              | 1,9                 | 090060 |
| 260              | 24V DC           | 2,4              | 1,9                 | 090061 |



**Litre meter**

Precision ± 1% - Fittings Ø 1" F - Max. pressure 3,5 bar.

| code   |
|--------|
| 530010 |



**Gas oil nozzle**

Free nut Ø 1" F & hose nozzle Ø 20 mm - Max flow 60 l/mn.

| code   |
|--------|
| 530020 |



**Gas oil nozzle w/ automatic shut-off**

Free nut Ø 1" F & hose nozzle Ø 20 mm - Max. flow 60 l/mn - Min. pressure 0.4 bar.

| code   |
|--------|
| 530025 |



**Discharge pipe**

Ø 20 mm with welded fittings MM 1".

| code       |
|------------|
| 4 m 530031 |



**Suction pipe**

Ø 25 mm with welded fittings MM 1".

| code         |
|--------------|
| 1 m 530026   |
| 1,5 m 530027 |
| 2 m 530028   |



**Hose nozzle**

M 1" for Ø 20 mm.  
M 1" for Ø 25 mm.

| code   |
|--------|
| 453056 |
| 453057 |



**Filter**

Ø 3/4" M - 1" F & hose nozzle.

| code   |
|--------|
| 530050 |



**Suction pipe**

M 1" - Adjustable length 50 to 90 cm.

| code   |
|--------|
| 530033 |



**Presscontrol**  
**Stainless steel fitting set**

For Panther 56 & 72 - 1-230V (50Hz) - Fitting M 1".  
Socket MM 1" & elbow 1".

| code   |
|--------|
| 416003 |
| 453014 |



## Membrane tanks

2-year guarantee - CE certification acc. to 2014/68/EU Directive - Pre-set pressure: 2 bar - Temperature: -10°C to +90°C - Food quality & safety membrane.



### Standard

| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | length (mm) | Ø tank (mm) | code     |
|------------|------|---------------------|----------------|-------------|-------------|-------------|----------|
| 5          | V    | 10                  | 1"             | 320         |             | 160         | 301005JE |
| 8          | V    | 10                  | 1"             | 335         |             | 200         | 302008JE |
| 19         | V    | 10                  | 1"             | 410         |             | 270         | 301019   |

| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | length (mm) | Ø tank (mm) | code   |
|------------|------|---------------------|----------------|-------------|-------------|-------------|--------|
| 24         | V    | 10                  | 1"             | 340         |             | 350         | 301024 |

| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | length (mm) | Ø tank (mm) | code   |
|------------|------|---------------------|----------------|-------------|-------------|-------------|--------|
| 20         | V    | 10                  | 1"             | 495         |             | 250         | 301020 |



| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | length (mm) | Ø tank (mm) | code   |
|------------|------|---------------------|----------------|-------------|-------------|-------------|--------|
| 20         | H    | 10                  | 1"             |             | 500         | 250         | 303020 |
| 40         | H    | 10                  | 1"             |             | 560         | 345         | 303040 |
| 60         | V    | 10                  | 1"             | 815         |             | 380         | 309060 |
| 60         | H    | 10                  | 1"             |             | 650         | 380         | 309061 |
| 80         | V    | 10                  | 1"             | 790         |             | 450         | 309080 |
| 80         | H    | 10                  | 1"             |             | 640         | 450         | 309081 |
| 100        | V    | 10                  | 1/2" & 1"      | 910         |             | 450         | 309100 |
| 100        | H    | 10                  | 1/2" & 1"      |             | 750         | 450         | 309101 |
| 200        | V    | 10                  | 1/2" & 1 1/2"  | 1215        |             | 554         | 309200 |
| 200        | H    | 10                  | 1/2" & 1 1/2"  |             | 1020        | 554         | 309201 |
| 300        | V    | 10                  | 1/2" & 1 1/2"  | 1375        |             | 625         | 309300 |
| 300        | H    | 10                  | 1/2" & 1 1/2"  |             | 1190        | 625         | 309301 |
| 500        | V    | 10                  | 1/2" & 1 1/2"  | 1460        |             | 775         | 309500 |
| 750        | V    | 10                  | 1/2" & 1 1/2"  | 1925        |             | 790         | 309750 |
| 1000       | V    | 10                  | 1/2" & 2"      | 1915        |             | 935         | 309900 |



V: vertical



20 l

100 l to 495 l

### High pressure

| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | Ø tank (mm) | code   |
|------------|------|---------------------|----------------|-------------|-------------|--------|
| 20         | V    | 16                  | 1"             | 485         | 250         | 308020 |
| 100        | V    | 16                  | 1/2" & 1"      | 915         | 464         | 309103 |
| 200        | V    | 16                  | 1/2" & 1 1/2"  | 1220        | 556         | 309203 |
| 300        | V    | 14                  | 1/2" & 1 1/2"  | 1370        | 626         | 309303 |
| 495        | V    | 12                  | 1/2" & 1 1/2"  | 1461        | 777         | 309503 |

Membranes on request for all types of Varem tanks





## Diaphragm tanks

5-year guarantee - No maintenance required - CE certification acc. to 2014/68/EU Directive.



### Challenger

Max. temperature: 90°C - Stainless steel 316 connections.



| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | length (mm) | code     |
|------------|------|---------------------|----------------|-------------|-------------|----------|
| 8          | V    | 10                  | 1"             | 315         |             | 305008JE |
| 18         | V    | 10                  | 1"             | 370         |             | 305018   |
| 18         | V    | 16                  | 1"             | 370         |             | 305019   |
| 24         | V    | 10                  | 1"             | 440         |             | 306024   |

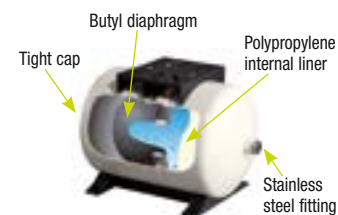
Pre-set: 1,9 bar.



H: horizontal

| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | length (mm) | code   |
|------------|------|---------------------|----------------|-------------|-------------|--------|
| 20         | H    | 10                  | 1"             | 440         |             | 305020 |
| 60         | H    | 10                  | 1"             | 530         |             | 305060 |
| 80         | H    | 10                  | 1"             | 730         |             | 305080 |
| 100        | H    | 10                  | 1"             | 720         |             | 305101 |

Pre-set: 1,9 bar.



V: vertical

| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | length (mm) | code   |
|------------|------|---------------------|----------------|-------------|-------------|--------|
| 60         | V    | 10                  | 1"             | 620         |             | 305059 |
| 80         | V    | 10                  | 1"             | 815         |             | 305079 |
| 100        | V    | 10                  | 1"             | 805         |             | 305100 |
| 150        | V    | 10                  | 1"             | 820         |             | 305150 |
| 200*       | V    | 10                  | 1 1/4"         | 1034        |             | 306201 |
| 240*       | V    | 10                  | 1 1/4"         | 1201        |             | 306240 |
| 310*       | V    | 10                  | 1 1/4"         | 1488        |             | 306310 |
| 450*       | V    | 10                  | 1 1/4"         | 1505        |             | 306450 |

Pre-set: 1,9 bar; except \* 2,6 bar.



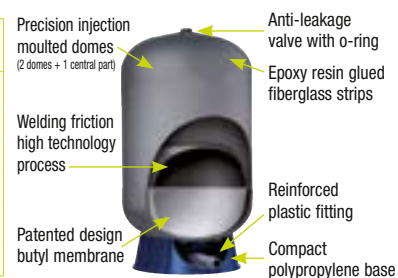
### C2-Lite

Fiberglass tank: light weight - Max. temperature: 50°C.



| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | length (mm) | code   |
|------------|------|---------------------|----------------|-------------|-------------|--------|
| 60         | V    | 8,6                 | 1"             | 649         | 9           | 318060 |
| 100        | V    | 8,6                 | 1"             | 967         | 12          | 318100 |
| 130        | V    | 8,6                 | 1"             | 1227        | 15          | 318130 |
| 250        | V    | 8,6                 | 1" 1/4"        | 1303        | 25          | 318250 |
| 350        | V    | 8,6                 | 1" 1/4"        | 1448        | 33          | 318350 |
| 450        | V    | 8,6                 | 1" 1/4"        | 1831        | 37          | 318450 |

Pre-set: 1,4 bar.



### AWB

All weather for outdoor installation - Carbon steel tank with polypropylene shell - Stainless steel connection.



| volume (l) | type | max. pressure (bar) | Ø connection M | height (mm) | length (mm) | code   |
|------------|------|---------------------|----------------|-------------|-------------|--------|
| 18         | V    | 10                  | 3/4"           | 425         | 5,3         | 318018 |
| 24         | V    | 10                  | 1"             | 454         | 6,2         | 318024 |

Pre-set: 1,9 bar.



| Connection set GC   | code   |
|---|--------|
| Includes flexible hose 500 mm - 1", 5 way fitting, pressure switch XMP 6 PM, manometer 0-6 radial, teflon roll. | 455090 |

# Automatic devices

To be used with membrane or diaphragm pressurised tanks.



**Automatic device set for water tanks 8 to 60 l**

For domestic pumps 1~230V, up to 1 CV - Includes pressure switch with lack of water protection, manometer, check valve.

code

415000

**Italtecnica**

**Presso-Mano PM5**

Pressure switch with built-in manometer & 2x1" F & 1x1" M fittings - Installation: pump outlet or pressurised tank outlet - 1~230V - Max. power: 1,5 kW - Max. pressure: 5 bar - Preset: 1,4 to 2,8 bar.

code

412570

**WT**

**Mondialpress**

Lack of water & hammer protection - For 1~230V surface pumps - Max. power: 1,1 kW - Max. pressure: 8 bar - Restart pressure: 1,5 bar - Min. pump pressure: 3,5 bar - Protection IP65 - Fittings M 1".

code

415552

**WT**

**Presscontrol**

Lack of water & hammer protection - For 1~230V surface pumps - Max. power: 1,5 kW - Max. pressure: 10 bar - Max. flow: 6 m<sup>3</sup>/h - Restart pressure: 1,5 bar - Min. pump pressure: 3 bar - Protection IP65 - Max. temperature: 60°C - Fittings M 1".

code

416000

**WT**

**Presscontrol wired**

Same as Presscontrol, except: wiring included.

code

416001

**WT**

**Presscontrol UP**

Same as Presscontrol, wired. Except: automatic reset mode after shut-down in case of lack of water.

code

416008JE

**WT**

**Mascontrol**

Lack of water & hammer protection - For 1~230V surface pumps - Max. power: 2,2 kW - Max. pressure: 10 bar - Max. flow: 6 m<sup>3</sup>/h - Restart pressure: 1,5 bar - Min. pump pressure: 3 bar - Protection IP65 - Max. temperature: 60°C - Fittings M 1" 1/4.

code

416006

**WT**

**Mascontrol UP tripolar**

Same as Mascontrol, except: automatic reset mode after shut-down in case of lack of water, 3~400V, pre-wiring.

code

416009JE

**WT**

**Controlpres**

Same as Mascontrol - Adjustable pressure: 3 to 6,5 bar - Max. pump pressure: 12 bar.

code

416007

**VAREM**

**Electrovarem**

Lack of water & hammer protection - 3 l tank included - With built-in manometer - For surface pumps 1~230V, 12 A - Max. power: 1,5 kW - Max. pressure: 10 bar - Max. temperature: 60°C - Fitting M 1".

code

416035

**SPIDO**

**Hydrotech 200**

Lack of water & hammer protection - For 1~230V surface pumps - Max. power: 1,3 kW - Max. pressure: 10 bar - Max. flow: 5 m<sup>3</sup>/h - Fittings MM 1".

code

003190

**SPIDO**

**Brio 2000 M**

Lack of water protection device - For surface & submersible pumps with pressure over 1,5 bar (max. power: 1,2 kW) - Max. pressure: 10 bar - Connections FM 1" - 1,5 m wire.

code

003251

**SPIDO**

**HTX**

Lack of water protection device - Manual resetting (restart) - For surface pumps 1~230V, 3 A to 8 A - Temperature: -5°C to 45°C.

code

003161

**Jetly**

**HDS 10 A**

Lack of water protection device - Manual resetting (restart) - For surface pumps 1~230V, 5 A to 10 A - Temperature: -5°C to 45°C.

code

433501

# Pressure switches



**Standard** ΔP adjustable - Pre-set: 1,4 to 2,8 bar - Fitting F 1/4" - 230V 16A.

code

003170



**Standard + wire** Pre-set: 2 to 3,5 bar - Fitting F 1/4" - Supplied with wire - 230V 16A.

code

003121



**XMP 6 bipolar** Max. pressure: 6 bar - Min. ΔP: 0,6 bar - Pre-set: 1,4 to 2,8 bar - Max. power: 1,5 kW (for 1~230V) - Fitting F 1/4" - Temperature: 0 to 70°C - Wired with standard take-off.

code

412500

**XMP 6 wired bipolar** Same as XMP 6 bipolar, except: wired included.

412501



**XMP 6 PM bi/tripolar** Max. pressure: 6 bar - Min. ΔP: 0,6 bar. Pre-set: 2 to 3,5 bar - Max. power: 3 kW (for 3~400V) - Fitting F 1/2" - Manometer outlet F 1/4" - Temperature: 0 to 70°C.

code

412506

**XMPC 6 PM bi/tripolar** Same as XMP 6 PM, except: **sold by multiple of 20 pcs only.**

412516

**XMP 12 PM bi/tripolar** Same as XMP 6 PM, except: max. pressure: 12 bar, min. ΔP: 1 bar, pre-set: 4 to 6 bar.

412512



**XMx Reversed with manometer inlet** Lack of water switch-off device - Pre-set: 0,5 to 1,5 bar - Usable only with remote control - Fitting F 1/2" - Manometer outlet F 1/4" - Temperature: 0 to 70°C - Max. pressure: 6 bar.

code

412560



**69 WEC bipolar with switch & lack of water protection** Max. pressure: 4,5 bar - Min. ΔP: 0,9 bar - Pre-set: 1,3 to 2,6 bar - Max. power: 1,1 kW (for 1~230V) - Fitting F 1/4" - Low pressure (0,4 bar) switch-off device.

code

412550



**69 WR3 Reversed** Lack of pressure switch-off device - Pre-set: 0,3 to 0,7 bar - Max. power: 1,5 kW (for 1~230V) - Fitting F 1/4" .

code

412552



**MCS 11 Universal unipolar** Lack of water switch-off device - Pre-set: 0,2 to 0,5 bar - Usable only with remote control - Fitting F 1/4" - Temperature: -25°C to 80°C - Max. pressure: 11 bar - Protection IP55.

code

410501

**MCS 22** Same as MCS 11, except max. pressure: 22 bar.

410502



**ELT** Pressure setting: -0,2 - 8 bar - Differential pressure: 0,6 - 3 bar.  
Pressure setting: 5 - 16 bar - Differential pressure: 1 - 3,5 bar.  
Pressure setting: 5 - 28 bar - Differential pressure: 2 - 10 bar.

code

132001SE

132002SE

132003

More informations page 68.

## Level switches

With neoprene wire.



### Bip Stop VS 2 threads + special earth connection

Drainage use - Differential angle 110° - All directions use -  
Fluid density 0,60 to 1,15 - Max. pressure: 5 bar - Max.  
temperature: 85°C - 135 x 70 mm - Elec.: 20 (8) A 250V -  
Protection IP68 - Includes socket male/female.

| code |        |
|------|--------|
| 5 m  | 411260 |
| 10 m | 411265 |
| 20 m | 411270 |

### TM-Red 3 threads

Drainage or filling use - Elec.: 10 (4) A 250V -  
Direct start 1,1 kW single phase - Max. temperature: 50°C -  
105 x 54 x 120 mm.

| code |        |
|------|--------|
| 5 m  | 411525 |
| 10 m | 411530 |
| 20 m | 411535 |

### Microstart VR

Drainage or filling use - Elec.: 20 (8) A 250V - 3 threads -  
Max. pressure: 10 bar - Max. temperature: 55°C -  
142 x 80 mm - Differential angle 60° - Protection IP68.

| code |        |
|------|--------|
| 5 m  | 411105 |
| 10 m | 411110 |
| 20 m | 411120 |

### Counter-weight

275 g.

| code |        |
|------|--------|
|      | 411595 |

### Adjustable ballast

Resin - 175 g - Includes blocking fitting.

| code |        |
|------|--------|
|      | 411585 |

### Cable hook

| code |        |
|------|--------|
|      | 411590 |

## Level monitors

With neoprene wire - 2 monitors needed for automatic control - All directions use -  
To be used with control panel for drainage and filling.



### Meca Small Ecolo

Elec.: 16 (6) A 250V - 130 x 70 mm -  
Max. temperature: 70°C - Differential angle 25°.

| code |        |
|------|--------|
| 5 m  | 411405 |
| 10 m | 411410 |
| 20 m | 411420 |

### Meca Ecolo

Elec.: 16 (6) A 250V - 5 waterproof compartments -  
170 x 80 mm - Max. temperature: 70°C -  
Differential angle 25°.

| code |        |
|------|--------|
| 5 m  | 411705 |
| 10 m | 411710 |
| 20 m | 411720 |

### Soba Tech

Very dirty water use - 152 x 95 mm - Max. temperature: 70°C -  
Without ballast - Differential angle 25°.

| code |        |
|------|--------|
| 5 m  | 411905 |
| 10 m | 411910 |
| 20 m | 411920 |

### Meca Ecolo "All Hypalon"

Use: liquid with oil, hydrocarbures, chlore, some acids, alcalines,  
etc... - Elec.: 16 (6) A 250V - 5 waterproof compartments -  
200 x 92 mm - Max. temperature: 95°C - Differential angle 25°.

| code |        |
|------|--------|
| 5 m  | 411725 |
| 10 m | 411735 |
| 20 m | 411745 |

### IFB Blue 3 threads

Lifting stations use - Wire A05 VV-F - Temperature: 55°C -  
10 A 250V - Differential angle 10°.

| code |        |
|------|--------|
| 15 m | 412605 |
| 10 m | 412610 |
| 15 m | 412615 |
| 20 m | 412620 |

### IFB compact

Same as IFB Blue 3 threads, except smaller dimensions for  
compact volume.

| code |        |
|------|--------|
| 10 m | 413610 |

## Level detectors

### Tuba Ecolo 1"

Neoprene wire - 8 (4) A 250V - 160 x 25 mm -  
Differential angle 10°.

| code |        |
|------|--------|
| 15 m | 405005 |
| 10 m | 405010 |

### Tuba Ecolo 1 1/4"

Neoprene wire - 12 (4) A 250V - 160 x 36 mm -  
Differential angle 20°.

| code |        |
|------|--------|
| 15 m | 411815 |
| 10 m | 411820 |



**NEW**



Motor protection & level monitoring for 1~230V & 3~400 V pumps - 6 modes: 1 electrode, 2 electrodes, without probe, reversed pressure switch, pulse meter.

**DSN 61 control panel**

With contactor up to 12A.  
With contactor up to 18A.

| code   |
|--------|
| 471261 |
| 471263 |



**Sound alarm set**

| code   |
|--------|
| 471699 |



**DSN electrode  
Stainless steel electrode  
Cable\***

For electrode - 1 x 1,5 mm<sup>2</sup> - Food quality & safety.

\* price/meter

| code   |
|--------|
| 414000 |
| 414010 |
| 431600 |

**NEW**



**Sound alarm  
Sound alarm with 36 hours  
running reserve**

Noise intensity 90 dB - 1~230V.

| code   |
|--------|
| 471701 |
| 471702 |



**Superclick tight  
connection**

IPX8 - Reticulated polymere gel -  
Connectors 1,5 to 6mm

| connectors | Ø<br>cable | code   |
|------------|------------|--------|
| 3          | 14         | 432120 |
| 5          | 20         | 432121 |

# Pipes & fittings



**Flat discharge  
pipe**

PVC pipe.

| length<br>(m) | Ø<br>pipe | code   |
|---------------|-----------|--------|
| 10            | 25        | 005110 |
| 10            | 30        | 005111 |
| 25            | 30        | 005113 |
| 25            | 40        | 005114 |
| 25            | 40        | 005115 |

**NEW**  
**NEW**



**Flat discharge set**

PVC pipe - Ø 50 - 2" camlock fitting -  
Male or female nipple to be mounted on the pump.

| length<br>(m) | code   |
|---------------|--------|
| 10            | 454509 |



**Flat discharge  
pipe & fittings**

PVC pipe - Symmetrical fittings at both ends -  
Temperature: -10°C to 60°C - Pressure 8 bar at 20°C.

| length<br>(m) | Ø<br>pipe | code   |
|---------------|-----------|--------|
| 10            | 50        | 454510 |
| 15            | 50        | 454515 |
| 10            | 80        | 454511 |



**Discharge set**

For outlet Ø 53/63 - Bore 50 - Includes check ball valve,  
fitting MM 2", PVC ball valve with full bore & 2 end fittings.

| code   |
|--------|
| 455010 |
| 455011 |

**Valve set**

Same as discharge set but without check ball valve.



**PVC check ball  
valve**

Threaded FF - Max. pressure: 10 bar - PVC body & ball -  
Max. temperature: 60°C.

| Ø     | code   |
|-------|--------|
| 1"1/4 | 334007 |
| 1"1/2 | 334008 |
| 2"    | 334009 |
| 2"1/2 | 334010 |
| 3"    | 334011 |

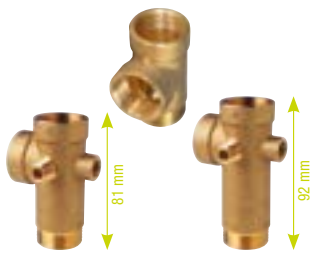


**Anti-smell cartridge**

For lifting stations & septic tanks - 100 mm diameter - Bad smells  
remover & hydrogen sulphide filter.

| code   |
|--------|
| 550400 |

# Pipes & fittings



|                      | Ø                          | code        |          |
|----------------------|----------------------------|-------------|----------|
| <b>3 way fitting</b> | 1" FF 1"                   | BB11-008    |          |
|                      |                            |             |          |
|                      | Ø                          | height (mm) | code     |
| <b>5 way fitting</b> | 1" FF 1" - F 1/4" - M 1/4" | 81          | RP5V     |
|                      | 1" FF 1" - F 1/4" - M 1/4" | 92          | BB11-007 |

## Manometers



### ■ Dry - ABS plastic box

#### Ø 50 - Axial



| pressure (bar) | Ø connection | code     |
|----------------|--------------|----------|
| 0 - 4          | 1/4"         | MA04     |
| 0 - 6          | 1/4"         | 413006TH |
| 0 - 10         | 1/4"         | MA10     |

#### Ø 63 - Axial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 6          | 1/4"         | M63A06 |
| 0 - 10         | 1/4"         | M63A10 |

#### Ø 50 - Radial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 4          | 1/4"         | MR04   |
| 0 - 6          | 1/4"         | 413106 |
| 0 - 10         | 1/4"         | MR10   |

#### Ø 63 - Radial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 6          | 1/4"         | M63R06 |
| 0 - 10         | 1/4"         | M63R10 |

#### Ø 80 - Radial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 4          | 1/2"         | M80R04 |
| 0 - 10         | 1/2"         | M80R10 |



#### Ø 100 - Radial

| pressure (bar) | Ø connection | code    |
|----------------|--------------|---------|
| 0 - 4          | 1/2"         | M100R06 |
| 0 - 10         | 1/2"         | M100R10 |

### ■ Glycerin filled - Stainless steel box

Brass connection - Max. temperature: 60°C - Class 1,6 - Polycarbonate glass.

#### Ø 50 - Axial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 2,5        | 1/4"         | 413203 |
| 0 - 6          | 1/4"         | 413206 |
| 0 - 10         | 1/4"         | MA10G  |
| 0 - 16         | 1/4"         | 413216 |

#### Ø 63 - Axial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 2,5        | 1/4"         | 413403 |
| 0 - 6          | 1/4"         | 413406 |
| 0 - 10         | 1/4"         | 413410 |
| 0 - 16         | 1/4"         | 413416 |
| 0 - 25         | 1/4"         | 413425 |

#### Ø 50 - Radial



| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 2,5        | 1/4"         | 413303 |
| 0 - 6          | 1/4"         | 413306 |
| 0 - 10         | 1/4"         | MR10G  |
| 0 - 16         | 1/4"         | 413316 |



#### Ø 63 - Axial

| pressure (bar) | Ø connection | code   |
|----------------|--------------|--------|
| 0 - 2,5        | 1/4"         | 413503 |
| 0 - 6          | 1/4"         | 413506 |
| 0 - 10         | 1/4"         | 413510 |
| 0 - 16         | 1/4"         | 413516 |
| 0 - 25         | 1/4"         | 413525 |

### ■ Manometer holder valves



| Ø    | pack | code  |
|------|------|-------|
| 1/4" | 50   | ZRI08 |
| 3/8" | 50   | ZRI12 |
| 1/2" | 25   | ZRI15 |



| Ø    | code    |
|------|---------|
| 1/4" | 1306002 |
| 3/8" | 1306003 |
| 1/2" | 1306004 |



| Ø    | code    |
|------|---------|
| 1/4" | 9880302 |
| 1/2" | 9880304 |

## Filtration pumps



Pallet of 30 pcs

|                | power supply (W) | (hp) | voltage (V-50Hz) | max. flow (m³/h) | max. height (m) | code   |
|----------------|------------------|------|------------------|------------------|-----------------|--------|
| <b>SPR 300</b> | 300              | 0,5  | 1-230            | 7                | 8               | 002960 |

For aboveground pool (5 to 25 m³).



Pallet of 40 pcs

|                | power supply (W) | (hp) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | code   |
|----------------|------------------|------|------------------|----------|------------------|-----------------|--------|
| <b>SPR 500</b> | 500              | 0,7  | 1-230            | 2        | 10               | 11              | 002961 |

For 20 to 45 m³ pool.



Pallet of 18 pcs

|                | power supply (W) | (hp) | voltage (V-50Hz) | amp. (A) | max. flow (m³/h) | max. height (m) | code   |
|----------------|------------------|------|------------------|----------|------------------|-----------------|--------|
| <b>SPR 800</b> | 800              | 1    | 1-230            | 3,2      | 15               | 13,5            | 002962 |

For 40 to 90 m³ pool.

## PVC fittings

### Reduced nipple



- F1"1/4 - M1"
- F1"1/2 - M1"1/4
- F2" - M1"1/2
- F2"1/2 - M2"

| code   |
|--------|
| 261200 |
| 261210 |
| 261220 |
| 261230 |

### Fitting to be glued



- F1"1/2 - M50 - F40
- M1"1/2 - M50 - F40

| code   |
|--------|
| 261280 |
| 261290 |

### Free nut nozzle



- F1"1/4 - Ø 27 or 25
- F1"1/2 - Ø 32 or 30
- F2" - Ø 42 or 40
- F2"1/4 - Ø 52 or 50

| code   |
|--------|
| 261240 |
| 261250 |
| 261260 |
| 261270 |

### EPDM flat gasket



- 1"
- 1"1/4
- 1"1/2
- 2"
- 2"1/4

| code   |
|--------|
| 261300 |
| 261310 |
| 261320 |
| 261330 |
| 261350 |

**NEW**

## Filtration

|                    | pool volume (m³)* | pump power supply (W/hp) | max flow (m³/h) | tank (l) | code   |
|--------------------|-------------------|--------------------------|-----------------|----------|--------|
| <b>Combo-S1</b>    | 4,6-8             | 100 / 0,15               | 3               | 12,5     | 002940 |
| <b>Combo-S2</b>    | 8-12              | 200 / 0,3                | 3,2             | 25       | 002941 |
| <b>Combo-4</b>     | 10-15             | 200 / 0,3                | 4               | 25       | 002942 |
| <b>Combo-6**</b>   | 20-25             | 450 / 0,6                | 6               | 25       | 002943 |
| <b>Combo-10***</b> | 25-35             | 600 / 0,8                | 10              | 50       | 002944 |

Pipes Ø 1"1/4-1"1/2.

\*Capacity varies according to climate. \*\*Includes prefilter. \*\*\*Includes prefilter + timer.



Combo-S1



Combo-S2



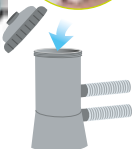
Combo-4



Combo-6



Combo-10



### Aqualoon recharge box 700g


### Filter cartridge

3µ filtration polyethylene balls - Box of 700 g - Replaces sand: 700 g Aqualoon correspond to 25 kg sand - Advantages: light, less back-wash, less water consumption, chemicals resistant, recyclable, non toxic.

| code   |
|--------|
| 002946 |
| 002948 |

**NEW**

## Maintenance accessories

|   |                                  |                                  |      |                  |
|---|----------------------------------|----------------------------------|------|------------------|
|    | <b>Surface net</b>               |                                  | code | 002970           |
|    | <b>Depth net</b>                 |                                  | code | 002971           |
|    | <b>Surface net</b>               | With 120 cm handle               | code | 002972           |
|     | <b>Wall brush</b>                |                                  | code | 002973           |
|    | <b>Hand brush</b>                |                                  | code | 002974           |
|     | <b>Broom head</b>                |                                  | code | 002975           |
|     | <b>Telescopic handle</b>         | 3 x 120 cm                       | code | 002984           |
|   | <b>Floating PE pipe</b>          | Ø 32 mm x 5 m<br>Ø 38 mm x 8 m   | code | 002985<br>002986 |
|   | <b>Cleaning set 5 pieces</b>     |                                  | code | 002977           |
|  | <b>Triangular suction head</b>   |                                  | code | 002976           |
|   | <b>Venturi cleaning broom</b>    | With bag                         | code | 002978           |
|  | <b>Thermometer</b>               |                                  | code | 002979           |
|   | <b>pH/Chlorine measuring set</b> |                                  | code | 002980           |
|  | <b>pH/Chlorine bottle</b>        |                                  | code | 002981           |
|  | <b>Small pebble diffuser</b>     |                                  | code | 002982           |
|   | <b>Big pebble diffuser</b>       |                                  | code | 002983           |
|   | <b>Sliceable PE pipe</b>         | Ø 32 mm x 15 m<br>Ø 38 mm x 15 m | code | 002987<br>002988 |

## Filtration pumps



| <b>KRIPSOL</b> | power supply (hp) | flow (m³/h) | max. height (m) | 1~230 V (50Hz) code | 3~400 V (50Hz) code |
|----------------|-------------------|-------------|-----------------|---------------------|---------------------|
| <b>KS</b>      | 0,75              | 11          | 16              | 101001070           | 101001073           |
|                | 1                 | 15,4        | 18              | 101001100           | 101001103           |
|                | 1,5               | 21,5        | 18              | 101001150           | 101001153           |
|                | 2                 | 25,7        | 18              | 101001200           | 101001203           |
|                | 3                 | 29,5        | 18              | 101001300           | 101001303           |



| <b>KRIPSOL</b> | power supply (hp) | flow (m³/h) | max. height (m) | 1~230 V (50Hz) code | 3~400 V (50Hz) code |
|----------------|-------------------|-------------|-----------------|---------------------|---------------------|
| <b>KSX Pro</b> | 0,5               | 7,5         | 14              | 101002050           | -                   |
|                | 0,75              | 11,5        | 16              | 101002070           | 101002073           |
|                | 1                 | 15,4        | 18              | 101002100           | 101002103           |
|                | 1,5               | 21,5        | 18              | 101002150           | 101002153           |
|                | 2                 | 25,7        | 18              | 101002200           | 101002203           |



| <b>PENTAIR</b>                  | power supply (hp) | flow (m³/h) | max. height (m) | 1~230 V (50Hz) code | 3~400 V (50Hz) code |
|---------------------------------|-------------------|-------------|-----------------|---------------------|---------------------|
| <b>Sta-Rite 5P2R Freshwater</b> | 0,5               | 8           | 18              | 101025050           | 101025053           |
|                                 | 0,75              | 12          | 18,5            | 101025070           | 101025073           |
|                                 | 1                 | 14          | 20              | 101025100           | 101025103           |
|                                 | 1,5               | 18          | 22              | 101025150           | 101025153           |

|                                  |      |    |      |           |           |
|----------------------------------|------|----|------|-----------|-----------|
| <b>Sta-Rite 5P2R Salty water</b> | 0,5  | 8  | 18   | 101026050 | 101026053 |
|                                  | 0,75 | 12 | 18,5 | 101026070 | 101026073 |
|                                  | 1    | 14 | 20   | 101026100 | 101026103 |
|                                  | 1,5  | 18 | 22   | 101026150 | 101026153 |

1" 1/2 connection.



| <b>PENTAIR</b>    | power supply (hp) | flow (m³/h) | 1~230 V (50Hz) code |
|-------------------|-------------------|-------------|---------------------|
| <b>Whisperflo</b> | 3                 | 4 to 32     | 101021999           |

Speed variation.

## Water boosters



| <b>DAB</b>    | power supply (hp) | flow (m³/h) | max. height (m) | 1~230 V (50Hz) code | 3~400 V (50Hz) code |
|---------------|-------------------|-------------|-----------------|---------------------|---------------------|
| <b>Jetcom</b> | 0,75              | 3,6         | 54              | 103011070           | -                   |
|               | 1                 | 3,6         | 54              | 103011100           | 103011103           |



| <b>DAB</b>     | power supply (hp) | flow (m³/h) | max. height (m) | 1~230 V (50Hz) code | 3~400 V (50Hz) code |
|----------------|-------------------|-------------|-----------------|---------------------|---------------------|
| <b>Eurocom</b> | 0,75              | 4,8         | 54              | 103012070           | 103012073           |
|                | 1                 | 4,8         | 62              | 103012100           | 103012103           |

## Water booster cleaner



| <b>PENTAIR</b>       | code      |
|----------------------|-----------|
| <b>Bluefury Lite</b> | 252021001 |

4 venturi jets - Filtration bag - Recommended min. flow: 3,6 m³/h - Recommended water booster: 1 hp - Supplied with 9,4 m pipe, return valve & flow tester - Max. pool dimensions: 12 m x 7 m.

**NEW**

## Drainage pumps

Professional floating motor pump for quick emptying pool maintenance & fire-fighting - Above 2 cm water suction - Immediate self-priming - Very high flow for long-range fire hose - Pool, river, lake, etc. - 4-stroke motor (Briggs & Stratton for 3,5 V; Kawasaki for 6V).

|                 | power supply (hp) | flow (m <sup>3</sup> /h) | tank (l) | max. pressure (bar) | weight (kg) | operating duration (mn) | code      |
|-----------------|-------------------|--------------------------|----------|---------------------|-------------|-------------------------|-----------|
| <b>Aquafast</b> | 3,5               | 42                       | 0,85     | 1,7                 | 21          | 40                      | 108099035 |
|                 | 6,0               | 70,8                     | 2        | 2,5                 | 26          | 60                      | 108099060 |

|                      |   | code       |
|----------------------|---|------------|
| <b>Red fire pipe</b> | 2" - 20 m - 2 symmetrical nozzles - Max. pressure 18 bar. | 1070992052 |

|                  |             | code       |
|------------------|-------------|------------|
| <b>Fire hose</b> | With valve. | 1070990001 |

|                  | power supply (W) | flow (m <sup>3</sup> /h) | max. height (m) | suction height (mm) | passing through (mm) | code      |
|------------------|------------------|--------------------------|-----------------|---------------------|----------------------|-----------|
| <b>Eurocover</b> | 200              | 6                        | 6,5             | 35                  | 5                    | 105015220 |

For pool cover.

## Filtration

|                | flow (m <sup>3</sup> /h) | filter (mm) | Ø valve (mm) | sand capacity (kg) | gravel capacity (kg) | code      |
|----------------|--------------------------|-------------|--------------|--------------------|----------------------|-----------|
| <b>Granada</b> | 10                       | 500         | 1"1/2        | 75                 | 25                   | 151005500 |
|                | 14                       | 600         | 1"1/2        | 100                | 25                   | 151005600 |

Polymere tank - Microfusion assembling - Includes valve - Sand, gravel & fittings not included.

|              | flow (m <sup>3</sup> /h) | filter (mm) | Ø valve (mm) | sand capacity (kg) | gravel capacity (kg) | code      |
|--------------|--------------------------|-------------|--------------|--------------------|----------------------|-----------|
| <b>Artik</b> | 10,5                     | 520         | 1"1/2        | 75                 | 25                   | 151001520 |
|              | 16                       | 640         | 1"1/2        | 100                | 50                   | 151001640 |
|              | 18                       | 680         | 2"           | 125                | 50                   | 151001680 |
|              | 22,5                     | 760         | 2"           | 150                | 75                   | 151001760 |
|              | 31,5                     | 900         | 2"           | 225                | 100                  | 151001910 |

Laminated polyester tank - Gelcoat finishing - Includes valve - Sand, gravel & fittings not included.

|            | flow (m <sup>3</sup> /h) | filter (mm) | Ø valve (mm) | sand capacity (kg) | gravel capacity (kg) | code      |
|------------|--------------------------|-------------|--------------|--------------------|----------------------|-----------|
| <b>Eos</b> | 9                        | 480         | 1"1/2        | 50                 | 25                   | 151021475 |
|            | 14                       | 610         | 1"1/2        | 100                | 50                   | 151021610 |
|            | 22                       | 760         | 2"           | 200                | 75                   | 151021760 |
|            | 32                       | 910         | 2"           | 300                | 125                  | 151021910 |

One-piece fiberglass polyester tank - Includes valve - Sand, gravel & fittings not included.

|                   |   | code      |
|-------------------|---|-----------|
| <b>Silverloon</b> | 3 µ filtration polyethylene balls with silver nano-particles - Box of 700 g - Replaces sand: 700 g Silverloon correspond to 25 kg sand - Advantages: light, less back-wash, less water consumption, chemicals resistant, recyclable, non toxic. | 159095100 |

|                 |  | code      |
|-----------------|--|-----------|
| <b>Retainer</b> | Retains the balls during washing in filter without top diffuser. | 159099015 |

|                           |  | code       |
|---------------------------|--|------------|
| <b>Silverloon skimmer</b> | Prefiltration & downstream filter medium protection - 10 ball bag. | 1590905010 |



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## Water treatment

Electrolyser with polarity reversal - "T" design self-cleaning cell & new technology mixed electrode - Roll-on cover power reduction mode - Up to 24 h over-chlorination mode - Salt range 2,5 to 4 g/l - Safety: salt rate too low & lack of water - Progressive polarity reversal: 2 to 16 h adjustable, depending on water hardness - Low mode & boost mode - Cell dimension 295 mm x 86 mm x 140 mm - Cell max. pressure 2 bar - Cell max. flow 22 m<sup>3</sup> or by-pass - Min. salt level 2,5 g/l - Recommended salt level in early season 4 to 5 g/l - Max. water temperature 40°C - Box dimension: 230 mm x 330 mm x 118 mm - Approx. total weight: 6 kg.

### AE Salt

10 g/h chlorine production - 50 m<sup>3</sup>.  
17 g/h chlorine production - 80 m<sup>3</sup>.  
23 g/h chlorine production - 110 m<sup>3</sup>.



| code      |
|-----------|
| 502021040 |
| 502021070 |
| 502021100 |

### RCA jack cable

For roll-on cover connection.

| code      |
|-----------|
| 502592109 |

Peristaltic pump for acid dosing only - Proportional dosing when approaching setting point (to avoid exceeding requested pH level) - Semi-automatic scaling of pH level = 7 - Digital display - 230V - IP55 - On/off switch - Includes installation set in 50 mm - Preset pH = 7,3 - Flow 1 l/h - Max. pressure 1 bar - Power 35 W - Max. pool volume 120 m<sup>3</sup>.

### Aedos pH

| code      |
|-----------|
| 504032110 |

In-line dosing device for chlorine pebbles only - 1 month duration treatment - 4 kg chlorine pebbles capacity - Includes control valve - Connection 1"1/2 - ⚠ No chlorine shock product, no powder product.

### In-line dosing device

Eco - 390 x 230 mm - Max. pool volume 100 m<sup>3</sup>.  
 HAYWARD 390 x 206 mm - Max. pool volume 150 m<sup>3</sup>.

| code      |
|-----------|
| 503020504 |
| 503010504 |

## Heat exchanger

For all kind of heating techniques - Low consumption circulator - Electronic controller & flow switch - Salty water compatible.



### Heat Line

| primary 90°C (kW) | primary 60°C (kW) | primary 45°C (kW) | pool volume (m <sup>3</sup> ) | primary flow (m <sup>3</sup> /h) | secondary flow (m <sup>3</sup> /h) | code      |
|-------------------|-------------------|-------------------|-------------------------------|----------------------------------|------------------------------------|-----------|
| 20                | 8,5               | 4                 | 50                            | 0,9                              | 10                                 | 203062020 |
| 40                | 17                | 8                 | 120                           | 1,7                              | 15                                 | 203062040 |
| 70                | 30                | 14                | 200                           | 3                                | 20                                 | 203062070 |

Other colours on request

## Installation accessories



### Skimmer

For concrete & liner pool - White ABS - Supplied with cap - 322 mm wall bushing - 40 mm overflow - 5 to 6 m<sup>3</sup>/h.

code

301215070



### Level control

Max. inlet pressure 2,5 bar - Ø 3/4" connection to potable water - 275 mm height - 209 mm diameter - 50 mm connection.

code

301252000



### Projector

For concrete & liner pool - White ABS - 280 mm diameter - Ø 3/4" connection - 2,5 m cable - 300 W not supplied with cable gland.

300 W - 12 V

code

301231070

Led 16 W - 1400 lm

301233070

Led 35 W - 1100 lm

301233570



### Connection box

For projector - 3 outlets - Supplied with 2 cable glands.

code

301251000



### Discharge device

For concrete & liner pool - White ABS - Supplied with cap - 6 m<sup>3</sup>/h flow - 100 mm diameter - 50 mm connection.

code

301241070



### Suction point

For concrete & liner pool - White ABS - Supplied with cap - 100 mm diameter - 50 mm connection.

code

301245070



### Wall bushing - Concrete

300 mm length - Usable 250 mm & 175 mm - 110 mm diameter - 50/2" connection.

code

301253010



### Wall bushing - Liner

300 mm length - Usable 250 mm & 175 mm - 118 mm diameter - 50/2" connection.

code

301253070



### Main drain

For concrete & liner pool - White ABS - Ø 12,5 mm grid - 6 m<sup>3</sup>/h max. flow - 230 mm diameter - 2" connection.

code

301221070



### Nipple

F 50 - M 2".

F 63 - M 2".

code

5523575020

5523576320



### PAR 56 spare lamp

300 W - 12 V.

code

309011300

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### PAR 56 spare power led

White - 17 W - 30 leds - 1430 lm.

White - 22 W - 39 leds - 1354 lm - 3 power remote-control.

Colour (11 colours, 5 programmes) - 16 W - 270 leds - 512 lm.

Colour (11 colours, 5 programmes) - 35 W - 36 leds - 1120 lm.

code

3095400300

3095409300

3095802708

3095400368



### On/off radio control

For led lamp PAR 56 - With remote control.

code

3095490368



## PVC valves & fittings

To be glued.

### Elbow 90°



| Ø  | pack | code       |
|----|------|------------|
| 50 | 60   | 5523105050 |

### Elbow 45°



| Ø  | pack | code       |
|----|------|------------|
| 50 | 150  | 5523155050 |

### Tee



| Ø  | pack | code       |
|----|------|------------|
| 50 | 80   | 5523305050 |

### Threaded union



| Ø          | pack | code       |
|------------|------|------------|
| 1"1/2 - 50 | 45   | 5523625015 |
| 2" - 50    | 40   | 5523625020 |

### Ball valve



| Ø  | pack | code       |
|----|------|------------|
| 32 | 30   | 5523903200 |
| 50 | 24   | 5523905000 |
| 63 | 16   | 5523906300 |

### Ball check valve



| Ø  | pack | code       |
|----|------|------------|
| 50 | 24   | 5523805050 |
| 63 | 16   | 5523806363 |

### Nipple



| Ø  | pack | code       |
|----|------|------------|
| 50 | 100  | 5523405050 |

### Reduced nipple



| Ø       | pack | code       |
|---------|------|------------|
| M63/F50 | 90   | 5523456350 |

### Union



| Ø  | pack | code       |
|----|------|------------|
| 50 | 100  | 5523605050 |

### Threaded reduced nipple



| Ø               | pack | code       |
|-----------------|------|------------|
| F40/M50 - 1"1/2 | 130  | 5523574015 |
| F50/M63 - 2"    | 75   | 5523575020 |

### Ball valve w/ control ball



| Ø  | pack | code       |
|----|------|------------|
| 32 | 25   | 5521913200 |
| 50 | 15   | 5521915000 |
| 63 | 8    | 5521916300 |

### Transparent ball check valve



| Ø  | pack | code       |
|----|------|------------|
| 50 | 1    | 5524805000 |
| 63 | 1    | 5524806300 |

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## Sealing products



### POOL TITE® glue

118 ml  
237 ml  
473 ml

Professional use - Contains THF.

| code      |
|-----------|
| 555011118 |
| 555011237 |
| 555011473 |



### SIRILUB silicon sealant

High quality - Inalterable & UV resistant - Permanent elasticity - Even sealing - Protection skin in 7 min. - 300 ml.

| code                       |
|----------------------------|
| White 5550213290           |
| Light grey 5550213293      |
| Beige 5550213292           |
| Anthracite grey 5550213297 |



### FIX ALL PURE POWER glue

20 ml tube

| code       |
|------------|
| 5550203018 |



### FIX ALL sealant-glue

290 ml cartridge  
125 ml tube

| code       |
|------------|
| 5550203298 |
| 5550203128 |



### FIX ALL HIGH TACK glue

Masonry work - Powerful & immediate positioning - Grey - 290 ml cartridge.

| code       |
|------------|
| 5550203120 |



### Expansive foam

Blocking & filling - 600 ml spray.

| code       |
|------------|
| 5550613600 |



### Sealing paste

For metal fittings - 100 ml tube.

| code       |
|------------|
| 5550303100 |



### Silicon gel

Water resistant heavy grease for O-ring pump - 20 ml tube.

| code       |
|------------|
| 5550403020 |



### Sealing fiber

For metal fittings - 40 g braid.

| code       |
|------------|
| 5550303040 |

## Maintenance accessories

|  |                            |   |           |
|--|----------------------------|---|-----------|
|  |                            |   | code      |
|   | <b>Depth net</b>           | With pickup-debris scraper.                                       | 601101200 |
|   | <b>Liner broom head</b>    | Supplied with anti-piling valve & lateral brush.                  | 601101100 |
|   | <b>12 wheel broom head</b> | For concrete pool.  | 601101112 |
|   | <b>Manual brush</b>        | Reinforced nylon - 48 cm width.                                   | 601101405 |
|    | <b>Telescopic handle</b>   | For above depth net & brooms - 1,4 to 4,3 m - 4 pieces - Compact. | 601404942 |
|  | <b>Broom pipe</b>          | EVA with PE interior spiral - 9 m - Ø 44 mm ext., Ø 38 mm int.    | 602013809 |

## Outdoor showers

|   |                       |  |   |
|---|-----------------------|--|---|
|   |                       |  | code  |
|  | <b>Solar shower</b>   | 25 l - 223 cm height - Polyethylene - Supplied with rinse-foot tap - Italian design & manufacturing. | Anthracite<br>White<br>604501107<br>604501100 |
|  | <b>Classic shower</b> | 198 cm height - Polyethylene - Hot/cold water - Italian design & manufacturing.                      | White<br>604511200                            |

## Inflatable spa

5/7 seat spa - TriTech inflatable wall with padded bottom - 2,01 x 2,01 x 0,8 m - 1050 l - 1117 kg - 230 V 50 Hz, max. consumption 2060 W (10 A), 7 m wire - Blower and inflatable set - 8 adjustable hydrojets powered by a 2000W (2,8 hp) pump - 140 air jets powered by a 800W (1 hp) blower - 7 colour aqua glow - Comfortable seat - 2000 W ceramic water heater - Cartridge filtration with a 35 W pump - Max. water temperature: 40°C - Clear Soft electro magnetism water pre-treatment system - Soft Touch command for heating & filtration setting - Safety inflatable cover & floor mat - 2 filtration cartridges - Floating product dosing device - DVD instruction & user manual - Insulation class II.

|   |                       |           |
|---|-----------------------|-----------|
|   |                       | code      |
|  | <b>Inflatable spa</b> | 451054173 |



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# GENERAL CONDITIONS OF SALE

## 1. CONCLUSION OF THE SALE

Any order to our Company for products, from whatever source, implies unreserved acceptance of these general conditions of sale. These conditions override any other general conditions of sale, whatever their terms and cancel any contrary clause that may figure on contracts, documents or correspondence from the purchaser.

It is understood that, should any clause that figures on the purchaser's contracts, documents or correspondence and which opposes the application of these general conditions of sale be contrary to the dispositions of these general conditions of sale, it will be considered null and void by our Company.

## 2. ACCEPTANCE OF ORDERS

Orders are processed following agreement on the price, delivery conditions and packaging units.

## 3. PRICES

The prices for the products are set by the price list in force on the day the order is shipped; these are trade prices and are subject to the dispositions of article 2. They are set in the light of current economic conditions and our Company reserves the right to modify them at any time without notice should these conditions fluctuate.

## 4. PAYMENT CONDITIONS

⚠ Our Company's only valid bank details are the ones stated on our invoices.

### 4.1. Time limit

Our invoices are dated on the day of shipment. They are payable at 30 days at the end of the month by bank transfer, unless otherwise specified.

### 4.2. Advanced payment

0,3% by month of advanced payment.

### 4.3. Penalties for late payment

Should there be any delay in a total or partial payment, our Company reserves the right to apply a penalty for late payment of an amount equivalent to the result of the application of a rate that is three times the legal rate, calculated at monthly rests following a formal warning sent to the purchaser.

All costs of whatever nature, relating to a payment that is late or in default, will be the responsibility of the purchaser.

Any compensation or deductions made unilaterally by the purchaser will be deemed to be late payments and will trigger the application of the sanctions set out above.

## 5. DELIVERY

### 5.1. Delivery conditions

See spreadsheet below.

### 5.2. Transfer of risk

Should goods be collected or delivered they will travel at the purchaser's risks and perils. Should carriage be included in the price, our Company, together with its service providers, will assume the risk during transport on condition that the purchaser checks the number and condition of the packages in the presence of the transporter and notes any reservations on the delivery document, which it must sign and have countersigned by the transporter or its agent and confirm these reservations by registered letter within 2 days.

Without prejudice to the dispositions to be taken with regard to the transporter, any complaints on apparent faults or on the non-conformity of the goods delivered must be formulated by registered letter with acknowledgement of receipt within 48 hours of reception of the goods.

Once this period has elapsed, no claim concerning such faults will be entertained.

### 5.3. Late delivery

Whatever the date agreed upon for delivery, no indemnity can be claimed for late delivery, unless there is a stipulation to the contrary that has been agreed to by us.

Should the order require assembly, specific work or any other individual requirement, delivery is subject to a feasibility study and delivery time may be increased.

In any case, delivery within the delivery time or the release of the goods can be made only if the purchaser is up to date with his payment obligations to our Company.

We reserve the right to carry out delivery of all or part of the order at a time. Should delivery be partial, each part will be deemed to be a complete commercial operation. Payment will be required in proportion to the quantity delivered.

### 5.4. Returns

**5.4.1.** No return of goods will be accepted if a complaint has not previously been made to us and accepted by us.

**5.4.2.** Should we agree, the goods must be returned within 15 days from the date of our agreement in their original packaging or packaging that is identical to the original one. If the claim is justified, the goods returned will be replaced or a credit note issued at our choice.

The purchaser is solely responsible for any damage to goods resulting from their warehousing under abnormal conditions or conditions that are incompatible with their nature.

### 5.4.3. Deduction

Returns under these conditions will give rise to a deduction of a minimum of 30% for taking back into stock if goods can be sold as they are. If not, the goods will have to be examined to establish the amount of additional deduction for reconditioning and renovation of the products.

## 6. RESERVATION OF OWNERSHIP

Our Company reserves the ownership of the goods delivered until their cost has been entered in our Company's accounts.

During the period of reserved ownership, as the risks are transferred at the time of delivery, the purchaser as a consignee must insure the goods against all the risks of damage or responsibility.

The purchaser, who is authorised to sell on the goods delivered in the normal pursuit of its activity, is required to inform our Company immediately of the seizure on behalf of third parties of goods that have been delivered with reservation of ownership.

Should there be failure to pay a fraction or all of any of the instalments agreed for the cost, and eight days after failure in part or in whole to answer a formal warning by registered letter, the sale may be cancelled as of right if our Company sees fit without prejudice to any damages and interest claimed from the purchaser. The goods must be made immediately available to our Company, unless our Company requires their return at the purchaser's expense. Taking back the goods does not mean a cancellation of the sales contract. Sums already paid by the purchaser will be retained as initial damages and interest and without prejudice to any other damages.

These dispositions do not prevent the transfer to the purchaser of the risk of loss or deterioration of the products sold or any damage they may cause, as set out in article 5.1 above.

## 7. FORCE MAJEURE

Our Company will be discharged from its obligations by any event that is beyond its control which prevents or delays the delivery of the products and which is assimilated contractually to force majeure. This will cover in particular events that occur in-house or with our sub-contractors such as: lock-outs, strikes, fire, epidemics, embargoes, accidents, especially to tooling, breakage of machines, interruption or delay in transport, the impossibility of obtaining procurement, defects in raw materials or any other event beyond our control that leads to staff being partially or totally laid-off in our Company or those of our suppliers or sub-contractors.

## 8. INTELLECTUAL PROPERTY RIGHTS

The purchaser undertakes to respect all intellectual property rights of our Company which he declares to have knowledge of.

## 9. GUARANTEE

For use considered to be normal, our guarantee will be limited to the replacement of parts acknowledged to be faulty within two years of delivery or more depending on the extensions to guarantees applying to certain ranges of products, without our being liable for any claim for compensation for damages and interest.

The costs of disassembly, carriage both ways and reassembly are excluded from the guarantee.

## 10. REPLACEMENT PARTS

When a product that we have supplied is stopped by our Company or the purchaser, our Company is not responsible for carrying out any need for after sales service which will have to be the subject of special agreement.

## 11. RECOMMENDATIONS

Any advice or counsel, technical indications or proposals that we may give or make do not imply any guarantee on our part. It is not our responsibility to assess the specifications or descriptions supplied. It is the customer's responsibility to check that the equipment is suitable for operation in real conditions of use.

## 12. INSURANCE

Our Company is insured as follows (casualty insurance certificate on request):

Third party insurance after delivery:

- €10,000,000 per year for all types of damage

- €2,000,000 per year for non-consecutive intangible damage.

## 13. ATTRIBUTION OF JURISDICTION – APPLICABLE LAW

**13.1.** It is expressly agreed that exclusive competence will be attributed for all disputes between the parties during their commercial relations to the French courts and in particular to the Commercial Court of Vienne, wherever the place of delivery, the method of payment accepted or even for claims under guarantee or where there are several defendants.

**13.2.** Relations with the purchaser will be governed by French law.

Should these conditions be translated into a foreign language, the text written in French will be the only one to have authentic value.



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