

**2020 CATALOG**

# **SUNFIELD**

**Agricultural Parts Manufacturer and Supplier**

**PTO Shaft**



**SunField LLC**  
Agricultural Parts

[www.sf-agriculturalparts.com](http://www.sf-agriculturalparts.com)



## About us

SunField LLC Agricultural Machinery is in DFW, TX and manufacturing facilities are in China. We provide high-quality replacement parts for combines, cotton pickers, tractors, and other agricultural equipment, as well as full supply chain service. We are the manufacture with field supports on the ground.

### The advantages of working with us

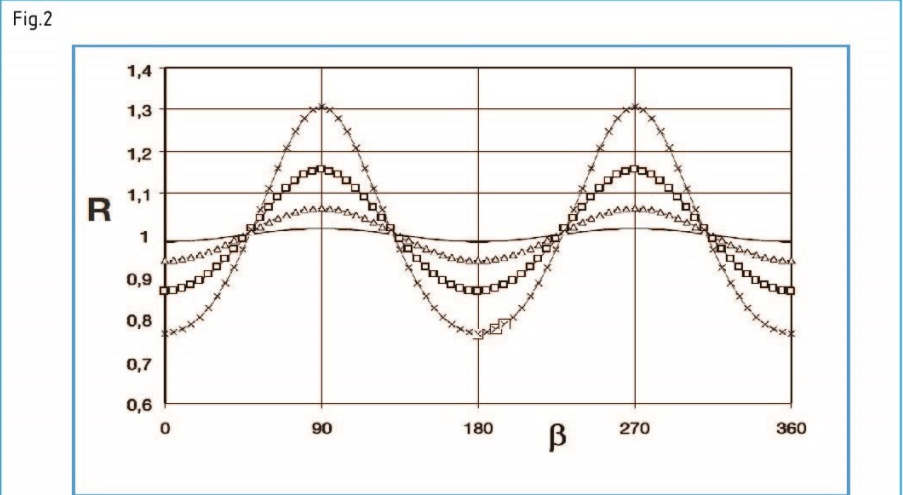
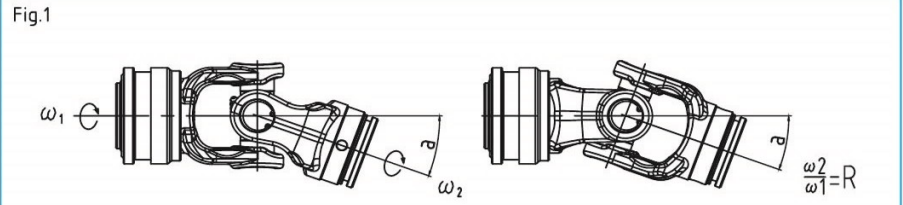
- **High-quality products.** We apply high standards of quality control procedures to ensure we offer the best products in the class to our customers.
- **Wide products selection.** For examples, more than 200 different sprockets for JD and CNH combines, corn head, and other equipment. We continue to add new products to our lines every year.
- **Flexible order quantity.** Flexibility is important to customers. Therefore, we don't require high MOQ! 50 PCS for any sprockets, even if to develop a new sprocket.
- **Competitive cost.** No extra layers between the manufactures and our customers.
- **Full supply chain services, including, but not limited to,**
  - New Product Development,**
  - Prototyping,**
  - Strategic Sourcing,**
  - Engineering,**
  - Customized Packaging,**
  - Vendor Management,**
  - International Logistic,**
  - and so on.**



SECTION 1: General information.....	002
Cardan joint theory	
Kinematic characteristics	
PTO Drive shaft rotation irregularity alignment chart	
Constant velocity joint CvJ	
SECTION 2: PTO drive shafts and Spare parts (T Series).....	006
PTO drive shafts and Spare parts (L Series).....	007
PTO drive shafts and Spare parts (S Series).....	008
PTO drive shafts and Spare parts (G Series).....	009
SECTION 3: Spare parts for PTO drive shaft.....	010
SECTION 4: Shear bolt torque limiter (SB Series).....	014
SECTION 5: Ratchet torque limiter (SA Series).....	016
SECTION 6: Overrunning clutch (RA1, RA1S Series).....	018
Overrunning clutch (RA2, RA2S Series)	
Overrunning clutch (RL / RLS Series)	
SECTION 7: Friction torque limiter (FFV1-FFV2 Series).....	022
Friction torque limiter (FFV3-FFV4 Series)	
Friction torque limiter (FFVT1-FFVT2 Series)	
Friction torque limiter (FFVT1-FFVT2 Series)	
Friction torque limiter (FFVS1-FFVS2-FFVS3-FFVS4 Series)	
SECTION 8: Constant velocity joint (SFT, 80°) (CV Series).....	032
SECTION 9: Speedlash (SP Series).....	034
SECTION 10: Splined dimensions.....	036
SECTION 11: PTO Adaptor & splined shaft.....	037
SECTION 12: Cross journal.....	039
SECTION 13: Tubes .....	040
SECTION 14: Plastic shield.....	041
SECTION 15: Safety and working conditions.....	042
SECTION 16: Gear box .....	046

Cardan joint theory

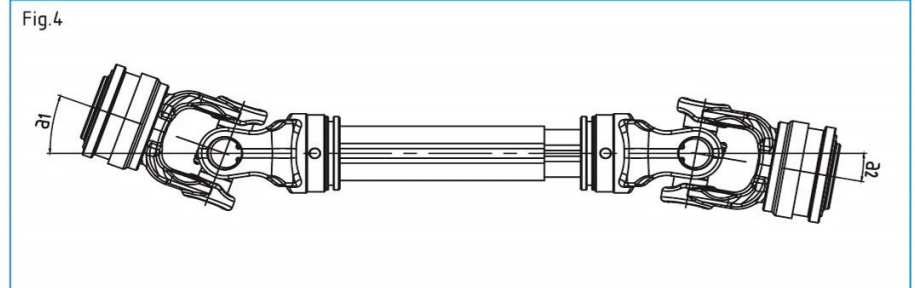
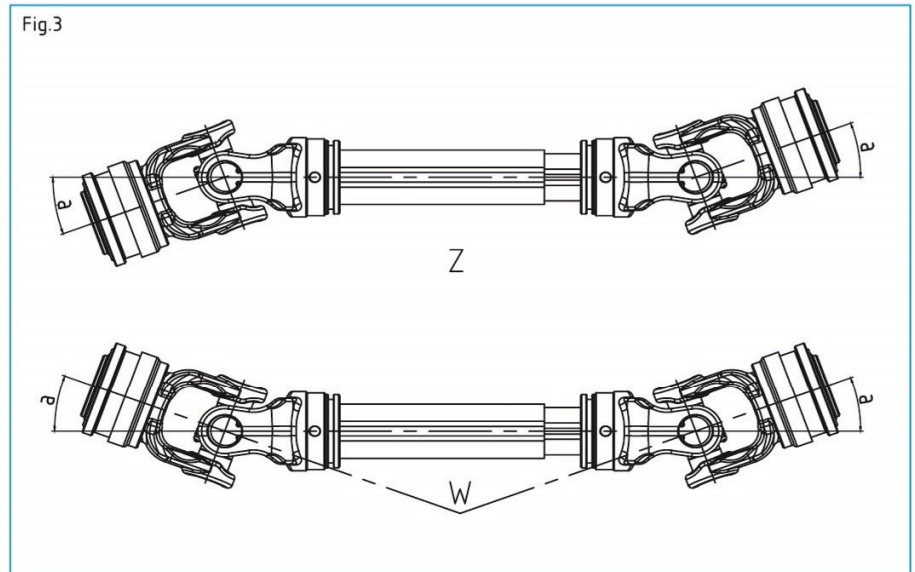
The PTO drive shaft for agricultural applications consists of two cardan joints and a telescopic coupling. The cardan joint, consisting of two yokes and a cross, is the element used to transmit the motion between two tilted axes. The cardan joint construction is designed so that during rotation, the speed of the output shaft is not always equal to that of the input shaft and this difference in speed depends on the articulation angle of the joint (Fig. 1). The transmission ratio versus the articulation angle and the rotation angle is represented in Fig. 2. The more the ratio deviates from 1 the greater becomes the irregularity of the motion, thus generating undesirable effects (vibrations, noise, inertial stress).



Instantaneous transmission ratio  
α=articulation angle β=rotation angle

Kinematic characteristics

The standard PTO drive shaft consists of two cardan joints. The irregularities of the single joints thus can be cancelled or mutually combined. When the articulation angles of the two joints are equal (see configuration W or Z in Fig. 3) the transmission is uniform, i.e. The speed of the output yoke is always equal to the speed of the input yoke, thus eliminating the undesirable effects. In all the other angulations (Fig. 4), an irregularity always remains that can be evaluated with the graph on the following page (Fig. 5).



PTO Drive shaft rotation irregularity alignment chart

Irregularity "i" of the motion depends on the articulation of the two cardan joints and on the difference between the articulations of the two joints (see the example: with angular difference being equal, the irregularity is greater if the articulations of the single joints are greater).

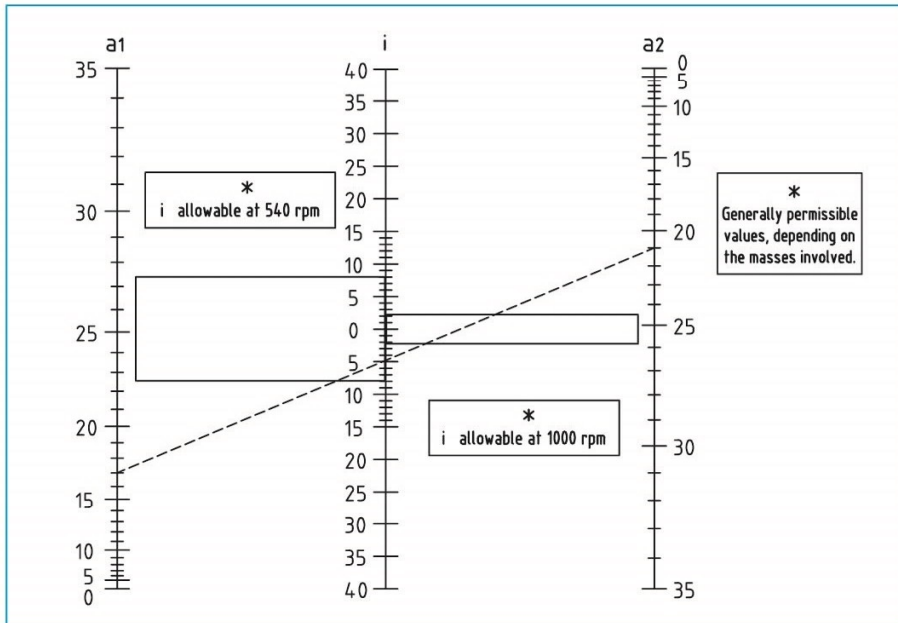
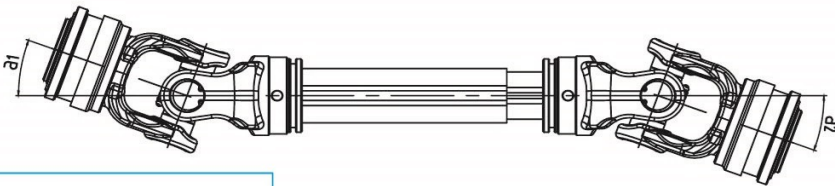


Fig.5



Example:  
 $a1 = 0^\circ, a2 = 4^\circ, a1 - a2 = 4^\circ$   
 $i = 0,5\%$   
 $a1 = 21^\circ, a2 = 25^\circ, a1 - a2 = 4^\circ$   
 $i = 6\%$

Constant velocity joint CVJ

The CvJ (Constant Velocity Joint) is a double universal joint with a centering system that equally divides the articulation angle between the two yokes (W configuration). The speed of the output yoke is always equal to the input speed and there are no rotation irregularities. In a PTO drive shaft with a CvJ joint and a standard joint (Fig. 6), the total irregularity is caused only by the standard joint, that therefore must work with small articulation angles. For high work angles at the two ends of the shaft, two CvJ joints must be used (Fig. 7). The CvJ joint can work with high articulation angles only for brief periods (ex.: while steering). Absolute quality And reliability of the CvJ construction are ensured by the ball bridge welded to the yoke which considerably reduces stress and consequently wears in the ball-cylinder contact zone and in the splined coupling between the shaft and the yoke.

Fig.6

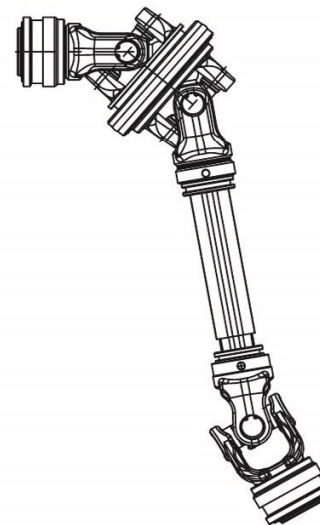
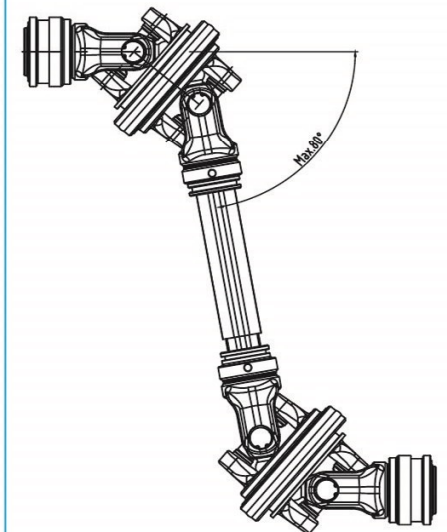


Fig.7

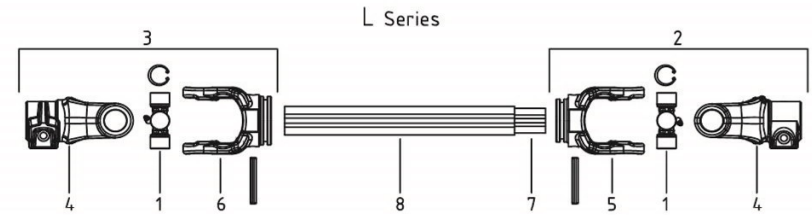
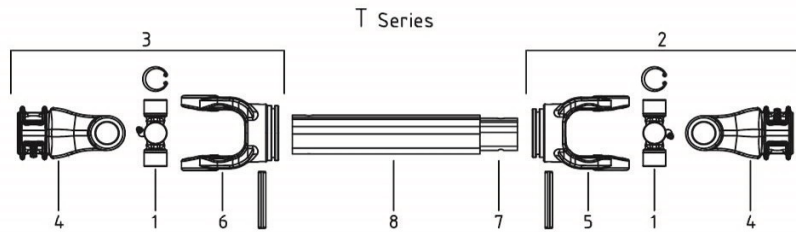


CE

CE

PTO drive shaft T Series

PTO drive shaft L Series



Type	Cross	Joint simple		Spline yoke	Tube yoke		Tube	
		Inner	Outer		Inner	Outer	Inner	Outer
	1	2	3	4	5	6	7	8
T110	22x54	T110001	T110002	A110138	T1226	T1233	T263	T332
T220	23.8x61.2	T220001	T220002	A220138	T2229	T2236	T293	T363
T311	27x70	T311001	T311002	A311138	T3236	T3243	T363	T433
T421	27x74.6	T421001	T421002	A421138	T4236	T4243	T364	T433
T500	30.2x80	T500001	T500002	A500138	T5245	T5252	T454	T523
T622	30.2x92	T622001	T622002	A622138	T6245	T6254	T454	T544
T723	30.2x106.5	T723001	T723002	A723138	T7245	T7254	T455	T544
T7N	34.9x94	T7N001	T7N002	A7N138	T7N245	T7N254	T455	T544
T824	34.9x106.5	T824001	T824002	A824138	T8254	T8263	T544	T634

Type	Cross	Joint simple		Spline yoke	Tube yoke		Tube	
		Inner	Outer		Inner	Outer	Inner	Outer
	1	2	3	4	5	6	7	8
L2100(L010)	22x55	L010001	L010002	A010138	L010223	L010230	L235	L303
L2200(L220)	23.8x61.2	L220001	L220002	A220138	L220234	L220241	L344	L413
L311	27x70	L311001	L311002	A311138	L311234	L311241	L344	L413
L2300(L421)	27x74.6	L421001	L421002	A421138	L421234	L421241	L344	L413
		L421003	L421004		L421239	L421248	L395	L484
L622	30.2x92	L622001	L622002	A622138	L622239	L622248	L395	L484
L2400(035)	32x76	L035001	L035002	A035138	L035239	L035248	L395	L484

Operating torque							
Type	540 tr./min			1000 tr./min			Nm
	Kw	pk	Nm	Kw	pk	Nm	
T110	12	16	210	18	25	172	320
T220	15	21	270	23	31	220	450
T311	22	30	390	35	47	330	640
T421	26	35	460	40	55	380	780
T500	35	47	620	54	74	520	1050
T622	47	64	830	74	100	710	1450
T723	55	75	970	87	118	830	1800
T7N	55	75	970	87	118	830	1800
T824	70	95	1240	110	150	1050	2250

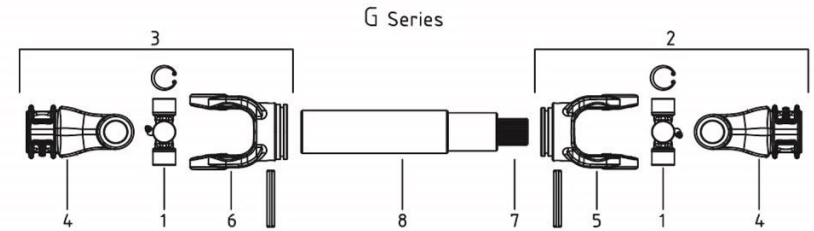
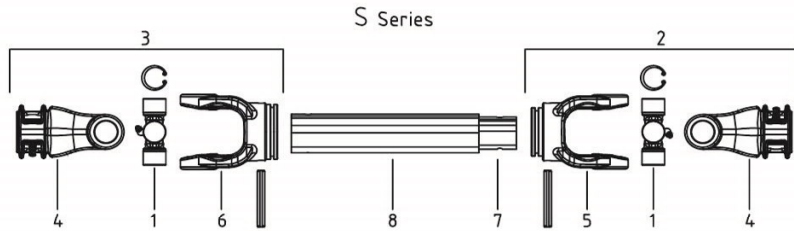
Operating torque							
Type	540 tr./min			1000 tr./min			Nm
	Kw	pk	Nm	Kw	pk	Nm	
L2100(L010)	12	16	210	18	24	175	1100
L2200(L220)	20	27	335	31	42	295	1750
L311	22	30	390	35	47	330	1950
L2300(L421)	28	38	500	44	60	415	2350
L2300S(L421)	32	43	575	52	71	450	2800
L622	35	49	600	58	78	525	3200
L2400(035)	39	53	695	61	83	580	3800

CE

CE

PTO drive shaft S Series

PTO drive shaft G Series



Type	Cross	Joint simple		Spline yoke	Tube yoke		Tube	
		Inner	Outer		Inner	Outer	Inner	Outer
	1	2	3	4	5	6	7	8
S622	30.2x92	S622001	S622002	A622138	S622251	S622261	S510	S614
S723	30.2x106.5	S723001	S723002	A723138	S723251	S723261	S510	S614
S824	34.9x106.5	S824001	S824002	A824138	S824251	S824261	S510	S614
2400(035)	32x76	S035001	S035002	A035138	S035251	S035261	S510	S614
2500(036)	36x88.8	S036001	S036002	A036138	S036251	S036261	S510	S614
2600(026)	42x104	S026001	S026002	A026138	S026251	S026261	S614	S710

Type	Cross	Joint simple		Spline yoke	Tube yoke		Shaft	Tube
		Inner	Outer		Inner	Outer		
	1	2	3	4	5	6	7	8
G500	30.2x80	G500001	G500002	A500138	G5004012	G500C58	G40-Z12	58x3
G622	30.2x92	G622001	G622002	A622138	G6224012	G622C58	G40-Z12	58x3
G7N	34.9x94	G7N001	G7N002	A7N138	G7N4514	G7NC65	G45-Z14	65x3.5
G824	34.9x106.5	G824001	G824002	A824138	G8244514	G824C65	G45-Z14	65x3.5
G2600(G026)	42x104	G026001	G026002	A026138	G0265520	G026C75	G55-Z20	75x4

Operating torque							
Type	540 tr./min			1000 tr./min			Nm
	Kw	pk	Nm	Kw	pk	Nm	
S622	47	64	830	74	100	710	2700
S723	36	56	780	75	92	550	3400
S824	45	77	890	82	110	780	4200
2400(035)	55	75	970	87	118	830	5200
2500(036)	66	90	1175	102	139	975	6000
2600(026)	79	107	1400	122	166	1165	7800

Operating torque							
Type	540 tr./min			1000 tr./min			Nm
	Kw	pk	Nm	Kw	pk	Nm	
G500	35	47	620	54	74	520	1050
G622	47	64	830	74	100	710	1450
G7N	55	75	970	87	118	830	1800
G824	70	95	1240	110	150	1050	2250
G2600(G026)	80	120	1560	140	190	1340	2900

CE

CE

Spare parts for PTO drive shaft

Type	Cross	W	H	L	S	Code 1	H	L	A	B	Code 2	Code 3	Code 4
110	22x54	62	21	92	1 1/8"-Z6	A110138	14	89	1 1/8"-Z6	M10	A110538	AE110332	AE110322
					1 1/8"-Z21	A110121						AE110335	AE110325
												AE110332	AE110328
												AE110332	AE110328
220	23.8x61.2	68	21	98	1 1/8"-Z6	A220118	20	98	1 1/8"-Z6	M10	A220538	AE220332	AE220322
					1 1/8"-Z6	A220138						AE220335	AE220325
					1 1/8"-Z21	A220121						AE220332	AE220328
												AE220332	AE220328
311	27x70	78	21	102	1 1/8"-Z6	A311118	22	102	1 1/8"-Z6	M12	A311538	AE311332	AE311322
					1 1/8"-Z6	A311138						AE311335	AE311325
					1 1/8"-Z21	A311121						AE311332	AE311328
												AE311332	AE311328
421	27x74.6	84	21	108	1 1/8"-Z6	A421118	22	108	1 1/8"-Z6	M12	A421538	AE421332	AE421322
					1 1/8"-Z6	A421138						AE421335	AE421325
					1 1/8"-Z21	A421121						AE421332	AE421328
												AE421332	AE421328
500	30.2x80	92	21	111	1 1/8"-Z6	A500138	22	111	1 1/8"-Z6	M12	A500538	AE500332	AE500322
					1 1/8"-Z21	A500121						AE500335	AE500325
												AE500332	AE500328
												AE500332	AE500328
622	30.2x92	104	21	118	1 1/8"-Z6	A622138	22	118	1 1/8"-Z6	M12	A622538	AE622332	AE622322
					1 1/8"-Z21	A622121						AE622335	AE622325
					1 1/8"-Z6	A622134						AE622338	AE622328
					1 1/8"-Z20	A622120						AE622332	AE622328

Spare parts for PTO drive shaft

Type	L	L1	A	B	Code 5	L2	C	Code 6	D	E	F	Code 7	L3	G	Code 8
110	80	20	20	8	A110020	15	M6	A110020S	20	6	12.8	AE110020	20	M6	AE110020S
					A110022			A110022S	22	6	13.8	AE110022			AE110022S
					A110025			A110025S	25	8	15.8	AE110025			AE110025S
					A110030			A110030S	30	8	18.3	AE110030			AE110030S
					A110032			A110032S	31.8	10	18.5	AE110032			AE110032S
220	84	20	20	8	A220020	15	M6	A220020S	20	6	12.8	AE220020	20	M6	AE220020S
					A220022			A220022S	22	6	13.8	AE220022			AE220022S
					A220025			A220025S	25	8	15.8	AE220025			AE220025S
					A220030			A220030S	30	8	18.3	AE220030			AE220030S
					A220032			A220032S	31.8	10	18.5	AE220032			AE220032S
311	92	20	20	8	A311020	20	M6	A311020S	20	6	12.8	AE311020	20	M6	AE311020S
					A311022			A311022S	22	6	13.8	AE311022			AE311022S
					A311025			A311025S	25	8	15.8	AE311025			AE311025S
					A311030			A311030S	30	8	18.3	AE311030			AE311030S
					A311035			A311035S	35	10	20.8	AE311035			AE311035S
421	92	20	20	8	A421020	20	M6	A421020S	22	6	13.8	AE421022	20	M6	AE421022S
					A421025			A421025S	25	8	15.8	AE421025			AE421025S
					A421030			A421030S	30	8	18.3	AE421030			AE421030S
					A421032			A421032S	35	10	20.8	AE421035			AE421035S
					A421035			A421035S	35	13	20.8	AE421035			AE421035S
500	98	20	20	10	A500030	20	M6	A500030S	30	8	18.3	AE500030	20	M8	AE500030S
					A500035			A500035S	35	10	20.8	AE500035			AE500035S
					A500040			A500040S	40	12	23.3	AE500040			AE500040S
622	105	20	20	10	A622030	20	M6	A622030S	30	8	18.3	AE622030	20	M8	AE622030S
					A622035			A622035S	35	10	20.8	AE622035			AE622035S
					A622040			A622040S	40	12	23.3	AE622040			AE622040S
					A622042			A622042S	42	12	24.3	AE622042			AE622042S



CE

CE

Spare parts for PTO drive shaft

Type	Cross	W	H	L	S	Code 1	H	L	A	B	Code 2	Code 3	Code 4
723	30.2x106.5	117	21	130	1 1/8"-Z6	A723138	20	122	1 1/8"-Z6	M12	A723538	AE723335 1 1/8" BORE 1/4" KEY	
					1 1/8"-Z21	A723121						AE7N338 1 1/2" BORE 1/4" KEY	
					1 1/2"-Z6	A723134							
					1 1/2"-Z20	A723120							
7N	32x94	107	21	125	1 1/8"-Z6	A7N138	20	120		M12		AE7N335 1 1/8" BORE 1/4" KEY	
					1 1/8"-Z21	A7N121				M12	AE7N338 1 1/2" BORE 1/4" KEY		
					1 1/2"-Z6	A7N134							
					1 1/2"-Z20	A7N120							
824	34.9x106.5	118	21	128	1 1/8"-Z6	A824138	20	120	1 1/8"-Z6	M16	A824538	AE824335 1 1/8" BORE 1/4" KEY	
					1 1/8"-Z21	A824121			1 1/8"-Z21	M16	A824521	AE824338 1 1/2" BORE 1/4" KEY	
					1 1/2"-Z6	A824134			1 1/2"-Z6		A824534		
					1 1/2"-Z20	A824120			1 1/2"-Z20		A824520		
2400(035)	32x76	90	21	111	1 1/8"-Z6	A035138	24	116	1 1/8"-Z6	M12	A035538	AE035332 1 1/2" BORE 1/4" KEY	
					1 1/8"-Z21	A035121				M12	AE035335 1 1/8" BORE 1/4" KEY		
					1 1/2"-Z6	A035134				M12	AE035338 1 1/2" BORE 1/4" KEY		
					1 1/2"-Z20	A035120							
2500(036)	36x88.8	100	21	128	1 1/8"-Z6	A036138	24	116	1 1/8"-Z6	M16	A036538		
					1 1/8"-Z21	A036121			1 1/8"-Z21	M16	A036521		
		24	21	140	1 1/2"-Z6	A036134			1 1/2"-Z6	M16	A036534		
					1 1/2"-Z20	A036120			1 1/2"-Z20	M16	A036520		
2600(026)	42x104	120	21	140	1 1/8"-Z6	A026138	24	130	1 1/8"-Z6	M16	A026538		
					1 1/8"-Z21	A026121			1 1/8"-Z21	M16	A026521		
		24	21	140	1 1/2"-Z6	A026134			1 1/2"-Z6	M16	A026534		
					1 1/2"-Z20	A026120			1 1/2"-Z20	M16	A026520		

Spare parts for PTO drive shaft

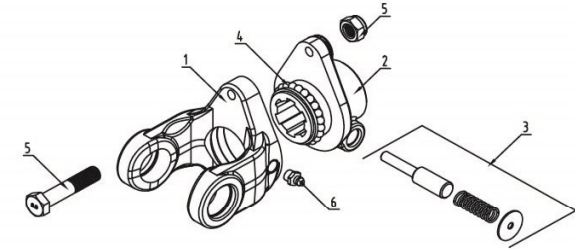
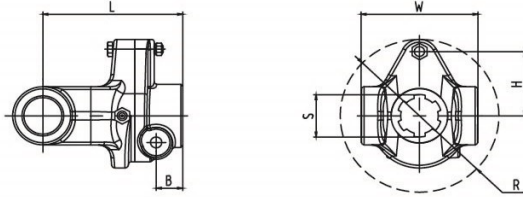
Type	L	L1	A	B	Code 5	L2	C	Code 6	D	E	F	Code 7	L3	G	Code 8	
723	117	25	35		A723035	25	M10	M8	A723035S	35	10	20.8	AE723035	25	M10	AE723035S
			40	13	A723040			A723040S	40	12	23.3	AE723040	M12		AE723040S	
			42		A723042			A723042S	42	12	24.3	AE723042			AE723042S	
			45		A723045			A723045S	45	14	26.3	AE723045	M14		AE723045S	
7N	106	20	35		A7N035	20	M10	M8	A7N035S	35	10	20.8	AE7N035	20	M10	AE7N035S
			40	13	A7N040			A7N040S	40	12	23.3	AE7N040	M12		AE7N040S	
			42		A7N042			A7N042S	42	12	24.3	AE7N042			AE7N042S	
			45		A7N045			A7N045S	45	14	26.3	AE7N045	M14		AE7N045S	
824	120	25	35		A824035	25	M10	M8	A824035S	35	10	20.8	AE824035	25	M10	AE824035S
			40	13	A824040			A824040S	40	12	23.3	AE824040	M12		AE824040S	
			42		A824042			A824042S	42	12	24.3	AE824042			AE824042S	
			45		A824045			A824045S	45	14	26.3	AE824045	M14		AE824045S	


CE

CE

Shear bolt torque limiter SB Series

Shear bolt torque limiter SB Series



Series		W	L	B	R	S	H	Bolt+Nut CL.8.8	Torque Nm max.	Type
110	22x54	62	95	19	90	1 3/8"-Z6	35	M6	650	SB110138
						1 3/8"-Z21				SB110121
220	23.8x61.2	72	99	19	110	1 3/8"-Z6	45	M6	900	SB220138
						1 3/8"-Z21				SB220121
421	27x74.6	86	113	21	125	1 3/8"-Z6	48	M8	1400	SB421138
						1 3/8"-Z21				SB421121
500	30.2x80	92	111	21	135	1 3/8"-Z6	46	M10	2100	SB500138
						1 3/8"-Z21				SB500121
622	30.2x92	102	141	20	150	1 3/8"-Z6	55	M10	2100	SB622138
						1 3/8"-Z21				SB622121
						1 3/4"-Z6				SB622134
						1 3/4"-Z20	SB622120			
						1 3/8"-Z6	SB824138			
824	34.9x106.5	118	148	20	150	1 3/8"-Z21	57	M12	3500	SB824121
						1 3/4"-Z6				SB824134
						1 3/4"-Z20				SB824120
						1 3/8"-Z6				SB035138
2400(035)	32x76	86	111	21	135	1 3/8"-Z6	46	M10	2100	SB035121
						1 3/8"-Z21				SB036138
2500(036)	36x88.8	102	141	20	150	1 3/8"-Z6	56	M10	2900	SB036121
						1 3/8"-Z21				SB036134
						1 3/4"-Z6				SB036120
						1 3/4"-Z20				SB026138
						1 3/8"-Z6				SB026121
2600(026)	42x104	118	145	24	150	1 3/8"-Z21	56	M12	4200	SB026134
						1 3/4"-Z6				SB026120
						1 3/4"-Z20				

ITEM	Size	DeScription	Notes
1	110	Yoke	
	220		
	421		
	500		
	622		
	824		
	2400(035)		
	2500(036)		
2	110	Spline hub	Spline:1 3/8"-Z6 1 3/8"-Z21
	220		
	421		
	500		Spline:1 3/8"-Z6 1 3/8"-Z21 1 3/4"-Z6 1 3/4"-Z20
	622		
	824		
	2400(035)		
2500(036)			
2600(026)			
3		Push pin + spring	1 3/8" 1 3/4"
4	110/220/311	Ball	7/32"
	421/500		1/4"
	622/824		5/16"
5		Bolt + Nut CL.8.8	M6x40/M6x45/M8x50 M10x55/M10x60/M12x65
6		Greaser	M6x1 / M8x1

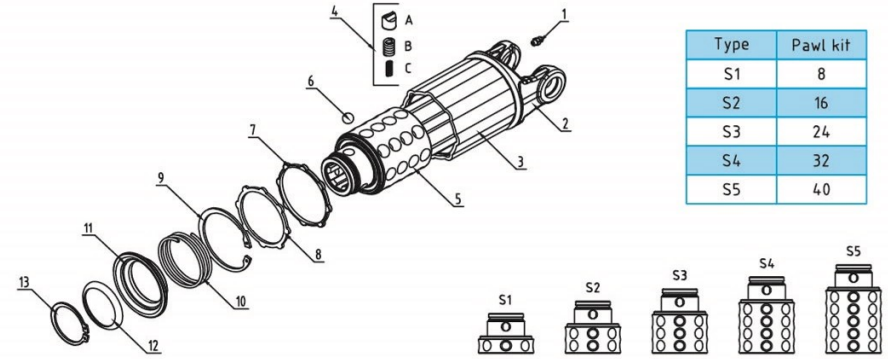
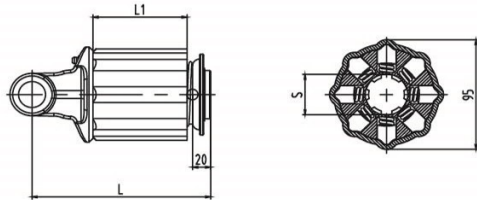
NOTE: available on demand with interfering clamp bolt  
The torque limiter interrupts the power transmission when the torque exceeds the setting value, by shearing the bolt. Transmission is restored by inserting a new bolt in the device.

CE

CE

Ratchet torque limiter SA Series

Ratchet torque limiter SA Series



Series	Image	L1	L	Limit.	Range	Torque Nm max.	S	Type *	
								13/8"-Z6	13/8"-Z21
110	22x54	38	112	S1	1	300	13/8"-Z6 13/8"-Z21	SA110138S1	SA110121S1
		57	131	S2	2	600		SA110138S2	SA110121S2
220	23.8x61.2	38	114	S1	1	300		SA220138S1	SA220121S1
		57	132	S2	2	600		SA220138S2	SA220121S2
		76	151	S3	3	900		SA220138S3	SA220121S3
311	27x70	57	141	S2	2	600		SA311138S2	SA311121S2
		76	171	S3	3	900		SA311138S3	SA311121S3
421	27x74.6	57	142	S2	2	600		SA421138S2	SA421121S2
		76	160	S3	3	900		SA421138S3	SA421121S3
		95	178	S4	4	1200		SA421138S4	SA421121S4
500	30.2x80	76	171	S3	3	900		SA500138S3	SA500121S3
		95	190	S4	4	1200		SA500138S4	SA500121S4
		114	209	S5	5	1500		SA500138S5	SA500121S5
622	30.2x92	76	171	S3	3	900		SA622138S3	SA622121S3
		95	190	S4	4	1200		SA622138S4	SA622121S4
		114	209	S5	5	1500		SA622138S5	SA622121S5
824	34.9x106.5	76	187	S3	3	900		SA824138S3	SA824121S3
		95	205	S4	4	1200		SA824138S4	SA824121S4
		114	224	S5	5	1500		SA824138S5	SA824121S5
2400(035)	32x76	76	171	S3	3	900		SA035138S3	SA035121S3
		95	190	S4	4	1200	SA035138S4	SA035121S4	
		114	209	S5	5	1500	SA035138S5	SA035121S5	
2500(036)	36x88.8	76	171	S3	3	900	SA036138S3	SA036121S3	
		95	190	S4	4	1200	SA036138S4	SA036121S4	
		114	209	S5	5	1500	SA036138S5	SA036121S5	

The torque limiter is activated when the operating torque exceeds the setting value. During the limiting phase, the device transmits reduced power in pulses. The elimination of the external cause and the reduction of the PTO speed allows the normal power transmission to be re-established. When the limiter is activated, it is recommended to disconnect the PTO to avoid unnecessary wear and overheating.

Type \*: Spline manufacture is divided into two  
13/8"-Z6, 13/8"-Z21 For example: SA110138S1, SA110121S1

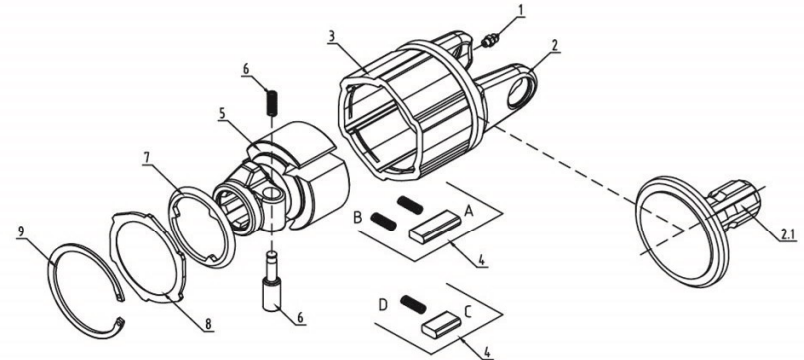
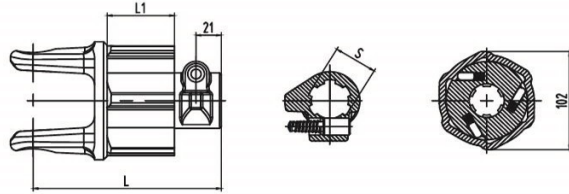
ITEM	Size	DeScription	Notes
1		Grease	M6x1
2	110	Yoke	
	220		
	311		
	421		
	500		
	622		
	824		
	2400(035) 2500(036)		
3		Tube	L=38/57/76/95/144
4		Ratchet teeth and springs set	A: Ratchet tooth B: Outer spring C: Inner spring
5		Spline hub.--S1	13/8"-Z6 13/8"-Z21
		Spline hub.--S2	
		Spline hub.--S3	
		Spline hub.--S4	
		Spline hub.--S5	
6		Ball	1/2"
7		Retaining washer	
8		Grease protection	
9		Circlip	
10		Collar spring	
11		Sliding sleeve collar	
12		Snap ring	
13		Circlip	


CE

CE

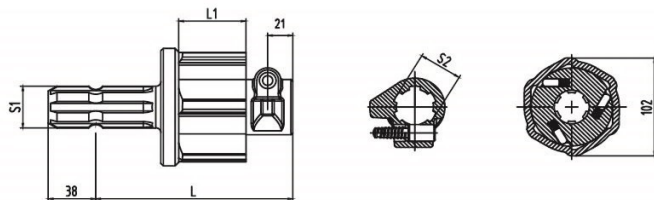
Overrunning clutch RA1 / RA2 / RA1S / RA2S Series

Overrunning clutch RA1 / RA2 / RA1S / RA2S Series



Series		L1	L	Torque Nm max.	S	Type	
						1 3/8"-Z6	1 3/8"-Z21
110	22x54	37	125	2400	1 3/8"-Z6 1 3/8"-Z21	RA1-110138	RA1-110121
220	23.8x61.2	37	130	2400		RA1-220138	RA1-220121
311	27x70	37	132	2400		RA1-311138	RA1-311121
421	27x74.6	37	138	2400		RA1-421138	RA1-421121
		56	156	3800		RA2-421138	RA2-421121
500	30.2x80	56	165	3800		RA2-500138	RA2-500121
622	30.2x92	56	167	3800		RA2-622138	RA2-622121
824	34.9x106.5	56	182	3800		RA2-824138	RA2-824121

ITEM	Size	DeScription	Notes
1		Grease	M6x1
2	110	Flange yoke	
	220		
	311		
	421		
	500		
	622		
824			
2.1		Spline hub.	1 3/8"-Z6 1 3/8"-Z21
3		Tube	L=37 / 56
4		A/C:Ratchet B/D:Spring	
5		Spline hub.	1 3/8"-Z6 1 3/8"-Z21
6		Push pin + spring	∅14
7		Retaining washer	
8		Grease protection	
9		Circlip	



L1	L	Torque Nm max.	S1	S2	Type
37	129	2400	1 3/8"-Z6	1 3/8"-Z21	138RA1S121
56	147	3800	1 3/8"-Z21	1 3/8"-Z6	121RA2S138

NOTE: available upon request for anti-clockwise direction of rotation.

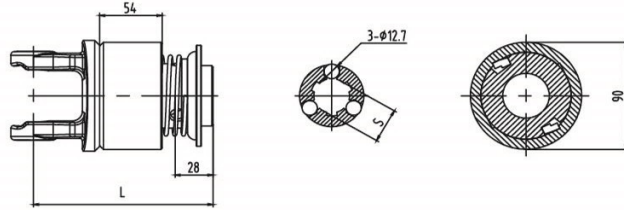
The device is used to transmit the motion in a single rotation direction, when the tractor drives the implement. During the stopping phase, with the tractor PTO disengaged and the implement still moving, the transmission is disconnected. This device is useful for operating machinery with high rotation inertia because during the stopping phase, the tractor PTO is dis-engaged from the driven machine.

CE

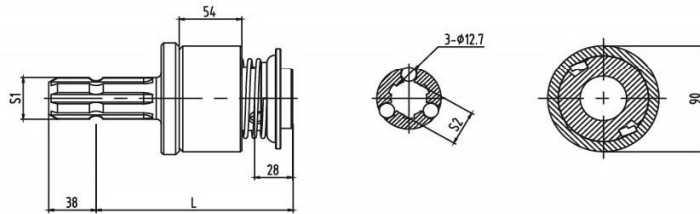
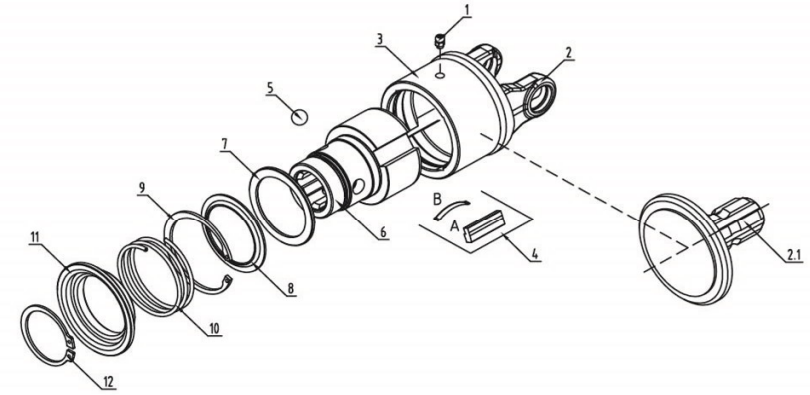
CE

Overrunning clutch RL / RLS Series

Overrunning clutch RL / RLS Series



Series	Image	L	Torque Nm max.	S	Type	
					1 3/8"-Z6	1 3/8"-Z21
110		14.0	3000	1 3/8"-Z6 1 3/8"-Z21	RL110138	RL110121
220		14.3			RL220138	RL220121
311		16.5			RL311138	RL311121
421		15.0			RL421138	RL421121
500		15.5			RL500138	RL500121
622		16.2			RL622138	RL622121
824		17.7			RL824138	RL824121



L	Torque Nm max.	S1	S2	Type
142	3800	1 3/8"-Z6	1 3/8"-Z21	138RLS121
		1 3/8"-Z21	1 3/8"-Z6	121RLS138

ITEM	Size	DeScription	Notes
1		Grease	M6x1
2	110	Flange yoke	
	220		
	311		
	421		
	500		
	622		
824			
2.1		Spline hub.	1 3/8"-Z6 1 3/8"-Z21
3		Tube	L=54
4		A: Ratchet B: Leaf + Spring	
5		Ball	1/2"
6		Spline hub.	1 3/8"-Z6 1 3/8"-Z21
7		Retaining washer ring	
8		Spring push ring	
9		Circlip	
10		Collar spring	
11		Sliding sleeve collar	
12		Circlip	

NOTE: available upon request for anti-clockwise direction of rotation.

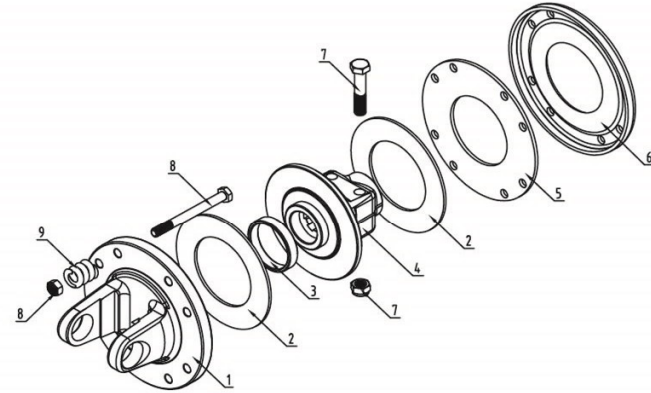
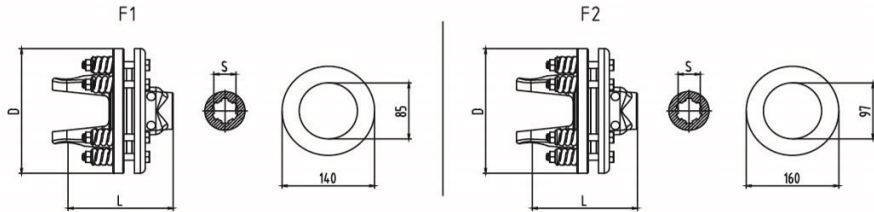
The device is used to transmit the motion in a single rotation direction, when the tractor drives the implement. During the stopping phase, with the tractor PTO disengaged and the implement still moving, the transmission is disconnected. This device is useful for operating machinery with high rotation inertia because during the stopping phase, the tractor PTO is dis-engaged from the driven machine.

CE

CE

Friction torque limiter FFV1-FFV2 Series

Friction torque limiter FFV1-FFV2 Series



Series		F1 - F2	S	D	L	Torque Nm max.	Type
421	27x74.6	F1	1 3/8"-Z6	180	154	900	FFV1421138
			1 3/8"-Z21				FFV1421121
		F2	1 3/8"-Z6	200		1200	FFV2421138
			1 3/8"-Z21				FFV2421121
500	30.2x80	F1	1 3/8"-Z6	180	154	900	FFV1500138
			1 3/8"-Z21				FFV1500121
		F2	1 3/8"-Z6	200		1200	FFV2500138
			1 3/8"-Z21				FFV2500121
622	30.2x92	F1	1 3/8"-Z6	180	161	900	FFV1622138
			1 3/8"-Z21				FFV1622121
			1 3/8"-Z6				FFV2622138
		F2	1 3/8"-Z21	200		1200	FFV2622121
			1 3/4"-Z6				FFV2622134
			1 3/4"-Z20				FFV2622120
824	34.9x106.5	F2	1 3/8"-Z6	200	169	1200	FFV2824138
			1 3/8"-Z21				FFV2824121
			1 3/4"-Z6				FFV2824134
			1 3/4"-Z20				FFV2824120
2400(035)	32x76	F2	1 3/8"-Z6	200	154	1200	FFVT2035138
			1 3/8"-Z21				FFVT2035121
			1 3/4"-Z6				FFVT2035134
			1 3/4"-Z20				FFVT2035120

ITEM	DeScription	Notes
1	Flange yoke	
2	Friction disc	φ140x85 φ160x97
3	Bushing	
4	Spline hub	1 3/8"-Z6 1 3/8"-Z21 1 3/4"-Z6 1 3/4"-Z20
5	Inner plate	
6	Pressure plate	
7	Bolt + Nut	M12 8.8CL.
8	Bolt + Nut	M10 8.8CL.
9	Speing	

The torque limiter is activated when the setting torque exceeds the calibration torque. During the torque peak limiting phase, the clutch continues to transmit power. The clutch is useful as a safety device to protect against load peaks and to start machines with high rotational inertia. It is recommended to ensure that the setting value is correct to avoid excessive heating of the friction discs (insufficient setting) or clutch seizing (excessive setting).

Friction clutches may become hot during use.

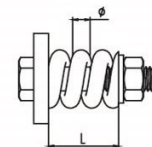


Do not touch!

Keep the area around the friction clutch clear of any material which could catch fire and avoid prolonged slipping.

Torque Specifications:

Spring L	F1			F2		
	φ5 Nm	φ6 Nm	φ7 Nm	φ5 Nm	φ6 Nm	φ7 Nm
L=28.5	240	390	640	280	470	770
L=28	320	510	850	360	610	1010
L=27.5	380	640	1070	440	740	1220
L=27	460	750	1230	520	860	1400
L=26.5	520	850	1360	590	980	1570
L=26	580	930	-	650	1070	-
L=25.5	620	-	-	700	-	-

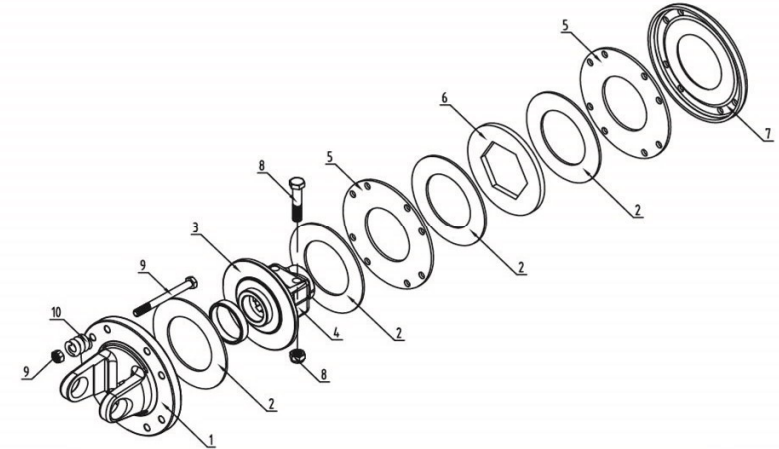
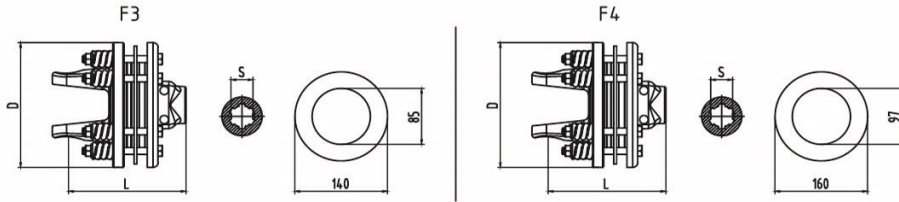


CE

CE

Friction torque limiter FFV3-FFV4 Series

Friction torque limiter FFV3-FFV4 Series



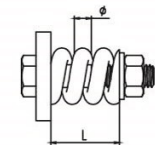
Series	Image	F3 - F4	S	D	L	Torque Nm max.	Type
500	30.2x80	F3	1 3/8"-Z6	180	168	2000	FFV3500138
			1 3/8"-Z21				FFV3500121
		F4	1 3/8"-Z6	200	168		FFV4500138
			1 3/8"-Z21				FFV4500121
			1 3/4"-Z6				FFV4500134
622	30.2x92	F3	1 3/8"-Z6	180	175	2000	FFV3622138
			1 3/8"-Z21				FFV3622121
		F4	1 3/8"-Z6	200	177		FFV4622138
			1 3/8"-Z21				FFV4622121
			1 3/4"-Z6				FFV4622134
824	34.9x106.5	F4	1 3/8"-Z6	200	182	2500	FFV4824138
			1 3/8"-Z21				FFV4824121
			1 3/4"-Z6				FFV4824134
			1 3/4"-Z20				FFV4824120
			1 3/8"-Z6				FFV4035138
2400 (035)	32x76	F4	1 3/8"-Z21	200	161	1450	FFV4035121
			1 3/4"-Z6				FFV4035134
			1 3/4"-Z20	FFV4035120			
			1 3/8"-Z6	FFV4036138			
2500 (036)	36x89	F4	1 3/8"-Z21	200	167	1700	FFV4036121
			1 3/4"-Z6				FFV4036134
			1 3/4"-Z20	FFV4036120			
			1 3/8"-Z6	FFV4026138			
2600 (026)	42x104	F4	1 3/8"-Z21	200	196	2000	FFV4026121
			1 3/4"-Z6				FFV4026134
			1 3/4"-Z20	FFV4026120			
			1 3/4"-Z20	FFV4026120			

ITEM	DeScription	Notes
1	Flange yoke	
2	Friction disc	φ140x85 φ160x97
3	Bushing	
4	Spline hub	1 3/8"-Z6 1 3/8"-Z21 1 3/4"-Z6 1 3/4"-Z20
5	Inner plate	
6	Drive plate	
7	Pressure plate	
8	Bolt + Nut	M12 8.8CL.
9	Bolt + Nut	M10 8.8CL.
10	Speing	

The torque limiter is activated when the setting torque exceeds the calibration torque. During the torque peak limiting phase, the clutch continues to transmit power. The clutch is useful as a safety device to protect against load peaks and to start machines with high rotational inertia. It is recommended to ensure that the setting value is correct to avoid excessive heating of the friction discs (insufficient setting) or clutch seizing (excessive setting).

Torque Specifications:

Spring L	F1			F2		
	φ5 Nm	φ6 Nm	φ7 Nm	φ5 Nm	φ6 Nm	φ7 Nm
L=28.5	240	390	640	280	470	770
L=28	320	510	850	360	610	1010
L=27.5	380	640	1070	440	740	1220
L=27	460	750	1230	520	860	1400
L=26.5	520	850	1360	590	980	1570
L=26	580	930	-	650	1070	-
L=25.5	620	-	-	700	-	-



Friction clutches may become hot during use.



Do not touch!

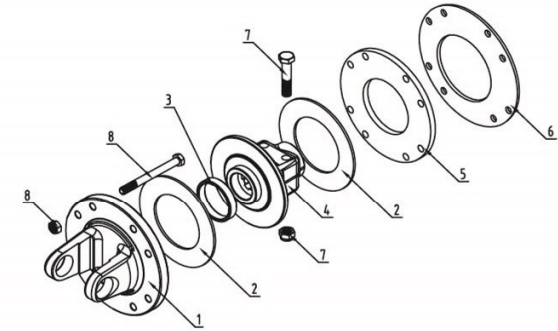
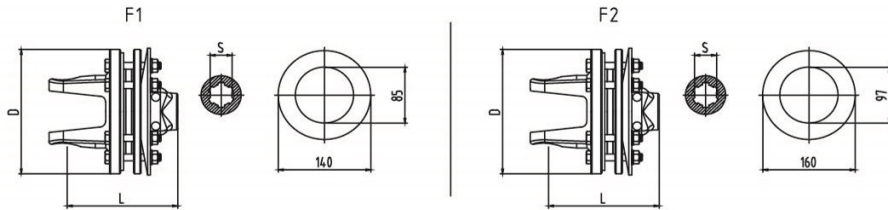
Keep the area around the friction clutch clear of any material which could catch fire and avoid prolonged slipping.


CE

CE

Friction torque limiter FFVT1-FFVT2 Series

Friction torque limiter FFVT1-FFVT2 Series



Series		F1 - F2	S	D	L	Torque Nm max.	Type
421	27x74.6	F1	1 3/8"-Z6	180	154	1000	FFVT1421138
			1 3/8"-Z21				FFVT1421121
		F2	1 3/8"-Z6	200	1500	FFVT2421138	
			1 3/8"-Z21			FFVT2421121	
500	30.2x80	F1	1 3/8"-Z6	180	154	1000	FFVT1500138
			1 3/8"-Z21				FFVT1500121
		F2	1 3/8"-Z6	200	1500	FFVT2500138	
			1 3/8"-Z21			FFVT2500121	
622	30.2x92	F1	1 3/8"-Z6	180	161	1000	FFVT1622138
			1 3/8"-Z21				FFVT1622121
			1 3/8"-Z6				FFVT2622138
		F2	1 3/8"-Z21	200	1500	FFVT2622121	
			1 3/4"-Z6			FFVT2622134	
			1 3/4"-Z20			FFVT2622120	
824	34.9x106.5	F2	1 3/8"-Z6	200	169	1800	FFVT4824138
			1 3/8"-Z21				FFVT4824121
			1 3/4"-Z6				FFVT4824134
			1 3/4"-Z20				FFVT4824120
2400(035)	32x76	F2	1 3/8"-Z6	200	154	1200	FFVT4035138
			1 3/8"-Z21				FFVT4035121
			1 3/4"-Z6				FFVT4035134
			1 3/4"-Z20				FFVT4035120

ITEM	DeScription	Notes
1	Flange yoke	
2	Friction disc	φ140x85 φ160x97
3	Bushing	
4	Spline hub	1 3/8"-Z6 1 3/8"-Z21 1 3/4"-Z6 1 3/4"-Z20
5	Inner plate	
6	Belleville spring	
7	Bolt + Nut	M12 8.8CL.
8	Bolt + Nut	M10 8.8CL.

The torque limiter is activated when the setting torque exceeds the calibration torque. During the torque peak limiting phase, the clutch continues to transmit power. The clutch is useful as a safety device to protect against load peaks and to start machines with high rotational inertia. It is recommended to ensure that the setting value is correct to avoid excessive heating of the friction discs (insufficient setting) or clutch seizing (excessive setting).

Friction clutches may become hot during use.



Do not touch!

Keep the area around the friction clutch clear of any material which could catch fire and avoid prolonged slipping.

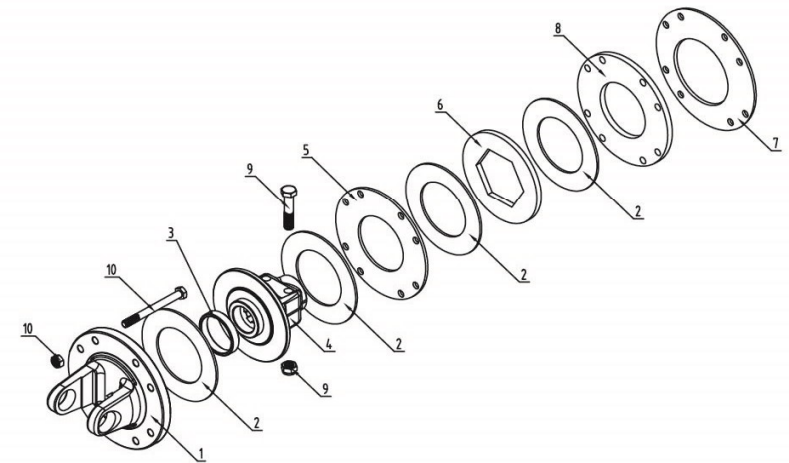
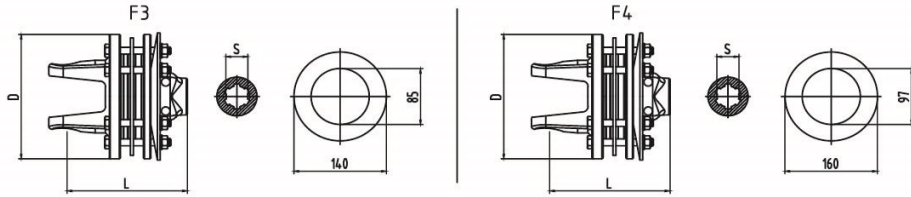



CE

CE

Friction torque limiter FFVT3-FFVT4 Series

Friction torque limiter FFVT3-FFVT4 Series



Series		F3 - F4	S	D	L	Torque Nm max.	Type
500	30.2x80	F3	1 3/8"-Z6	180	168	2000	FFVT3500138
			1 3/8"-Z21				FFVT3500121
			1 3/8"-Z6				FFVT4500138
		F4	1 3/8"-Z21	200	168	2000	FFVT4500121
			1 3/4"-Z6				FFVT4500134
			1 3/4"-Z20				FFVT4500120
622	30.2x92	F3	1 3/8"-Z6	180	175	2000	FFVT3622138
			1 3/8"-Z21				FFVT3622121
			1 3/8"-Z6				FFVT4622138
		F4	1 3/8"-Z21	200	177	2000	FFVT4622121
			1 3/4"-Z6				FFVT4622134
			1 3/4"-Z20				FFVT4622120
824	34.9x106.5	F4	1 3/8"-Z6	200	182	2500	FFVT4824138
			1 3/8"-Z21				FFVT4824121
			1 3/4"-Z6				FFVT4824134
			1 3/4"-Z20				FFVT4824120
			1 3/8"-Z6				FFVT4035138
2400 (035)	32x76	F4	1 3/8"-Z21	200	161	1450	FFVT4035121
			1 3/4"-Z6				FFVT4035134
			1 3/4"-Z20		FFVT4035120		
2500 (036)	36x89	F4	1 3/8"-Z6	200	167	1700	FFVT4036138
			1 3/8"-Z21				FFVT4036121
			1 3/4"-Z6		FFVT4036134		
			1 3/4"-Z20				FFVT4036120
2600 (026)	42x104	F4	1 3/8"-Z6	200	196	2000	FFVT4026138
			1 3/8"-Z21				FFVT4026121
			1 3/4"-Z6		FFVT4026134		
			1 3/4"-Z20		FFVT4026120		

ITEM	DeScription	Notes
1	Flange yoke	
2	Friction disc	φ140x85 φ160x97
3	Bushing	
4	Spline hub	1 3/8"-Z6 1 3/8"-Z21 1 3/4"-Z6 1 3/4"-Z20
5	Inner plate	
6	Drive plate	
7	Belleville spring	
8	Inner plate	
9	Bolt + Nut	M12 8.8CL.
10	Bolt + Nut	M10 8.8CL.

The torque limiter is activated when the setting torque exceeds the calibration torque. During the torque peak limiting phase, the clutch continues to transmit power. The clutch is useful as a safety device to protect against load peaks and to start machines with high rotational inertia. It is recommended to ensure that the setting value is correct to avoid excessive heating of the friction discs (insufficient setting) or clutch seizing (excessive setting).

Friction clutches may become hot during use.



Do not touch!

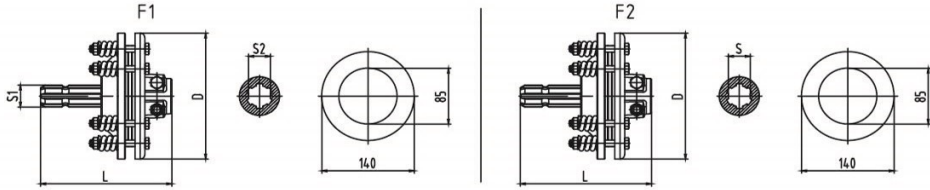
Keep the area around the friction clutch clear of any material which could catch fire and avoid prolonged slipping.

CE

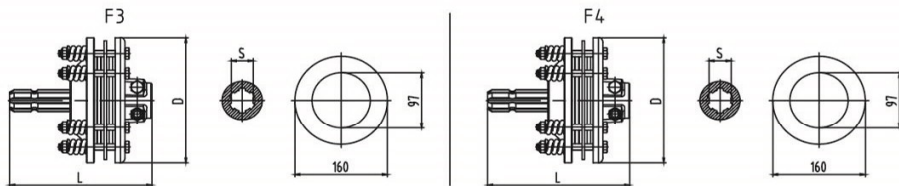
CE

Friction torque limiter FFVS1-FFVS2-FFVS3-FFVS4 Series

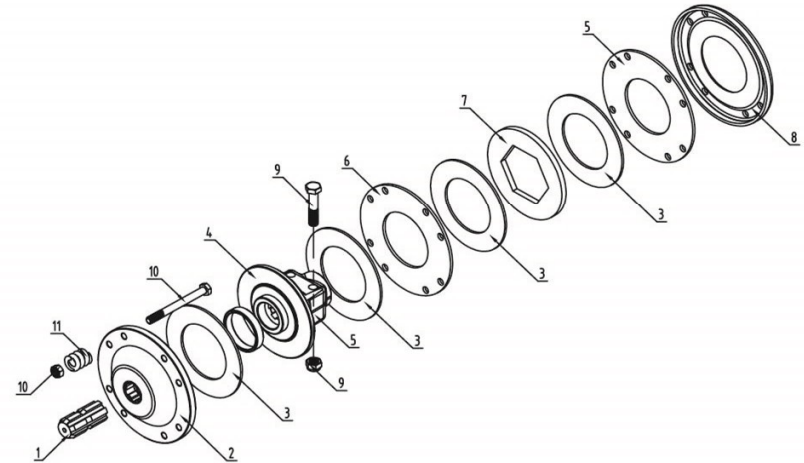
Friction torque limiter FFVS1-FFVS2-FFVS3-FFVS4 Series



F1 - F2	S1	S2	D	L	Torque Nm max.	Type
F1	1 3/8"-Z6	1 3/8"-Z6	180	200	900	FFVS1138
	1 3/8"-Z21	1 3/8"-Z21				FFVS1121
	38x32x6-z8	38x32x6-z8				FFVS138328
	1 3/4"-Z6	1 3/4"-Z6				FFVS1134
	1 3/4"-Z21	1 3/4"-Z21				FFVS1120
F2	1 3/8"-Z6	1 3/8"-Z6	200	200	1200	FFVS2138
	1 3/8"-Z21	1 3/8"-Z21				FFVS2121
	38x32x6-z8	38x32x6-z8				FFVS238328
	1 3/4"-Z6	1 3/4"-Z6				FFVS2134
	1 3/4"-Z21	1 3/4"-Z21				FFVS2120



F3 - F4	S1	S2	D	L	Torque Nm max.	Type
F3	1 3/8"-Z6	1 3/8"-Z6	180	217	900	FFVS3138
	1 3/8"-Z21	1 3/8"-Z21				FFVS3121
	38x32x6-z8	38x32x6-z8				FFVS338328
	1 3/4"-Z6	1 3/4"-Z6				FFVS3134
	1 3/4"-Z21	1 3/4"-Z21				FFVS3120
F4	1 3/8"-Z6	1 3/8"-Z6	200	217	1200	FFVS4138
	1 3/8"-Z21	1 3/8"-Z21				FFVS4121
	38x32x6-z8	38x32x6-z8				FFVS438328
	1 3/4"-Z6	1 3/4"-Z6				FFVS4134
	1 3/4"-Z21	1 3/4"-Z21				FFVS4120



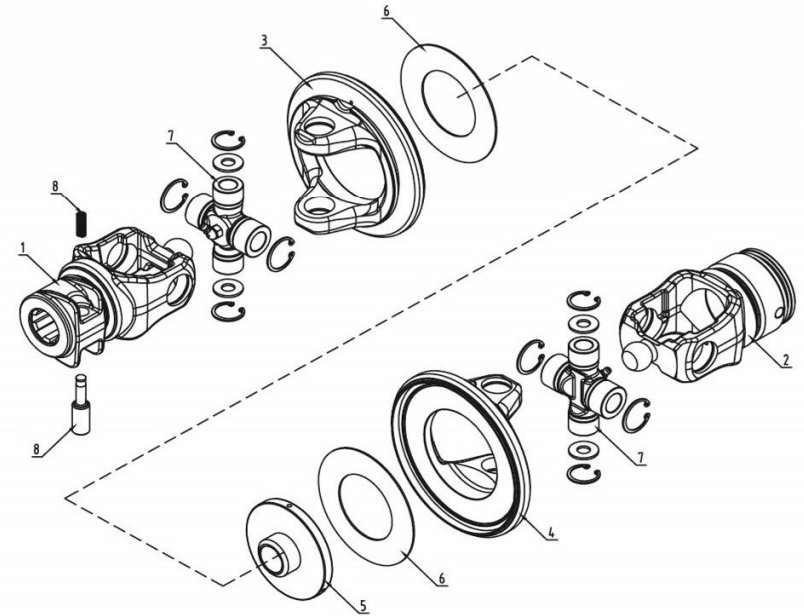
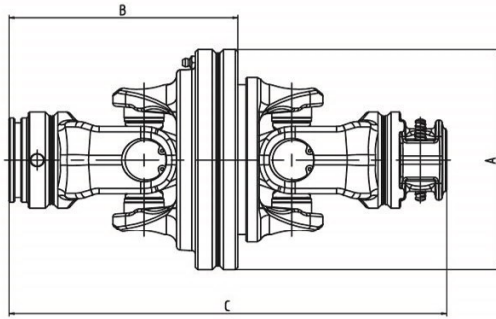
ITEM	DeSCRIPTION	Notes
1	Spline shaft	1 3/8"-Z6 1 3/8"-Z21 38x32x6-z8 1 3/4"-Z6 1 3/4"-Z20
2	Flange yoke	
3	Friction disc	φ140x85 φ160x97
4	Bushing	
5	Spline hub	1 3/8"-Z6 1 3/8"-Z21 38x32x6-z8 1 3/4"-Z6 1 3/4"-Z20
6	Inner plate	
7	Drive plate	
8	Pressure plate	
9	Bolt + Nut	M12 8.8CL.
10	Bolt + Nut	M10 8.8CL.
11	Spring	

CE

CE

Constant velocity joint ( SFT.80° ) CV Series

Constant velocity joint ( SFT.80° ) CV Series



Size		A	B	C						Type			
421	23.8x91 27x74.6	155	164	315	T364	CV46236	-	-	-	-	CV238000	CV2386138	CV4001
					-	-	L344	CV2386234	-	-		CV2386121	CV4001121
					-	-	L413	CV2386241	-	-		CV2386138	CV238001
					-	-	-	-	-	-		N/A	N/A
					-	-	-	-	-	-		CV2386138	CV238002
					-	-	-	-	-	-		N/A	N/A
622	27x94 32x76	166	184	350	T454	CV66245	-	-	-	-	CV35000	CV356138	CV6001
					-	-	-	-	-	-		CV356121	CV6001121
					T544	CV66254	-	-	-	-		CV356138	CV6002
					-	-	L395	CV356239	-	-		CV356121	CV6002121
					-	-	-	-	-	-		CV356138	CV35001
					-	-	L484	CV356248	-	-		N/A	N/A
824	32x106 36x88.8	184	184	350	T544	CV86254	-	-	-	-	CV36000	CV356138	CV35002
					-	-	-	-	-	-		N/A	N/A
					-	-	-	-	S510	CV366251		CV366138	CV8001
					-	-	-	-	-	-		CV366121	CV8001121
					-	-	-	-	-	-		CV366120	CV8001120
					-	-	-	-	-	-		CV366138	CV36001
					-	-	-	-	-	-		CV366121	CV36001121
					-	-	-	-	-	-		CV366120	CV36001120
					-	-	-	-	-	-		CV366138	CV36002
					-	-	-	-	S614	CV366261		CV366121	CV36002121
-	-	-	-	-	-	CV366120	CV36002120						

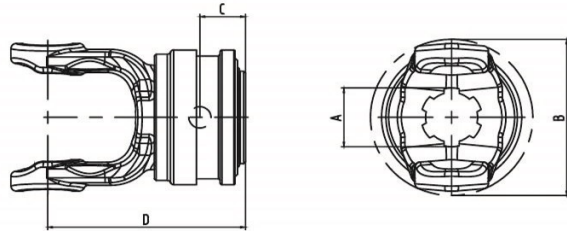
ITEM	DeScription	Notes
1	Yoke	1 3/8"-Z6 1 3/8"-Z21 38x32x6-z8 1 3/4"-Z6 1 3/4"-Z20
2	Yoke	
3	Flange yoke.a	
4	Flange yoke.b	
5	Slider	
6	Belleville spring	
7	Cross + Bearing kit	
8	Pin + Spring	


CE

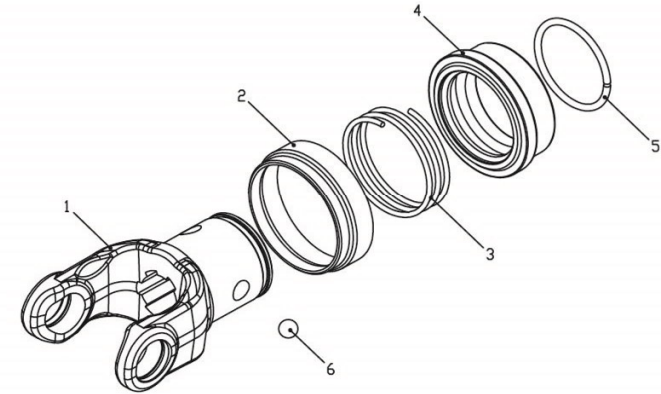
CE

Speedlash SP Series

Speedlash SP Series



Series		A	B	C	D	Type
110	22x54	1 3/8"-Z6	73	26	98	SP110138
		1 3/8"-Z21				SP110121
220	23.8x61.2	1 3/8"-Z6	80	26	104	SP220138
		1 3/8"-Z21				SP220121
421	27x74.6	1 3/8"-Z6	94	26	111	SP421138
		1 3/8"-Z21				SP421121
500	30.2x80	1 3/8"-Z6	100	26	115	SP500138
		1 3/8"-Z21				SP500121
622	30.2x92	1 3/8"-Z6	115	26	120	SP622138
		1 3/8"-Z21				SP622121
		1 3/4"-Z6	29.5	131	SP622134	
		1 3/4"-Z20			SP622120	
824	34.9x106.5	1 3/8"-Z6	132	26	137	SP824138
		1 3/8"-Z21				SP824121
		1 3/4"-Z6	29.5	142	SP824134	
		1 3/4"-Z20			SP824120	

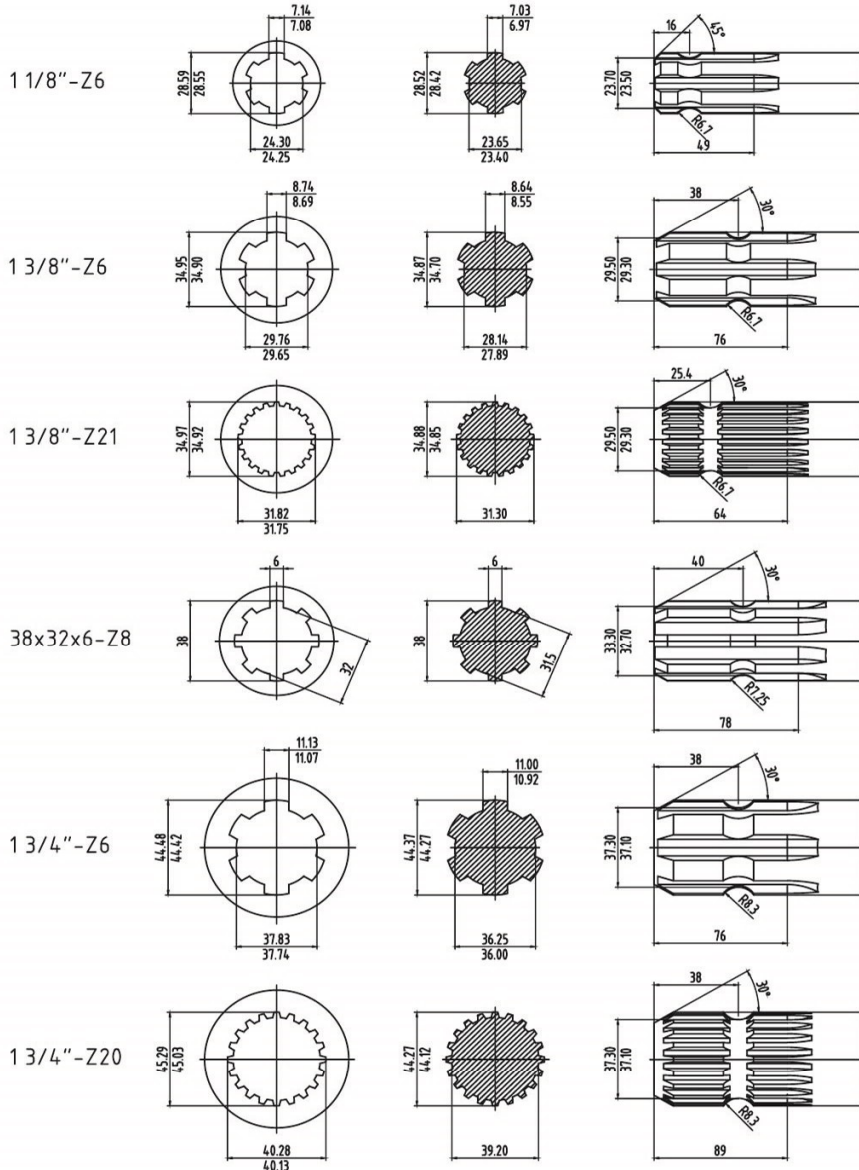


ITEM	Size	DeScription	Notes
1	110	Yoke	Spline:1 3/8"-Z6 1 3/8"-Z21
	220		
	421		
	500		
	622		
	824		
2		Protection set	
3		Collar spring	
4		Sliding sleeve collar	
5		Snap ring	
6		Ball	1/2"

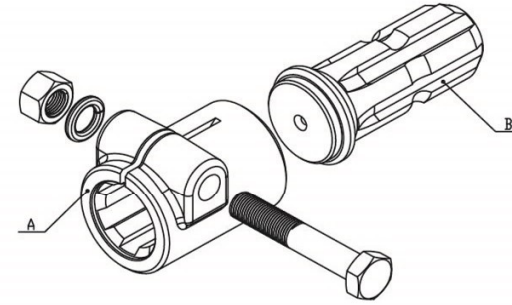
CE

CE

Splined dimensions



PTO Adaptor & splined shaft



Code	A	B	Length	Code	A	B	Length
138B118	13/8"-Z6	1 1/8"-Z6	135	138P118	13/8"-Z6	1 1/8"-Z6	135
138B138		1 3/8"-Z6	160	138P138		1 3/8"-Z6	160
138B134		1 3/4"-Z6	165	138P134		1 3/4"-Z6	165
138B121		1 3/8"-Z21	160	138P121		1 3/8"-Z21	160
138B120		1 3/4"-Z20	165	138P120		1 3/4"-Z20	165
134B138	13/4"-Z6	1 3/8"-Z6	160	121P118	13/8"-Z21	1 1/8"-Z6	135
134B121		1 3/8"-Z21	170	121P138		1 3/8"-Z6	160
134B120		1 3/4"-Z20	175	121P134		1 3/4"-Z6	165
121B118	13/8"-Z21	1 1/8"-Z6	135	121P120	1 3/4"-Z20		
121B138		1 3/8"-Z6	160				
121B134		1 3/4"-Z6	165				
121B120		1 3/4"-Z20					
120B138	13/4"-Z20	1 3/8"-Z6	170				
120B134		1 3/4"-Z6	175				
120B121		1 3/8"-Z21	170				

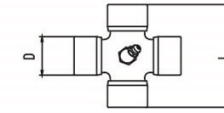
CE

CE

PTO Adaptor & splined shaft

CROSS

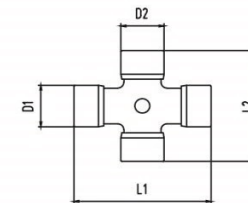
L	Splined bush					Spline joint
	F 1 1/8"-Z6	F 1 3/8"-Z6	F 1 3/4"-Z6	F 1 3/8"-Z21	F 1 3/4"-Z20	F 1 3/8"-Z6
60	PG118060	PG138060	PG134060	PG121060	PG120060	PG138060S
65	PG118065	PG138065	PG134065	PG121065	PG120065	PG138065S
80	PG118080	PG138080	PG134080	PG121080	PG120080	PG138080S
100	PG118100	PG138100	PG134100	PG121100	PG120100	PG138100S
120	PG118120	PG138120	PG134120	PG121120	PG120120	PG138120S
130	PG118130	PG138130	PG134130	PG121130	PG120130	PG138130S



L	Splined shaft(one end)				
	F 1 1/8"-Z6	F 1 3/8"-Z6	F 1 3/4"-Z6	F 1 3/8"-Z21	F 1 3/4"-Z20
-	SG118---	SG138---	SG134---	SG121---	SG120---

L	Splined shaft(both ends)				
	F 1 1/8"-Z6	F 1 3/8"-Z6	F 1 3/4"-Z6	F 1 3/8"-Z21	F 1 3/4"-Z20
-	SG118D---	SG138D---	SG134D---	SG121D---	SG120D---

Series	Type	D	L
165	AP165	19	52
110	610.100	22	54
010/2100	AP0-10	22	55
220/2200	600.220	23.8	61.2
311	AP3-11	27	70
421/2300	AP421	27	74.6
500	AP500	30.2	80
622	600.622	30.2	92
723	AP723	30.2	106.5
7N	AP7N	34.9	94
824	AP824	34.9	106.5
035/2400	AP0-35	32	76
036/2500	AP36	36	88.8
026/2600	620.026	42	104



SERIES	Type	D1	L1	D2	L2
CVJ4	AP2106	23.8	91	27	74.6
CVJ6	AP3506	27	94	32	76
CVJ8	AP3606	32	106	36	88.8

CE

CE

Safety and working conditions

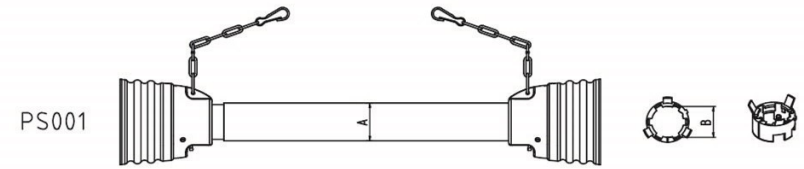
Safety and working conditions

Inner				Outer			
Type	A	B	Code	Type	A	B	Code
110	26.5	3.5	T263	110	33	2.6	T332
220	29	3.5	T293	220	36	3.4	T363
311	36	3.4	T363	311	43	3	T433
421	36	4.5	T364	421	43	3	T433
500	45	4	T454	500	52	3	T523
622	45	4	T454	622	54	4	T544
723	45	5.5	T455	723	54	4	T544
824	54	4	T544	824	63	4	T634
9	54	6	T546	9	63	4	T634

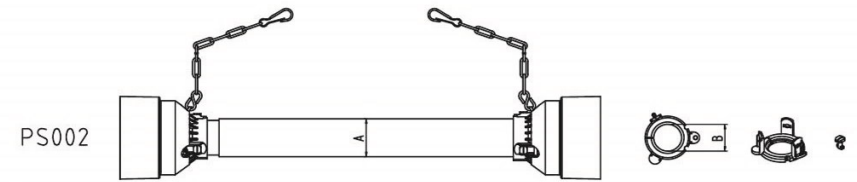
Inner					Outer				
Type	A	B	S	Code	Type	A	B	S	Code
2100	23.8	31	5	L235	2100	30	39	3	L303
2100/2200/2300	34.5	40	4	L344	2100/2200/2300	41.3	48	3	L413
2300/2400	39.5	49	5	L395	2300/2400	48	57.5	4	L484

Inner				Outer					
Type	A	B	S	Code	Type	A	B	S	Code
2400(035)/2500(036)	51	37	-	S510	2400(035)/2500(036)	61	47	4.5	S614
2600(026)	61	47	4.5	S614	2600(026)	71	57.5	5	S715

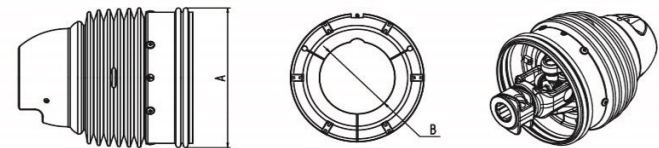
Type	A	Length	Code	Type	A	Length	Code
50HP	40-Z12	--	G40Z12--	50HP	58	3	R583
70/90/100HP	45-Z14	--	G45Z14--	70/90/100HP	65	3.5	R653
130HP	55-Z20	--	G55Z20--	130HP	75	4	R754



Series	Tube (A)		Retaining collar (B)	
	Inner	Outer	Inner	Outer
110	55.5	61	34	40
220			41	47
311 - 421	61	66.5	47	54
500	75	81.2	54.5	63
622 - 7N			60	69
824	90	96	69.5	81.5



Series	Tube (A)		Retaining collar (B)	
	Inner	Outer	Inner	Outer
110	55.5	61	34	40
220			41	47
311 - 421	61	66.5	47	54
500	75	81.2	54.5	63
622 - 7N			60	69
824	90	96	69.5	81.5



Series	A	B
421	210	117
622	225	123
824	245	127

Safety and working conditions

S&J Has always considered safety to be one of the most important design and construction parameters for its products which are all built in full compliance with the international ISO standard and EU safety regulations. Information on safety and on correct final user's application of the PTO drive shaft are supplied in safety labels and in the "Use and Maintenance" Manual provided with all PTO drive shafts. It is the customer responsibility to inform S&J. about the Country to which the PTO drive shafts will be delivered, in order to provide them with the suitable Manuals and Labels.

Equipped with:

- Safety labels
- Instruction handbook
- Anti-rotation chains




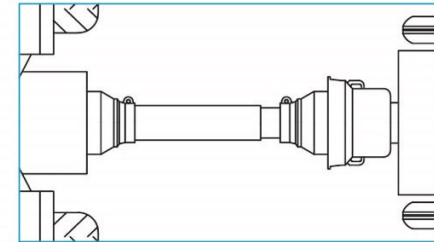
Label on outer protective tube



"Use and Maintenance" handbook

Safety and working conditions

 Please read carefully before use "Use and Maintenance" handbook. Before starting to work, make sure that:

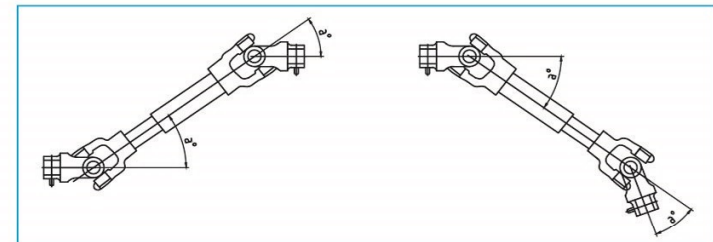


• Ensure that all driveline, tractor and implement shields are functional and in place before operation. Damaged or missing parts must be replaced with original spare parts, correctly installed, before using the driveline.



• Ensure that the driveline is securely attached to the tractor.

• The joint angles are limited and equal; for operations that exceed 35°, disengage the power take-off.



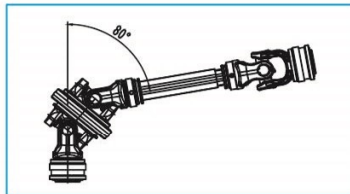


CE

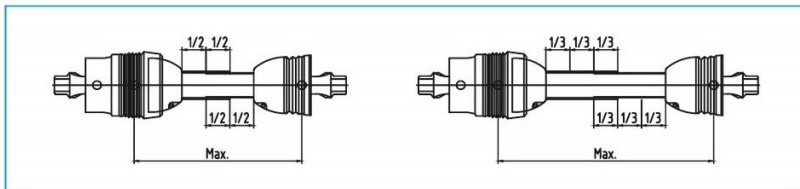
CE

Safety and working conditions

- the PTO drive shaft joint does not operate continuously with an angle close to 80°, but only for brief periods (steering).



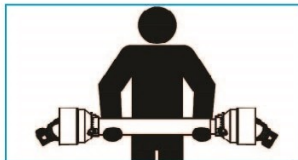
- 1/3 of the transmissions telescopic elements are always overlapping in the STD transmission and 1/2 in the PTO drive shaft transmissions..



- DANGER! Rotating driveline-contact can cause death. Keep away! Do not wear loose clothing, jewelry, or hair that could become entangled with the driveline.

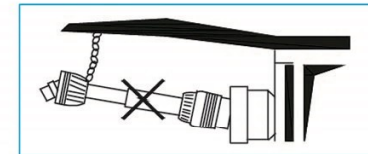


- The transmission must be transported horizontally to prevent accidents (since it may slip out) or to avoid damage to safety guards. Depending on the weight, use a suitable means of transport.



Safety and working conditions

- Never use the safety chains to support the driveline for storage. Always use the support on the implement.



- Do not stand on the driveline. Do not step over, or go under the driveline.



- Disengage the P.T.O, turn off the tractor engine and remove key before approaching the implement or performing maintenance work.



- Friction clutches may become hot during use .Do not touch! Keep the area around the friction clutch clear of any material which could catch fire and avoid prolonged slipping.

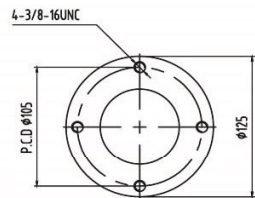
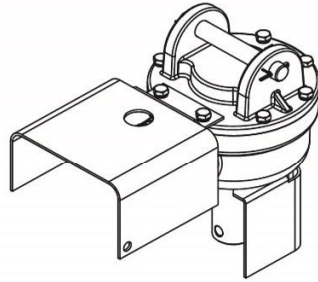
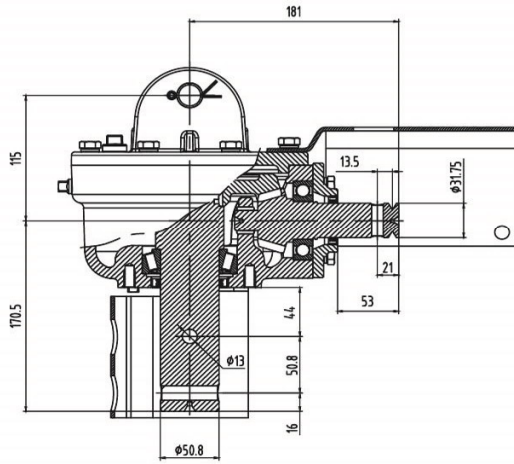


CE

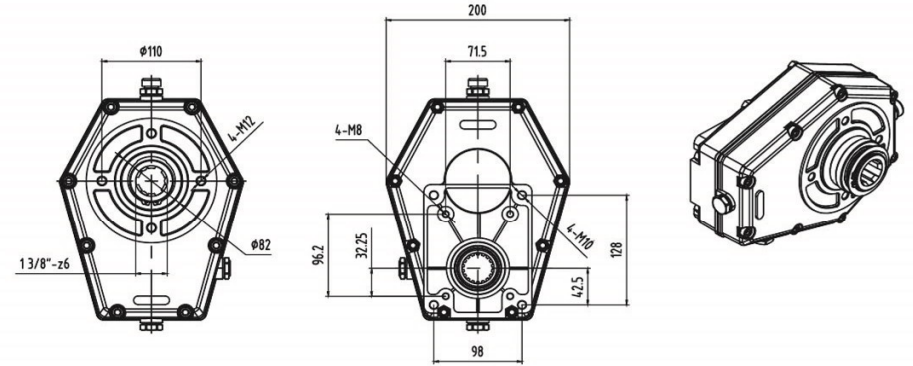
CE

Gear box

Gear box



Part NO.	Input					Output	
	Ratio	R.P.M	KW	HP - CV	N.m	N.m	R.P.M
SJ-S240701AS	3 : 1	540	45	60	778	2334	180



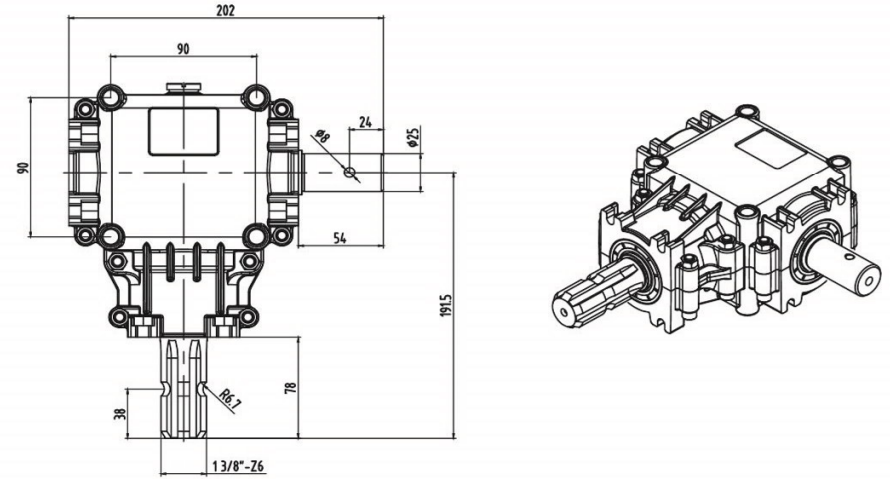
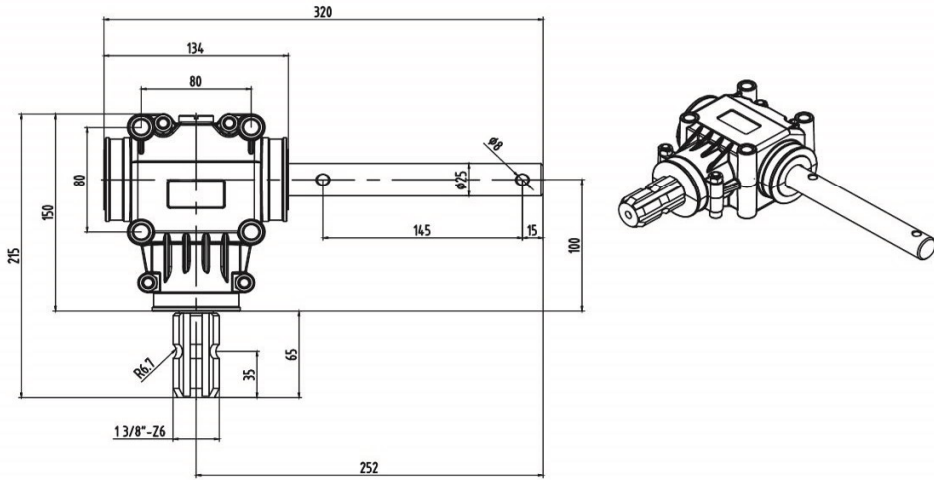
Part NO.	Input					Output	
	Ratio	R.P.M	KW	HP - CV	N.m	N.m	R.P.M
SJ-CN00090	3.76 : 1	540	13	17.5	158	230	143
SJ-CN00097	3.05 : 1	540	13	17.5	158	230	177

CE

CE

Gear box

Gear box



Part NO.		SJM1515-1
Ratio		1 : 1
Module		4.5
Input Description		Spline shaft (1 3/8"-Z6)
Output Description		Plain shaft (25)
Housing Material		YL104
Gear Material		20CrMnTi
Shaft Material		40Cr/20CrMnTi
Housing Surface Colour		According to the customers requirements
N.W	kg	4.2
Rated input power	HP	11
	KW	8
Rated output torque	N.m	14
Rated input speed	R.P.M	54.0

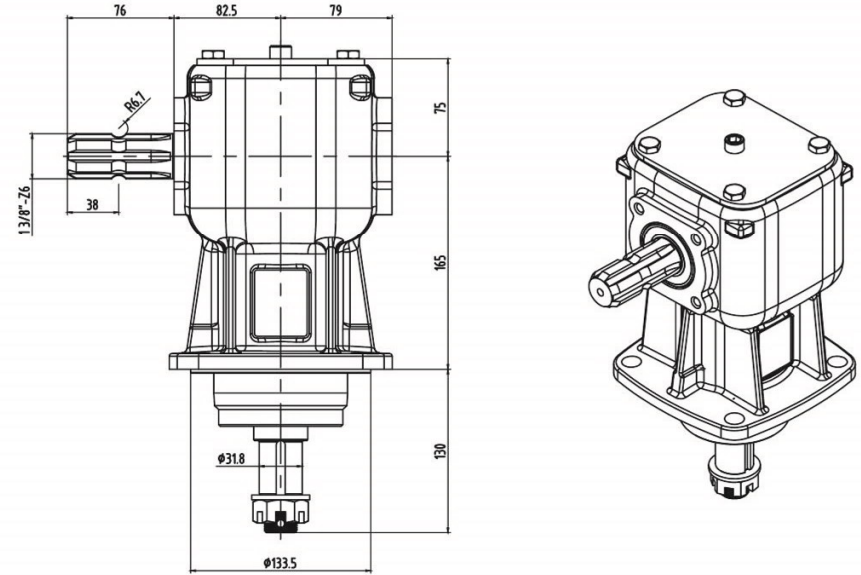
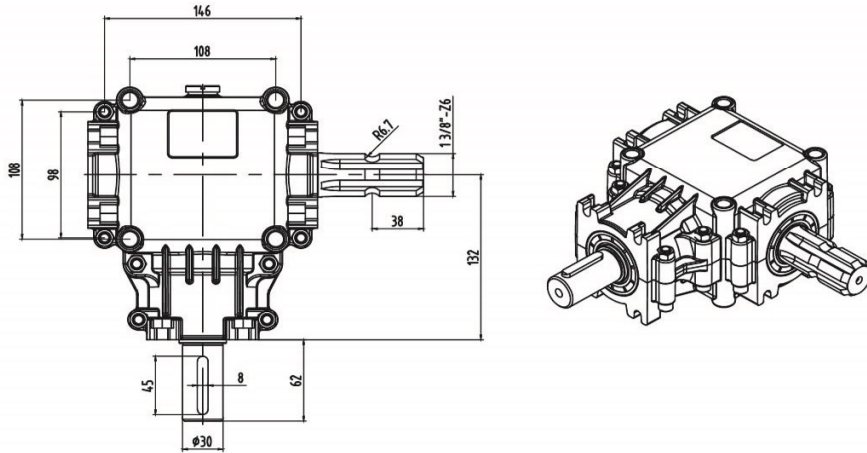
Part NO.		SJM1616-2
Ratio		1 : 1
Module		4.5
Input Description		Spline shaft (1 3/8"-Z6)
Output Description		Plain shaft (25)
Housing Material		YL104
Gear Material		20CrMnTi
Shaft Material		40Cr/45#
Housing Surface Colour		Black plastic spray
N.W	kg	4.7
Rated input power	HP	15
	KW	11
Rated output torque	N.m	18.9
Rated input speed	R.P.M	54.0

CE

CE

Gear box

Gear box



Part NO.	SJM2509-2F.W	
Ratio	1 : 2.78	
Module	3.8	
Input Description	Spline shaft (1 3/8"-Z6)	
Output Description	Plain shaft (φ30)	
Housing Material	YL104	
Gear Material	20CrMnTi	
Shaft Material	40Cr/20CrMnTi	
Housing Surface Colour	True colors	
N.W	kg	7.4
Rated input power	HP	14
	KW	10
Rated output torque	N.m	4.9
Rated input speed	R.P.M	54.0

Part NO.	SJM2312-1	
Ratio	1 : 1.92	
Module	5	
Input Description	Spline shaft (1 3/8"-Z6)	
Output Description	Cone base aequilate spline shaft	
Housing Material	QT400-18	
Gear Material	20CrMnTi	
Shaft Material	20CrMnTi	
Housing Surface Colour	According to the customers requirements	
N.W	kg	16
Rated input power	HP	30
	KW	22
Rated output torque	N.m	20
Rated input speed	R.P.M	54.0