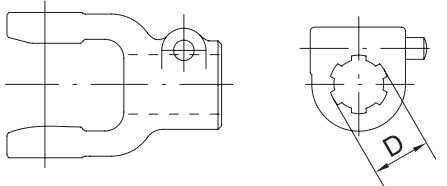
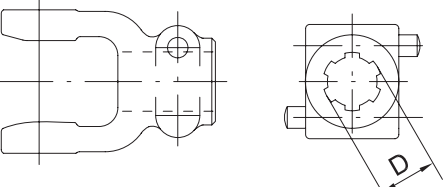
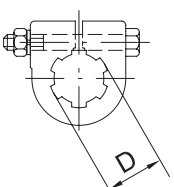
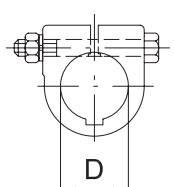
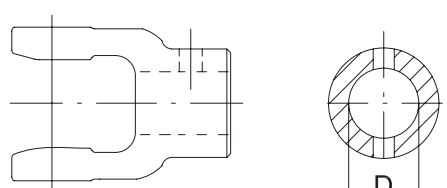
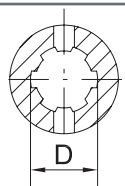
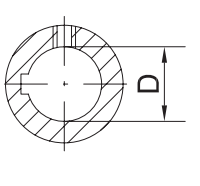
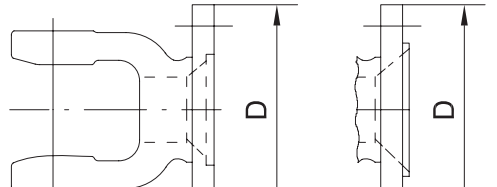


Priključne vile Outer yokes	D	Veličina / Size					
		05	08	12	16	18	20
	6x21x25 (6)	×	×				
	6x26x30 (6)	×	×				
	6x32x38 (8)	×	×	×	×		
	Tip1 1 1/8" (6)	×	×	×	×		
	Tip2 1 1/8" (21)	×	×	×	×		
	6x32x38 (8)					×	×
	Tip1 1 3/8" (6)					×	×
	Tip2 1 3/8" (21)					×	×
	Tip3 1 3/4" (20)						×
	1 3/4" (6)						×
	6x23x28 (6)	×	×				
	6x26x30 (6)	×	×				
	Tip1 1 1/8" (6)	×	×	×	×	×	×
	Tip2 1 1/8" (21)	×	×	×	×	×	×
	1 1/4" (6)						×
	20H8	×					
	25H8	×	×				
	30H8	×	×	×	×	×	×
	35H8		×	×	×	×	×
	40H8				×	×	×
	20H8	×					
	22H8	×					
	25H8	×	×	×			
	30H8	×	×	×	×	×	
	35H8			×	×	×	×
	40H8				×	×	×
	Tip1 1 1/8" (6)	×	×	×	×	×	
	1 1/4" (6)						×
	Tip3 1 3/4" (20)						×
	20H8	×					
	22H8	×					
	25H8	×	×	×	×		
	30H8	×	×	×	×	×	
	35H8			×	×	×	×
	40H8				×	×	×
	75	×					
	87.5	×					
	90			×	×		
	100			×	×	×	
	120						×



**DRIVE SHAFTS DESIGN "B"**  
KARDANSKO VRATILO IZVEDBA "B"

**DRIVE SHAFTS DESIGN "A"**  
KARDANSKO VRATILO IZVEDBA "A"

**DRIVE SHAFTS DESIGN "C"**  
KARDANSKO VRATILO IZVEDBA "C"

**DOUBLE JOINT SHAFTS**  
ZGLOBNE OSOVINE

**INTERMEDIATE SHAFTS**  
MEĐUVRATILO

**BALL BEARINGS FOR AGRICULTURAL MACHINES**  
LEŽAJI ZA POLJOPRIVREDNU MEHANIZACIJU

**BALL BEARINGS FOR AUTOMOTIVE INDUSTRY**  
LEŽAJI ZA AUTO INDUSTRIJU

**Fabrika kotrljajućih ležajeva i kardana FKL a.d. Temerin**  
Industrijska zona bb  
21235 TEMERIN  
SRBIJA  
Tel.: +381 21 6841 100, Fax: +381 21 842 650  
E-mail: marketing@fkl-serbia.com

**Factory of Rolling Bearings and Cardan Shafts FKL Temerin**  
Industrijska zona bb  
21235 TEMERIN  
SERBIA  
Phone.: +381 21 6841 100, Fax: +381 21 842 650  
E-mail: marketing@fkl-serbia.com

**BRANCH OFFICES:**  
**LLC "FKL-RUSSIA"**  
Novgorodskaya Str. 121  
394088 VORONEZH  
RUSSIAN FEDERATION  
Phone/Fax: +74732 747150 / 748361  
E-mail: mail@rusfkl.ru

**TEMKO SKOPJE**  
Socijalistička zora 39  
91060 SKOPJE  
MACEDONIA  
Phone/Fax: +389 23 66 068

[www.fkl-serbia.com](http://www.fkl-serbia.com)

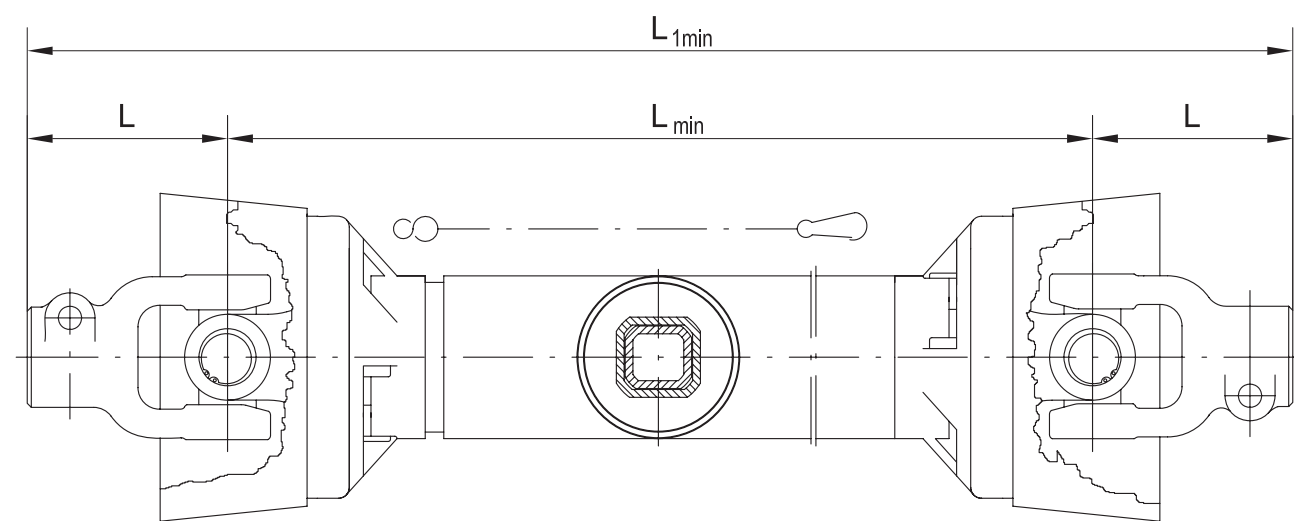
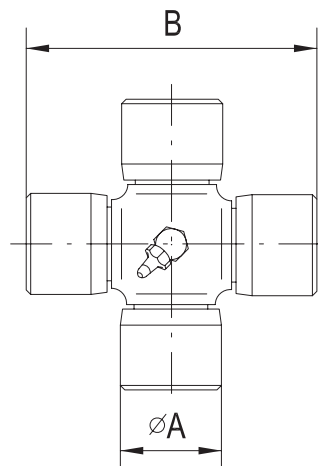


# Kardanska vratila

za poljoprivrednu mehanizaciju

## KARDANSKA VRATILA PTO - DRIVE SHAFTS

Veličina Size	Mere sklopa krstaka Cross assemblies dimensions		Dinamička nosivost Dynamic capacity Md (Nm)	
	ØA (mm)	B(mm)	540 min <sup>-1</sup>	1000 min <sup>-1</sup>
05	22	55	210	172
08	24	61	270	220
12	27	75	460	380
16	32	76	620	520
18	34	90	830	710
20	35	106.5	1240	1050



$L_{min}$  - minimalna dužina u sabijenom stanju/minimal shaft length (compressed)

$L_{max}$  - maksimalna radna dužina/maximal shaft length in operation

Veličina Size	05	08	12	16	18	20
$L_{min}$	460	465	480	505	515	545
L	90	98	107	112	116	129
$L_{max}$	1950	2000	2000	2000	2000	2000
$L_{lmin}$	$L_{lmin} = L_{min} + L + L$					

## SPOJNICE ZA KARDANSKA VRATILA OVERLOAD AND OVERRUNNING CLUTCHES

Različite pogonske potrebe poljoprivrednih mašina, a najpre velika kinetička energija zamajca radnih mašina, zahtevaju osiguranje radnih i pogonskih elemenata pomoću sigurnosnih spojnicu. Spojnice za kardanska vratila čuvaju pogonske sisteme od dejstva momenata preopterećenja i na taj način omogućavaju optimalno korišćenje materijala pri konstrukciji sklopova, kao i siguran i bezbedan rad mašina. Spojnice su jednostavne konstrukcije, lako se održavaju a izrađene su od kvalitetnih domaćih materijala. Kriterijum za izbor spojnicu po veličini i načinu dejstva su vrste mašina i vrste opterećenja. Tolerancija podešenosti za nosivost spojnicu u odnosu na deklarisanu nosivost iznosi ± 10%.

### JEDNOSMERNE SPOJNICE

se primenjuju kao spojnice rasterećenja u slučajevima gde postoji opasnost od dejstva zamajnih momenata radne mašine na pogonske elemente, kada pogonska mašina iznenada prestane sa radom.

### SIGURNOSNE SPOJNICE

sa radijalnim grebenima oblikom grebena zatvara tok snage. Kod preopterećenja grebeni bivaju potisnuti u otvore i nastaje proklizavanje između pogonskog i gornjeg dela spojnicu koje se pulsirajući manifestuje. Reski zvuk koji se tada javlja ima upozoravajuću ulogu.

### SPOJNICE SA SMIČUĆIM VIJKOM

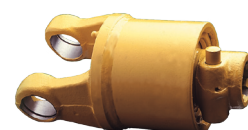
su krute spojnice i koriste se za izbegavanje blokade usled preopterećenja. Porast momenta iznad jačine vijka na smicanje izaziva smicanje vijka i prekida se tok snage. Zamenom vijka ponovo se uspostavlja prenos snage.

### FRIKCIONE SPOJNICE

su sigurnosne spojnice koje pomoću sile trenja prenose obrtni moment. Koriste se kod pogona gde su preopterećenja čista i kratkotrajna. Kod njih je prekid i uspostavljanje toka snaga mekši nego kod sigurnosnih spojnicu sa radijalnim grebenima.

### JEDNOSMERNO-FRIKCIONE SPOJNICE

predstavljaju kombinaciju jednosmerne i frikciione spojnicu, stoga je način dejstva određen prema karakteristikama opisanim ranije.



Different driving requirements of agricultural machines, first of all large kinetic energy of the flying wheel of working machines require the insurance of working and driving elements by means of safety couplings. Couplings for cardan shafts preserve the driving system from the moment effect of overload and in that way provide optimum utilization of material whith construction of structures as well as the safe and uninterrupted machine operation. The couplings are of simple construction, they are maintained easily and made of qualitative local materials. The criteria for the couplings choice per size and working manner are the kind of machines and kind of load.

Tolerances of fitness for coupling load compared to the declared capacity is ± 10%.

### OVERRUNNING CLUTCHES

are applied as balanced clutches in the cases when there exists a danger of effect of flywheel moment of the working machine to the driving elements when the driving machine suddenly stops working.

### RADIAL PIN CLUTCHES

whith radial hanges by hange shape closes the power flow when overload hanges are pushed to the holes and than sliding occurs between the driving and driven part of the coupling in the pulsating manner. The sharp sound which appears than has a warning role.

### SHEAR BOLT CLUTCHES

are rough couplings and are used for avoiding blocade because of overload. The increase of moment beyond the shearing screw causes the screw shearing and the flow of power is interrupted. By the screw replacement the power transmission is set again.

### FRICTION CLUTCHES

are safety couplings which by means of tearing power transmits the turning moment. They are used whith the driving where the overloads are frequent and short. Here the interruption and reestablishment is softer then with the safety couplings with radial hanges.

### FRICTION AND OVERRUNNING CLUTCHES

present the combination of one-way and friction couplings so the operational manner is determined according to the characteristics set above.

## SPOJNICE ZA KARDANSKA VRATILA OVERLOAD AND OVERRUNNING CLUTCHES

Oznaka veličine Type	Nosivost Capacity (Nm)	Dimenzije Dimensions (mm)			Veličina kardanskog vratila PTO Drive shafts								
		B	b	R	C	05	08	12	16	18	20		
<b>JEDNOSMERNE SPOJNICE OVERRUNNING CLUTCHES</b>													
SJ	SJ-2	1600	131	24	100								
	SJ-2V	1600	131	24	100	38							
	SJ-4	2400	143	24	100								
	SJ-4V	2400	151	24	100	38							
SI,AM	3000	141	37	73	28								
Priključci: Vratilo 1 1/2", Shaft 1 1/2"; Glavčina 1 1/2", 1 1/4" Hub 1 1/2", 1 1/4"													
<b>SIGURNOSNE SPOJNICE RADIAL PIN CLUTCHES</b>													
SR	SR-1	300	127	24	100								
	SR-2	600	153	24	100								
	SR-3	900	176	24	100								
	SR-4	1200	203	24	100								
	SR-1V	300	119	24	100	38							
	SR-2V	600	151	24	100	38							
	SR-3V	900	171	24	100	38							
	SR-4V	1200	191	24	100	38							
	Priključci: Vratilo 1 1/2", Shaft 1 1/2"; Glavčina 1 1/2", 1 1/4" Hub 1 1/2", 1 1/4"												
	<b>SPOJNICE SA SMIČUĆIM VIJKOM SHEAR BOLT CLUTCHES</b>												
SV	SV-05	320	95	20	35	55							
	SV-08	450	99	20	45	55							
	SV-12	740	107	20	48	63							
	SV-16	1350	109	21	55	63							
	SV-18	1600	137	24	60	78							
	SV-20	2000	143	24	45	78							
Priključci: Glavčina 1 1/2", 1 1/4" Hub 1 1/2", 1 1/4"													
<b>FRIKCIONE SPOJNICE FRICTION CLUTCHES</b>													
SF	SF-1	900	138	29	180								
	SF-2	1200	147	29	200								
	SF-3	1500	170	29	180								
	SF-4	2000	170	29	200								
	SF-1V	900	143	29	180	38							
	SF-2V	1200	143	29	200	38							
	SF-3V	1500	162	29	180	38							
	SF-4V	2000	162	29	200	38							
Priključci: Vratilo 1 1/2", Shaft 1 1/2"; Glavčina 1 1/2", 1 1/4" Hub 1 1/2", 1 1/4"													
<b>FRIKCIONE SPOJNICE FRICTION CLUTCHES</b>													
SFT	SFT-1	300-700	147	29	168								
	SFT-2	700-1400	170	29	168								
	SFT-1V	300-700	148	29	168	38							
	SFT-2V	700-1400	160	29	168	38							
Priključci: Vratilo 1 1/2", Shaft 1 1/2"; Glavčina 1 1/2", 1 1/4" Hub 1 1/2", 1 1/4"													
<b>JEDNOSMERNO-FRIKCIONE SPOJNICE FRICTION AND OVERRUNNING CLUTCHES</b>													
SJF	SJF-1V	800	235	158	38								
Priključci: Vratilo 1 1/2", Shaft 1 1/2"; Glavčina 1 1/2", 1 1/4" Hub 1 1/2", 1 1/4"													