



GENERAL CATALOGUE



EUROCARDAN
ENERGY ON THE MOVE



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1. INTRODUCTION

1.1 MASTER LINE

The Master cardan drives are conceived and produced with the constant aim of offering a reliable product, designed in compliance with the safety standards, promoting easy installation and rapid maintenance.

All this has been achieved thanks to a design department that makes use of cutting-edge tools as well as the know-how accumulated by Eurocardan in almost half a century of life, a production plant able to guarantee a high quality standard thanks to technologically advanced machinery, an efficient quality control department and a testing laboratory able to extract valuable information from durability and destructive tests.

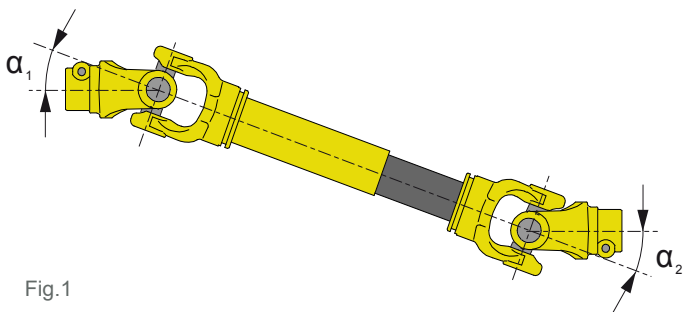
The range of products offered by Eurocardan is very wide and able to satisfy a wide variety of requirements, from those of the hobbyist user to those of the professional user.

This catalogue, relating to the Master product line, is intended to guide and accompany the reader in choosing the configuration of the product that best suits the application for which it will be used, helping them to identify the type of transmission and its dimensions that best suit their needs.

1.2 CHOICE AND APPLICATION OF THE CARDAN DRIVE

The universal joint, named after the Italian mathematician Gerolamo Cardano, has found considerable use in agriculture, especially in the last forty years. The cardan drive is generally used where it is necessary to transmit power between two non-aligned shafts and with variable relative distance.

The kinematic study of the universal joint shows that, due to the angle formed by the axes of the connected shafts (fig.1), the instantaneous transmission ratio (understood as the ratio of the instantaneous speeds of the driven and driving forks) is not kept constant, but has a periodic, sinusoidal trend. This in practice means that, even if the speed of the driving fork is uniform, as is almost always the case in agricultural applications, the speed of the driven fork is variable moment by moment, so it is an accelerated motion wheel and generates inertial torques if it is connected to a flywheel mass, with the consequent occurrence of vibrations and noise that are all the wider and more dangerous the greater the angle of the joint.



The cardan drive can be achieved by using a single joint, two joints and up to three joints in the most particular cases.

The single universal joint (the one consisting of two forks and a cross) is used in transmissions between two coplanar shafts at close distance whose axes form a certain angle.

The double universal joint is generally used when the axes are not concurrent but are skewed at a mutual distance such that use of the single joint is not possible.

In the event that the shafts are at a variable distance, double universal joint transmissions are used in which the two joints are connected by telescopic pipes. This is the most versatile and most used configuration for power transmission between tractors and agricultural machinery.

The three-joint transmission is used for even greater distances between shafts and to reduce transmission irregularity.

The objective of this chapter is to guide the customer towards correct identification of the cardan shaft for each specific application.

The choice of the cardan shaft is divided into 3 distinct phases:

1. Identification of the type of application;
2. Identification of the family and size of the tree;
3. Choice of the safety body.

2. IDENTIFICATION OF THE TYPE OF APPLICATION

The first phase of the correct identification of a cardan shaft requires knowledge of the requirements of the machine. Normally, the types of applications are divided into:

1. Carried machines;
2. Towed (or stationary) machines.

2.1 CARRIED MACHINES

In the case of carried machines, i.e. connected by a three-point connection, in the working condition the situation of fig.2 is applicable.

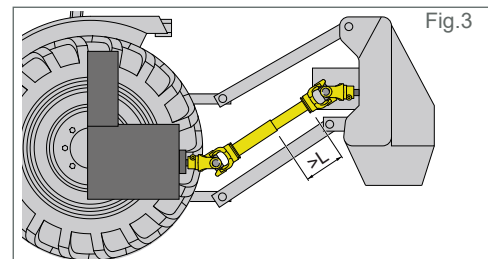
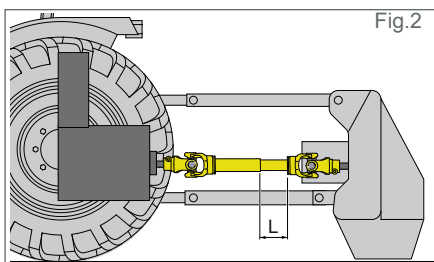
In this condition, the ideal situation is to have the two drive shafts of the tractor and of the machine as parallel and as aligned as possible to promote homogeneity or in any case to limit irregularity of the transmission.

In this position the cardan drive is in its minimum length condition and the angles to the joints are minimal.

In the condition of the lifted machine, however, the situation of fig.3 is valid in which, due to the kinematics of the coupling device, the transmission is at its maximum extension. The angles of the joints also increase and therefore it is necessary to stop the transmission to avoid damage to the cardan shaft.

In sizing the length of the cardan shaft, the conditions of use must be taken into account so that the two half shafts do not reach complete closure and/or instead maintain an adequate overlap of the telescopic pipes. In the event that a specific application requires elongations such as not to guarantee sufficient overlap, it is advisable to use telescopic elements with grooved profiles.

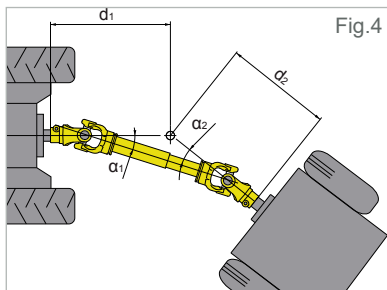
In working conditions, power take-offs (PTO) should respect the condition of parallelism and alignment as much as possible in order to ensure modest and equal joint angles as the amplitude of these angles influences the speed of the shaft.



2.2 MACHINES TOWED

With towed machines it is generally the case that, when the transmission is straight (Fig.2), it is also at the maximum length while, during steering, the length decreases as the steering angle increases.

During steering, the two transmission joints are angled according to the position of the machine attachment point on the tractor.



In the event that this point is equidistant between the two power take-offs ($d_1 = d_2$ in fig.4) of the tractor and the operating machine, then the two angles α_1 and α_2 are equal and therefore the transmission is defined as homokinetic.

If the attachment point is closer to the tractor or, less frequently, to the operating machine, the two angles α_1 and α_2 are not equal and the joint closest to the attachment point undergoes a greater angle than the other.

A solution to the problem of transmission irregularity at high joint angles is represented by the homokinetic joint.

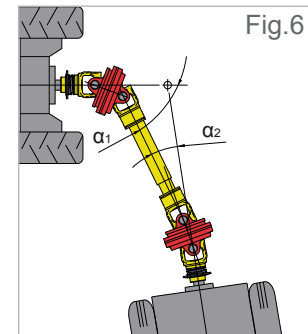
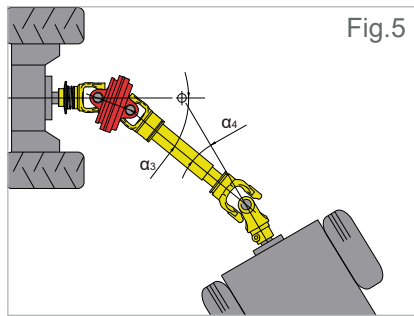
This joint has the peculiarity of being homokinetic in itself and therefore being able to work at different angles without incurring irregularities. In addition, compared to a normal joint, it can work at much higher joint angles up to 80° (but only for short periods, for example during steering).

The homokinetic joint can replace only one of the joints of a transmission, or both.

As a rule, transmission to a single homokinetic joint is used, on the tractor side (for high α_1 and low α_2 values) or on the machine side (for high α_2 and low α_1 values), when on these the required joint angle is high or in any case the transmission irregularity is to be reduced (fig.5). Note that in this case the overall transmission will not be homokinetic as it will retain the irregularity due to the normal joint. Therefore, the latter should not work at an angle greater than the indicative value of 16° .

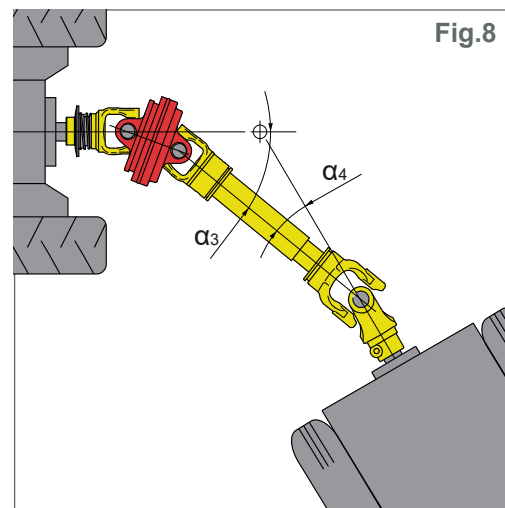
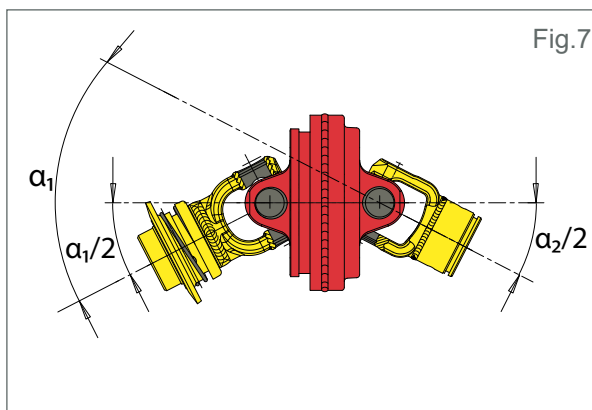
In cases where this is not possible, double homokinetic joint transmission is used (fig.6). Note that in this case the overall transmission is always homokinetic regardless of the value of the joint angles.

As already mentioned, the diversity between the two angles means that the irregularity of the transmission is generated with the consequent increase in vibrations and noise.



In situations where the point of attachment of towed operating machines is **not equidistant between the two PTOs**, the two angles α_1 and α_2 are not equal so, in calculating the **theoretical average duration of the cardan drive**, it is necessary to use the value **relating to the greatest angle between the two**, i.e. $\alpha_1/2$ in the case of fig.7.

This applies only to **homokinetic double-joint trees** where **the overall transmission is homokinetic**. On the other hand, for gimbal transmissions composed of **a simple joint and a homokinetic joint (fig.8)**, the parameter α that must be used for the **average theoretical duration** is that relating to the **standard joint** if the **joint angle is greater than half that of the homokinetic joint** ($\alpha_4 > \alpha_3/2$) or, conversely, **half the joint angle relating to the homokinetic joint**, if it is **greater than that relating to the standard joint** ($\alpha_3/2 > \alpha_4$).



2.3 GROOVED PROFILES

The grooved profiles unified by the ISO 500 standards are as follows:

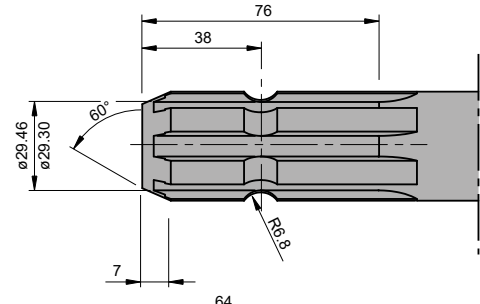
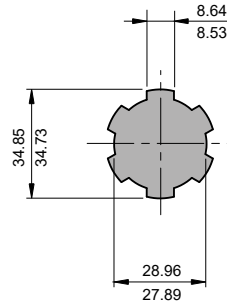
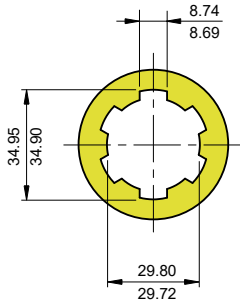
- 1 3/8" z6;
- 1 3/8" z21;
- 1 3/4" z20.

Other profiles are also very popular, namely:

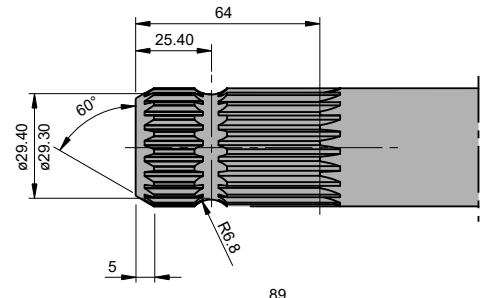
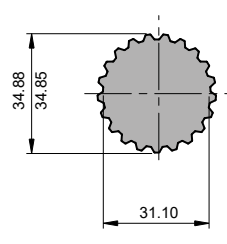
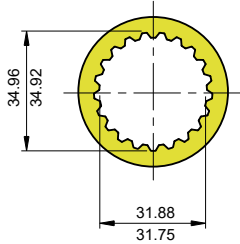
- 1" Z 15
- 1 1/8" Z 6
- 1 3/4" Z 6

For profiles other than those illustrated, contact Eurocardan:

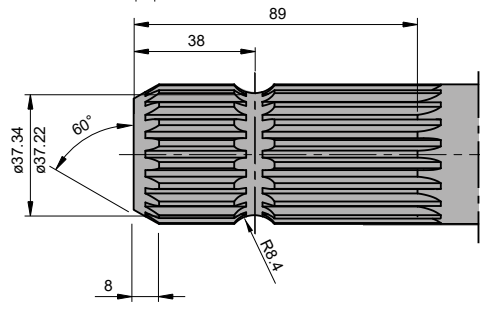
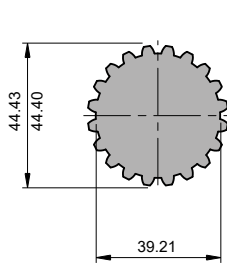
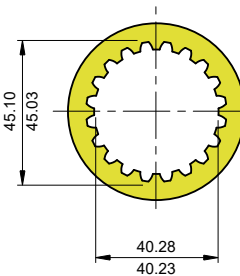
1 3/8" Z6



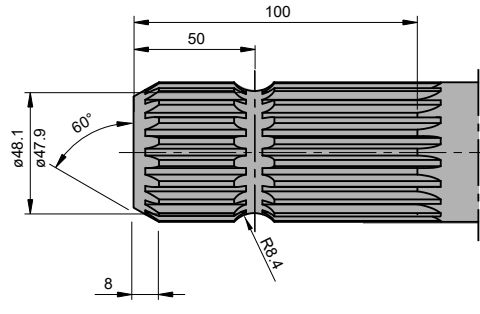
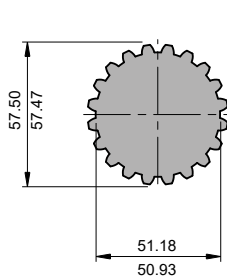
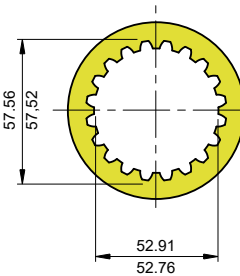
1 3/8" Z21



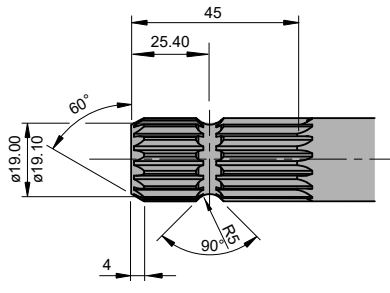
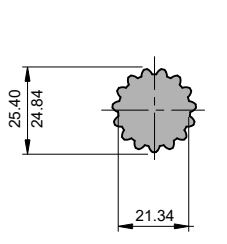
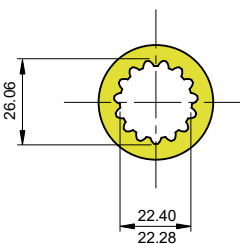
1 3/4" Z20



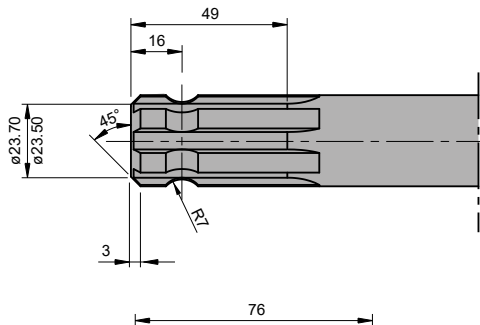
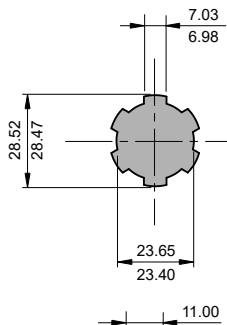
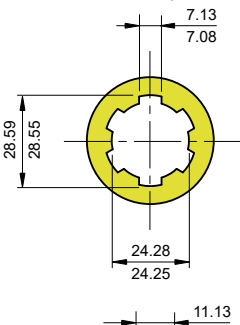
2 1/4" Z22



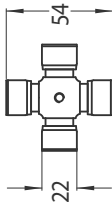
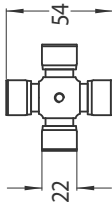
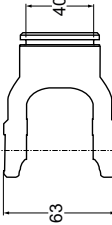
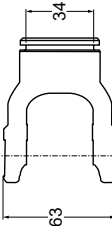
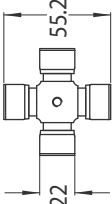
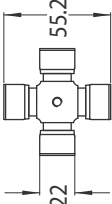
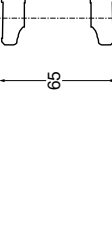
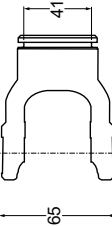
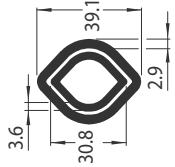
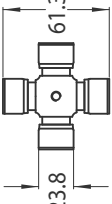
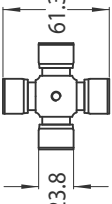
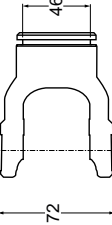
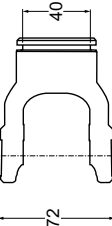
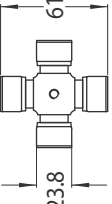
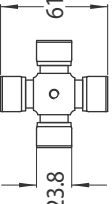
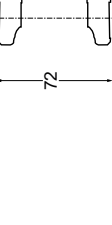
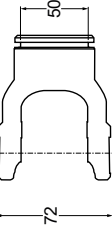
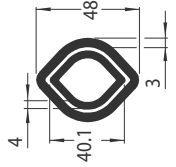
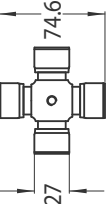
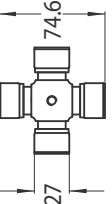
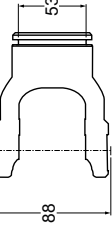
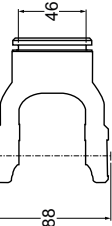
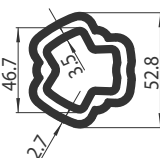
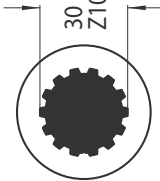
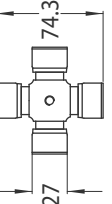
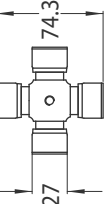
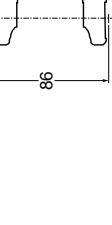
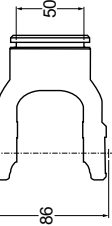
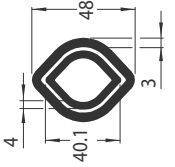
1" Z15



1 1/8" Z6



STANDARD CARDANS- DRIVE SHAFTS U-JOINTS

Size MASTER Size	Crociera Cross		Serie - Series					SQ
			Outer pipe forks	Inner pipe forks	AX - MX - TX - AXH	YE - YF	BX	
1								
3100								
2								
3200								
4								
3300								

5	3400	6	7	3500	8	10

HOMOKINETIC CARDANS - DRIVE SHAFTS CV-JOINTS

Series - Series

Size MASTER Size	Crociera Cross	Outer pipe forks	Inner pipe forks	AJ - AK -AW	VJ - YK - YW	TJ - TK - TW	SJ - SK - SW
GO2 3280							
GO4 3380							
GO6 3480							
GO8 3580							

2.4 RATED TRANSMISSIBLE POWERS AND TORQUES

Before installing the cardan drive, make sure that the power required by the machine, depending on the rotation speed, is compatible with the nominal value shown in the table. These values refer to use with a transmission angle of 5° and a joint life of 1000 h or with a 10° angle and a life of 500 h.

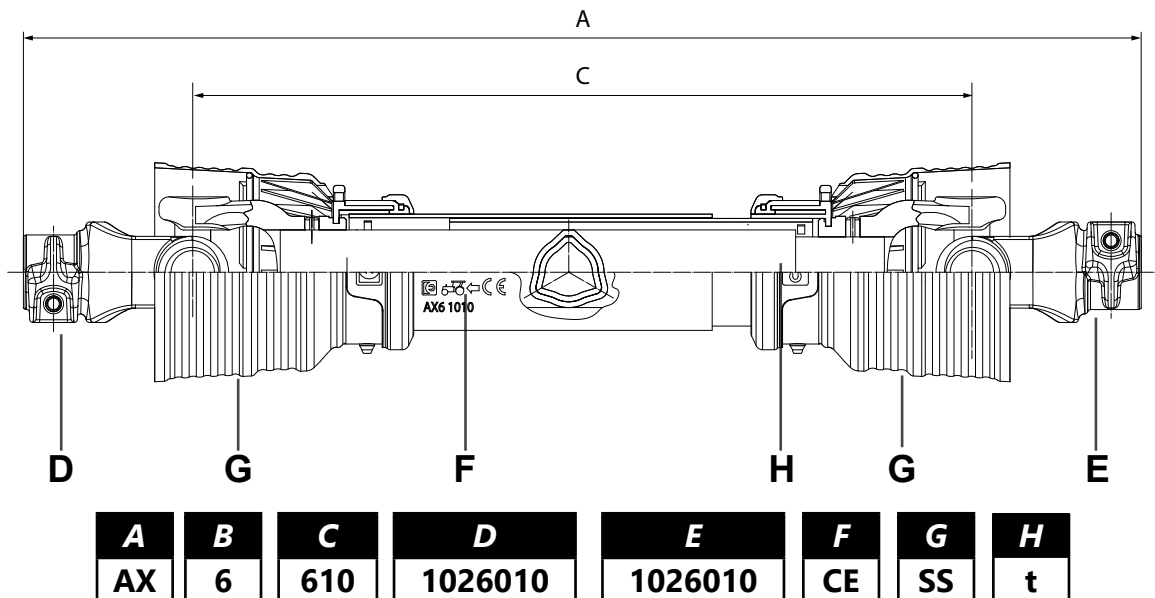
STANDARD CARDANS- DRIVE SHAFTS U-JOINTS							
Size MASTER Size	540 min ⁻¹ (rpm)		1000 min ⁻¹ (rpm)		Cat. ASAE		
	Coppia Torque M [Nm] (lb•in)	Potenza Power P [Kw] (HP-CV)	Coppia Torque M [Nm] (lb•in)	Potenza Power P [Kw] (HP-CV)			
1	190 (1680)	11 (15)	160 (1420)	17 (23)	1R		
3100	190 (1680)	11 (15)	160 (1420)	17 (23)			
2	270 (2390)	15 (20)	240 (2120)	25 (34)	2R - 1H		
3200	270 (2390)	15 (20)	240 (2120)	25 (34)			
4	420 (3752)	24 (33)	353 (3124)	37 (50)	3R - 2H	4R - 3H	3R - 2H
3300	420 (3752)	24 (33)	353 (3124)	37 (50)			
5	600 (5310)	34 (45)	500 (4425)	52 (70)	4R - 3H	4R - 3H	4R - 3H
3400	600 (5310)	34 (45)	500 (4425)	52 (70)			
6	780 (6900)	44 (60)	640 (5665)	67 (90)	4R - 2H	5R - 4H	4R - 3H
7	1060 (9380)	60 (82)	870 (7700)	91 (120)	6R - 4H	6R - 4H	6R - 4H
3500	1060 (9380)	60 (82)	870 (7700)	91 (120)			
8	1200 (10620)	68 (92)	980 (8670)	103 (140)	6R - 4H	6R - 4H	6R - 4H
10	1380 (12210)	78 (105)	1130 (10000)	118 (160)		7R - 6H	6R

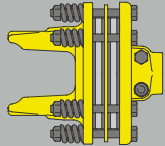
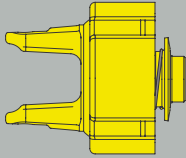
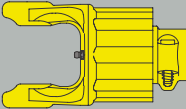
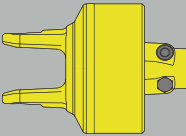
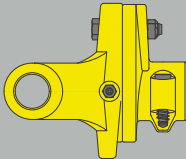
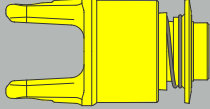
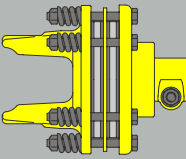
HOMOKINETIC CARDANS - DRIVE SHAFTS CV-JOINTS						
Size MASTER Size	540 min ⁻¹ (rpm)		1000 min ⁻¹ (rpm)		Cat. ASAE	
	Coppia Torque M [Nm] (lb•in)	Potenza Power P [Kw] (HP-CV)	Coppia Torque M [Nm] (lb•in)	Potenza Power P [Kw] (HP-CV)		
2	270 (2390)	15 (20)	240 (2120)	25 (34)	2R-1H	-
3280						
4	420 (3752)	24 (33)	353 (3124)	37 (50)	3R	3H
3380						
6	780 (6900)	44 (60)	640 (5665)	67 (90)	4R	4H
3480						
8	1200 (10620)	68 (92)	980 (8670)	103 (140)	5H	6R
3580						

3. HOW TO IDENTIFY A CARDAN DRIVE

A		B		C	D	
SERIES: Identify transmission type.		Size Crosses Standard	Size Crosses Homokinetics	Identify the length Transmission L.	Tractor Side. Identify the tractor side component.	
	AX - AJ AK - AW MX	1	-	 L 460 560 610 810 1010 1210		
	YE - YJ YK - YW YF	2	2			
	BX	4	4			
	TQ - TJ TK - TW	5	-			
	SQ - SJ SK - SW	6	6			
		7	-			
		8	8			
		10	-			
		3100	-			
		3200	3280			
		3300	3380			
		3400	3480			
		3500	3580			

*Viewable from page 23 to page 52



E	F	G	H
Machine side. Identify the fork or safety device on the machine side	Certification transmission	Hoods configuration tractor side and machine side.	If envisaged, indicate any treatments required on the pipes.
      	CE <i>Transmission with "CE" certification</i> CP <i>Transmission for US and Canada countries with safety chains</i> CU <i>Transmission for USA and Canada countries without safety chains</i> WB <i>Transmission without "CE" certification for non-EU countries</i> E2 <i>Transmission with "CE" certification with stickers for US coun- tries and Canada</i> SP <i>Transmission without protection</i>	SS <i>Standard - Standard</i> SC <i>Standard - Short</i> SL <i>Standard - Long</i> LL <i>Long - Long</i> ES <i>Extra short - Standard</i> MC <i>For MX - Short</i>	t Hardened pipes r Rilsan Pipes c Carbonitrided Pipes

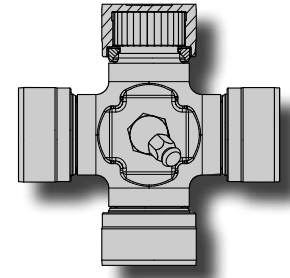
*Viewable from page 53 to 92

4. FUNDAMENTALS OF THE CARDAN SHAFT

4.1 CRUISES

They represent the main elements of the cardan shaft as they directly contribute to the determination of the duration of a transmission. The rated torque of the cardan shaft is the torque corresponding to the duration of the joint of 1000 hours with a joint angle of 5°, speed 540 rpm; the values of torque and transmittable power are obtained by combining, with appropriate coefficients, those of the crosses and pipes.

For these reasons, crosses must be built respecting high quality standards to allow correct and prolonged operation in difficult environments such as agricultural ones.



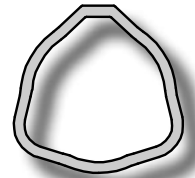
4.2 TELESCOPIC ELEMENTS

The resistance of the pipes is calculated by verifying the maximum torsion that the pipe withstands before reaching yielding, so it is directly connected to the area of the pipe section. The cardan shaft must be chosen so that the torque provided for the application is less than the permissible torsional stress from the pipes.

The telescopic elements allow the shaft to adapt to the variations in distance between the two PTOs, which is why the ability to slide axially under load is essential, generating reduced telescopic pressures and, for this reason, the lubrication of the telescopic elements is essential to moderate wear and to reduce axial pressures.

Eurocardan boasts a wide range of telescopic solutions that allow the transmission of motion in a wide variety of applications:

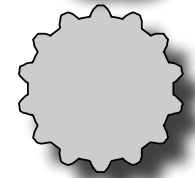
Trilobed (or triangular) pipes: they represent the solution for standard applications that require a correct balance between torque and axial pressure. Coupling between the two pipes (inner and outer) is permitted in a single phase position.



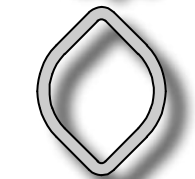
York pipes: the York profile allows, compared to the standard profile, use of the transmission in more burdensome applications characterised by the presence of greater torque peaks. In addition, the special profile with built-in grease ducts allows a better distribution of the lubricant between the outer and inner pipe as well as acting as a grease accumulation to keep the lubricant longer than standard profiles. Coupling between the two pipes (inner and outer) is permitted in a single phase position.



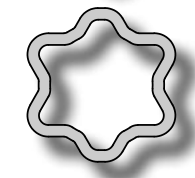
Grooved pipes and shafts: they are adopted in applications characterised by high torques, consistent shaft elongations (higher than those permitted by other pipes) and frequent axial slides.



Bilobed or lemon pipes (German standard): they represent the solution to standard applications that require a correct balance between torque and axial pressure. Coupling between the two pipes (inner and outer) is permitted in two phase positions.



Star pipes (German standard): thanks to the special six-contact section, they allow better torque transmission compared to the two-lobed profile. Coupling between the two pipes (inner and outer) is permitted in two phase positions.



In addition, to improve the wear resistance and axial sliding characteristics, two treatments are possible on the pipes:

HARDENING: the treatment is only performed on the inner pipe and is used to obtain pipes with greater surface hardness as well as improved torsional resistance. Hardened pipes are particularly suitable in highly abrasive environments.

RILSAN: the sanitised pipes allow a 50% reduction in the friction coefficient compared to the contact between two normal metal surfaces and this means being able to significantly reduce the axial pressures. These pipes are particularly suitable in applications that require frequent axial sliding under load, such as in the case of towed machines.

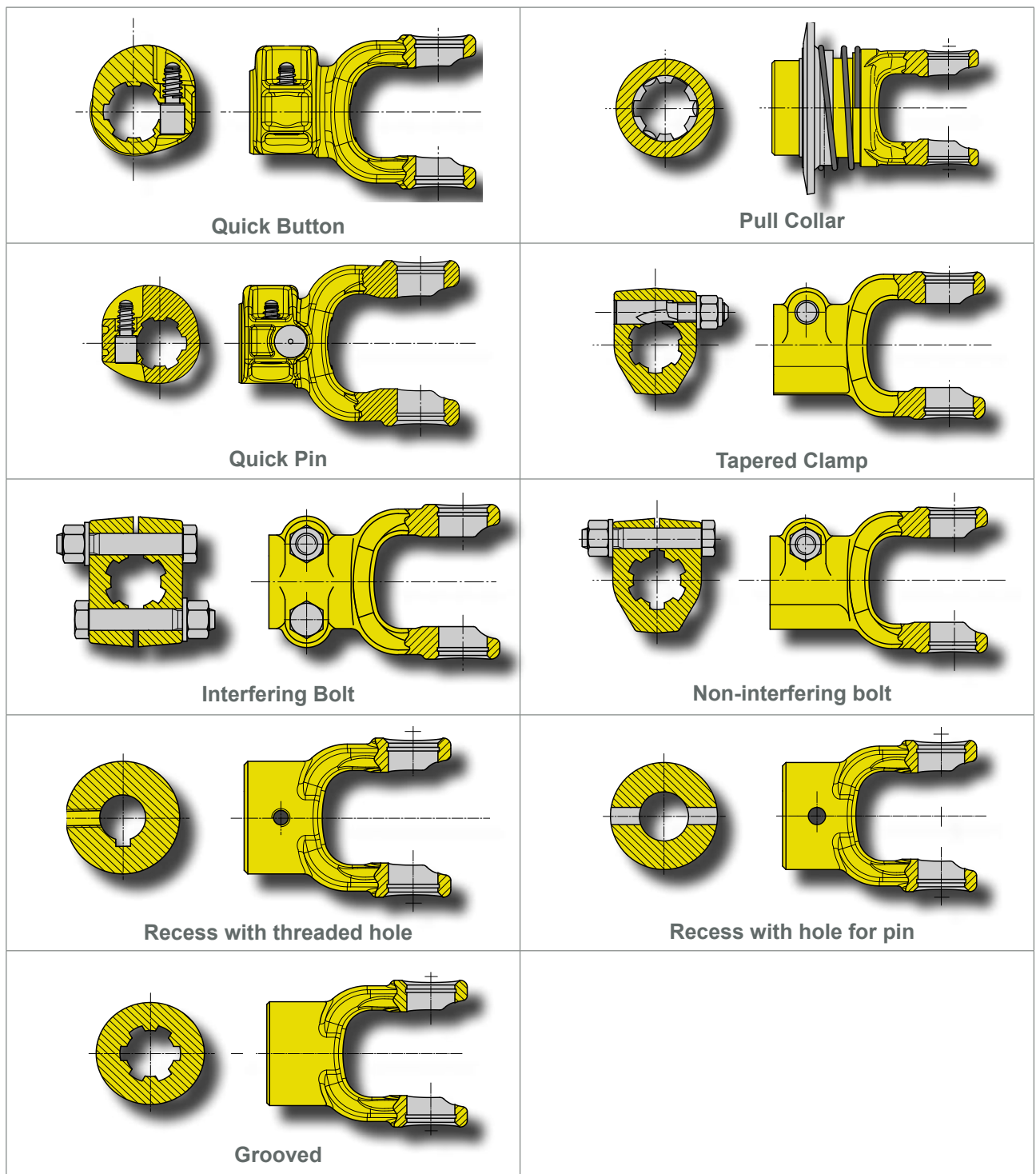
4.3 EXTREMITY FORKS

The end forks are a fundamental part of the cardan shaft used as the main fastening systems between the tractor and the machine, respecting the dimensions established by the ISO 500, DIN 9611 and ANSI/ASABE standards, grouping them into three types:

- Type 1: 1 3/8" Z6 (540 rpm);
- Type 2: 1 3/8" Z21 (1000 rpm);
- Type 3 : 1 3/4" Z20 (1000 rpm).

Usually the cardan must be left connected to the machine. For this reason the fork on the tool side is of the conical clamp, bolt or double bolt type so all the locks are to be made with tools.

On the tractor side, however, the cardan shaft must be able to be released quickly (without the use of tools), so collar or button forks are used.



4.4 SAFETY DEVICES

The **safety device** – essential to **limit the torque** acting on the cardan drive in case of **overloads** – must be installed **on the side of the tool** allowing to considerably reduce **immobilisation and repair costs**.

FD



The FD torque limiter is a helical spring clutch, used to limit the value of the torque transmitted to the calibration value through sliding of the friction discs, while maintaining power transmission. It is also useful to absorb torque peaks during machine start-up with high inertia. Torque limitation is ensured by sliding of the clutch components on 2 or 4 discs of special material (asbestos-free). The value of the calibration torque can be adjusted by changing the compression height of the coil springs. Available with 2 or 4 friction discs. Work in both directions of rotation.

BD



The BD friction disc torque limiter is a Belleville conical spring clutch, used to limit the value of the torque transmitted at the calibration value (750-1600 Nm) through sliding of the friction discs while maintaining the power transmission. Belleville conical springs allow the clutch to retain its calibration characteristics for a long time, not being affected by wearing of the discs. The closed and linear design is aimed at removing grip points, protrusions and cavities, thus increasing the safety features during use. The clutch uses 2 or 4 discs (BD2: 2 friction discs; BD4: 4 friction discs) in special material (asbestos-free). The value of the calibration torque is pre-set at the factory and can be modified by the user by replacing the spring pack if necessary. This system precludes the possibility of tampering with the clutch calibration during use, ensuring protection of the transmission.

FT-A/FT-F



The FT-A and FT-F torque limiters are friction plate clutches which intervene without interrupting power transmission. They work in both directions of rotation and the Belleville conical springs limit the value of the torque transmitted to the calibration value through sliding of the friction discs (in quantities of 2 or 4, in special material). The Belleville conical springs guarantee maintaining of the clutch calibration over time, as they are not affected by wearing of the discs. For the FT-A the value of the calibration torque can be adjusted by changing the compression height of the conical spring. The value of the calibration torque of the FT-F is instead pre-set in the factory, precluding the possibility of tampering with the clutch calibration during use and thus safeguarding protection of the transmission of the machine on which it is applied.

LN



The torque limiter LN is a device that limits torque thanks to pawls that act in a radial direction counteracted by the resistance offered by helical springs. The transmission is reset automatically when the number of revolutions is reduced. When the transmitted torque exceeds the pre-set calibration value, the pawls come out of their seats overcoming the resistance offered by 1 or 2 helical springs.

At the time of intervention, the LN limiter interrupts the power transmission, reducing the transmitted torque to a minimum value necessary for the subsequent reset, which occurs automatically when the number of revolutions is reduced. The value of the calibration torque is pre-set at the factory according to the number of rows of pawls and the configuration adopted for the springs. Thanks to the residual torque reduced to a minimum, overheating and vibrations are also reduced during the intervention.

LDR/LDR-K/LDR-M



The LDR torque limiter is of the radial cam type, acting in a single direction of rotation (the reverse rotation version is also available) which ensures torque transmission up to the pre-set calibration value by means of a set of springs. At the time of intervention, the LDR limiter disconnects the power transmission, cancelling the torque transmitted to less than a residual pulsating torque, necessary for the subsequent reset. The latter occurs automatically when, once the cause of clogging has been eliminated, the number of revolutions of the transmission is reduced to a minimum value sufficient for the purpose. The value of the calibration torque is pre-set at the factory and can be varied by the user after replacing the spring set. Thanks to the residual torque reduced to a minimum, overheating and vibrations are also reduced during the intervention. Compact dimensions, reduced weights, use of sliding bearings and the use of quality materials allow the device to be used even for speeds of over 1000 rpm.

LC



The LC device limits the torque thanks to the shearing of a bolt that must be replaced to restore the power transmission. The intervention torque is a function of the bolt's distance from the transmission axis, its diameter and its resistance class.

When the torque exceeds that bearable by the bolt this is sheared and the transmitted power is cancelled. To restore the transmission, the sheared bolt must be replaced with one with the same characteristics (diameter, strength class, threaded portion and length) as the original bolt. Special executions on request. Work in both directions of rotation.

RF



The RF freewheel allows the transmission of motion in only one direction of rotation. It is used in the presence of machines with high rotational inertia to avoid harmful torque returns during deceleration or stopping.

Power transmission is achieved through hardened steel lugs which are pushed against broached seats in the hub by flat springs.

FR



The FR limiter is a combined safety device that integrates the functions of disc clutch and freewheel. The torque is limited to the calibration value while maintaining the power transmission.

The sliding of the clutch components takes place on 2 or 4 friction discs in special material (asbestos-free). The value of the calibration torque can be adjusted by changing the compression height of the coil springs. The integrated freewheel prevents harmful torque returns during deceleration or stopping.

LCRF



The LCRF limiter is a combined safety device that integrates the functions of shear bolt limiter and freewheel. It performs the dual function of ensuring protection of the machine from overloads and preventing the return of torque on machines with high rotational inertia when the power transmission is interrupted.

The freewheel allows the transmission of motion in only one direction of rotation; when the torque exceeds that bearable by the bolt, it is sheared and the transmitted power is cancelled. To restore the transmission, the sheared bolt must be replaced with one with the same characteristics (diameter, strength class, threaded portion and length) as the original bolt.

GPS



the GPS coupling is a flexible torsion device that, thanks to a special vulcanised rubber interposed between the hub and fork, allows a reduction of torque peaks and alternating loads. It absorbs shocks, torsional vibrations and helps compensate for slight misalignments between the shafts themselves. The special vulcanised rubber tolerates angular displacements of the driven part with respect to the conductor part of up to 20°, a mechanical limit that is reached when the stop pin reaches the mechanical stop.

To avoid breakage of the pin in the event of sudden overloads, it is advisable to equip the transmission with a torque limiter.

4.5 COMPREHENSIVE PROTECTIONS

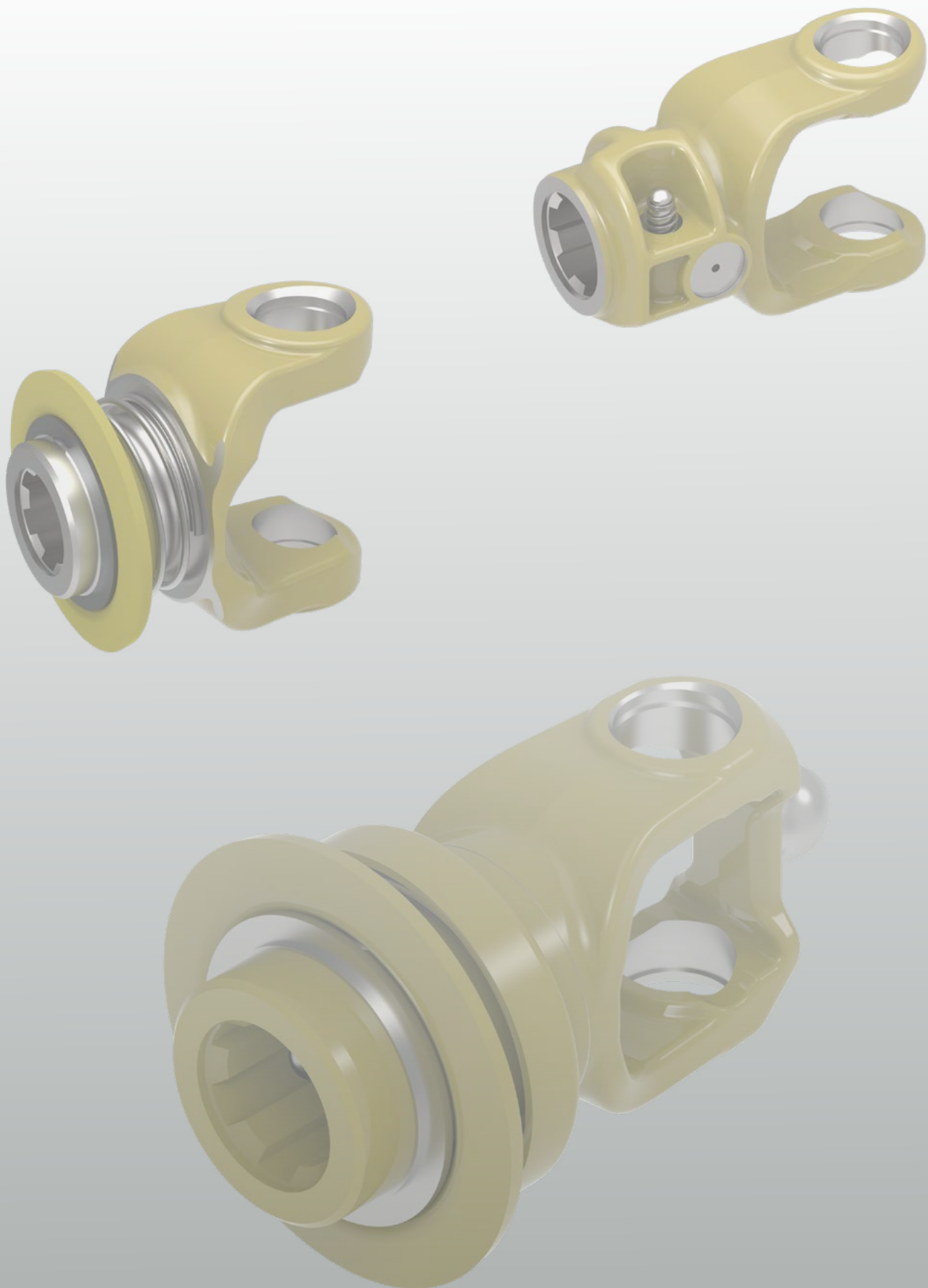
The cardan shaft is equipped with complete protections produced by Eurocardan according to current regulations that are used to reduce the possibility of coming into contact with the rotating parts while maintaining all degrees of movement.

The tasks of the machine manufacturer are to:

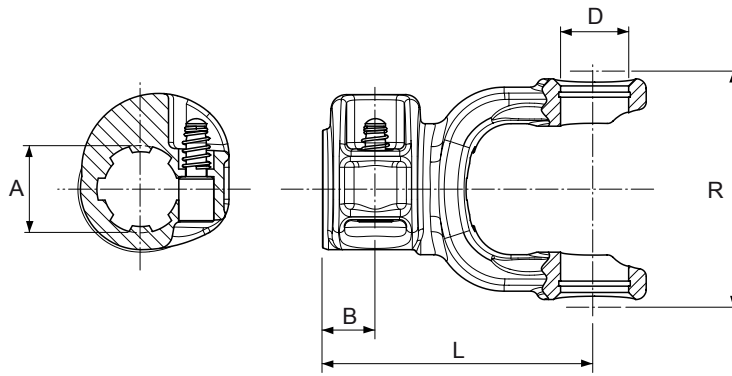
- Add protection for the interface area between cardan and power take-off on the tool side (PIC);
- Equip the machine with a support to rest the PTO shaft when it is disconnected from the tractor;
- Equip the machine with special anchoring points for the anti-rotation chains of the protections.

The operator's task is to always keep the protection in an efficient condition to ensure their safety.

5. EXTREMITY FORKS



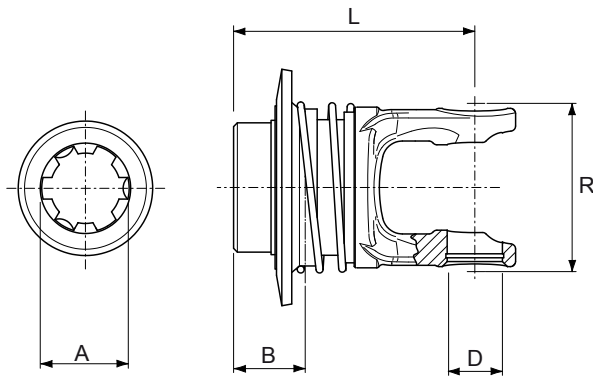
WITH BUTTON



Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	CODE	CODE QUICK BUTTON KIT
1	22	67	21	93	1 1/8" Z6	1021005	1581037
					1 3/8" Z6	1021010	1581037
					1 3/8" Z21	1021015	1581038
					26 UNI 220	1021001	1581037
2	23.8	76	21	99	1 1/8" Z6	1022005	1581037
					1 3/8" Z6	1022010	1581037
					1 3/8" Z21	1022015	1581038
					26 UNI 220	1022001	1581037
					32 UNI 222	1022019	1581037
4	27	92	21	108	1 1/8" Z6	1024005	1581037
					1 3/8" Z6	1024010	1581037
					1 3/8" Z21	1024015	1581038
					26 UNI 220	1024001	1581037
					32 UNI 222	1024019	1581037
5	30.2	98	21	111	1 3/8" Z6	1025010	1581037
					1 3/8" Z21	1025015	1581038
					32 UNI 222	1025019	1581037
6	30.2	112	21	118	1 3/8" Z6	1026010	1581037
					1 3/8" Z21	1026015	1581038
					32 UNI 222	1026019	1581037
			24	123	1 3/4" Z6	1026020	1581042
					1 3/4" Z20	1026025	1581042
7	34.9	112	21	118	1 3/8" Z6	1027010	1581037
					1 3/8" Z21	1027015	1581038
			24	123	1 3/4" Z6	1027020	1581042
					1 3/4" Z20	1027025	1581042
8	34.9	124	21	128	1 3/8" Z6	1028010	1581037
					1 3/8" Z21	1028015	1581038
			24	133	1 3/4" Z6	1028020	1581042
					1 3/4" Z20	1028025	1581042
10	42	136	21	141	1 3/8" Z6	102T010	1581037
					1 3/8" Z21	102T015	1581038
			24	145	1 3/4" Z6	102T020	1581042
					1 3/4" Z20	102T025	1581042

Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	CODE	CODE QUICK BUTTON KIT
3100	22	67	21	93	1 3/8" Z6	1021W10	1581037
					1 3/8" Z21	1021W15	1581038
3200	23.8	76	21	93	1 3/8" Z6	1022W10	1581037
					1 3/8" Z21	1022W15	1581038
					32 UNI 222	1022W19	1581037
3300	27	92	21	108	1 3/8" Z6	1023W10	1581037
					1 3/8" Z21	1023W15	1581038
					32 UNI 222	1023W19	1581037
3400	32	94	24	112	1 3/8" Z6	1024W10	1581037
					1 3/8" Z21	1024W15	1581038
					32 UNI 222	1024W19	1581037

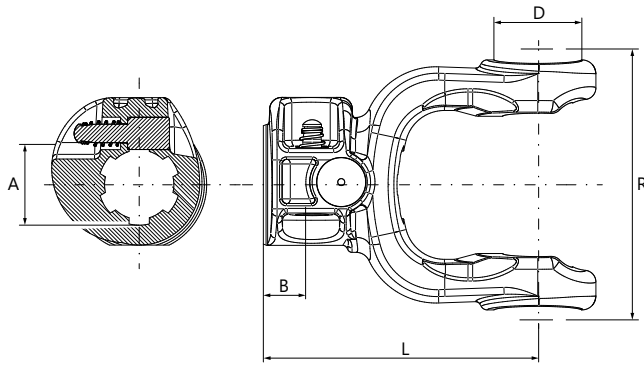
PULL COLLAR



Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	CODE	CODE PULL COLLAR KIT
1	22	67	28.5	96	1 1/8" Z6	1011008	1004240
					1 3/8" Z6	1011013	1004227
					1 3/8" Z21	1011018	
2	23.8	76		102	1 1/8" Z6	1012008	1004230
					1 3/8" Z6	1012013	1004227
					1 3/8" Z21	1012018	
4	27	92		111	1 3/8" Z6	1014013	1004227
					1 3/8" Z21	1014018	
5	30.2	98		114	1 3/8" Z6	1015013	1004227
					1 3/8" Z21	1015018	
6	30.2	112	28.5	121	1 3/8" Z6	1016013	1004227
					1 3/8" Z21	1016018	
				124	1 3/4" Z6	1016023	1004242
					1 3/4" Z20	1016028	
7	34.9	112		121	1 3/8" Z6	1017013	1004227
					1 3/8" Z21	1017018	
				124	1 3/4" Z6	1017023	1004242
					1 3/4" Z20	1017028	
8	34.9	124		134	1 3/8" Z6	1018013	1004227
					1 3/8" Z21	1018018	
				135	1 3/4" Z6	1018023	1004242
					1 3/4" Z20	1018028	
10	42	136		147	1 3/8" Z6	101T013	1004225
					1 3/8" Z21	101T018	
				152	1 3/4" Z6	101T023	1004242
					1 3/4" Z20	101T028	

Size	D (mm)	R (mm)	B (mm)	L (mm)	A	CODE	CODE KIT PUSH-BUTTON
3100	22	69	28.5	96	1 3/8" Z6	1011W13	1004249
					1 3/8" Z21	1011W18	
3200	23.8	76		99	1 3/8" Z6	1012W13	
					1 3/8" Z21	1012W18	
3300	27	92		108	1 3/8" Z6	1013W13	
					1 3/8" Z21	1013W18	
3400	32	94		117	1 3/8" Z6	1014W13	1004227
					1 3/8" Z21	1014W18	
3500	36	106		133	1 3/8" Z6	1015W13	
					1 3/8" Z21	1015W18	
					1 3/4" Z6	1015W23	1004242
					1 3/4" Z20	1015W28	

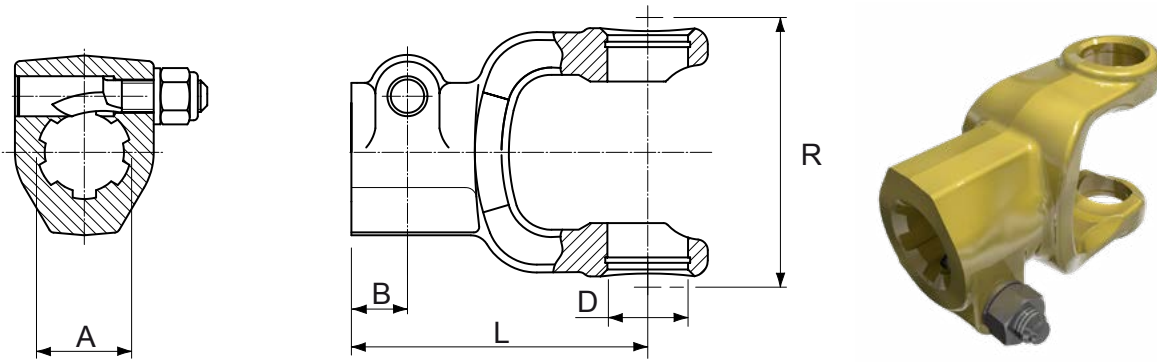
QUICK PIN



Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	CODE	CODE KIT BUTTON	CODE QUICK PIN KIT
1	22	67	21	93	1 3/8" Z6	1021510	1581037	1581922
					1 3/8" Z21	1021515	1581038	1581924
2	23.8	76	21	99	1 3/8" Z6	1022510	1581037	1581922
					1 3/8" Z21	1022515	1581038	1581924
4	27	92	21	108	1 3/8" Z6	1024510	1581037	1581922
					1 3/8" Z21	1024515	1581038	1581924
5	30.2	98	21	111	1 3/8" Z6	1025510	1581037	1581922
					1 3/8" Z21	1025515	1581038	1581924
6	30.2	112	21	118	1 3/8" Z6	1026510	1581042	1581922
					1 3/8" Z21	1026515		1581924
			24	123	1 3/4" Z6	1026520		1581923
					1 3/4" Z20	1026525		1581923
7	34.9	112	21	118	1 3/8" Z6	1027510	1581037	1581922
					1 3/8" Z21	1027515	1581038	1581924
			24	123	1 3/4" Z6	1027520	1581042	1581923
					1 3/4" Z20	1027525		1581923
8	34.9	124	21	128	1 3/8" Z6	1028510	1581037	1581922
					1 3/8" Z21	1028515	1581038	1581924
			24	133	1 3/4" Z6	1028520	1581042	1581923
					1 3/4" Z20	1028525		1581923
10	42	136	21	141	1 3/8" Z6	102T510	1581037	1581922
					1 3/8" Z21	102T515	1581038	1581924
			24	145	1 3/4" Z6	102T520	1581042	1581923
					1 3/4" Z20	102T525		1581923

Size	D (mm)	R (mm)	B (mm)	L (mm)	A	CODE	CODE BUTTON KIT	CODE QUICK PIN KIT	
3100	22	67	21	93	1 3/8" Z6	1021W30	1581037	1581922	
					1 3/8" Z21	1021W35	1581038	1581924	
3200	23.8	76		99	1 3/8" Z6	1022W30	1581037	1581922	
					1 3/8" Z21	1022W35	1581038	1581924	
3300	27	92		108	1 3/8" Z6	1023W30	1581037	1581922	
					1 3/8" Z21	1023W35	1581038	1581924	
3400	32	94		24	112	1 3/8" Z6	1024W30	1581037	1581922
						1 3/8" Z21	1024W35	1581038	1581924
3500	36	106	118		1 3/8" Z6	1025W30	1581037	1581922	
					1 3/8" Z21	1025W35	1581038	1581924	
					1 3/4" Z6	1025W40	1581042	1581923	
					1 3/4" Z20	1025W45		1581923	

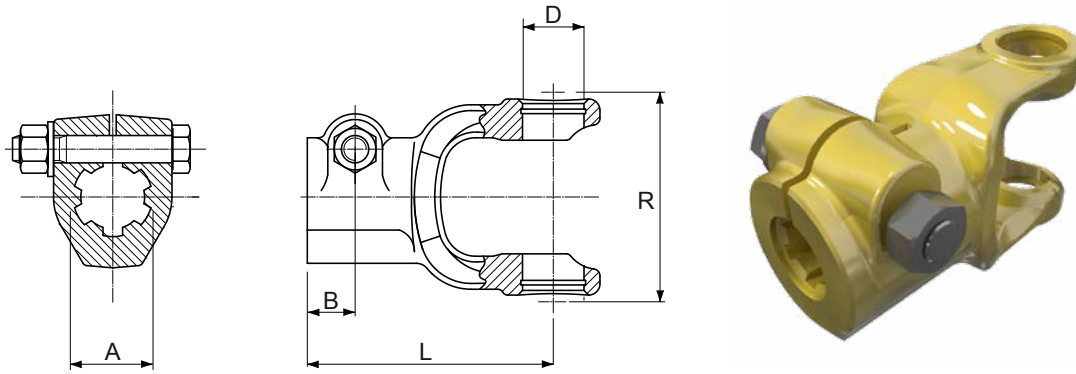
CONICAL CLAMP



Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	CODE	KIT TAPERED CLAMP
1	22	67	21	93	1 1/8" Z6	1031005	6821282
					1 3/8" Z6	1031010	
					1 3/8" Z21	1031015	
2	23.8	76	21	101	1 1/8" Z6	1032005	
					1 3/8" Z6	1032010	
					1 3/8" Z21	1032015	
4	27	92	21	108	1 1/8" Z6	1034005	
					1 3/8" Z6	1034010	
					1 3/8" Z21	1034015	
5	30.2	98	21	111	1 3/8" Z6	1035010	6821486
					1 3/8" Z21	1035015	
					1 3/4" Z6	1035020	
					1 3/4" Z20	1035025	
6	30.2	112	21	118	1 3/8" Z6	1036010	6821282
				118	1 3/8" Z21	1036015	6821486
				121	1 3/4" Z6	1036020	
					1 3/4" Z20	1036025	
7	34.9	112	21	118	1 3/8" Z6	1037010	6821282
				118	1 3/8" Z21	1037015	6821486
				121	1 3/4" Z6	1037020	
					1 3/4" Z20	1037025	
8	34.9	124	25	131	1 3/8" Z6	1038010	6821281
					1 3/8" Z21	1038015	6821486
					1 3/4" Z6	1038020	
					1 3/4" Z20	1038025	
10	42	136	25	137	1 3/8" Z6	103T010	6821281
					1 3/8" Z21	103T015	6821486
					1 3/4" Z6	103T020	
					1 3/4" Z20	103T025	

Size	D (mm)	R (mm)	B (mm)	L (mm)	A (mm)	CODE	KIT TAPERED CLAMP
3200	23.8	76	20	98	1 3/8" Z6	1032W10	6821282
					1 3/8" Z21	1032W15	
3300	27	92	20	107	1 3/8" Z6	1033W10	
					1 3/8" Z21	1033W15	
3400	32	94	24	112	1 3/8" Z6	1034W10	6821486
					1 3/8" Z21	1034W15	
					1 3/4" Z6	1034W20	
					1 3/4" Z20	1034W25	
3500	36	106	24	118	1 3/8" Z6	1035W10	6821282
					1 3/8" Z21	1035W15	
					1 3/4" Z6	1035W20	6821486
					1 3/4" Z20	1035W25	

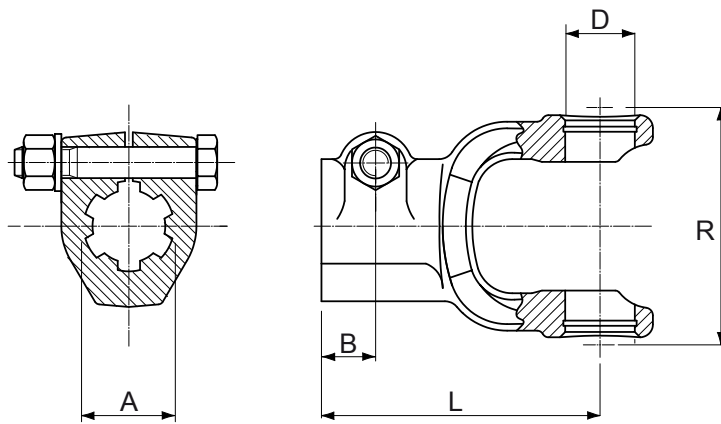
INTERFERING BOLT



Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A (mm)	CODE	KIT BOLT
1	22	67	21	93	1 1/8" Z6	1101005	6811265
					1 3/8" Z6	1101010	
					1 3/8" Z21	1101015	
2	23.8	76	21	101	1 1/8" Z6	1102005	6811270
					1 3/8" Z6	1102010	
					1 3/8" Z21	1102015	
4	27	92	21	108	1 1/8" Z6	1104005	
					1 3/8" Z6	1104010	
					1 3/8" Z21	1104015	
5	30.2	98	21	111	1 3/8" Z6	1105010	6811270
					1 3/8" Z21	1105015	
					1 3/4" Z6	1105020	6811480
					1 3/4" Z21	1105025	
6	30.2	112	21	118	1 3/8" Z6	1106010	6811270
			21	118	1 3/8" Z21	1106015	
			21	121	1 3/4" Z6	1106020	6811480
					1 3/4" Z21	1106025	
7	34.9	112	21	118	1 3/8" Z6	1107010	6811270
			21	118	1 3/8" Z21	1107015	
			21	121	1 3/4" Z6	1107020	6811480
					1 3/4" Z21	1107025	
8	34.9	124	25	131	1 3/8" Z6	1108010	6811290
					1 3/8" Z21	1108015	
					1 3/4" Z6	1108020	6811490
					1 3/4" Z21	1108025	
10	42	136	25	137	1 3/8" Z6	110T010	6811290
					1 3/8" Z21	110T015	
					1 3/4" Z6	110T020	6811410
					1 3/4" Z21	110T025	

Size	D (mm)	R (mm)	B (mm)	L (mm)	A (mm)	CODE	KIT BOLT
3200	23.8	76	20	98	1 3/8" Z6	1102W10	6811270
					1 3/8" Z21	1102W15	
3300	27	92	20	107	1 3/8" Z6	1103W10	
					1 3/8" Z21	1103W15	
3400	32	94	24	112	1 3/8" Z6	1104W10	6811475
					1 3/8" Z21	1104W15	
					1 3/4" Z6	1104W20	
					1 3/4" Z20	1104W25	
3500	36	106	24	118	1 3/8" Z6	1105W10	6811275
					1 3/8" Z21	1105W15	
					1 3/4" Z6	1105W20	6811480
					1 3/4" Z21	1105W25	

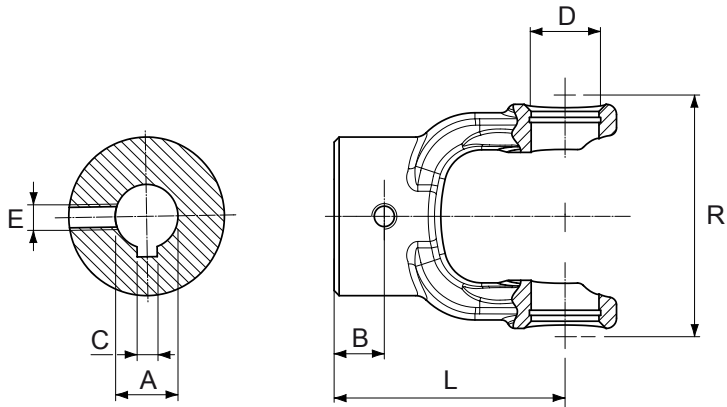
NON-INTERFERING BOLT



Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A (mm)	CODE	KIT BOLT
1	22	67	21	93	1 1/8" Z6	1101505	6811265
					1 3/8" Z6	1101510	
					1 3/8" Z21	1101515	
2	23.8	76	21	101	1 1/8" Z6	1102505	6811270
					1 3/8" Z6	1102510	
					1 3/8" Z21	1102515	
4	27	92	21	108	1 1/8" Z6	1104505	
					1 3/8" Z6	1104510	
					1 3/8" Z21	1104515	
5	30.2	98	21	111	1 3/8" Z6	1105510	6811280
					1 3/8" Z21	1105515	
					1 3/4" Z6	1105520	
					1 3/4" Z21	1105525	
6	30.2	112	21	118	1 3/8" Z6	1106510	6811270
			21	121	1 3/8" Z21	1106515	6811280
					1 3/4" Z6	1106520	
					1 3/4" Z21	1106525	
7	34.9	112	21	118	1 3/8" Z6	1107510	6811270
			21	121	1 3/8" Z21	1107515	6811280
					1 3/4" Z6	1107520	
					1 3/4" Z21	1107525	
8	34.9	124	25	131	1 3/8" Z6	1108510	6811290
					1 3/8" Z21	1108515	6811490
					1 3/4" Z6	1108520	
					1 3/4" Z21	1108525	
10	41	134	25	137	1 3/8" Z6	110T510	6811290
					1 3/8" Z21	110T515	6811410
					1 3/4" Z6	110T520	
					1 3/4" Z21	110T525	

Size	D (mm)	R (mm)	B (mm)	L (mm)	A (mm)	CODE	KIT BOLT
3200	23.8	76	20	98	1 3/8" Z6	1102W60	6811270
					1 3/8" Z21	1102W65	
3300	27	92	20	107	1 3/8" Z6	1103W60	
					1 3/8" Z21	1103W65	
3400	32	94	24	112	1 3/8" Z6	1104W60	6811280
					1 3/8" Z21	1104W65	
					1 3/4" Z6	1104W70	
					1 3/4" Z20	1104W75	
3500	36	106	24	118	1 3/8" Z6	1105W60	6811275
					1 3/8" Z21	1105W65	
					1 3/4" Z6	1105W70	6811280
					1 3/4" Z21	1105W75	

RECESS WITH THREADED HOLE



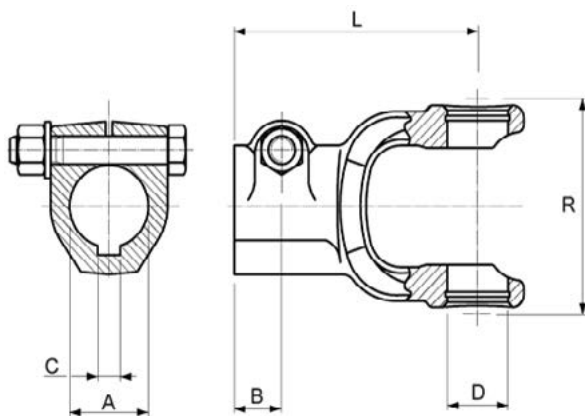
Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	C	E (mm)	CODE
1	22	67	20	80	20 H8	6 JS9	M8	1061005
					22 H8	6 JS9	M8	1061010
					25 H8	8 JS9	M10	1061015
					30 H8	8 JS9	M10	1061020
					3/4"	3/16"	3/8 16 UNC	1061004
					1"	1/4"	3/8 16 UNC	1061016
					1 1/4"	1/4"	3/8 16 UNC	1061022
2	23.8	76		84	20 H8	6 JS9	M8	1062005
					22 H8	6 JS9	M8	1062010
					25 H8	8 JS9	M10	1062015
					30 H8	8 JS9	M10	1062020
					3/4"	3/16"	3/8 16 UNC	1062004
					1"	1/4"	3/8 16 UNC	1062016
					1 1/4"	1/4"	3/8 16 UNC	1062022
4	27	92	92	25 H8	8 JS9	M10	1064010	
				30 H8	8 JS9	M10	1064015	
				35 H8	10 JS9	M12	1064020	
				1"	1 1/4"	3/8 16 UNC	1064016	
				1 1/4"	1 1/4"	3/8 16 UNC	1064022	
				1 3/8"	5/16"	3/8 16 UNC	1064024	
5	30.2	98	98	30 H8	8 JS9	M10	1065005	
				35 H8	10 JS9	M12	1065010	
				40 H8	12 JS9	M12	1065015	
				1 1/4"	1/4"	3/8 16 UNC	1065022	
				1 3/8"	5/16"	3/8 16 UNC	1065024	
				1 1/2"	3/8"	3/8 16 UNC	1065026	
6	30.2	112	108	30 H8	8 JS9	M10	1066005	
				35 H8	10 JS9	M12	1066010	
				40 H8	12 JS9	M12	1066015	
				1 1/4"	1/4"	3/8 16 UNC	1066022	
				1 3/8"	5/16"	3/8 16 UNC	1066024	
				1 1/2"	3/8"	3/8 16 UNC	1066026	

7	34.9	112	20	108	35 H8	10 JS9	M12	1067005
					40 H8	12 JS9	M12	1067010
					45 H8	14 JS9	M14	1067020
					1 3/8"	5/16"	3/8 16UNC	1067024
					1 1/2"	3/8"	3/8 16 UNC	1067026
					1 3/4"	3/8"	3/8 16 UNC	1067028
8	34.9	124		119	35 H8	10 JS9	M12	1068005
					40 H8	12 JS9	M12	1068010
					45 H8	14 JS9	M14	1068020
					1 3/8"	5/16"	3/8 16UNC	1068024
					1 1/2"	3/8"	3/8 16 UNC	1068026
					1 3/4"	3/8"	3/8 16 UNC	1068028
10	42	136	25	137	40 H8	12 JS9	M12	106T010
					45 H8	14 JS9	M14	106T020
					1 1/2"	3/8"	3/8 16UNC	106T026
					1 3/4"	3/8"	3/8 16 UNC	106T028

Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	C	E (mm)	CODE
3100	22	69	20	80	20 H8	6 JS9	M8	1061W05
					22 H8	6 JS9	M8	1061W10
					25 H8	8 JS9	M10	1061W15
					30 H8	8 JS9	M10	1061W20
					3/4"	3/16"	3/8 16 UNC	1061W04
					1"	1/4"	3/8 16 UNC	1061W16
					1 1/4"	1/4"	3/8 16 UNC	1061W22
3200	23.8	76	16		20 H8	6 JS9	M8	1062W05
					22 H8	6 JS9	M8	1062W10
					25 H8	8 JS9	M10	1062W15
					30 H8	8 JS9	M10	1062W20
					3/4"	3/16"	3/8 16 UNC	1062W04
					1"	1/4"	3/8 16 UNC	1062W16
					1 1/4"	1/4"	3/8 16 UNC	1062W22
3300	27	92	15	95	25 H8	8 JS9	M10	1063W10
					30 H8	8 JS9	M10	1063W15
					35 H8	10 JS9	M12	1063W20
					1"	1/4"	3/8 16 UNC	1063W16
					1 1/4"	1/4"	3/8 16 UNC	1063W22
					1 3/8"	5/16"	3/8 16 UNC	1063W24
3400	32	94	22	101	30 H8	8 JS9	M10	1064W05
					35 H8	10 JS9	M12	1064W10
					40 H8	12 JS9	M12	1064W15
					1 1/4"	1/4"	3/8 16 UNC	1064W22
					1 3/8"	5/16"	3/8 16 UNC	1064W24
					1 1/2"	3/8"	3/8 16 UNC	1064W26

3500	36	106	24	118	35 H8	10 JS9	M12	1065W10
					40 H8	12 JS9	M12	1065W15
					45 H8	14 JS9	M14	1065W22
					1 3/8"	5/16"	3/8 16UNC	1065W24
					1 1/2"	3/8"	3/8 16 UNC	1065W26
					1 3/4"	3/8"	3/8 16 UNC	1065W28

SLOT WITH INTERFERING BOLT

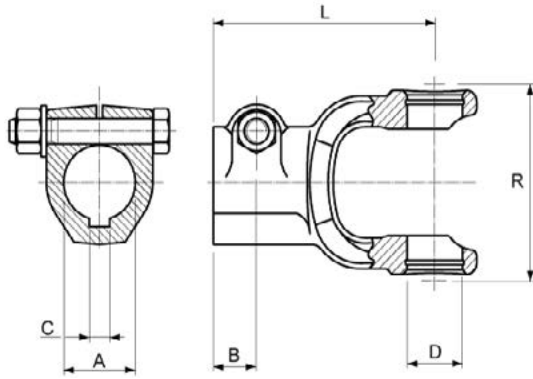


Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	C	E (mm)	CODE	KIT BOLT
1	22	67	93	21	20 H8	6 JS9	8.5	1041005	6811265
					22 H8	6 JS9	9.5	1041010	
					25 H8	8 JS9	11	1041015	
					30 H8	8 JS9	13	1041020	
					3/4"	3/16"	8	1041004	
					1"	1/4"	11	1041016	
					1 1/4"	1/4"	14	1041022	
2	23.8	76	101		20 H8	6 JS9	8.5	1042005	6811270
					22 H8	6 JS9	9.5	1042010	
					25 H8	8 JS9	11	1042015	
					30 H8	8 JS9	13	1042020	
					3/4"	3/16"	8	1042004	
					1"	1/4"	11	1042016	
					1 1/4"	1/4"	14	1042022	
4	27	92	108		22 H8	6 JS9	9.5	1044005	6811270
					25 H8	8 JS9	11	1044010	
					30 H8	8 JS9	13	1044015	
					35 H8	10 JS9	15.5	1044020	
					1"	1/4"	11	1044016	
					1 1/4"	1/4"	14	1044022	
					1 3/8"	5/16"	15.5	1044024	
5	30.2	98	111		30 H8	8 JS9	13	1045005	6811270
					35 H8	10 JS9	15.5	1045010	
					40 H8	12 JS9	18	1045015	6811280
					1 1/4"	1/4"	14	1045022	6811270
					1 3/8"	5/16"	15.5	1045024	
					1 1/2"	3/8"	17	1045026	6811280

6	30.2	112	118	21	30 H8	8 JS9	13	1046005	6811270
					35 H8	10 JS9	15.5	1046010	
			121		40 H8	12 JS9	18	1046015	6811280
			118		1 1/4"	1/4"	14	1046022	6811270
					1 3/8"	5/16"	15.5	1046024	
		121		1 1/2"	3/8"	17	1046026	6811280	
7	34.9	112	118		35 H8	10 JS9	15.5	1047005	6811270
			121		40 H8	12 JS9	18	1047010	6811280
					45 H8	14 JS9	20.5	1047020	
			118		1 3/8"	5/16"	15.5	1047024	6811270
			121		1 1/2"	3/8"	17	1047026	6811280
					1 3/4"	3/8"	20.5	1047028	
8	34.9	124	131	25	35 H8	10 JS9	15.5	1048005	6811290
					40 H8	12 JS9	18	1048010	
					45 H8	14 JS9	20.5	1048020	
					1 3/8"	5/16"	15.5	1048024	
					1 1/2"	3/8"	17	1048026	
					1 3/4"	3/8"	20.5	1048028	
10	42	136	137		40 H8	12 JS9	18	104T010	
					45 H8	14 JS9	20.5	104T020	
					1 1/2"	3/8"	17	104T026	
					1 3/4"	3/8"	20.5	104T028	

Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	C	E (mm)	CODE
3200	23.8	76	20	98	25 H8	8 JS9	11	6811270
					30 H8	8 JS9	13	
					1"	1/4"	11	
					1 1/4"	1/4"	14	
3300	27	92	20	107	30 H8	8 JS9	13	6811270
					35 H8	10 JS9	15.5	
					1"	1/4"	11	
					1 1/4"	1/4"	14	
3400	32	94	24	112	30 H8	8 JS9	13	6811270
					35 H8	10 JS9	15.5	
					40 H8	12 JS9	18	
					1 1/4"	1/4"	14	
					1 3/8"	5/16"	15.5	
3500	36	106	24	118	35 H8	10 JS9	15.5	6811275
					40 H8	12 JS9	18	
					1 1/2"	3/8"	17	
					1 3/4"	3/8"	20.5	6811280

RECESS WITH NON-INTERFERING BOLT

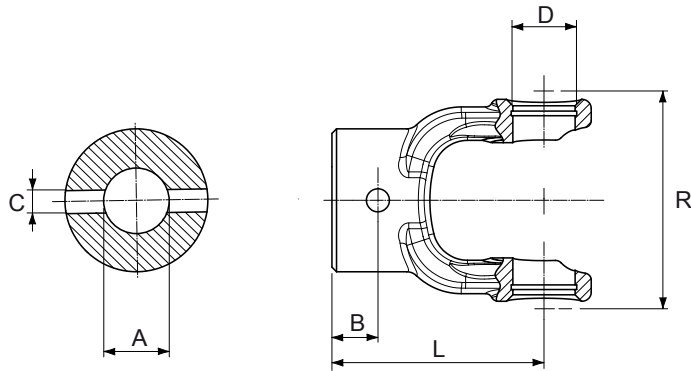


Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	C	CODE	KIT BOLT
1	22	67	93	21	20 H8	6 JS9	1051005	6811265
					22 H8	6 JS9	1051010	
					25 H8	8 JS9	1051015	
					30 H8	8 JS9	1051020	
					3/4"	3/16"	1051004	
					1"	1/4"	1051016	
					1 1/4"	1/4"	1051022	
2	23.8	76	101	21	20 H8	6 JS9	1052005	6811270
					22 H8	6 JS9	1052010	
					25 H8	8 JS9	1052015	
					30 H8	8 JS9	1052020	
					3/4"	3/16"	1052004	
					1"	1/4"	1052016	
					1 1/4"	1/4"	1052022	
4	27	92	108	21	22 H8	6 JS9	1054005	6811270
					25 H8	8 JS9	1054010	
					30 H8	8 JS9	1054015	
					35 H8	10 JS9	1054020	
					1"	1/4"	1054016	
					1 1/4"	1/4"	1054022	
					1 3/8"	5/16"	1054024	
5	30.2	98	111	21	30 H8	8 JS9	1055005	6811280
					35 H8	10 JS9	1055010	
					40 H8	12 JS9	1055015	
					1 1/4"	1/4"	1055022	6811270
					1 3/8"	5/16"	1055024	6811280
					1 1/2"	3/8"	1055026	

6	30.2	112	118	21	30 H8	8 JS9	1056005	6811270
			121		35 H8	10 JS9	1056010	6811280
			118		40 H8	12 JS9	1056015	
			121		1 1/4"	1/4"	1056022	6811270
					1 3/8"	5/16"	1056024	6811280
					1 1/2"	3/8"	1056026	
7	34.9	112	118		35 H8	10 JS9	1057005	6811270
			121		40 H8	12 JS9	1057010	6811280
			118		45 H8	14 JS9	1057020	
			121		1 3/8"	5/16"	1057024	6811270
					1 1/2"	3/8"	1057026	6811280
				1 3/4"	3/8"	1057028		
8	34.9	124	131	25	35 H8	10 JS9	1058005	6811290
					40 H8	12 JS9	1058010	
					45 H8	14 JS9	1058020	
					1 3/8"	5/16"	1058024	
					1 1/2"	3/8"	1058026	
					1 3/4"	3/8"	1058028	
10	42	136	137		40 H8	12 JS9	105T010	
					45 H8	14 JS9	105T020	
					1 1/2"	3/8"	105T026	
					1 3/4"	3/8"	105T028	

Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	C	CODE
3200	23.8	76	20	98	25 H8	8 JS9	6811270
					30 H8	8 JS9	
					1"	1/4"	
					1 1/4"	1/4"	
3300	27	92		107	30 H8	8 JS9	
					35 H8	10 JS9	
					1"	1/4"	
					1 1/4"	1/4"	
3400	32	94	24	112	30 H8	8 JS9	
					35 H8	10 JS9	
					40 H8	12 JS9	
					1 1/4"	1/4"	
					1 3/8"	5/16"	
3500	36	106		118	35 H8	10 JS9	6811275
					40 H8	12 JS9	
					1 1/2"	3/8"	6811280
					1 3/4"	3/8"	

PLUG HOLE



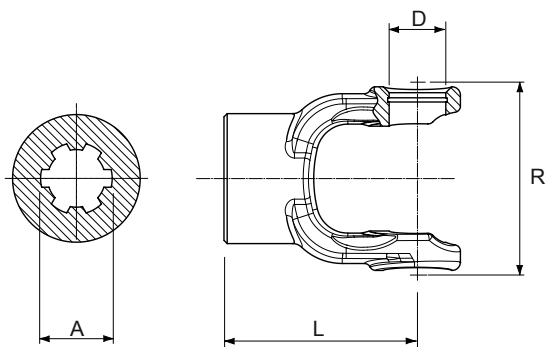
Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	C	CODE
1	22	67	20	80	20 H8	6 H12	1071005
					22 H8	6 H12	1071010
					25 H8	8 H12	1071015
					30 H8	10 H12	1071020
					3/4"	15/64"	1071004
					1"	5/16"	1071016
					1 1/4"	25/64"	1071022
2	23.8	76		84	20 H8	6 H12	1072005
					22 H8	8 H12	1072010
					25 H8	8 H12	1072015
					30 H8	10 H12	1072020
					3/4"	15/64"	1072004
					1"	5/16"	1072016
					1 1/4"	25/64"	1072022
4	27	92		92	25 H8	8 H12	1074010
					30 H8	10 H12	1074015
					35 H8	13 H12	1074020
					1"	5/16"	1074016
					1 1/4"	25/64"	1074022
					1 3/8"	33/64"	1074024
5	30.2	98		98	30 H8	10 H12	1075005
					35 H8	13 H12	1075010
					40 H8	13 H12	1075015
					1 1/4"	25/64"	1075022
					1 3/8"	33/64"	1075024
					1 1/2"	33/64"	1075026
6	30.2	112		108	30 H8	10 H12	1076005
					35 H8	13 H12	1076010
					40 H8	13 H12	1076015
					1 1/4"	25/64"	1076022
					1 3/8"	33/64"	1076024
					1 1/2"	33/64"	1076026

7	34.9	112	20	108	35 H8	13 H12	1077005
					40 H8	13 H12	1077010
					45 H8	13 H12	1077020
					1 3/8"	33/64"	1077024
					1 1/2"	33/64"	1077026
					1 3/4"	33/64"	1077028
8	34.9	124	20	119	35 H8	13 H12	1078005
					40 H8	13 H12	1078010
					45 H8	13 H12	1078020
					1 3/8"	33/64"	1078024
					1 1/2"	33/64"	1078026
					1 3/4"	33/64"	1078028
10	42	136	25	137	40 H8	13 H12	107T010
					45 H8	13 H12	107T020
					1 1/2"	33/64"	107T026
					1 3/4"	33/64"	107T028

Dim.	D (mm)	R (mm)	B (mm)	L (mm)	A	C	CODE
3100	22	69	20	80	20 H8	6 H12	1071W05
					22 H8	6 H12	1071W10
					25 H8	8 H12	1071W15
					30 H8	10 H12	1071W20
					3/4"	15/64"	1071W04
					1"	5/16"	1071W16
					1 1/4"	25/64"	1071W22
3200	23.8	76		80	20 H8	6 H12	1072W05
					22 H8	8 H12	1072W10
					25 H8	8 H12	1072W15
					30 H8	10 H12	1072W20
					3/4"	15/64"	1072W04
					1"	5/16"	1072W16
					1 1/4"	25/64"	1072W22
3300	27	92	95	25 H8	8 H12	1073W15	
				30 H8	10 H12	1073W20	
				35 H8	13 H12	1073W25	
				1"	5/16"	1073W16	
				1 1/4"	25/64"	1073W22	
				1 3/8"	33/64"	1073W24	
3400	32	94	22	101	30 H8	10 H12	1074W10
					35 H8	13 H12	1074W15
					40 H8	13 H12	1074W20
					1 1/4"	25/64"	1074W22
					1 3/8"	33/64"	1074W24
					1 1/2"	33/64"	1074W26

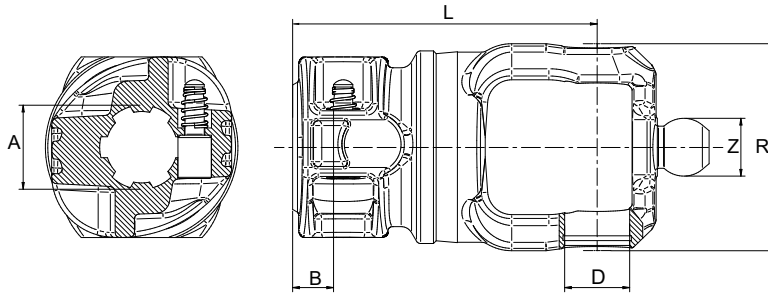
3500	36	106	24	118	30 H8	10 H12	1075W10
					35 H8	13 H12	1075W15
					40 H8	13 H12	1075W20
					1 3/8"	33/64"	1075W24
					1 1/2"	33/64"	1075W26
					1 3/4"	33/64"	1075W28

GROOVED



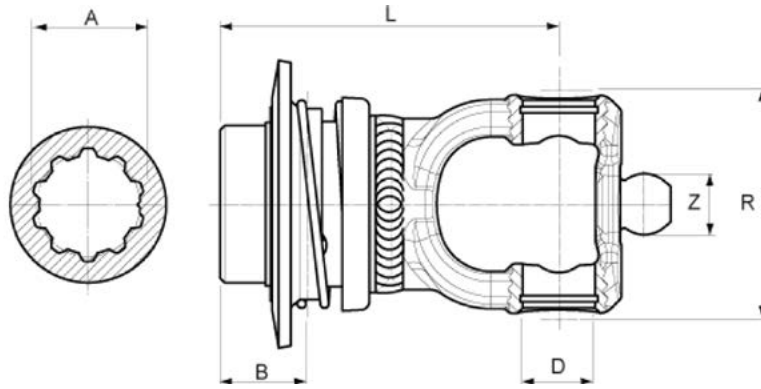
Dim.	D (mm)	R (mm)	L (mm)	A	CODE
1	22	67	80	1 1/8 Z6	1701005
				1 3/8 Z6	1701010
				1 3/8 Z21	1701015
				21 UNI 221	1701012
				26 UNI 220	1701001
2	23.8	76	84	1 1/8 Z6	1702005
				1 3/8 Z6	1702010
				1 3/8 Z21	1702015
				21 UNI 221	1702012
				26 UNI 220	1702001
4	27	92	92	1 1/8 Z6	1704005
				1 3/8 Z6	1704010
				1 3/8 Z21	1704015
5	30.2	98	98	1 3/8 Z6	1705010
				1 3/8 Z21	1705015
				1 3/4 Z6	1705020
				1 3/4 Z20	1705025
6	30.2	112	108	1 3/8 Z6	1706010
				1 3/8 Z21	1706015
				1 3/4 Z6	1706020
				1 3/4 Z20	1706025
7	34.9	112		1 3/8 Z6	1707010
				1 3/8 Z21	1707015
				1 3/4 Z6	1707020
				1 3/4 Z20	1707025
8	34.9	124	119	1 3/8 Z6	1708010
				1 3/8 Z21	1708015
				1 3/4 Z6	1708020
				1 3/4 Z20	1708025
10	42	136	137	1 3/8 Z6	170T010
				1 3/8 Z21	170T015
				1 3/4 Z6	170T020
				1 3/4 Z20	170T025

HOMOKINETICS WITH BUTTON



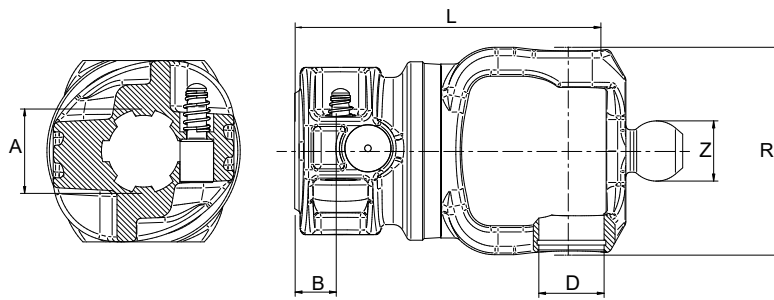
Size	D (mm)	R (mm)	B (mm)	L (mm)	Z	A	CODE	KIT CODE BUTTON QUICK
2	23.8	75	21	112	20	1 3/8" Z6	1022710	1581037
3200						1 3/8" Z21	1022715	1581038
4	27	92	21	123	24	1 3/8" Z6	1024710	1581037
3300						1 3/8" Z21	1024715	1581038
6	30.2	102	21	128	27	1 3/8" Z6	1026710	1581037
3400						1 3/8" Z21	1026715	1581038
6	30.2	102	24	130	27	1 3/4" Z6	1026720	1581042
3400						1 3/4" Z20	1026725	1581042
8	34.9	114	21	140	30	1 3/8" Z6	1028710	1581037
3500						1 3/8" Z21	1028715	1581038
8	34.9	114	24	140	30	1 3/4" Z6	1028720	1581042
3500						1 3/4" Z20	1028725	1581042

HOMOKINETIC PULL COLLARS



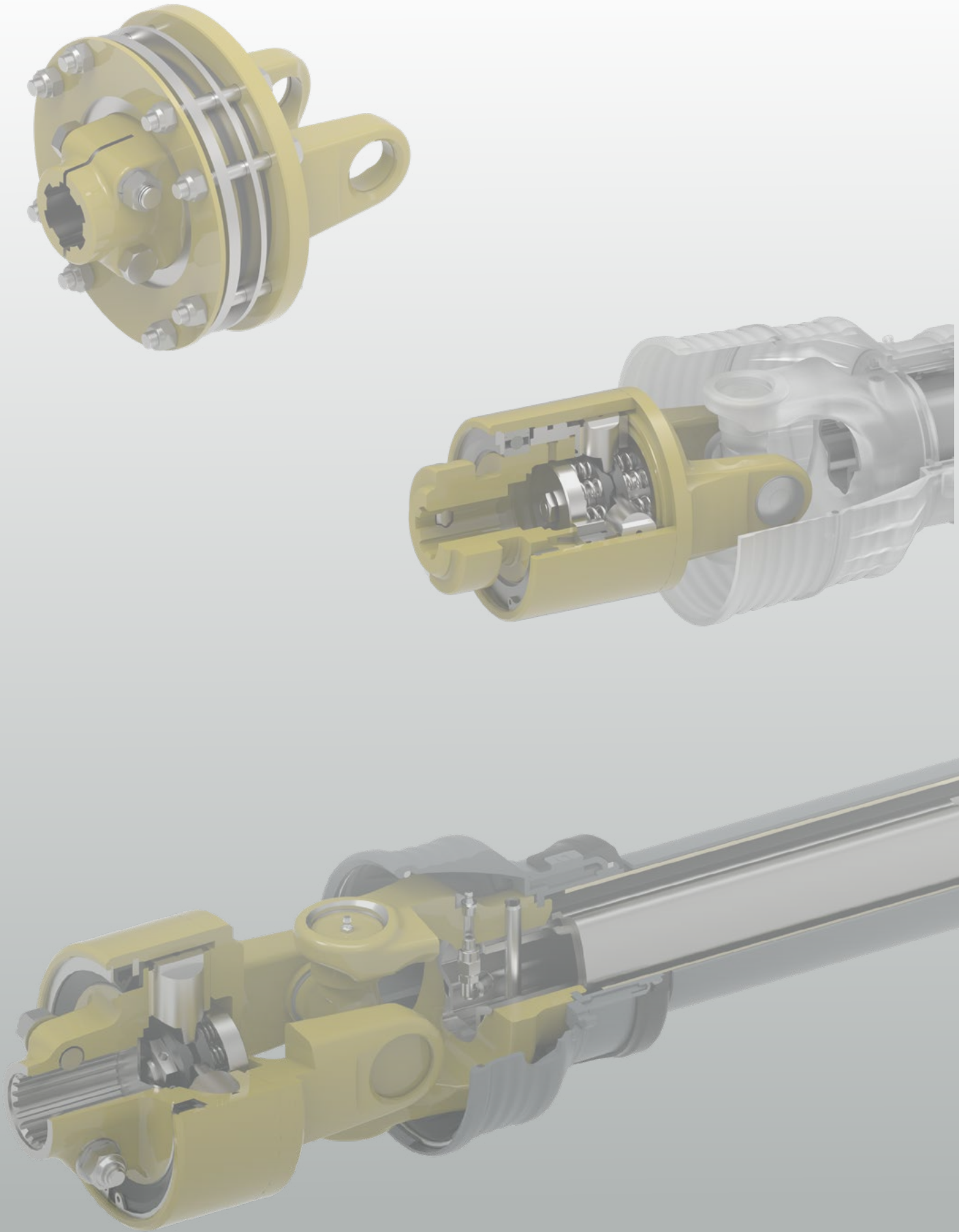
Dim.	D (mm)	R (mm)	B (mm)	L (mm)	Z	A	CODE	CODE KIT PUSH-BUTTON
2	23.8	75	28.5	114	20	1 3/8" Z6	1012713	1004245
3200						1 3/8" Z21	1012718	
4	27	92	28.5	122	24	1 3/8" Z6	1014713	
3300						1 3/8" Z21	1014718	
6	30.2	102	28.5	123.5	27	1 3/8" Z6	1016713	
3400						1 3/8" Z21	1016718	
6	30.2	102	28.5	128	30	1 3/4" Z6	1016723	1004242
3400						1 3/4" Z20	1016728	
8	34.9	114	28.5	133.5	30	1 3/8" Z6	1018713	1004245
3500						1 3/8" Z21	1018718	
8	34.9	114	28.5	138	30	1 3/4" Z6	1018723	1004242
3500						1 3/4" Z20	1018728	

QUICK PIN HOMOKINETICS



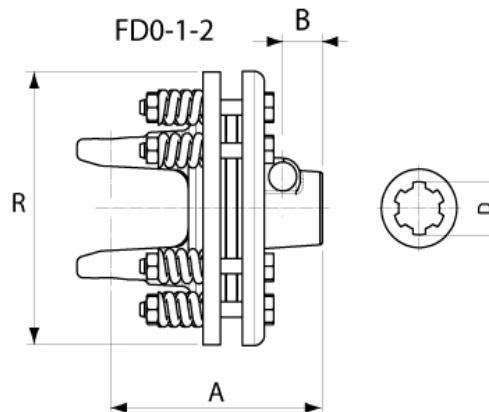
Size	D (mm)	R (mm)	B (mm)	L (mm)	Z	A	CODE	CODE KIT QUICK PIN	KIT BUTTON
2	23.8	75	21	112	20	1 3/8" Z6	1022760	1581922	1581037
3200						1 3/8" Z21	1022765	1581924	1581038
4	27	92	21	123	24	1 3/8" Z6	1024760	1581922	1581037
3300						1 3/8" Z21	1024765	1581924	1581038
6	30.2	102	21	128	27	1 3/8" Z6	1026760	1581922	1581037
3400						1 3/8" Z21	1026765	1581924	1581038
6	30.2	102	24	130	24	1 3/4" Z6	1026770	1581923	1581042
3400						1 3/4" Z20	1026775		
8	34.9	114	21	138	21	1 3/8" Z6	1028760	1581022	1581037
3500						1 3/8" Z21	1028765	1581924	1581038
8	34.9	114	24	140	30	1 3/4" Z6	1028770	1581923	1581042
3500						1 3/4" Z20	1028775		

6. SAFETY ELEMENTS



6.1 FD

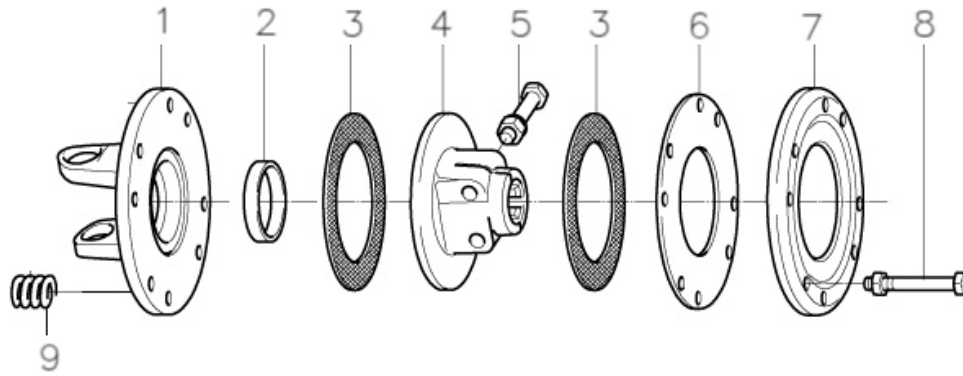
2-DISC



Size				FD0	FD1	FD2	ATTACHMENT
	Mmax [Nm]			700	900	1200	
	R [mm]			152	180	200	
	A [mm]	B [mm]	D	CODE			
4	128	21	1 3/8" Z6	1334030	-	-	SECANT BOLT
			1 3/8" Z21	1334041	-	-	-
	138	27	1 3/8" Z6	-	1344018	-	DOUBLE SECANT BOLT
			1 3/8" Z21	-	1344021	-	DOUBLE SECANT BOLT
5	144	27	1 3/8" Z6	-	1345018	1385018	DOUBLE SECANT BOLT
			1 3/8" Z21	-	1345021	1385121	DOUBLE SECANT BOLT
	151	29	1 3/4" Z6	-	1365018	1405018	DOUBLE SECANT BOLT
			1 3/4" Z20	-	1365028	1405028	DOUBLE SECANT BOLT
6	151	27	1 3/8" Z6	-	1346018	1386018	DOUBLE SECANT BOLT
			1 3/8" Z21	-	1346021	1386121	CONICAL CLAMP
	158	29	1 3/4" Z6	-	1366018	1406018	DOUBLE SECANT BOLT
			1 3/4" Z20	-	1366028	1406028	DOUBLE SECANT BOLT
7	151	27	1 3/8" Z6	-	1347018	1387018	-
			1 3/8" Z21	-	1347021	1387121	-
	158	29	1 3/4" Z6	-	1367018	1407018	-
			1 3/4" Z20	-	1367028	1407028	-
8	159	27	1 3/8" Z6	-	-	1388018	DOUBLE SECANT BOLT
			1 3/8" Z21	-	-	1388121	DOUBLE SECANT BOLT
	166	26	1 3/4" Z6	-	-	1408018	DOUBLE SECANT BOLT
			1 3/4" Z20	-	-	1408028	DOUBLE SECANT BOLT

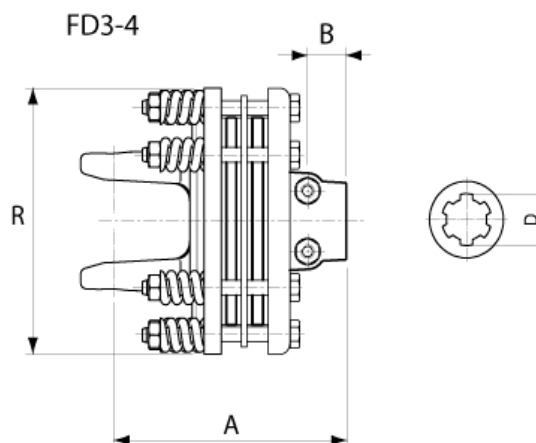
Dim.				FD1	FD2	ATTACHMENT
	Mmax [Nm]			900	1200	
	R [mm]			180	200	
	A [mm]	B [mm]	D	CODE		
3300	138	27	1 3/8" Z6	1343W18	-	DOUBLE SECANT BOLT
			1 3/8" Z21	1343W21	-	
3400	151	27	1 3/4" Z6	-	1384W18	DOUBLE SECANT BOLT
			1 3/4" Z20	-	1384W21	
	158	29	1 3/4" Z6	-	1404W18	DOUBLE SECANT BOLT
			1 3/4" Z20	-	1404W28	

COMPONENTS



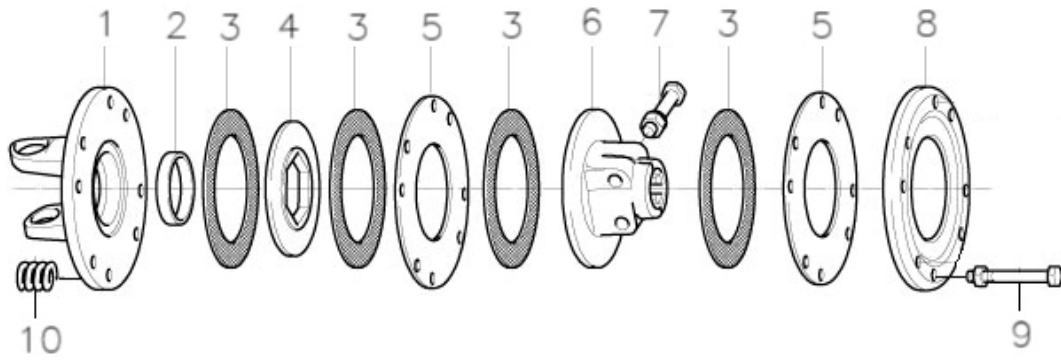
						FD0		FD1		FD2
No.	Description	Dim.	D	GROOVINGS	Qty	CODE	Qty	CODE	Qty	CODE
1	FLANGE	4	-	-	1	1704021	1	1704006	1	-
		5				-		1705006		1705041
		6				-		1706005		1706033
		7				-		1707005		1707033
		8				-		-		1708006
2	BEARING	-	-	-	1	1704017	1	1705009	1	1705009
3	FRICTION DISC	-	Ø 120	-	2	1804000	2	-	2	-
			Ø 140			-		1805010		-
			Ø 160			-		-		1808010
4	HUB	-	-	1 3/8" Z6	1	1704016	1	1705005	1	1708005
				1 3/8" Z21		1704011		1705047		1708121
				1 3/4" Z6		-		1705045		1708014
				1 3/4" Z20		-		1705046		1706314
5	BOLT KIT M12X65	-	-	1 3/8"	1	6761265	-	-	-	-
	BOLT KIT M12X70				-	-	2	6761270	-	-
	BOLT KIT M12X80			1 3/4"	-	-	-	-	2	6761480
6	INTERNAL DISC	-	-	-	1	1134008	1	1135008	1	1138008
7	PRESSURE PLATE	-	-	-	1	1134007	1	1135007	1	1138007
8	BOLT AND NUT M10X75	-	-	-	8	6691075	-	-	-	-
	BOLT AND NUT M10X85	-	-	-	-	-	8	6691085	8	6691085
9	COIL SPRING	-	-	-	8	1215012	8	1215012	8	1215012

4-DISC



				FD3	FD4
Dim.	Mmax [Nm]			1500	2200
	R [mm]			180	200
	A [mm]	B [mm]	D	CODE	
4	156	27	1 3/8" Z6	1424030	-
			1 3/8" Z21	1424034	-
	163	29	1 3/4" Z6	1444031	-
			1 3/4" Z20	1444036	-
5	162	27	1 3/8" Z6	1425030	-
			1 3/8" Z21	1425035	-
	169	29	1 3/4" Z6	1445031	-
			1 3/4" Z20	1445041	-
6	169	27	1 3/8" Z6	1426030	1466030
			1 3/8" Z21	1426035	1466035
	176	29	1 3/4" Z6	1446031	1446032
			1 3/4" Z20	1446017	1446037
7	169	27	1 3/8" Z6	1427030	1467030
			1 3/8" Z21	1427035	1467035
	176	29	1 3/4" Z6	1447031	1447032
			1 3/4" Z20	1447017	1447037
8	177	27	1 3/8" Z6	1428030	1468031
			1 3/8" Z21	1428035	1468044
	184	29	1 3/4" Z6	1428031	1448032
			1 3/4" Z20	1448017	1448034
10	174	27	1 3/8" Z6	-	1460028
			1 3/8" Z21	-	1460030
	181	29	1 3/4" Z6	-	1440032
			1 3/4" Z20	-	1440034

COMPONENTS

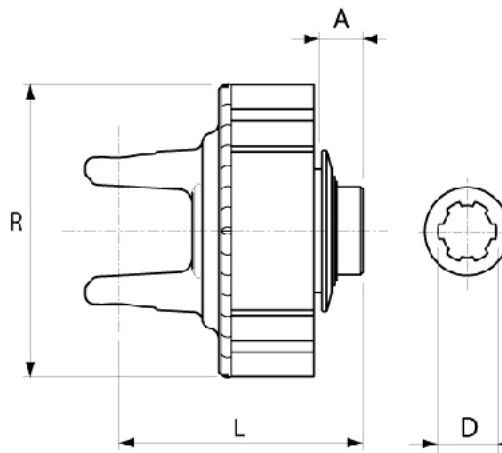


						FD3		FD4
No.	Description	Dim.	D	GROOVINGS	Qty	CODE	Qty	CODE
1	FLANGE	4	-	-	1	1704006	1	-
		5				1705006		1705041
		6				1706005		1706033
		7				1707005		1707033
		8				1708011		1708006
		10						170T006
2	BEARING	-	-	-	1	1705009	1	1705009
3	FRICTION DISC	-	Ø 140	-	4	1805010	4	-
			Ø 160			-		1808010
4	HUB DISC	-	-	-	1	1705033	1	1708034
5	INTERNAL DISC	-	-	-	2	1135008	2	1138008
6	HUB	-	-	1 3/8" Z6	1	1705032	1	1708018
				1 3/8" Z21		1705048		1708021
				1 3/4" Z6		1705049		1708019
				1 3/4" Z20		1705043		1706313
7	BOLT KIT M12X70	-	-	1 3/8"	2	6761270	-	-
	BOLT KIT M12X80			1 3/4"	-	-	2	6761480
8	PRESSURE PLATE	-	-	-	1	1135007	1	1138007
9	BOLT AND NUT M10X100	-	-	-	8	6691010	8	6691010
10	COIL SPRING	-	-	-	8	1215012	8	1215012

No.	Description	Dim.	D	GROOVINGS	Qty	FD3	Qty	FD4
						CODE		CODE
1	FLANGE	3300	-	-	1	1703W06	1	v
		3400				-		1704W41
2	BEARING	-	-	-	1	1705009	1	1705009
3	FRICTION DISC	-	Ø 140	-	4	1805010	4	-
			Ø 160			-		1808010
4	HUB DISC	-	-	-	1	1705033	1	1708034
5	INTERNAL DISC	-	-	-	2	1135008	2	1135008
6	HUB	-	-	1 3/8" Z6	1	1705032	1	1708018
				1 3/8" Z21		1705048		1708021
				1 3/4" Z6		-		1708019
				1 3/4" Z20		-		1706313
7	BOLT KIT M12X70	-	-	1 3/8"	2	6761270	-	-
	BOLT KIT M12X80			1 3/4"	-	-	2	6761480
8	PRESSURE PLATE	-	-	-	1	1135007	1	1138007
9	BOLT AND NUT M10X100	-	-	-	8	6691010	1	6691010
10	COIL SPRING	-	-	-	8	1215012	8	1215012

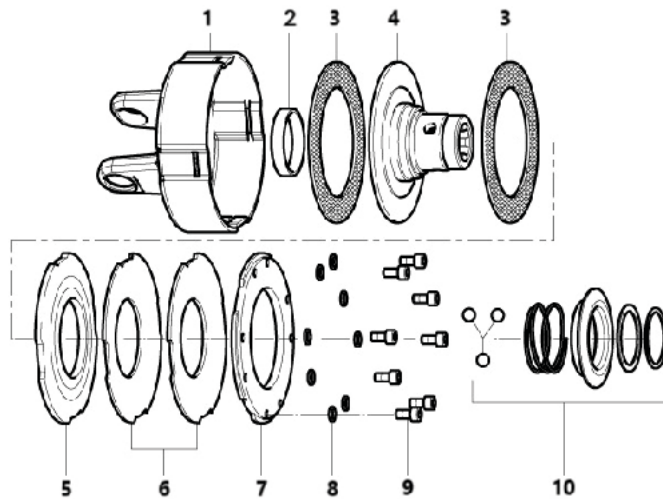
6.2 BD

2-DISC



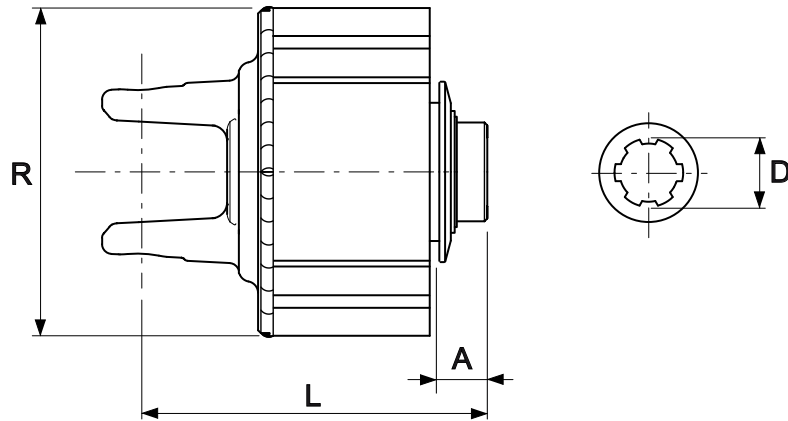
Dim.				BD2		
	Mmax [Nm]			750	900	1200
	R [mm]			171		
	L [mm]	A [mm]	D	CODE		
4	145	28	1 3/8" Z6	1384707	1384709	1384711
			1 3/8" Z21	1384708	1384710	1384712
5	153	28	1 3/8" Z6	1385707	1385709	1385711
			1 3/8" Z21	1385708	1385710	1385712
6	160	28	1 3/8" Z6	1386707	1386709	1386711
			1 3/8" Z21	1386708	1386710	1386712
7	160	28	1 3/8" Z6	1387707	1387709	1387711
			1 3/8" Z21	1387708	1387710	1387712
8	164	28	1 3/8" Z6	1388707	1388709	1388711
			1 3/8" Z21	1388708	1388710	1388712

COMPONENTS



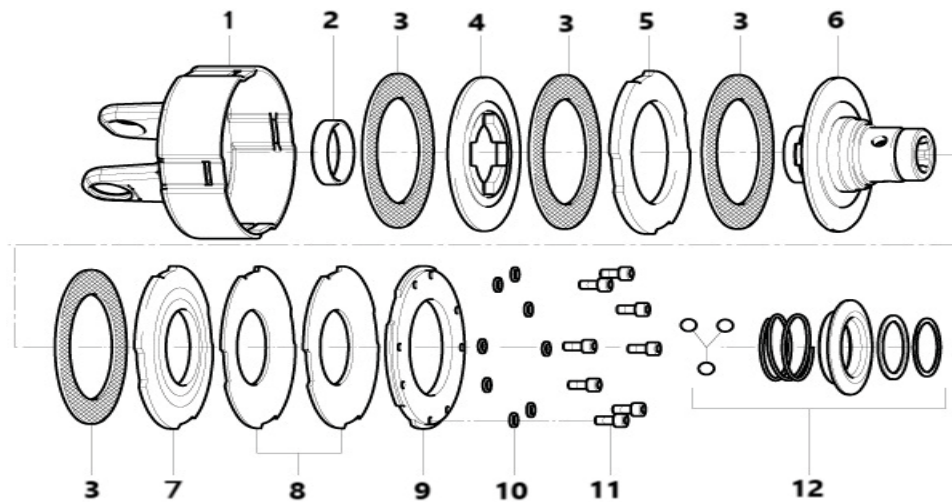
No.	Description	Dim.	Qty	GROOVING	CALIBRATION [Nm]	BD2
1	EXTERNAL BODY	4	1	-	-	1384001
		5				1385001
		6				1386001
		7				1387001
		8				1388001
2	RING	-	1	-	-	1705009
3	FRICTION DISC	-	2	-	-	1806010
4	HUB	-		1 3/8" Z6	-	1704065
				1 3/8" Z21		1704064
5	PRESSURE DISC	-	1	-	-	1134011
6	SPRING KIT	4 5	1	-	750	1216912
		4 5 6			900	1216914
		5 6			1200	1216911
7	CLOSING FLANGE	-	1	-	-	1134012
8	SPECIAL WASHER Ø14 X Ø8.5 X TH.2	-	8	-	-	6402901
9	TCEI SCREW 10.9 M8X18 UNI 5931	-	8	-	-	6040818
10	PULL COLLAR KIT E	-	10	-	-	1004227

4-DISC



				BD4		
Dim.	Mmax [Nm]			1000	1300	1600
	R [mm]			171		
	A [mm]	L [mm]	D	CODE		
5	28	175	1 3/8" Z6	1465703	-	-
			1 3/8" Z21	1465704	-	-
			1 3/8" Z6	-	1465705	-
			1 3/8" Z21	-	1465706	-
			1 3/8" Z6	-	-	1465707
			1 3/8" Z21	-	-	1465708
6	28	182	1 3/8" Z6	1466703	-	-
			1 3/8" Z21	1466704	-	-
			1 3/8" Z6	-	1466705	-
			1 3/8" Z21	-	1466706	-
			1 3/8" Z6	-	-	1466707
			1 3/8" Z21	-	-	1466708
7	28	182	1 3/8" Z6	1467703	-	-
			1 3/8" Z21	1467704	-	-
			1 3/8" Z6	-	1467705	-
			1 3/8" Z21	-	1467706	-
			1 3/8" Z6	-	-	1467707
			1 3/8" Z21	-	-	1467708
8	28	185	1 3/8" Z6	1468703	-	-
			1 3/8" Z21	1468704	-	-
			1 3/8" Z6	-	1468705	-
			1 3/8" Z21	-	1468706	-
			1 3/8" Z6	-	-	1468707
			1 3/8" Z21	-	-	1468708

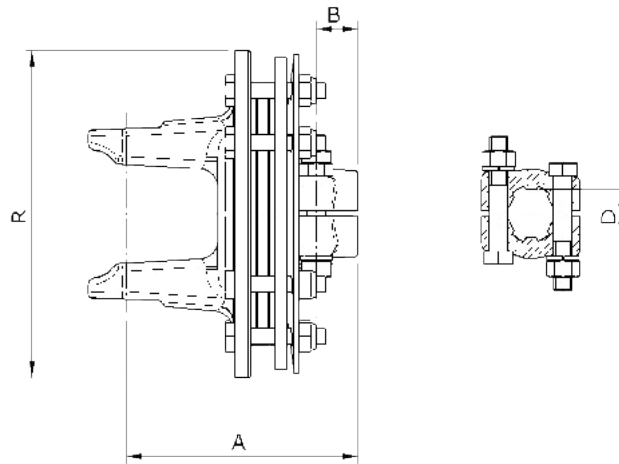
COMPONENTS



No.	Description	Dim.	Qty	CALIBRATION [Nm]	GROOVINGS	CODE
1	EXTERNAL BODY	5	1	-	-	1465001
		6				1466001
		7				1467001
		8				1468001
2	RING	-	1	-	-	1705009
3	FRICTION DISC	-	4	-	-	1806010
4	ROTARY FLANGE	-	1	-	-	1136010
5	PRESSURE FLANGE	-	1	-	-	1136008
6	HUB	-		-	1 3/8" Z6	1706085
					1 3/8" Z21	1706086
7	PRESSURE DISC	-	1	-	-	1134011
8	SPRING KIT	5 6 8	1	1000	-	1216913
				1300	-	1216906
		6 8		1600	-	1216914
9	CLOSING FLANGE		1	-	-	1134012
10	SPECIAL WASHER Ø14 X Ø8.5 X TH.2,8		8	-	-	6402901
11	TCEI SCREW 10.9 M8X18 UNI 5931		8	-	-	6040818
12	PULL COLLAR KIT E		1	-	-	1004227

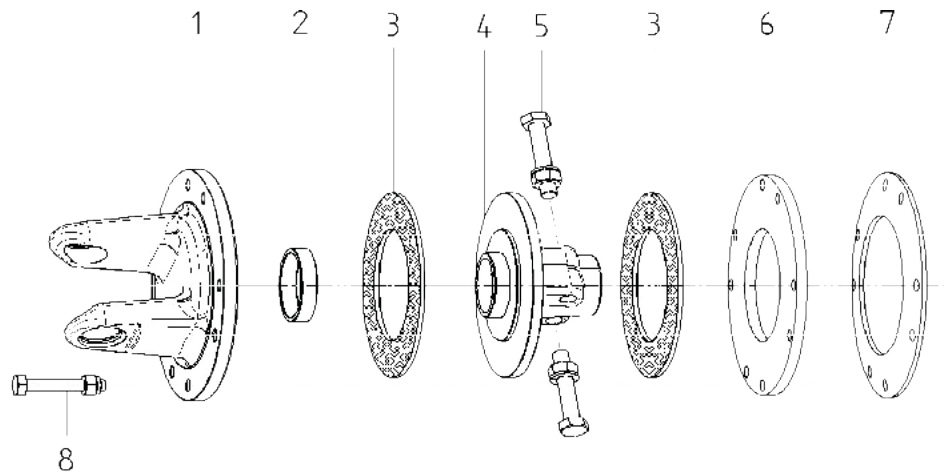
6.3 FT-A

2-DISC



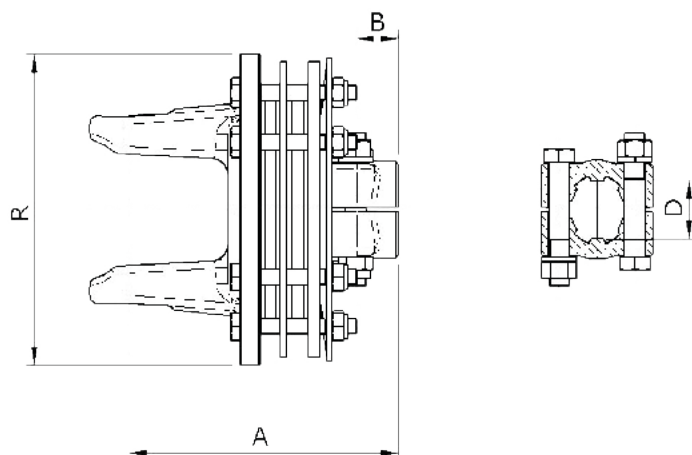
				FT-A1	FT-A2
Dim.	Mmax [Nm]			900	1200
	R [mm]			180	200
	A [mm]	B [mm]	D	CODE	
4	138	27	1 3/8" Z6	1344418	-
			1 3/8" Z21	1344421	-
5	144	27	1 3/8" Z6	1345418	1385418
			1 3/8" Z21	1345421	1385421
	151	29	1 3/4" Z6	-	1405418
			1 3/4" Z20	-	1405428
6	151	27	1 3/8" Z6	1346418	1386418
			1 3/8" Z21	1346421	1386421
	158	29	1 3/4" Z6	-	1406418
			1 3/4" Z20	-	1406428
7	151	27	1 3/8" Z6	1347418	1387418
			1 3/8" Z21	1347421	1387421
	158	29	1 3/4" Z6	-	1407418
			1 3/4" Z20	-	1407428
8	159	27	1 3/8" Z6	-	1388418
			1 3/8" Z21	-	1388421
	166	29	1 3/4" Z6	-	1408418
			1 3/4" Z20	-	1408428

COMPONENTS



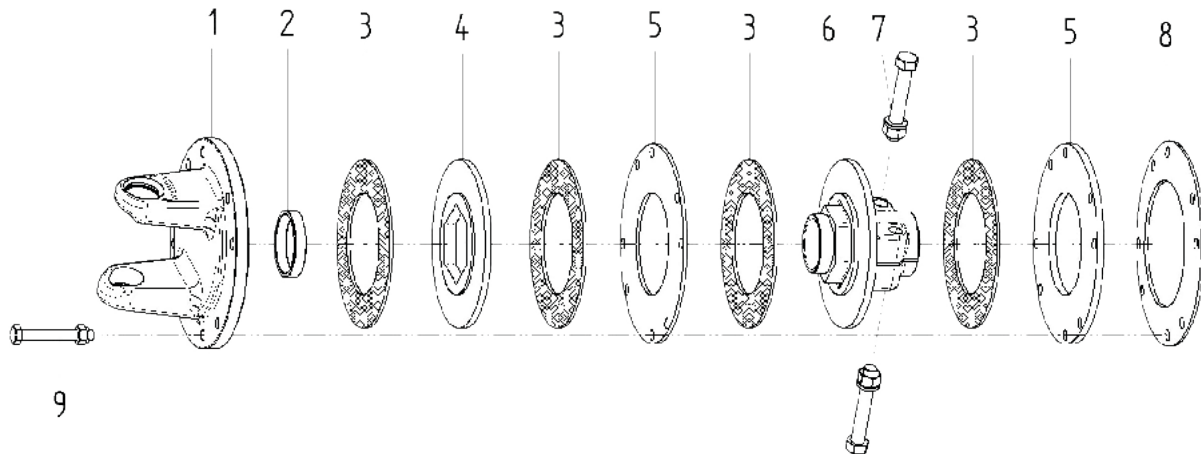
No.	Description	Dim.	Ø [mm]	D	Qty	FT-A1	Ø [mm]	Qty	FT-A2
1	FLANGE FT-A	4	-	-	1	1704006	-	1	-
		5				1705006			1705041
		6				1706005			1706033
		7				1707005			1707033
		8				-			1708006
2	FT-A1/FT-A2 BEARING	-	-	-	1	1705009	-	-	1705009
3	FRICTION DISC FT-A	-	140	-	2	1805010	160	2	1808010
4	HUB FT-A	-	-	1 3/8" Z6	1	1705005	-	1	1708005
				1 3/8" Z21		1705047			1708121
				1 3/4" Z6		-			1708014
				1 3/4" Z20		-			1706314
5	HUB BOLT KIT FT-A1/A2	-	M12x70	1 3/8"	2	6761270	-	2	6761270
			M14x80	1 3/4"		6761480			6761480
6	PRESSURE PLATE FT-A	-	-	-	1	1138043	-	1	1138047
7	FT-A CUP SPRING	-	-	-	1	1216201	-	1	1216301
8	BOLT WITH NUT FT-A	-	M10x60		8	6691060	-	8	6691060

4-DISC



				FT-A3	FT-A4
Dim.	Mmax [Nm]			1500	2200
	R [mm]			180	200
	A [mm]	B [mm]	D	CODE	
4	156	27	1 3/8" Z6	1424430	-
			1 3/8" Z21	1424434	-
5	162	27	1 3/8" Z6	1425430	-
			1 3/8" Z21	1425435	-
	169	29	1 3/4" Z6	1445431	-
			1 3/4" Z20	1445441	-
6	169	27	1 3/8" Z6	1426430	1466430
			1 3/8" Z21	1426435	1466435
	176	29	1 3/4" Z6	1446431	1446432
			1 3/4" Z20	1446417	1446437
7	169	27	1 3/8" Z6	1427430	1467430
			1 3/8" Z21	1427435	1467435
	176	29	1 3/4" Z6	1447431	1447432
			1 3/4" Z20	1447417	1447437
8	177	27	1 3/8" Z6	1428430	1468431
			1 3/8" Z21	1428435	1468444
	184	29	1 3/4" Z6	1428431	1448432
			1 3/4" Z20	1448417	1448434
10	174	27	1 3/8" Z6	-	146T428
			1 3/8" Z21	-	146T430
	181	29	1 3/4" Z6	-	144T432
			1 3/4" Z20	-	144T434

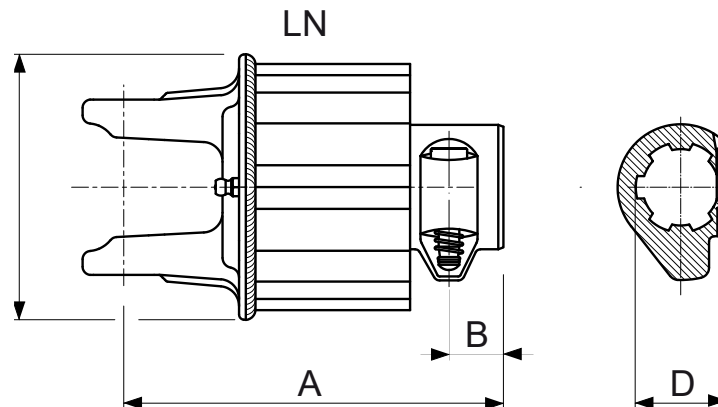
COMPONENTS



No.	Description	Dim.	Ø [mm]	D	Qty	FT-A3	Ø [mm]	Qty	FT-A4
1	FLANGE FT-A	4	-	-	1	1704006	-	1	-
		5				1705006			1705041
		6				1706005			1706033
		7				1707005			1707033
		8				1708011			1708006
		10				-			170T006
2	FT-A3/FT-A4 BEARING	-	-	-	1	1705009	-	1	1705009
3	FRICTION DISC FT-A	-	140	-	4	1805010	160	4	1808010
4	HUB DISC FT-A	-	-	-	1	1705033	-	1	1708034
5	PRESSURE PLATE FT-A	-	-	-	2	1138043	-	2	1138047
6	HUB FT-A	-	-	1 3/8" Z6	1	1705032	-	1	1708018
				1 3/8" Z21		1705048			1708021
				1 3/4" Z6		1705049			1708019
				1 3/4" Z20		1705043			1706313
7	HUB BOLT KIT FT-A	-	M12x70	1 3/8"	2	6761270	-	2	6761270
			M14x80	1 3/4"		6761480			6761480
8	FT-A CUP SPRING	-	-	-	1	1216201	-	1	1216301
9	BOLT WITH NUT FT-A	-	M10x80	-	8	6691080	-	8	6691080

6.4 LN

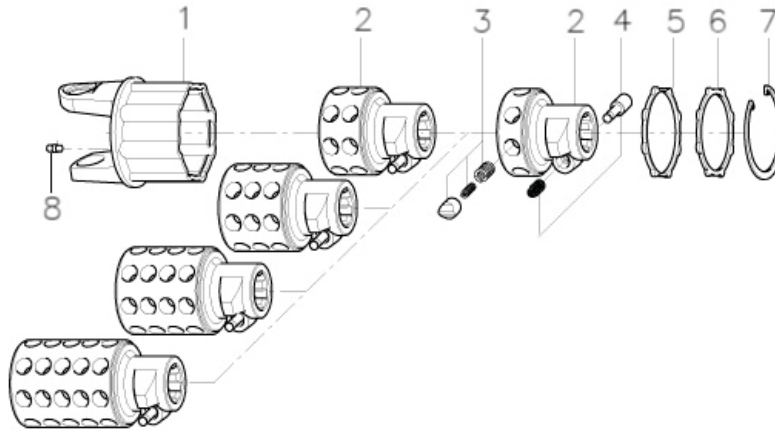
WITH PAWL



				LN									No. FILE Not.	
Dim.	Mmax [Nm]			380	760	760	1140	1520	1900	1140	1520	1900		
	R [mm]			98		102				118				
	A [mm]	B [mm]	D	CODE										
1	118	21	1 3/8" Z6	1601250	-	-	-	-	-	-	-	-	1	
			1 3/8" Z21	1601251	-	-	-	-	-	-	-	-		
2	122	21	1 3/8" Z6	1602250	-	-	-	-	-	-	-	-	1	
			1 3/8" Z21	1602251	-	-	-	-	-	-	-	-		
	142	21	1 3/8" Z6	-	1622250	-	-	-	-	-	-	-	2	
			1 3/8" Z21	-	1622251	-	-	-	-	-	-	-		
4	153	21	1 3/8" Z6	-	-	1624250	-	-	-	-	-	-	2	
			1 3/8" Z21	-	-	1624251	-	-	-	-	-	-		
	173	21	1 3/8" Z6	-	-	-	1644250	-	-	-	-	-	3	
			1 3/8" Z21	-	-	-	1644251	-	-	-	-	-		
	193	21	1 3/8" Z6	-	-	-	-	1664250	-	-	-	-	4	
			1 3/8" Z21	-	-	-	-	1664251	-	-	-	-		
5	157	21	1 3/8" Z6	-	-	1625250	-	-	-	-	-	-	2	
			1 3/8" Z21	-	-	1625251	-	-	-	-	-	-		
	177	21	1 3/8" Z6	-	-	-	1645250	-	-	-	-	-	3	
			1 3/8" Z21	-	-	-	1645251	-	-	-	-	-		
	197	21	1 3/8" Z6	-	-	-	-	1665250	-	-	-	-	4	
			1 3/8" Z21	-	-	-	-	1665251	-	-	-	-		
	217	21	1 3/8" Z6	-	-	-	-	-	1685250	-	-	-	5	
			1 3/8" Z21	-	-	-	-	-	1685250	-	-	-		
6	184	21	1 3/8" Z6	-	-	-	-	-	-	1646250	-	-	3	
			1 3/8" Z21	-	-	-	-	-	-	1645251	-	-		
	204	21	1 3/8" Z6	-	-	-	-	-	-	-	1666250	-	4	
			1 3/8" Z21	-	-	-	-	-	-	-	1666251	-		
	224	21	1 3/8" Z6	-	-	-	-	-	-	-	-	1686250	5	
			1 3/8" Z21	-	-	-	-	-	-	-	-	1686251		
7	204	21	1 3/8" Z6	-	-	-	-	-	-	-	1667250	-	4	
			1 3/8" Z21	-	-	-	-	-	-	-	1667251	-		
	224	21	1 3/8" Z6	-	-	-	-	-	-	-	-	1687250	5	
			1 3/8" Z21	-	-	-	-	-	-	-	-	1687251		

				LN								
Dim.	Mmax [Nm]			380	760	760	1140	1520	1900	1140	1520	1900
	R [mm]			98		102				120		
	A [mm]	B [mm]	D	CODE								
3100	122	21	1 3/8" Z6	1601W09	-	-	-	-	-	-	-	-
			1 3/8" Z21	1601W10	-	-	-	-	-	-	-	-
3200	127	21	1 3/8" Z6	1602W09	-	-	-	-	-	-	-	-
			1 3/8" Z21	1602W10	-	-	-	-	-	-	-	-
	147	21	1 3/8" Z6	-	1622W09	-	-	-	-	-	-	-
			1 3/8" Z21	-	1622W10	-	-	-	-	-	-	-
3300	155	21	1 3/8" Z6	-	-	1623W09	-	-	-	-	-	-
			1 3/8" Z21	-	-	1623W10	-	-	-	-	-	-
	175	21	1 3/8" Z6	-	-	-	1643W09	-	-	-	-	-
			1 3/8" Z21	-	-	-	1643W10	-	-	-	-	-
	193	21	1 3/8" Z6	-	-	-	-	1663W09	-	-	-	-
			1 3/8" Z21	-	-	-	-	1663W10	-	-	-	-
3400	155	21	1 3/8" Z6	-	-	1624W09	-	-	-	-	-	-
			1 3/8" Z21	-	-	1624W10	-	-	-	-	-	-
	175	21	1 3/8" Z6	-	-	-	1644W09	-	-	-	-	-
			1 3/8" Z21	-	-	-	1644W10	-	-	-	-	-
	195	21	1 3/8" Z6	-	-	-	-	1664W09	-	-	-	-
			1 3/8" Z21	-	-	-	-	1664W10	-	-	-	-
	215	21	1 3/8" Z6	-	-	-	-	-	1684W09	-	-	-
			1 3/8" Z21	-	-	-	-	-	1684W10	-	-	-
3500	184	21	1 3/8" Z6	-	-	-	-	-	-	1645W09	-	-
			1 3/8" Z21	-	-	-	-	-	-	1645W10	-	-
	207	21	1 3/8" Z6	-	-	-	-	-	-	-	1665W09	-
			1 3/8" Z21	-	-	-	-	-	-	-	1665W10	-
	227	21	1 3/8" Z6	-	-	-	-	-	-	-	-	1685W09
			1 3/8" Z21	-	-	-	-	-	-	-	-	-

COMPONENTS



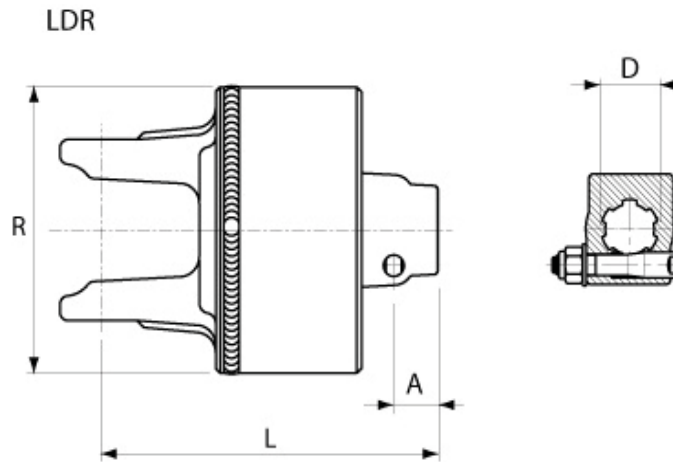
					LN			LN
No.	Description	Dim.	Qty	GROOVINGS	CODE	Dim.	Qty	CODE
1	EXTERNAL BODY LN1*	1	1	-	1601248	3100	1	1601W48
		2			1602248	3200		1602W48
	EXTERNAL BODY LN2*	2		-	1622248	3200		1622W48
		4			1624248	3300		1623W48
		5			1625248	3400		1624W48
	EXTERNAL BODY LN3*	4		-	1644248	3200		1642W48
		5			1645248	3300		1643W48
		6			1646248	3400		1644W48
	EXTERNAL BODY LN4*			-		3500		1645W48
		4			1664248	3300 3400 3500		1663W48
		5			1665248			1664W48
		6			1666248			1665W48
	7	1667248						
	EXTERNAL BODY LN5*	5		-	1685248	3400 3500		1684W48
6		1686248	1685W48					
7		1687248						
2	HUB LN1*	-	1	1 3/8" Z6	1701245	-	1	1701245
				1 3/8" Z21	1701244			1701244
	HUB LN2*			1 3/8" Z6	1702245			1702245
				1 3/8" Z21	1702244			1702244
	HUB LN3*			1 3/8" Z6	1703245			1703245
				1 3/8" Z21	1703244			1703244
	HUB LN4*			1 3/8" Z6	1704245			1704245
				1 3/8" Z21	1704246			1704246
	HUB LN5*			1 3/8" Z6	1705245			1705245
				1 3/8" Z21	1705256			1705256
3	LN1 PAWL KIT	-	8	-	1601146	-	8	1601146
	LN2 PAWL KIT		16				16	
	LN3 PAWL KIT		24				24	
	LN4 PAWL KIT		32				32	
	LN5 PAWL KIT		40				40	

4	BUTTON KIT	-	1	-	1581038	-	1	1581038
5	DUST RING	-	1	-	1781226	-	1	1781226
6	CLOSING RING	-	1	-	1131225	-	1	1131225
7	ELASTIC RING	-	1	-	6320080	-	1	6320080
8	STRAIGHT GREASE NIPPLE M6	-	1	-	6560006	-	1	6560006

*LN1,...,5 - INDICATES THE NUMBER OF PAWL ROWS PRESENT ON THE RELATIVE COMPONENT.

6.5 LDR

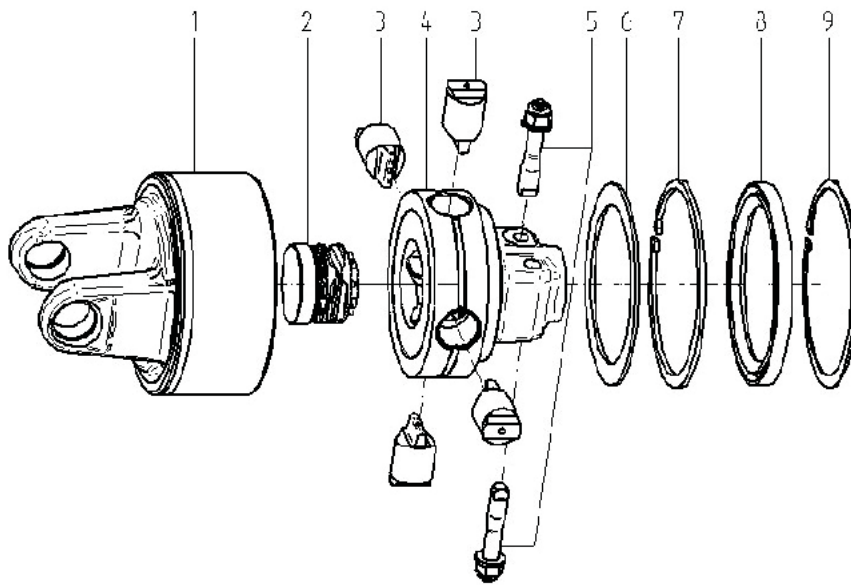
CAM TYPE



				LDR				
Dim.	Mmax [Nm]			1600	2000	2500	3000	3500
	R [mm]			170				
	A [mm]	L [mm]	D	CODE				
4	27	190	1 3/8" Z6	1714205	1714305	-	-	-
			1 3/8" Z21	1714206	1714306	-	-	-
5	27	196	1 3/8" Z6	1715205	1715305	-	-	-
			1 3/8" Z21	1715206	1715306	-	-	-
6	27	203	1 3/8" Z6	-	1716305	1716405	-	-
			1 3/8" Z21	-	1716306	1716406	-	-
	29	203	1 3/4" Z6	-	1716307	1716407	-	-
			1 3/4" Z20	-	1716308	1716408	-	-
7	27	203	1 3/8" Z6	-	-	1717405	1717505	
			1 3/8" Z21	-	-	1717406	1717506	
	29	203	1 3/4" Z6	-	-	1717407	1717507	
			1 3/4" Z20	-	-	1717408	1717508	
8	27	210	1 3/8" Z6	-	-	1718405	1718505	1718605
			1 3/8" Z21	-	-	1718406	1718506	1718606
	29	210	1 3/4" Z6	-	-	1718407	1718507	1718607
			1 3/4" Z20	-	-	1718408	1718508	1718608
10	27	210	1 3/8" Z6	-	-	-	171T505	171T605
			1 3/8" Z21	-	-	-	171T506	171T606
	29	210	1 3/4" Z6	-	-	-	171T507	171T607
			1 3/4" Z20	-	-	-	171T508	171T608

				LDR		
Dim.	Mmax [Nm]			2000	2500	3000
	R [mm]			170		
	A [mm]	L [mm]	D	CODE		
3400	27	196	1 3/8" Z6	1714W21	1714W31	-
			1 3/8" Z21	1714W22	1714W32	-
3500	27	203	1 3/8" Z6	-	1715W31	1715W41
			1 3/8" Z21	-	1715W32	1715W42
	29	203	1 3/4" Z6	-	1715W33	1715W43
			1 3/4" Z20	-	1715W34	1715W44

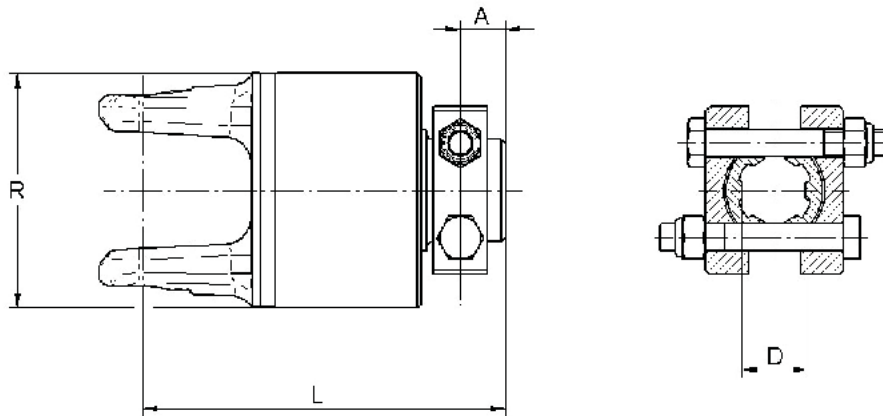
COMPONENTS



No.	Description	Dim.	Qty	GROOVINGS	CALIBRATION [Nm]	CODE
1	EXTERNAL BODY	4	1	-	-	1714010
		5				1715010
		6				1716010
		7				1717010
		8				1718010
		10				171T010
2	SPRING PACK	4	1	-	1600	1006114
		5			2000	1006115
		6 7 8 10			2000	1006115
					2500	1006116
					3000	1006117
					3500	1006118
					4000	1006119
3	NIGHTINGALEØ	-	4	-	-	1236075
4	HUB ASSEMBLY	-	1	1 3/8" Z6	-	1006172
				1 3/8" Z21		1006173
				1 3/4" Z6		1008172
				1 3/4" Z20		1008173
5	TAPER CLAMP KIT	-	2	1 3/8"	-	6821281
				1 3/4"		6821486
6	INNER RING	-	1	-	-	1136154
7	SEEGER RING	-	1	-	-	6320155
8	OIL SEAL	-	1	-	-	6201215
9	SHOULDER RING		1	-	-	6322155

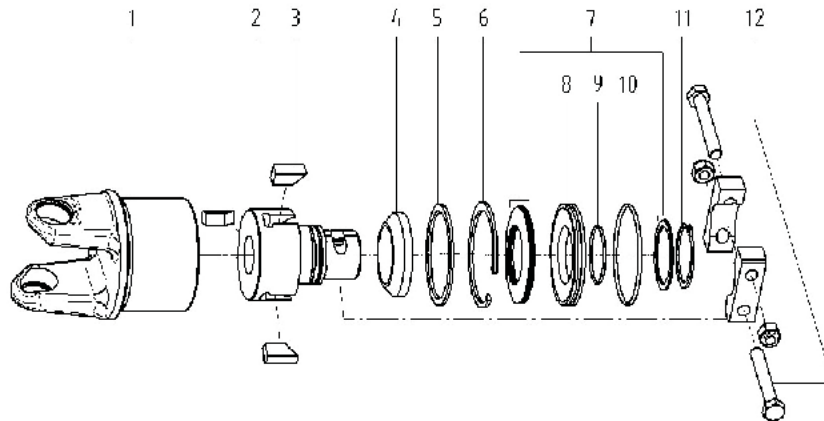
6.6 LDR-K

CAM TYPE



				LDR-K				
Dim.	Mmax [Nm]			600	900	1200	1600	2000
	R [mm]			104.5				
	A [mm]	L [mm]	D	CODE				
2	21	160	1 3/8" Z6	1752123	-	-	-	-
			1 3/8" Z21	1752124	-	-	-	-
4	21	168	1 3/8" Z6	1754123	1754124	1754126	-	-
			1 3/8" Z21	1754323	1754324	1754326	-	-
5	21	171	1 3/8" Z6	-	1755124	1755126	-	-
			1 3/8" Z21	-	1755324	1755326	-	-
			1 3/4" Z6	-	-	-	1755128	-
			1 3/4" Z20	-	-	-	1755328	-
6	21	181	1 3/8" Z6	-	-	1756126	1756128	1756130
			1 3/8" Z21	-	-	1756326	1756328	1756330
7	21	181	1 3/8" Z6	-	-	1757126	1757128	1757130
			1 3/8" Z21	-	-	1757326	1757328	1757330

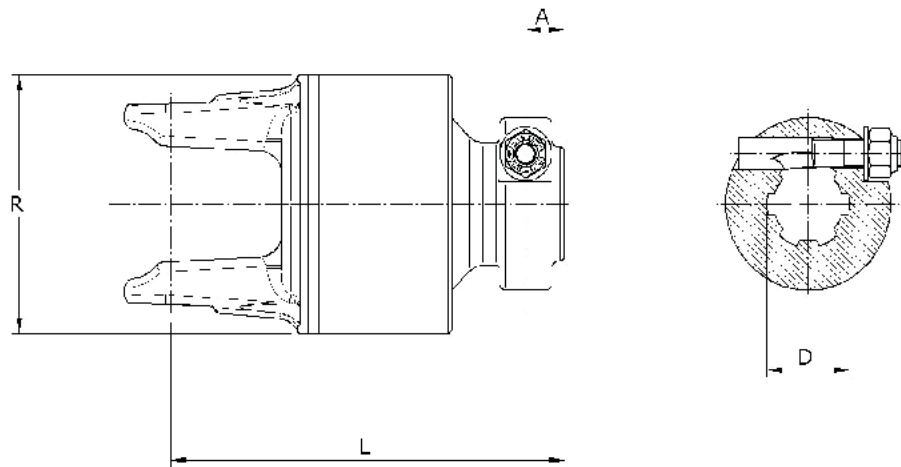
COMPONENTS



No.	Description	Dim.	Qty	GROOVINGS	CALIBRATION [Nm]	CODE
1	EXTERNAL BODY	2	1	-	-	1752010
		4				1754010
		5				1755010
		6				1756010
		7				1757010
2	HUB	-	1	1 3/8" Z6	-	1204112
				1 3/8" Z21		1204113
3	PAWL LDR-K	-	3	-	-	1236057
4	CONICAL RING	-	1	-	-	1136056
5	INNER RING	-	1	-	-	1136052
6	INNER SEEGER RING	-	1	-	-	6320095
7	SPRINGS KIT	2	1	-	600	1007206
		4				1007206
		4			900	1007209
		5				1007209
		4			1200	1007212
		5				1007212
		6				1007212
		7				1007216
		5			1600	1007216
		6				1007216
		7				1007216
		6			2000	1007220
		7				1007220
8	OUTER RING	-	1	-	-	1136050
9	O-RING Ø50	-	1	-	-	69305417
10	O-RING Ø88	-	1	-	-	69309417
11	OUTER SEEGER RING	-	1	-	-	6321054
12	BRIDGE CLAMP KIT 1 3/8"	-	1	-	-	6821070

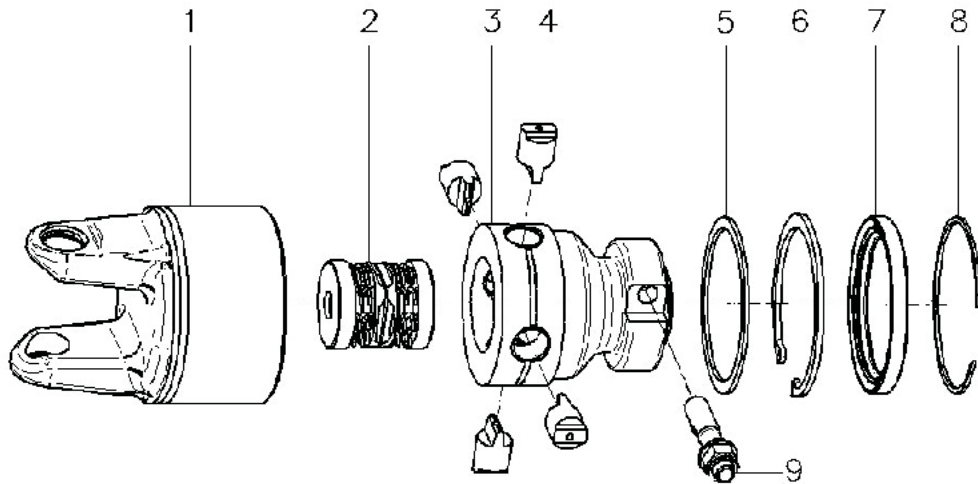
6.7 LDR-M

CAM TYPE



				LDR-M					
Dim.	Mmax [Nm]			1000	1200	1500	1700	2000	2200
	R [mm]			134					
	A [mm]	L [mm]	D	CODE					
4	21	200	1 3/8" Z6	1754511	1754521	-	-	-	-
			1 3/8" Z21	1754512	1754522	-	-	-	-
5	21	206	1 3/8" Z6	-	1755521	1755531	-	-	-
			1 3/8" Z21	-	1755522	1755532	-	-	-
6	21	213	1 3/8" Z6	-	-	1756531	1756541	1756551	-
			1 3/8" Z21	-	-	1756532	1756542	1756552	-
			1 3/4" Z6	-	-	1756533	1756543	1756553	-
			1 3/4" Z20	-	-	1756534	1756544	1756554	-
7	21	213	1 3/8" Z6	-	-	-	1757541	1757551	1757561
			1 3/8" Z21	-	-	-	1757542	1757552	1757562
			1 3/4" Z6	-	-	-	1757543	1757553	1757563
			1 3/4" Z20	-	-	-	1757544	1757554	1757564

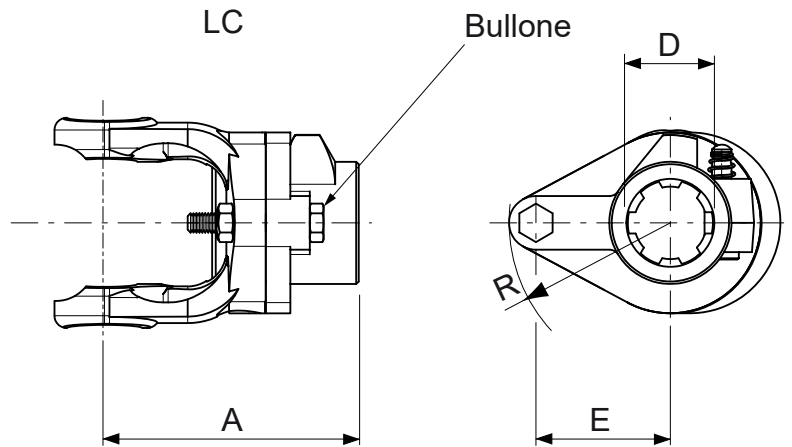
COMPONENTS



No.	Description	Dim.	Qty	GROOVINGS	CALIBRATION [Nm]	CODE
1	EXTERNAL BODY	4	1	-	-	1714010
		5				1715010
		6				1716010
		7				1717010
2	SPRING PACK	4	1	-	1000	1006410
		4			1200	1006412
		5			1500	1006412
		6				1006415
		7			1700	1006415
		6				1006417
		7			2000	1006417
		7				1006420
3	HUB ASSEMBLY	-	1	1 3/8" Z6	-	1006420
				1 3/8" Z21		1006422
				1 3/4" Z6		1005171
				1 3/4" Z20		1005172
4	PAWL Ø25	-	4	-	-	1005173
5	INNER RING	-	1	-	-	1005174
6	SEEGER RING	-	1	-	-	1236085
7	OIL SEAL	-	1	-	-	1136120
8	SHOULDER RING	-	1	-	-	6320120
9	CONICAL CLAMP KIT	-	1	1 3/8"	-	6209012
				1 3/4"		6323120
						6821281
						6821486

6.8 LC

BOLTED

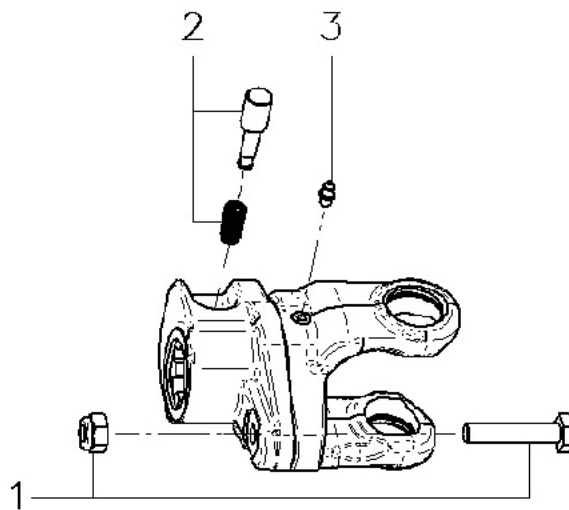


				LC											
Dim.	Mmax [Nm]			650	900	1700	2100	2500	3000	3500	4500				
	E [mm]			36	48	55	46	55	49	57	49	*BOLT.	KIT *BOLT.		
	R [mm]			61		68		78							
	A [mm]	B [mm]	D	CODE											
1	109	21	1 3/8" Z6	1481037	-	-	-	-	-	-	-	M6X40	6690640		
			1 3/8" Z21	1481034	-	-	-	-	-	-	-				
2	113	21	1 3/8" Z6	-	1482037	-	-	-	-	-	-			M8x45	6690845
			1 3/8" Z21	-	1482034	-	-	-	-	-	-				
4	121	21	1 3/8" Z6	-	-	1484037	-	-	-	-	-	M10x50	6691050		
			1 3/8" Z21	-	-	1484034	-	-	-	-	-				
5	123	21	1 3/8" Z6	-	-	-	1485037	-	-	-	-			M10x55	6691055
			1 3/8" Z21	-	-	-	1485034	-	-	-	-				
6	137	21	1 3/8" Z6	-	-	-	-	1486037	-	-	-	M12x60	6691260		
			1 3/8" Z21	-	-	-	-	1486034	-	-	-				
	142	24	1 3/4" Z6	-	-	-	-	1496237	-	-	-				
			1 3/4" Z20	-	-	-	-	1496234	-	-	-				
7	137	21	1 3/8" Z6	-	-	-	-	-	1487037	-	-	M12x65	6691265		
			1 3/8" Z21	-	-	-	-	-	1487034	-	-				
	142	24	1 3/4" Z6	-	-	-	-	-	1497237	-	-				
			1 3/4" Z20	-	-	-	-	-	1497234	-	-				
8	146	21	1 3/8" Z6	-	-	-	-	-	-	1488037	-	M14x65	6691465		
			1 3/8" Z21	-	-	-	-	-	-	1488034	-				
	151	24	1 3/4" Z6	-	-	-	-	-	-	1498237	-				
			1 3/4" Z20	-	-	-	-	-	-	1498234	-				
10	167	21	1 3/8" Z6	-	-	-	-	-	-	-	148T037	M14x65	6691465		
			1 3/8" Z21	-	-	-	-	-	-	-	148T034				
	172	21	1 3/4" Z6	-	-	-	-	-	-	-	149T237				
			1 3/4" Z20	-	-	-	-	-	-	-	149T234				

* Bolt

				LC						
Dim.	Mmax [Nm]			650	900	1700	2100	2500	*BOLT.	KIT *BOLT.
	E [mm]			36	48	55	46	55		
	R [mm]			61		68		78		
	A [mm]	B [mm]	D	CODE						
3100	109	21	1 3/8" Z6	1481W37	-	-	-	-	M6X40	6690640
			1 3/8" Z21	1481W34	-	-	-	-		
3200	113	21	1 3/8" Z6	-	1482W37	-	-	-	M6X40	6690640
			1 3/8" Z21	-	1482W34	-	-	-		6690640
3300	121	21	1 3/8" Z6	-	-	1483W37	-	-	M8x45	6690845
			1 3/8" Z21	-	-	1483W34	-	-		
3400	123	21	1 3/8" Z6	-	-	-	1484W16	-	M10x50	6691050
			1 3/8" Z21	-	-	-	1484W26	-		
3500	137	21	1 3/8" Z6	-	-	-	-	1485W16	M10x55	6691055
			1 3/8" Z21	-	-	-	-	1485W26		
	142	24	1 3/4" Z6	-	-	-	-	1495W16		
			1 3/4" Z20	-	-	-	-	1495W26		
* Bolt										

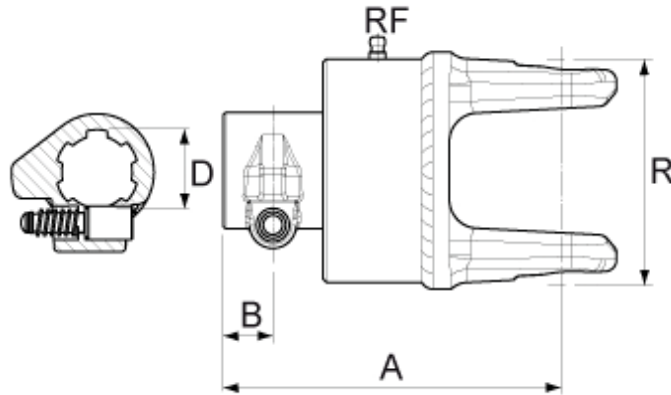
COMPONENTS



		LC			LC			
No.	Description	Dim.	Qty	GROOVINGS	Dim.	Qty	GROOVINGS	CODE
1	BOLT KIT M6X40 CL.8.8	1	1	-	3100	1	-	6690640
		2			3200			
	BOLT KIT M8X45 CL.8.8	4			3300			6690845
	BOLT KIT M10X50 CL.8.8	5			3400			6691050
	BOLT KIT M10X55 CL.8.8	6			3500			6691055
	BOLT KIT M12X60 CL.8.8	7			-	-	-	6691265
	BOLT KIT M12X65 CL.8.8	8			-	-	-	6691265
	BOLT KIT M14X65 CL.8.8	10			-	-	-	6691465
2	BUTTON KIT	1	1	1 3/8	-	1	1 3/8	1581037
		2						
		4						
		5	2	1 3/8		-	-	1581037
		6						
		7						
3	STRAIGHT GREASE NIPPLE M6	8	2	1 3/4		2	1 3/4	1581042
		10						
		6						
		7						
		8						
		10						

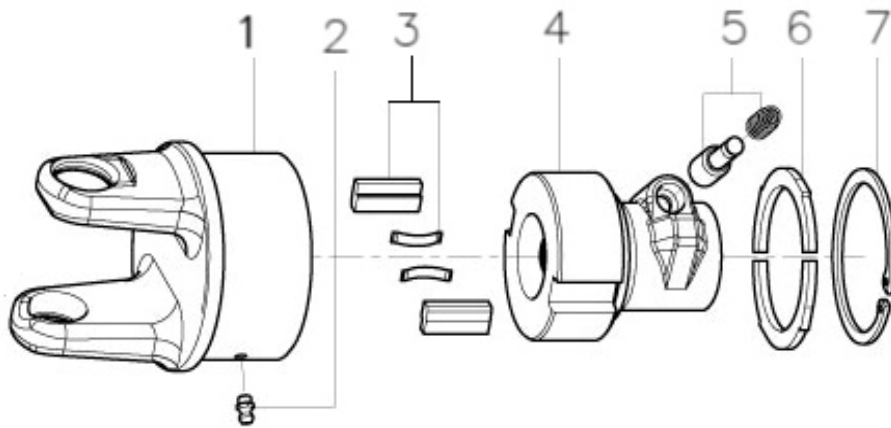
6.9 RF

BUTTON WITH FREEWHEEL



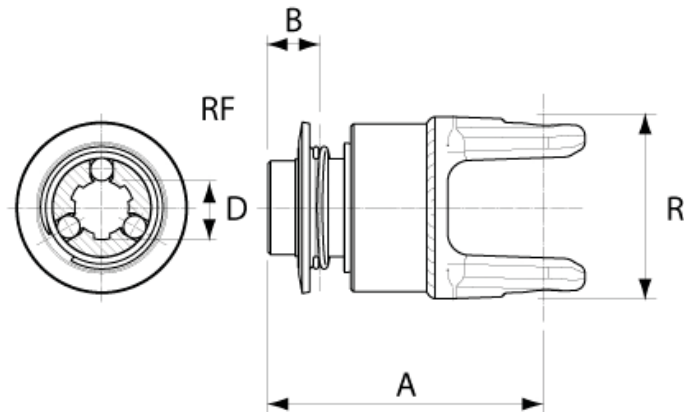
				RF1	RF11	RF2	RFI2	RF3	RFI3	R [mm]
Dim.	Mmax [Nm]			1600		2400		4000		
	A [mm]	B [mm]	D	CODE						
1	133	21	1 3/8" Z6	1501260	1501261	-	-	-	-	98
			1 3/8" Z21	1501262	1501263	-	-	-	-	98
2	138	21	1 3/8" Z6	1502260	1502261	-	-	-	-	98
			1 3/8" Z21	1502262	1502263	-	-	-	-	98
4	145	21	1 3/8" Z6	1504260	1504261	-	-	-	-	102
			1 3/8" Z21	1504262	1504263	-	-	-	-	102
	159	21	1 3/8" Z6	-	-	1744260	1744261	-	-	102
			1 3/8" Z21	-	-	1744262	1744263	-	-	102
5	148	21	1 3/8" Z6	1505260	1505261	-	-	-	-	102
			1 3/8" Z21	1505262	1505263	-	-	-	-	102
	162	21	1 3/8" Z6	-	-	1745260	1745261	-	-	102
			1 3/8" Z21	-	-	1745252	1745263	-	-	102
6	158	21	1 3/8" Z6	1506260	1506261	-	-	-	-	120
			1 3/8" Z21	1506262	1506263	-	-	-	-	120
	172	21	1 3/4" Z6	-	-	1746260	1746261	-	-	120
			1 3/4" Z6	-	-	1746262	1746263	-	-	120
7	172	21	1 3/8" Z6	-	-	1747260	1747261	-	-	120
			1 3/8" Z21	-	-	1747262	1747263	-	-	
8	196	21	1 3/8" Z6	-	-	1748260	1748261	-	-	124
			1 3/8" Z21	-	-	1748262	1748263	-	-	124
	218	21	1 3/8" Z6	-	-	-	-	1768260	-	124
			1 3/8" Z21	-	-	-	-	1768262	-	124
	212	21	1 3/8" Z6	-	-	-	-	-	1768261	127
			1 3/8" Z21	-	-	-	-	-	1768263	127
10	225	21	1 3/8" Z6					176T260	176T261	140
			1 3/8" Z21					176T262	176T263	140

COMPONENTS



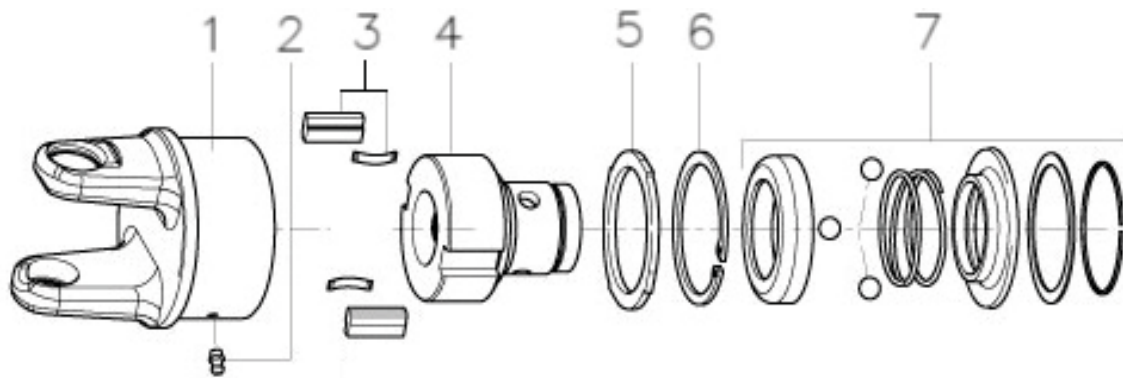
					RF1	RFI1	RF2	RFI2	RF3	RFI3
No.	Description	Dim.	GROOVINGS	Qty	CODE					
1	EXTERNAL BODY	1	-	1	1501240	1501241	-	-	-	-
		2			1502240	1502241	-	-	-	-
		4			1504240	1504241	1744240	1744241	-	-
		5			1505240	1505241	1745240	1745241	-	-
		7			-	-	1747240	1747241	-	-
		6			1606240	1506241	1746240	1746241	-	-
		8			-	-	1748240	1748241	1768240	1768241
		10			-	-	-	-	176T240	176T241
2	STRAIGHT GREASE NIPPLE M6	-	-	1	6560006					
3	LUG KIT + FLAT SPRING RF1-RFI1	-	-	2	1506000		-		-	
	LUG KIT + FLAT SPRING RF2-RFI2	-	-	2	-		1748000		-	
	LUG KIT + FLAT SPRING RF3-RFI3	-	-	2	-		-		1760000	
4	HUB	-	1 3/8" Z6	1	1506132		1748132		1760132	
			1 3/8" Z21		1506133		1748133		1760133	
5	BUTTON KIT	-	-	1	1581038					
6	SEAL HALF RING	-	-	2	1133011					
7	SEEGER FOR HOLE Ø75	-	-	1	6320075					

PULL COLLAR WITH FREE WHEEL



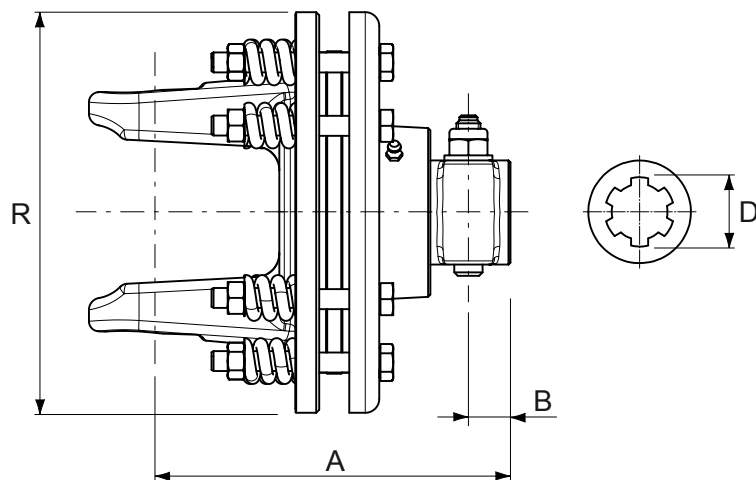
				RF1	RFI1	RF2	RFI2	RF3	RFI3	R [mm]
Dim.	Mmax [Nm]			1600		2400		4000		
	A [mm]	B [mm]	D	CODE						
1	137	28.5	1 3/8" Z6	1501250	1501251	-	-	-	-	98
			1 3/8" Z21	1501252	1501253	-	-	-	-	98
2	142	28.5	1 3/8" Z6	1502250	1502251	-	-	-	-	98
			1 3/8" Z21	1502252	1502253	-	-	-	-	98
4	149	28.5	1 3/8" Z6	1504250	1504251	-	-	-	-	102
			1 3/8" Z21	1504252	1504253	-	-	-	-	102
	163	28.5	1 3/8" Z6	-	-	1744250	1744251	-	-	102
			1 3/8" Z21	-	-	1744252	1744253	-	-	102
5	152	28.5	1 3/8" Z6	1505250	1505251	-	-	-	-	102
			1 3/8" Z21	1505252	1505253	-	-	-	-	102
	166	28.5	1 3/8 Z6	-	-	1745250	1745251	-	-	102
			1 3/8 Z21	-	-	1745252	1745253	-	-	102
6	162	28.5	1 3/8" Z6	1506250	1506251	-	-	-	-	120
			1 3/8" Z21	1506252	1506253	-	-	-	-	120
	175	28.5	1 3/8" Z6	-	-	1746250	1746251	-	-	120
			1 3/8" Z21	-	-	1746252	1746253	-	-	120
	198	28.5	1 3/4" Z6	-	-	1746254	1746255	-	-	120
			1 3/4" Z20	-	-	1746256	1746257	-	-	120
7	175	28.5	1 3/8" Z6	-	-	1747250	1747251	-	-	120
			1 3/8" Z21	-	-	1747252	1747253	-	-	120
	198	28.5	1 3/4" Z6	-	-	1747254	1747255	-	-	120
			1 3/4" Z20	-	-	1747256	1747257	-	-	120
8	206	28.5	1 3/8" Z6	-	-	1748250	1748251	-	-	124
			1 3/8" Z21	-	-	1748252	1748253	-	-	124
	226	28.5	1 3/4" Z6	-	-	1748254	1748255	-	-	124
			1 3/4" Z20	-	-	1748256	1748257	-	-	124
	223	28.5	1 3/8" Z6	-	-	-	-	1768250	1768251	124
			1 3/8" Z21	-	-	-	-	1768252	1768253	124
	245	28.5	1 3/4" Z6	-	-	-	-	1768254	1768255	124
			1 3/4" Z20	-	-	-	-	1768256	1768257	124
10	234	28.5	1 3/8" Z6	-	-	-	-	176T250	176T251	140
			1 3/8" Z21					176T252	176T253	140
	256	28.5	1 3/4" Z6	-	-	-	-	176T254	176T255	140
			1 3/4" Z20					176T256	176T257	140

COMPONENTS



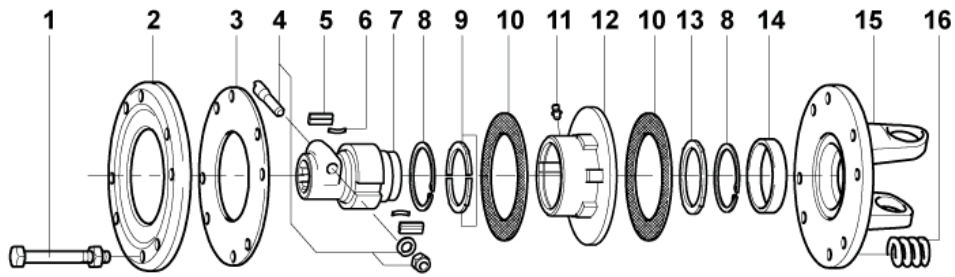
					RF1	RFI1	RF2	RFI2	RF3	RFI3
No.	Description	Dim.	GROOVINGS	Qty	CODE					
1	EXTERNAL BODY	1	-	1	1501240	1501241	-	-	-	-
		2			1502240	1502241	-	-	-	-
		4			1504240	1504241	1744240	1744241	-	-
		5			1505240	1505241	1745240	1745241	-	-
		7			-	-	1747240	1747241	-	-
		6			1606240	1506241	1746240	1746241	-	-
		8			-	-	1748240	1748241	1768240	1768241
		10			-	-	-	-	176T240	176T241
2	STRAIGHT GREASE NIPPLE M6	-	-	1	6560006					
3	LUG KIT + FLAT SPRING RF1-RFI1	-	-	2	1506000		-		-	
	LUG KIT + FLAT SPRING RF2-RFI2	-	-	2	-		1748000		-	
	LUG KIT + FLAT SPRING RF3-RFI3	-	-	2	-		-		1760000	
4	HUB	-	1 3/8" Z6	1	1506130		1748130		1760130	
			1 3/8" Z21		1506131		1748131		1760131	
			1 3/4" Z6		-		1748140		1760140	
			1 3/4" Z20		-		1748141		1760141	
5	SEAL HALF RING	-	-	2	1133011					
6	SEEGER FOR HOLE Ø75	-	-	1	6320075					
7	PULL COLLAR KIT	-	1 3/8"	1	1004229					
			1 3/4"		1004237					

2 DISC WITH CONICAL CLAMP



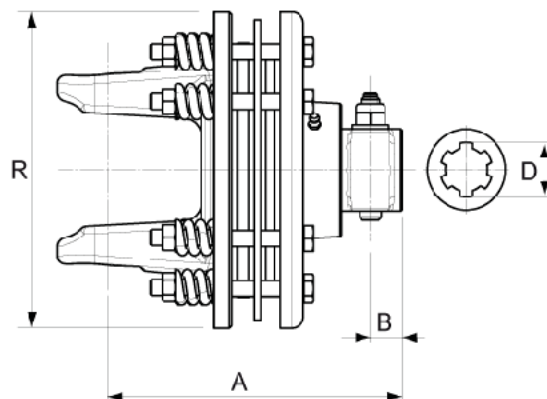
				FR2	FRI2
Dim.	Mmax [Nm]			1200	
	R [mm]			200	
	A [mm]	B [mm]	D	CODE	
5	187.5	21	1 3/8" Z6	1455280	1455281
			1 3/8" Z21	1455282	1455283
6	194.5	21	1 3/8" Z6	1456280	1456281
			1 3/8" Z21	1456282	1456283
7	194.5	21	1 3/8" Z6	1457280	1457281
			1 3/8" Z21	1457282	1457283
8	202.5	21	1 3/8" Z6	1458280	1458281
			1 3/8" Z21	1458282	1458283

COMPONENTS



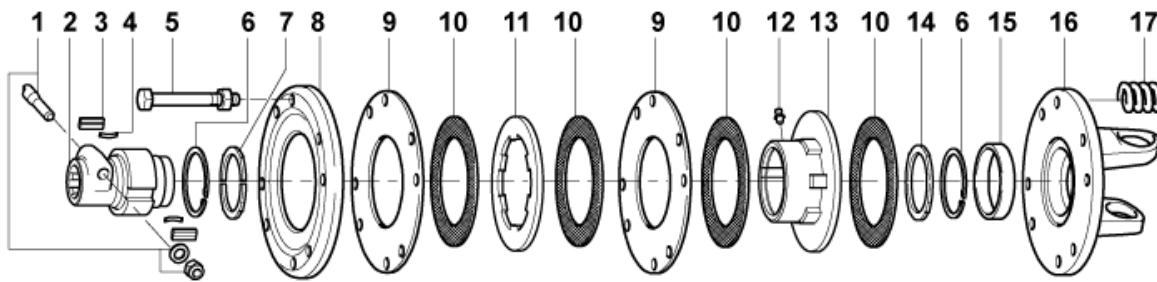
					FR2	
No.	Description	Dim.	GROOVINGS	Qty	CODE	
1	COMPLETE BOLT M10X85	-	-	8	6691085	
2	PRESSURE DISC	-	-	1	1138007	
3	INTERNAL DISC	-	-	1	1138008	
4	CONICAL CLAMP KIT	-	-	1	6821271	
5	LUG	-	-	2	1328062	
6	FLAT SPRING	-	-	2	1218001	
7	HUB		1 3/8" Z6	1	1705446	
			1 3/8" Z21		1705447	
8	SEEGER FOR HOLE Ø75	-	-	2	6320075	
9	SHAPED SEALING HALF RING	-	-	2	1133011	
10	FRICTION DISC	-	-	2	1808010	
11	STRAIGHT GREASE NIPPLE M6	-	-	1	6560006	
12	FLANGED OUTER BODY	-	-	1	1590216	1590217
13	SHAPED SEALING RING	-	-	1	1133012	
14	CLUTCH BEARING FD	-	-	1	1705009	
15	FLANGED FORK	5	-	1	1705041	
		6			1706033	
		7			1707033	
		8			1708006	
16	SPRING FOR FD	-	-	8	1215012	

4 DISC WITH CONICAL CLAMP



				FR4	FRI4
Dim.	Mmax [Nm]			2200	
	R [mm]			200	
	A [mm]	B [mm]	D	CODE	
5	187.5	21	1 3/8" Z6	1455470	1455472
			1 3/8" Z21	1455471	1455473
6	194.5	21	1 3/8" Z6	1456470	1456472
			1 3/8" Z21	1456471	1456473
7	194.5	21	1 3/8" Z6	1457470	1457472
			1 3/8" Z21	1457471	1457473
8	202.5	21	1 3/8" Z6	1458470	1458472
			1 3/8" Z21	1458471	1458473
10	202	21	1 3/8" Z6	145T470	145T472
			1 3/8" Z21	145T471	145T473

COMPONENTS

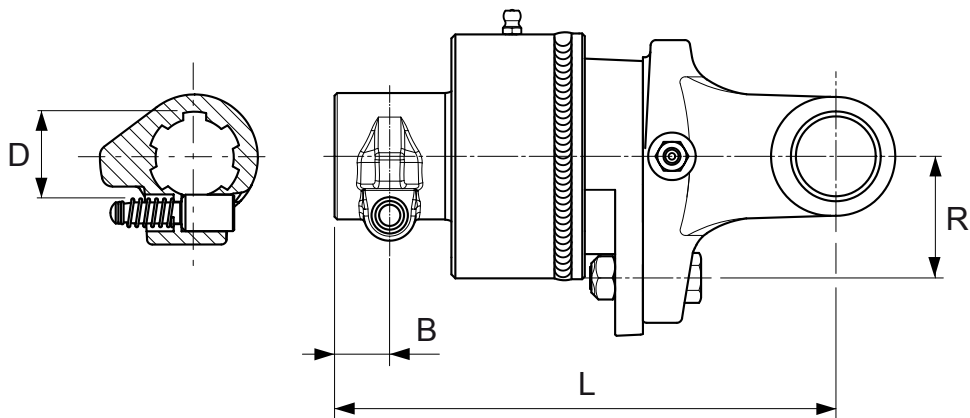


					FR4	
No.	Description	Dim.	GROOVINGS	Qty	CODE	
1	TAPER CLAMP KIT	-	-	1	6821271	
2	HUB	-	1 3/8" Z6	1	1705446	
			1 3/8" Z21		1705447	
3	LUG	-	-	2	1328062	
4	FLAT SPRING	-	-	2	1218001	
5	COMPLETE BOLT M10X100	-	-	8	6691010	
6	SEEGER FOR HOLE Ø75	-	-	2	6320075	
7	SHAPED SEALING HALF RING	-	-	2	1133011	
8	PRESSURE DISC	-	-	1	1138007	
9	INTERNAL DISC	-	-	2	1138008	
10	FRICTION DISC	-	-	4	1808010	
11	INTERMEDIATE DISC WITH BRAKE PAD HOLDER	-	-	1	1135417	
12	M6 GREASE NIPPLE	-	-	1	6560006	
13	FLANGED OUTER BODY FR	-	-	1	1590216	1590217
14	SHAPED SEALING RING	-	-	1	1133012	
15	CLUTCH BEARING FD	-	-	1	1705009	
16	FLANGED FORK	5	-	1	1705041	
		6			1706033	
		7			1706033	
		8			1708006	
		10			170T006	
17	SPRING FOR FD	-	-	8	1215012	

6.11

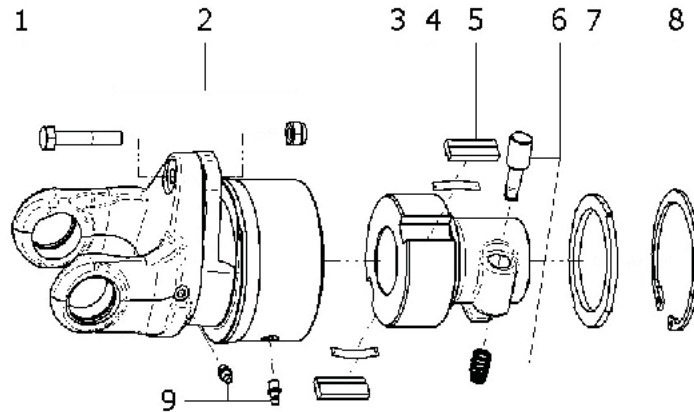
LCRF

WITH LIMITER AND FREEWHEEL



				LCRF			SCREW
Dim.	Mmax [Nm]			1700	2500	2100	
	R [mm]			55		46	
	L [mm]	B [mm]	D	CODE			
4	185	21	1 3/8" Z6	1414001	-	-	M8x45
			1 3/8" Z21	1414004	-	-	
	188	21	1 3/8" Z6	-	1414003	-	M10x45
			1 3/8" Z21	-	1414006	-	
5	190	21	1 3/8" Z6	-	-	1415001	
			1 3/8" Z21	-	-	1415002	
6	197	21	1 3/8" Z6	-	1416001	-	
			1 3/8" Z21	-	1416002	-	

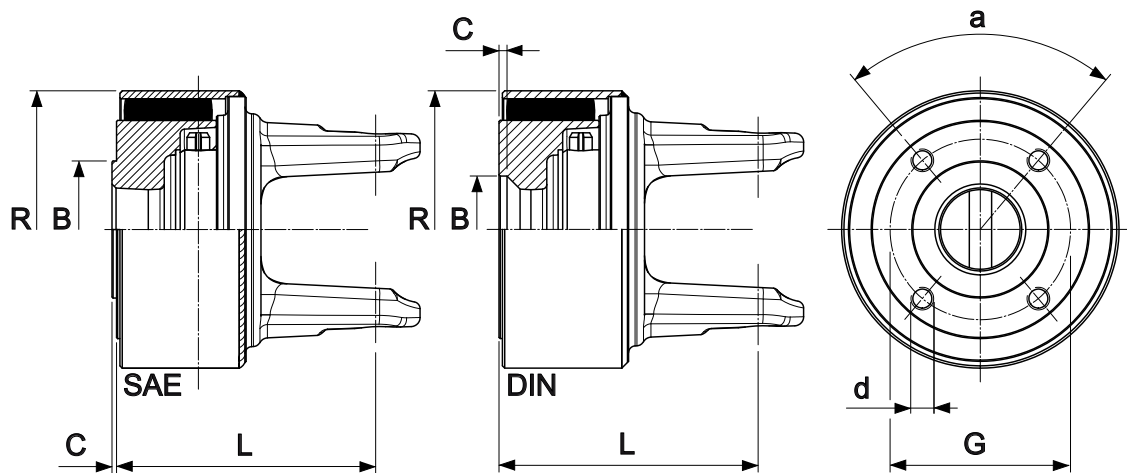
COMPONENTS



		LCRF					
No.	Description	Dim.	GROOVINGS	BOLT	WHEELBASE [mm]	Qty	CODE
1	FORK ASSEMBLY+LCRF BODY	4	-	M8	55	1	1414301
				M10			1414303
		5		M10	46	1	1415301
		6		M10		1	1416301
2	BOLT KIT		-	M8x45	55	1	6690845
				M10x45	46	1	6691045
					55	1	
3	RF HUB		1 3/8" Z6	-	-	1	1506132
			1 3/8" Z21				1506133
4	FLAT SPRING	-	-	-	-	2	1215001
5	LUG		-	-	-	2	1326062
6	BUTTON KIT		-	-	-	1	1501038
7	SEALING HALF RING	-	-	-	-	2	1133011
8	SEEGER RING X D75 HOLE	-	-	-	-	1	6320075
9	STRAIGHT GREASE NIPPLE M6	-	-	-	-	2	6560006

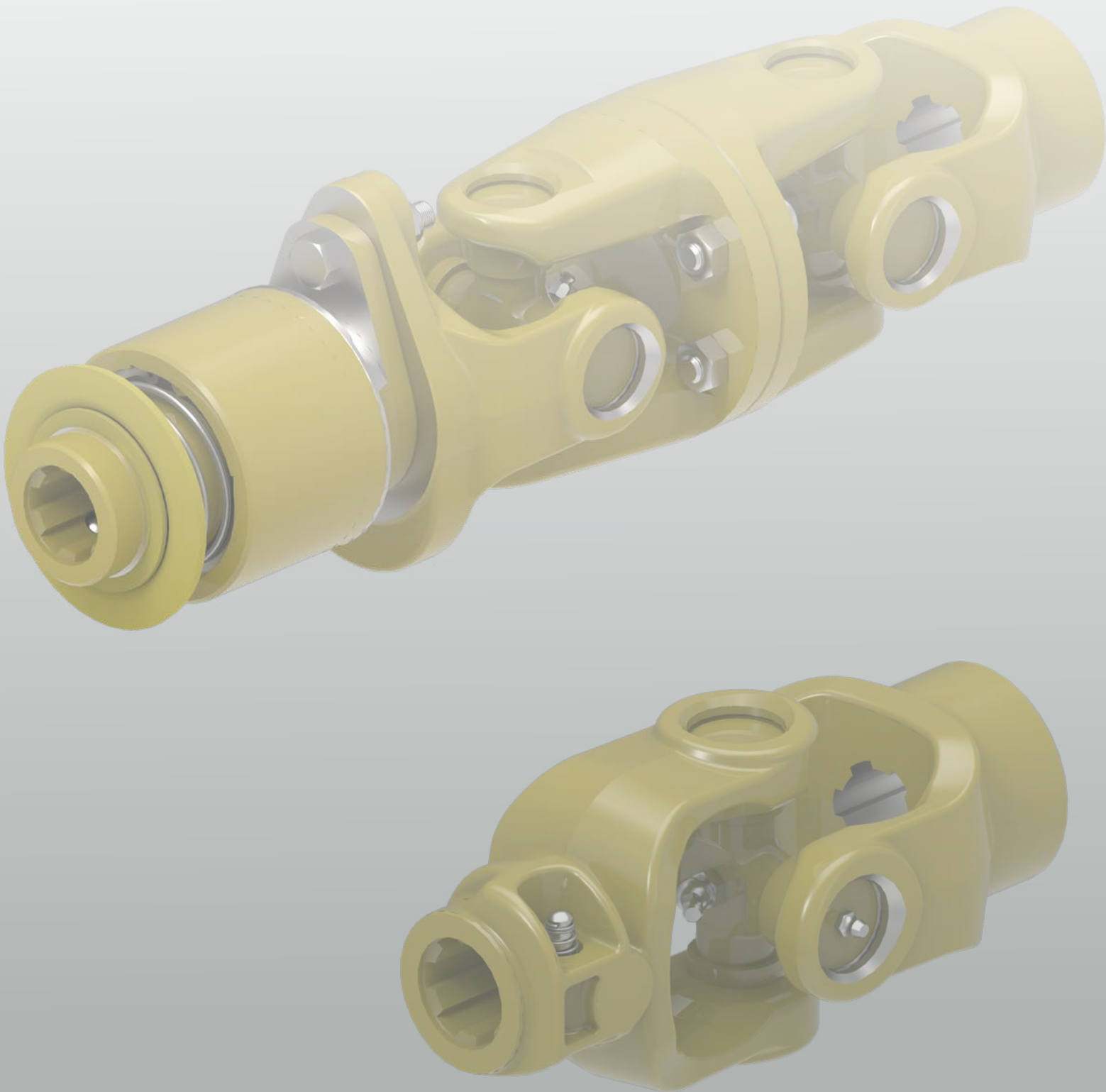
6.12

GPS

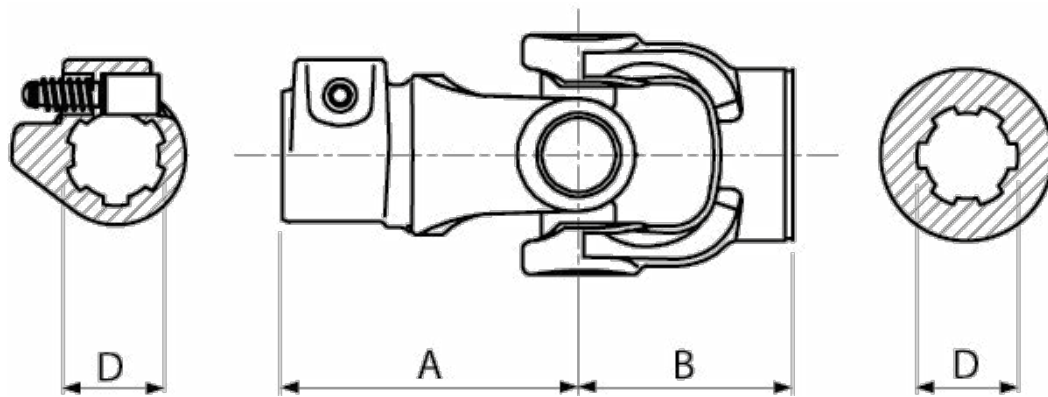


				GPS					TYPE OF ATTACH- MENT
Dim.	Mmax [Nm]			800					
	R [mm]			122					
	L [mm]	B [mm]	C [mm]	G [mm]	d [mm]	a [Degrees]	hardness	CODE	
4	114	47	3.5	74.5	M8	90	65	1574001	DIN 90
	114	60.32	2	74.9	M10	100		1574002	SAE 1300
5	116.5	47	3.5	74.5	M8	90		1575001	DIN 90
	116.5	60.32	2	74.9	M10	100		1575002	SAE 1300
6	119.5	47	3.5	74.5	M8	90		1576001	DIN 90
	119.5	60.32	2	74.9	M10	100		1576002	SAE 1300

7. JOINTS

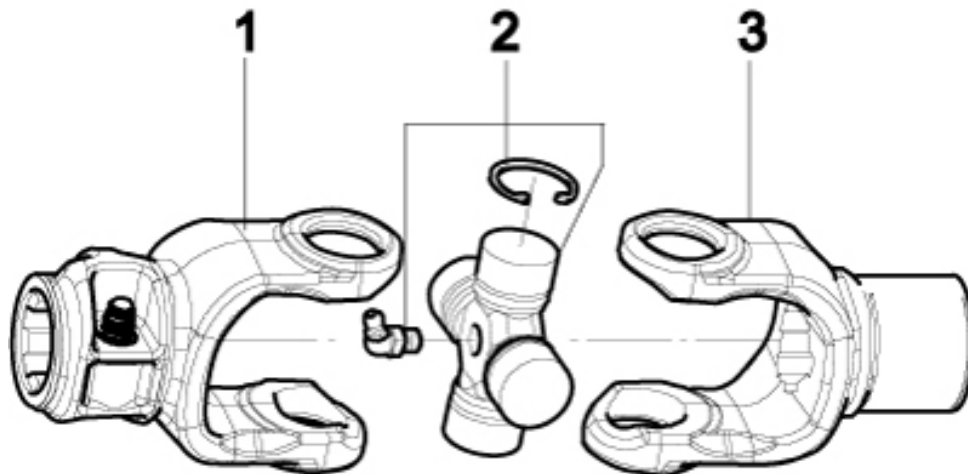


7.1 SIMPLE



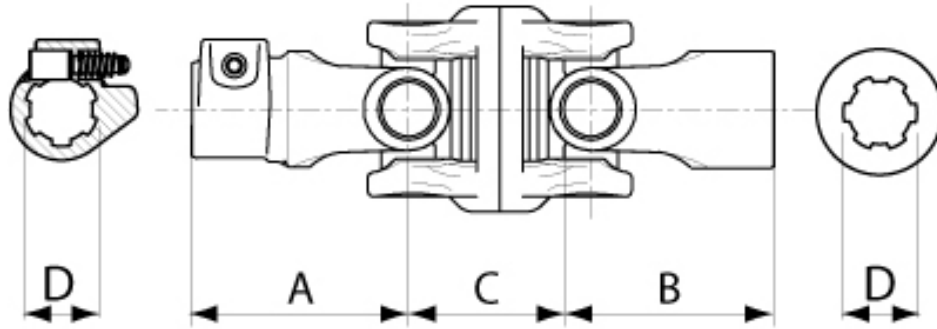
Dim.	A [mm]	B [mm]	D	CODE
1	93	93	1 3/8" Z6	7001010
2	101	101	1 3/8" Z6	7002010
4	108	108	1 3/8" Z6	7004010
5	111	111	1 3/8" Z6	7005010
6	118	118	1 3/8" Z6	7006010
8	126	126	1 3/8" Z6	7008010
10	137	137	1 3/8" Z6	7000010

COMPONENTS



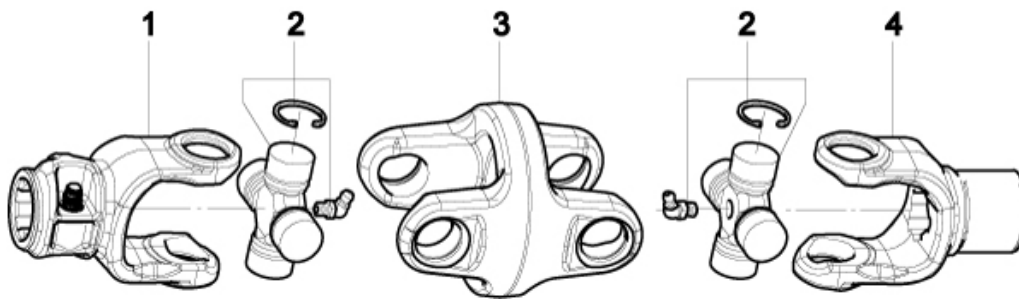
No.	Description		Dim.	Qty	CODE
1	FORK ASSEMBLY		1	1	1021010
			2		1022010
			4		1024010
			5		1025010
			6		1026010
			8		1028010
			10		1020010
2	CROSS ASSEMBLY		1	1	1001020
			2		1002020
			4		1004020
			5		1005020
			6		1006020
			8		1008020
			10		1000020
3	GROOVED FORK		1	1	1701010
			2		1702010
			4		1704010
			5		1705010
			6		1706010
			8		1708010
			10		1700010

7.2 DOUBLE



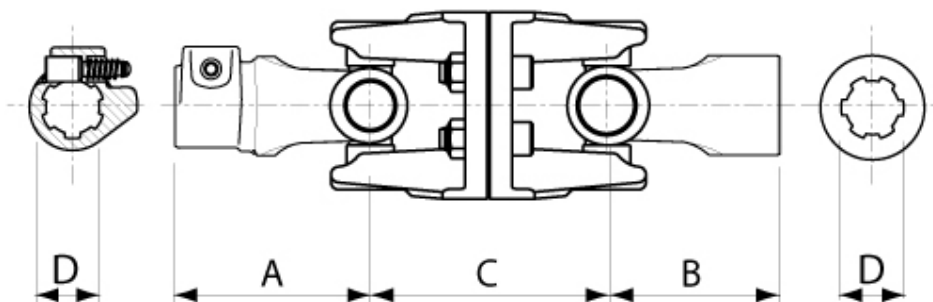
Dim.	A [mm]	B [mm]	C [mm]	D	CODE
1	93	93	68	1 3/8" Z6	7001010
2	101	101	78	1 3/8" Z6	7002010
4	108	108	92	1 3/8" Z6	7004010
6	118	118	109	1 3/8" Z6	7006010

COMPONENTS



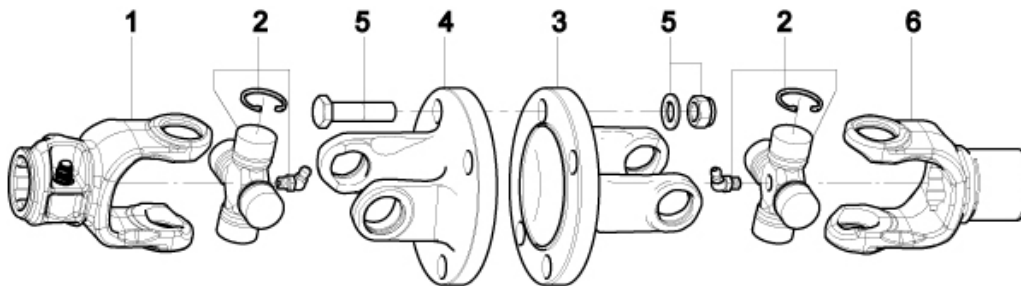
No.	Description		Dim.	Qty	CODE
1	FORK ASSEMBLY		1	1	1021010
			2		1022010
			4		1024010
			6		1026010
2	CROSS ASSEMBLY		1	2	1001020
			2		1002020
			4		1004020
			6		1006020
3	DOUBLE FORK		1	1	1701226
			2		1702226
			4		1704226
			6		1706226
4	GROOVED FORK		1	1	1701010
			2		1702010
			4		1704010
			6		1706010

7.3 FLANGED DOUBLE



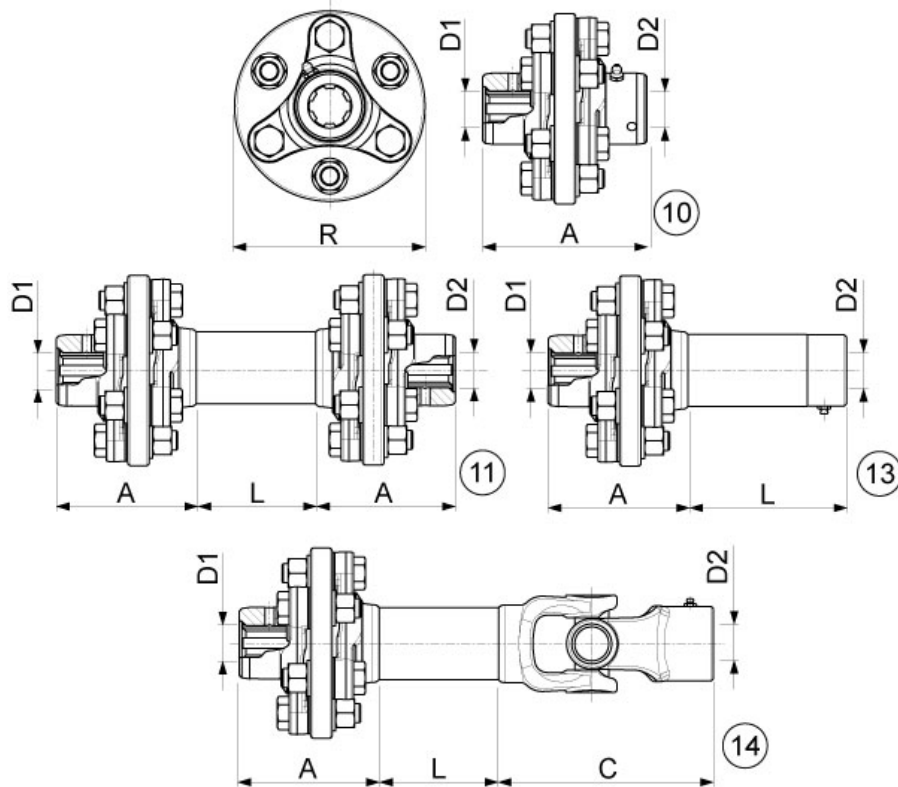
Dim.	A [mm]	B [mm]	C [mm]	D	CODE
1	93	80	98	1 3/8" Z6	7601010
2	101	84	106	1 3/8" Z6	7602010
4	108	92	128	1 3/8" Z6	7604010
5	111	98	136	1 3/8" Z6	7605010
6	118	108	154	1 3/8" Z6	7606010
8	126	119	170	1 3/8" Z6	7608010

COMPONENTS



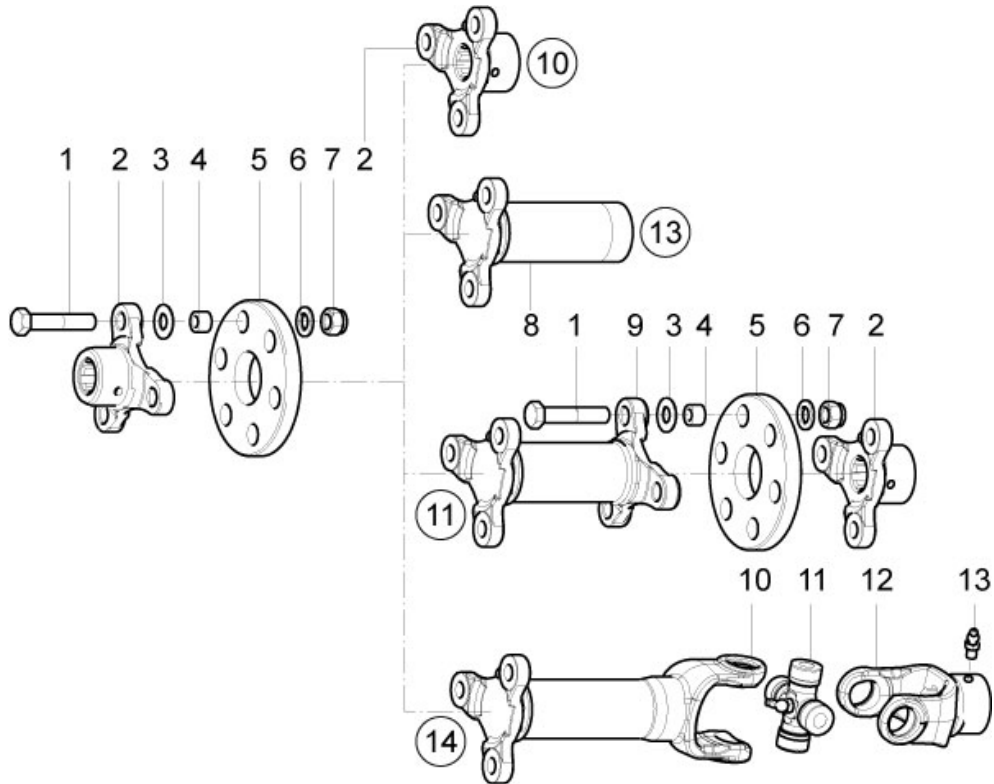
No.	Description		Dim.	Qty	CODE
1	FORK ASSEMBLY		1	1	1021010
			2		1022010
			4		1024010
			5		1025010
			6		1026010
			8		1028010
2	CROSS ASSEMBLY		1	2	1001020
			2		1002020
			4		1004020
			5		1005020
			6		1006020
			8		1008020
3	FLANGE FORK M		1	1	1091073
			2		1082200
			4		1084405
			5		1095004
			6		1096000
			8		1098003
4	FLANGE FORK F		1	1	1081073
			2		1082100
			4		1084004
			5		1085002
			6		1086000
			8		1088001
5	COMPLETE BOLT	M8	1	4	6690830
		M8	2	4	6690830
		M10	4	4	6691035
		M10	5	4	6691035
		M10	6	4	6691035
		M14	8	4	6691445
6	GROOVED FORK		1	1	1701010
			2		1702010
			4		1704010
			5		1705010
			6		1706010
			8		1708010

7.4 1 DISC ELASTICS



REF.	TYPE	A [mm]	L [mm]	C [mm]	R [mm]	D1	D2	CODE
1	10	138	-	-	160	1 3/8" Z6	1 3/8" Z6	7155026
2	10	138	-	-	160	1 3/8" Z6	1 3/8" Z21	7155025
3	10	138	-	-	160	1 3/4" Z20	1 3/4" Z20	7155019
4	11	113	76	-	160	1 3/8" Z6	1 3/8" Z6	7155054
5	11	113	76	-	160	1 3/8" Z21	1 3/8" Z21	7155055
6	13	113	250	-	160	1 3/8" Z6	1 3/8" Z6	7155056
7	13	113	150	-	160	1 3/8" Z21	1 3/8" Z21	7155027
8	14	113	209	98	160	1 3/8" Z6	1 3/8" Z6	7155057
9	14	113	209	98	160	1 3/8" Z21	1 3/8" Z21	7155058

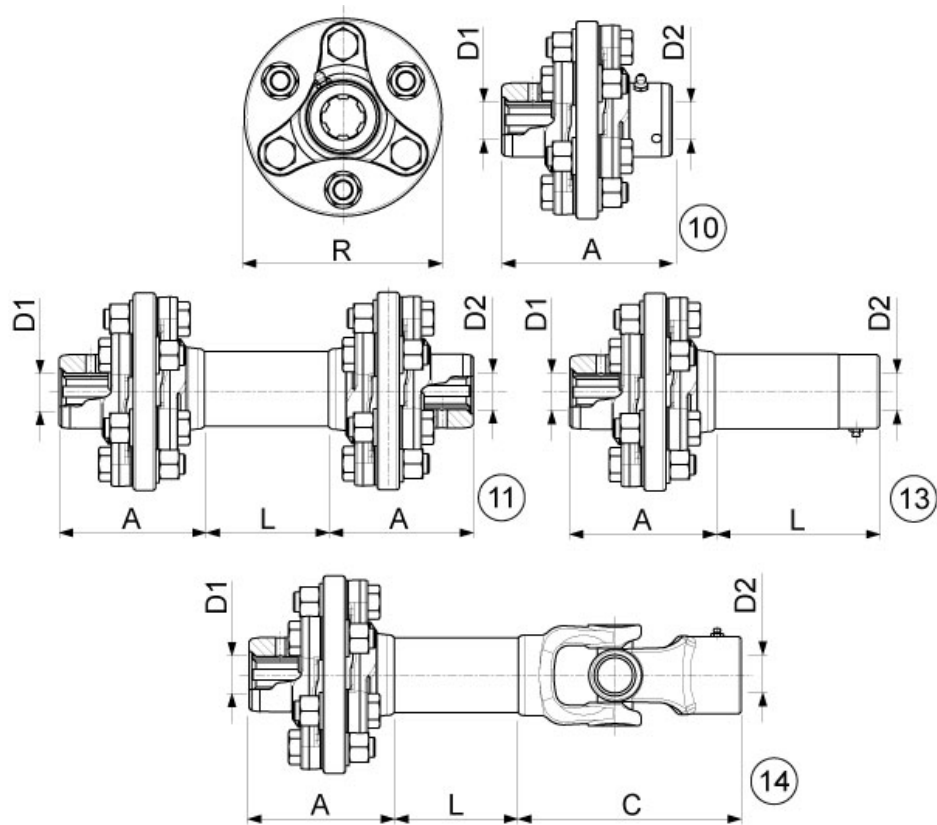
COMPONENTS



No.	Ref.	Description	GROOVINGS	L [mm]	TYPE	Qty	CODE
1	1	TE SCREW M16X60X1.5 UNI 5738			10	6	6141660
2	1				13	6	6141660
3	1				11	12	6141660
4	1				14	6	6141660
5	2	HUB	1 3/8" Z6	-		1	1705275
6	2		1 3/8" Z21				1705276
7	2		1 3/4" Z6				1705279
8	2		1 3/4" Z20				1705277
9	3	GE SHAPED WASHER		-	10	6	1235287
10	3				13		1235287
11	3				11	12	1235287
12	3				14	6	1235287

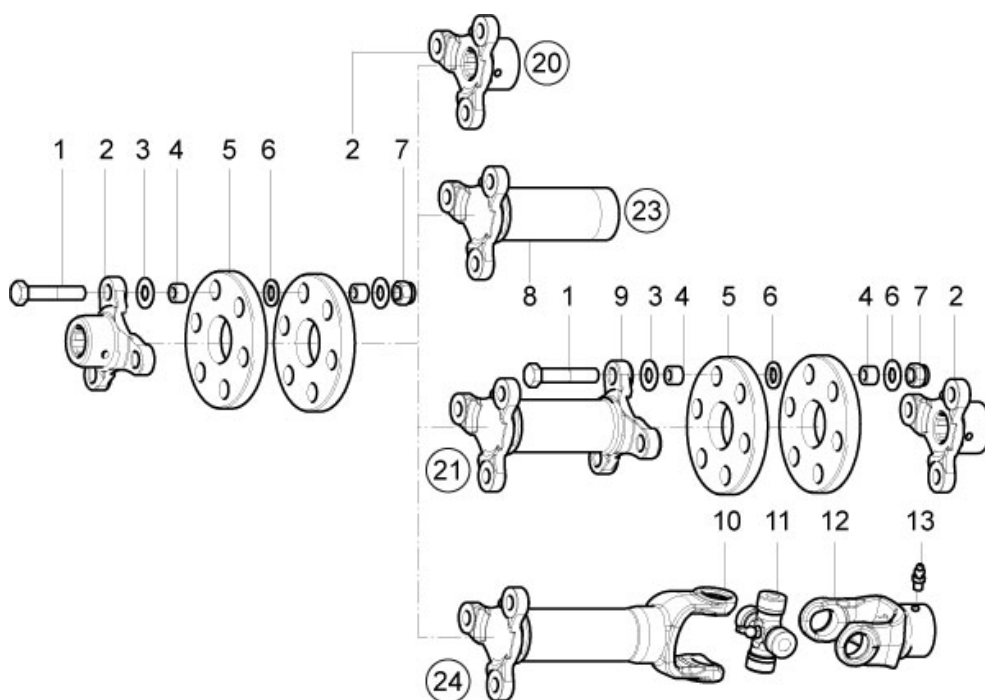
13	4	GE BUSHING		-	10	6	1535275
14	4				13		1535275
15	4				11?	12	1535275
16	4				14	6	1535275
17	5	GE RUBBER ELASTIC DISC		-	10	1	1785273
18	5				13		1785273
19	5				11	2	1785273
20	5				14	1	1785273
21	6	FLAT WASHER D17 UNI 6592		-	10	6	6412016
22	6				13		6412016
23	6				11	12	6412016
24	6				14	6	6412016
25	7	SELF-LOCK. NUT M16X1.5		-	10	6	6410716
26	7				13		6410716
27	7				11	12	6410716
28	7				14	6	6410716
29	8	COMPL. GE5 CENTRAL UNIT		283	13	1	1005330
30	9			142	11		1005225
31	10			242	14		1005230
32	11	COMPL. CROSS			14	1	1005020
33	12	COMPL. GROOVED FORK	1 3/8" Z6		14	1	1705272
34	13	STRAIGHT GREASE NIPPLE M8X1				2	6560008

7.5 2 DISC ELASTICS



									CODE
No.	TYPE	Dim.	A [mm]	L [mm]	C [mm]	R [mm]	D1	D2	
1	20	5	159	-	-	160	1 3/4" Z6	1 3/4" Z6	7155059
2				-	-		1 3/4" Z6	1 3/4" Z20	7155020
3				-	-		1 3/4" Z20	1 3/4" Z20	7155060
4	22		134	200	-		1 3/4" Z6	1 3/4" Z6	7155061
5					-		1 3/4" Z6	1 3/4" Z20	7155021
6	23			260	-		1 3/4" Z6	1 3/4" Z20	7155062
7					-		1 3/4" Z20	1 3/4" Z20	7155004
8	24			199	98		1 3/4" Z6	1 3/4" Z20	7155022
9							1 3/4" Z20	1 3/4" Z20	7155063

COMPONENTS

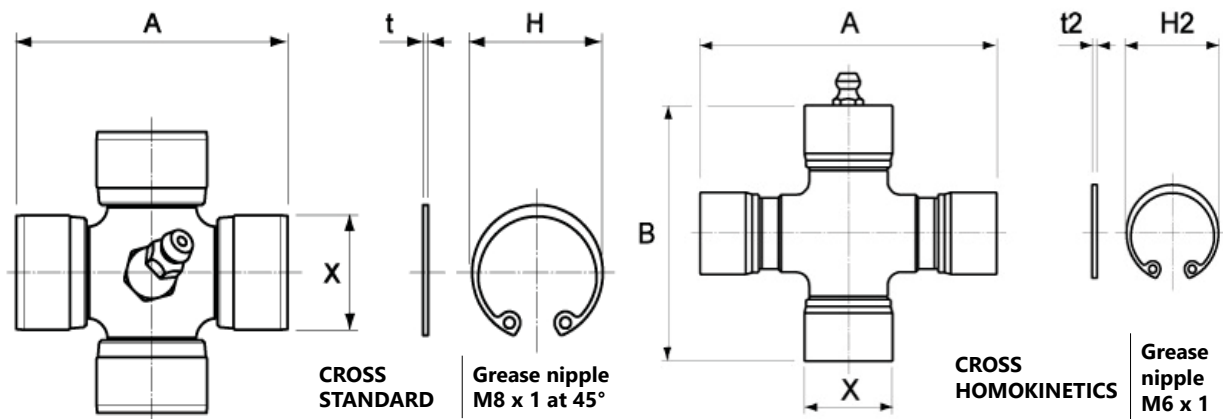


No.	Ref.	Description	GROOVINGS	L [mm]	TYPE	Qty	CODE
1	1	TE SCREW M16X60X1.5 UNI 5738	-	-	20	6	6141680
2					23	6	6141680
3					22	12	6141680
4					24	6	6141680
5	2	HUB	1 3/8" Z6	-		1	1705275
6			1 3/8" Z21				1705276
7			1 3/4" Z6				1705279
8			1 3/4" Z20				1705277
9	3	GE SHAPED WASHER	-	-	20	6	1235287
10					23		1235287
11					22	12	1235287
12					24	6	1235287

13	4	GE BUSHING	-	-	20	12	1535275
14					23		1535275
15					22	24	1535275
16					24	12	1535275
17	5	GE RUBBER ELASTIC DISC	-	-	20	2	1785273
18					23		1785273
19					22	4	1785273
20					24	2	1785273
21	6	FLAT WASHER D17 UNI 6592	-	-	20	6	6412016
22					23		6412016
23					22	12	6412016
24					24	6	6412016
25	7	SELF-LOCK. NUT M16X1.5	-	-	20	6	6410716
26					23		6410716
27					22	12	6410716
28					24	6	6410716
29	8	CENTRAL ASSEMBLY GE5	-	293	23	1	1005321
30	9			266	22		1005232
31	10			233	24		1005233
32	11	COMPL. CROSS	-		24	1	1005020
33	12	COMPL. GROOVED FORK	1 3/8" Z6		24	1	1705308
34	13	STRAIGHT GREASE NIPPLE M8X1	-			2	6560008

8. SPARE PARTS

8.1 CROSSES

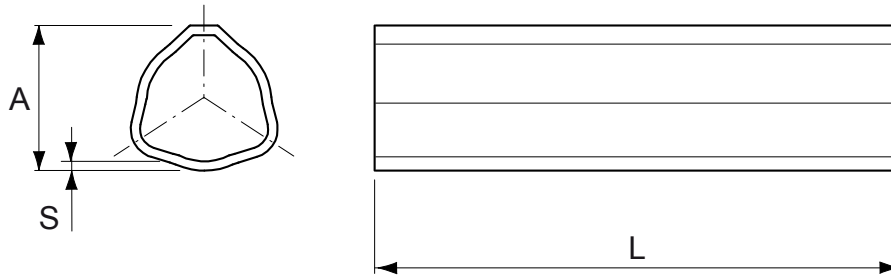


Dim.	CROSS STANDARD	X/Y	T [mm]	H [mm]	CODE	CODE SPARE PARTS KIT
	A x X					
1	54 x 22	-	1	23.5	1001020	1001021
2	61.5 x 23.8	-	1.2	25.9	1002020	1002021
4	74.6 x 27	-	1.2	29.1	1004040	1004021
5	80 x 30.2	-	1.2	32.1	1005020	1005021
6	92 x 30.2	-	1.2	32.1	1006020	1006021
7	93.8 x 34.9	-	1.5	37.8	1007020	1007021
8	106.4 x 34.9	-	1.5	37.8	1008020	1008021
10	118 x 42	-	1.75	46	1000040	1000041

Dim.	CROSS HOMOKINETICS	X/Y	T2 [mm]	H2 [mm]	CODE	CODE SPARE PARTS KIT
	A x B					
2	61.3 x 79.8	23.8	1.2	25.9	1002720	1002721
4	74.6 x 91	27	1.5	29.1	1004720	1004721
6	82 x 100	30.2	1.5	32.1	1006720	1006721
8	88.8 x 10	34.9	1.5	37.8	1008720	1008721

8.2 TELESCOPIC PARTS

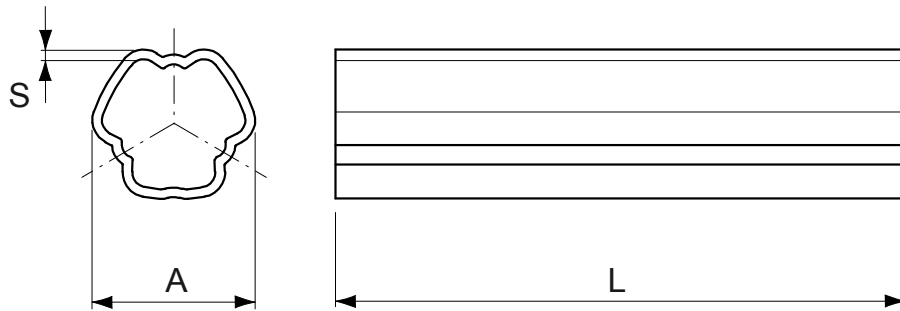
TRILOBATE PROFILE



TRILOBATED TELESCOPES					
Dim.	A x S [mm]	L [mm]	TYPE	Code	Code with Pin Hole
1	26.6 x 3.5	1000	INTERNAL	1520803	1520100
		1500		1520801	1520150
		3000		1520800	-
	32.4 x 2.5	1000	EXTERNAL	1521803	1521100
		1500		1521802	1521150
		3000		1521800	-
2	29 x 4	1000	INTERNAL	1522803	1522100
		1500		1522801	1522150
		3000		1522800	-
	36.1 x 3.1	1000	EXTERNAL	1523803	1523100
		1500		1523802	1523150
		3000		1523800	-
4	36.1 x 4.5	1000	INTERNAL	1525803	1525100
		1500		1525801	1525150
		3000		1525800	-
	43.4 x 3.3	1000	EXTERNAL	1524803	1524100
		1500		1524802	1524150
		3000		1524800	-

5	44.7 x 4	1000	INTERNAL	1526803	1526100
		1500		1526801	1526150
		3000		1526800	-
	51.3 x 2.9	1000	EXTERNAL	1527803	1527100
		1500		1527802	1527150
		3000		1527800	-
6	44.7 x 4	1000	INTERNAL	1526803	1526100
		1500		1526801	1526150
		3000		1526800	-
	51.3 x 2.9	1000	EXTERNAL	1528803	1528100
		1500		1528802	1528150
		3000		1528800	-
7	44.7 x 5.5	1000	INTERNAL	1529803	1529100
		1500		1529801	1529150
		3000		1529800	-
	53.6 x 3.8	1000	EXTERNAL	1528803	1528100
		1500		1528802	1528150
		3000		1528800	-
8	53.6 x 3.8	1000	INTERNAL	1528803	1528100
		1500		1528802	1528150
		3000		1528800	-
	62.7 x 4.1	1000	EXTERNAL	1530803	1530100
		1500		1530802	1530150
		3000		1530800	-

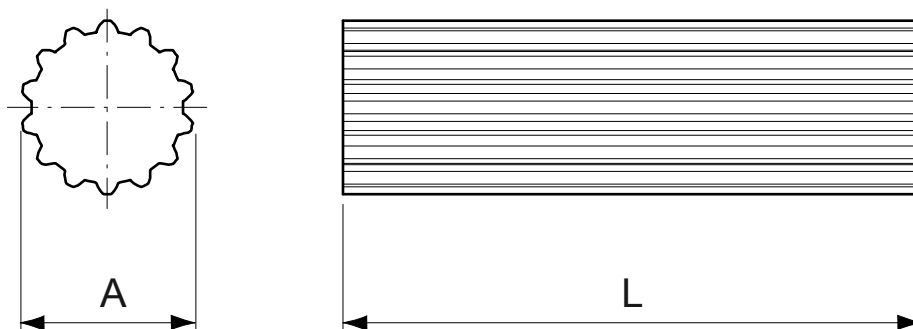
YORK PROFILE



	YORK TELESCOPICS				
Dim.	A x S [mm]	L [mm]	TYPE	CODE	CODE WITH PIN HOLE
4	46.7 x 3.5	1000	INTERNAL	1813803	1813100
		1500		1813802	1813150
		3000		1813800	-
	52.8 x 2.7	1000	EXTERNAL	1814803	1814100
		1500		1814802	1814150
		3000		1814800	-
5	46.7 x 3.5	1000	INTERNAL	1813803	1813100
		1500		1813802	1813150
		3000		1813800	-
	52.8 x 2.7	1000	EXTERNAL	1814803	1814100
		1500		1814802	1814150
		3000		1814800	-
6	53.4 x 4	1000	INTERNAL	1815803	1815100
		1500		1815802	1815150
		3000		1815800	-
	61 x 3.3	1000	EXTERNAL	1816803	1816100
		1500		1816802	1816150
		3000		1816800	-
7	53.4 x 4	1000	INTERNAL	1815803	1815100
		1500		1815802	1815150
		3000		1815800	-
	61 x 3.3	1000	EXTERNAL	1816803	1816100
		1500		1816802	1816150
		3000		1816800	-

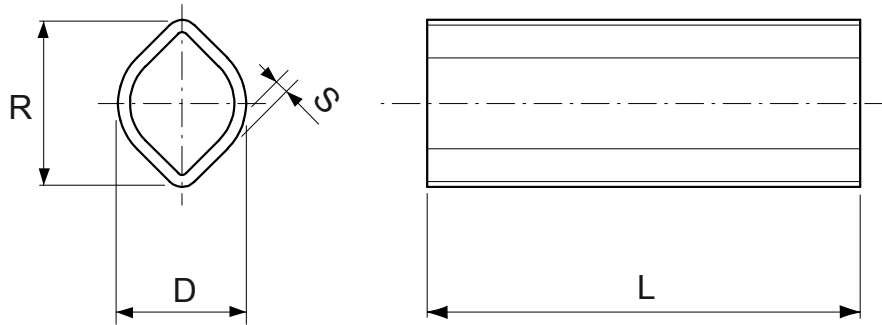
8	60.8 x 4	1000	INTERNAL	1817803	1817100
		1500		1817802	1817150
		3000		1817800	-
	68.3 x 3.4	1000	EXTERNAL	1818803	1818100
		1500		1818802	1818150
		3000		1818800	-
10	64.4 x 5	1000	INTERNAL	1819803	1819100
		1500		1819802	1819150
		3000		1819800	-
	73.9 x 4.4	1000	EXTERNAL	1810803	1810100
		1500		1810804	1810150
		3000		1810800	-

GROOVED PROFILE



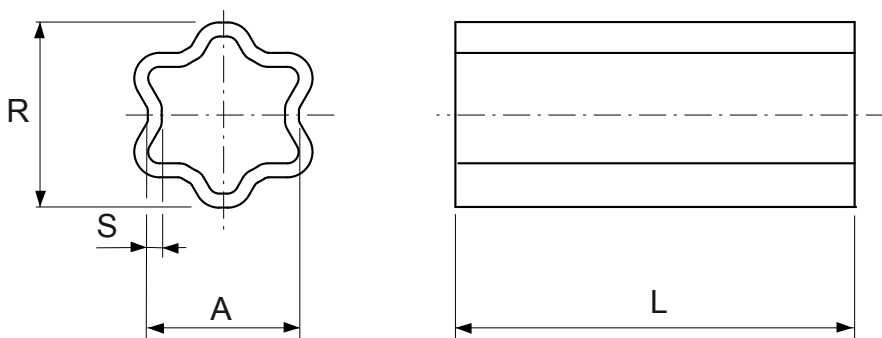
	GROOVED TELESCOPIC				
Dim.	A	L [mm]	Z [number of teeth]	Code	Code with Pin Hole
4	CUNA 30	1000	10	1304803	1304100
		1500		1304801	1304150
		3000		1304800	-
5	CUNA 35	1000	12	1305803	1305100
		1500		1305801	1305150
		3000		1305800	-
6		1000		1305803	1305100
		1500		1305801	1305150
		3000		1305800	-
7	CUNA 40	1000	14	1306803	1306100
		1500		1306801	1306150
		3000		1306800	-
8		1000		1306803	1306100
		1500		1306801	1306150
		3000		1306800	-
10	CUNA 45	1000	16	1303803	1303100
		1500		1303801	1303150
		3000		1303800	-

LEMON PROFILE



LEMON TELESCOPIC					
Dim.	R x D x S [mm]	L [mm]	TYPE	Code	Code with Pin Hole
3100	30.75 x 23.85 x 3.6	1000	INTERNAL	150600803	150600100
		1500		150600802	150600150
		3000		150600800	-
	39.1 x 30 x 2.85	1000	EXTERNAL	151200803	151200100
		1500		151200802	151200150
		3000		151200800	-
3200	40.1 x 34.5 x 4	1000	INTERNAL	151100803	151100100
		1500		151100802	151100150
		3000		151100800	-
	48 x 41.25 x 3	1000	EXTERNAL	151500803	151500100
		1500		151500802	151500150
		3000		151500800	-
3300	40.1 x 34.5 x 4	1000	INTERNAL	151100803	151100100
		1500		151100802	151100150
		3000		151100800	-
	48 x 41.25 x 3	1000	EXTERNAL	151500803	151500100
		1500		151500802	151500150
		3000		151500800	-
3400	49 x 39.5 x 4.5	1000	INTERNAL	152500803	152500100
		1500		152500802	152500150
		3000		152500800	-
	57.5 x 48 x 3.8	1000	EXTERNAL	153500803	153500100
		1500		153500802	153500150
		3000		153500800	-

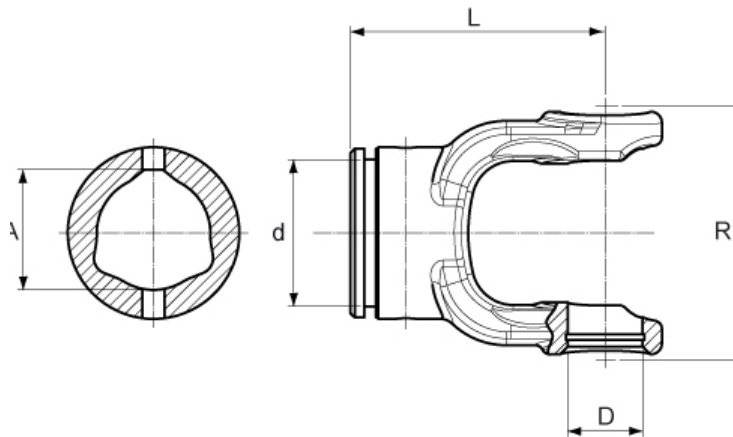
STAR PROFILE



	STAR TELESCOPIC				
Dim.	R x H x S [mm]	L [mm]	TYPE	Code	Code with Pin Hole
3400	51.4 x 47.4 x	1000	INTERNAL	154500803	154500100
		1500		154500802	154500150
		3000		154500800	-
	60.7 x 56.8 x 4.3	1000	EXTERNAL	155600803	155600100
		1500		155600802	155600150
		3000		155600800	-
3500	51.4 x 47.4 x	1000	INTERNAL	154500803	154500100
		1500		154500802	154500150
		3000		154500800	-
	60.7 x 56.8 x 4.3	1000	EXTERNAL	155600803	155600100
		1500		155600802	155600150
		3000		155600800	-

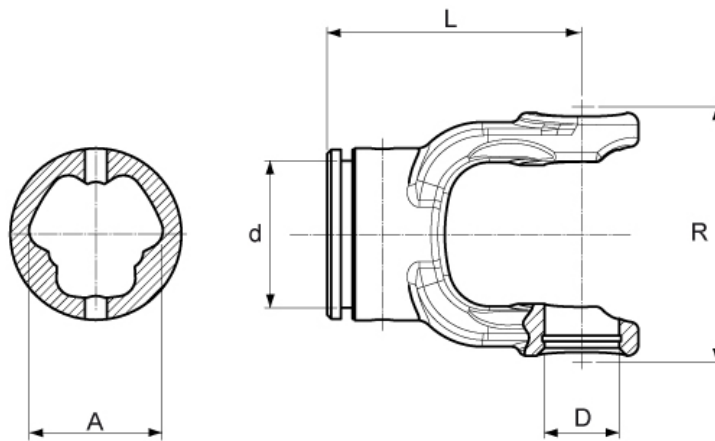
8.3 INTERNAL FORKS

TRILOBATE PROFILE



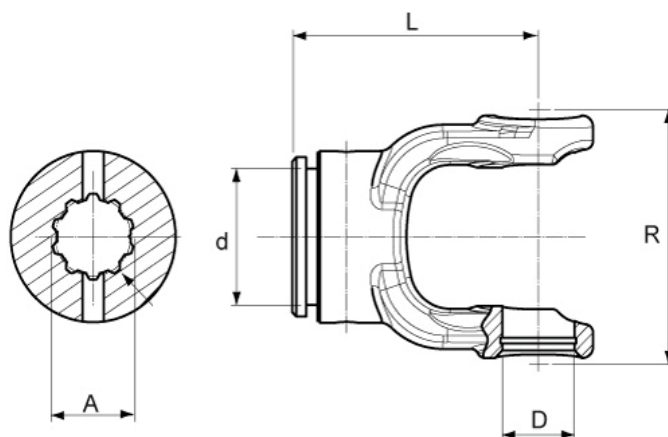
Dim.	TYPE	A [mm]	D [mm]	d [mm]	L [mm]	R [mm]	CODE
1	INNER PIPE FORK	26.6	22	34	80	67	1701029
	OUTER PIPE FORK	32.4		40			1701027
2	INNER PIPE FORK	29	23.8	40	84	76	1702029
	OUTER PIPE FORK	36.1		42			1702027
4	INNER PIPE FORK	36.1	27	46	92	92	1704027
	OUTER PIPE FORK	43.4		53			1704029
5	INNER PIPE FORK	44.7	30.2	53	98	98	1705029
	OUTER PIPE FORK	51.3		62			1705027
6	INNER PIPE FORK	44.7		59	107	112	1706029
	OUTER PIPE FORK	53.6		68			1706027
8	INNER PIPE FORK	53.6	34.9	74	120	124	1708029
	OUTER PIPE FORK	62.7		80			1708027

YORK PROFILE



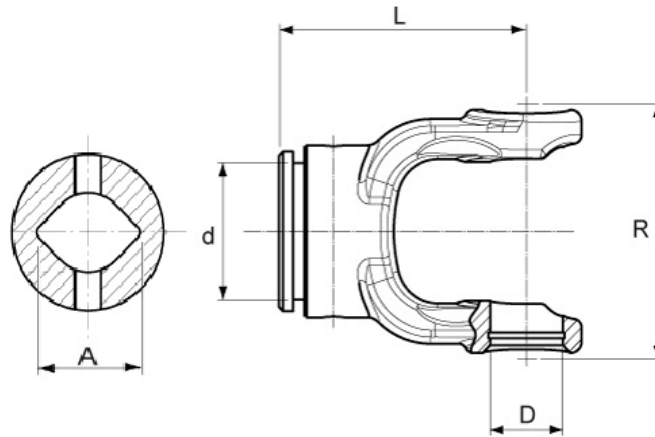
Dim.	TYPE	D [mm]	A [mm]	d [mm]	L [mm]	R [mm]	CODE
4	INNER PIPE FORK	27	46.7	53	92	92	1704069
	OUTER PIPE FORK	27	52.8	62			1704067
6	INNER PIPE FORK	30.2	53.4	59	107	112	1706069
	OUTER PIPE FORK	30.2	61	68			1706067
8	INNER PIPE FORK	34.9	60.8	74	120	124	1708069
	OUTER PIPE FORK	34.9	38.3	80			1708067
10	INNER PIPE FORK	41	64.4	74	135	136	1700069
	OUTER PIPE FORK	41	73.9	80			1700067

GROOVED PROFILE



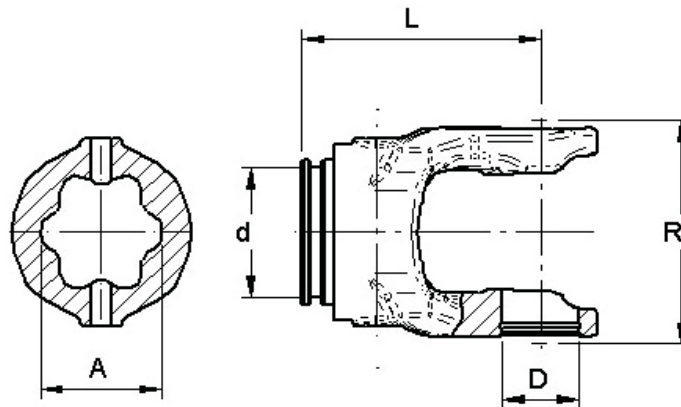
							CODE
Dim.	D [mm]	A [mm]	Z [n° teeth]	d [mm]	L [mm]	R [mm]	
4	27	CUNA 30	10	46	92	92	1704013
5	30.2	CUNA 35	12	56	98	98	1705013
6	30.2	CUNA 35		59	107	112	1706013
7	34.9	CUNA 40	14				120
8	34.9	CUNA 40		74.8	135	136	
10	41	CUNA 45	16				1700113

LEMON PROFILE



Dim.	TYPE	A [mm]	D [mm]	L [mm]	d [mm]	R [mm]	PIPE	CODE
3100	INNER PIPE FORK	30.8	22	66	40.8	69	00a/00c	1701W29
	OUTER PIPE FORK	39.1					0a	1701W27
	INNER PIPE FORK	40.1					0v	1701W19
	OUTER PIPE FORK	48					1	1701W17
3200	INNER PIPE FORK	30.8	24	75	49.8	76	00a/00c	1702W19
	OUTER PIPE FORK	39.1					0a	1702W17
	INNER PIPE FORK	40.1					0v	1702W29
	OUTER PIPE FORK	48					1	1702W27
3300	INNER PIPE FORK	40.1	27	85	49.8	92	0v	1703W29
	OUTER PIPE FORK	48					1	1703W27
	INNER PIPE FORK	49					1b	1703W19
	OUTER PIPE FORK	57.5					2a	1703W17
3400	INNER PIPE FORK	49	32	92	62.2	94	1b	1704W29
	OUTER PIPE FORK	57.5		102			2a	1704W27

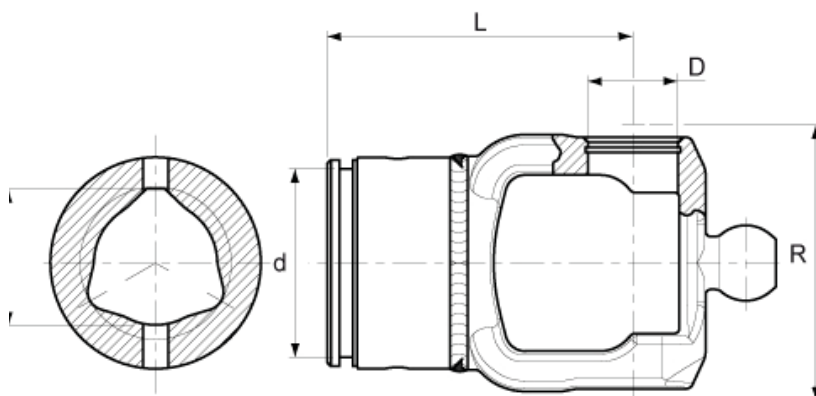
STAR PROFILE



Dim.	TYPE	A [mm]	D [mm]	L [mm]	d [mm]	R [mm]	PIPE	CODE
3400	INNER PIPE FORK	51	32	92	62.2	94	S4	1704W69
	OUTER PIPE FORK	61		102			S5	1704W67
3500	INNER PIPE FORK	51	36	106	62.2	106	S4	1705W69
	OUTER PIPE FORK	61		112			S5	1705W67

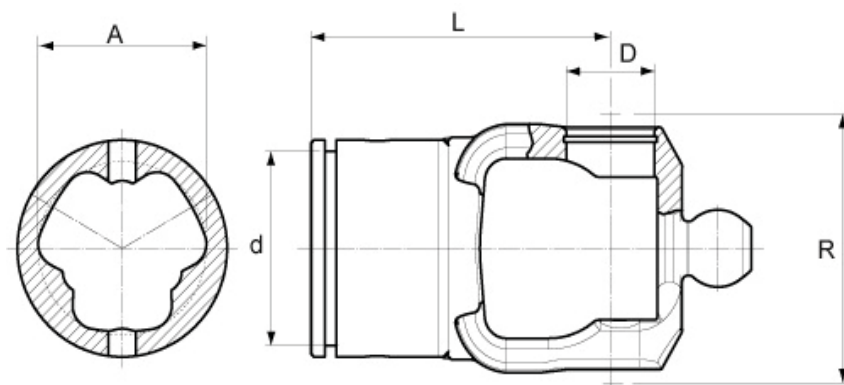
8.4 HOMOKINETIC INTERNAL FORKS

TRILOBATE PROFILE



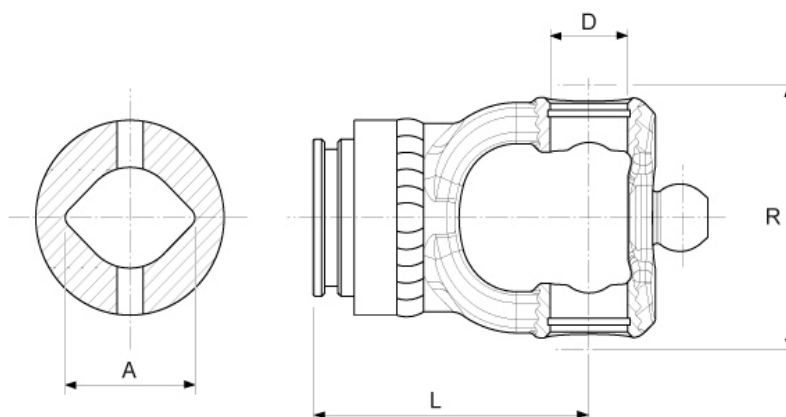
Dim.	TYPE	A [mm]	D [mm]	L [mm]	d [mm]	R [mm]	CODE
2	INNER PIPE FORK	29	23.8	93	40	75	1002829
	OUTER PIPE FORK	36.1			42		1002827
4	INNER PIPE FORK	36.1	27	101	46	92	1004829
	OUTER PIPE FORK	43.4			53		1004827
6	INNER PIPE FORK	44.7	30.2	107	59	97	1006729
	OUTER PIPE FORK	53.6			68		1006727
8	INNER PIPE FORK	53.6	34.9	122	74	114	1008729
	OUTER PIPE FORK	62.7			80		1008727

YORK PROFILE



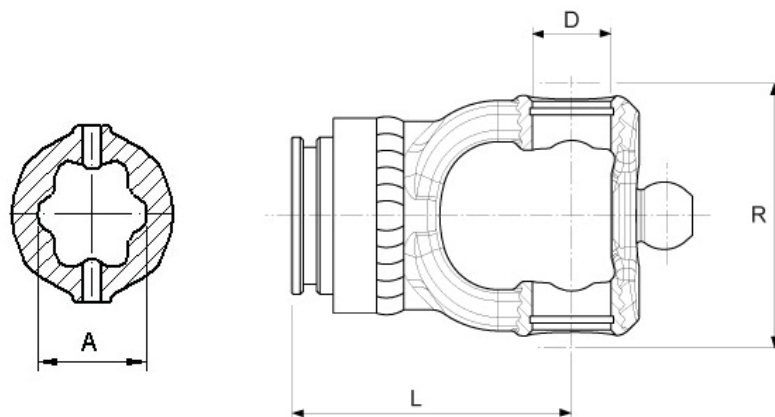
Dim.	TYPE	A [mm]	D [mm]	L [mm]	d [mm]	R [mm]	CODE
4	INNER PIPE FORK	46.7	27	101	46	92	1004802
	OUTER PIPE FORK	52.8		115	53		1004801
6	INNER PIPE FORK	53.4	30.2	107	59	97	1006769
	OUTER PIPE FORK	61			68		1006767
8	INNER PIPE FORK	60.8	34.9	128	74	114	1008769
	OUTER PIPE FORK	68.3			80		1008767

LEMON PROFILE



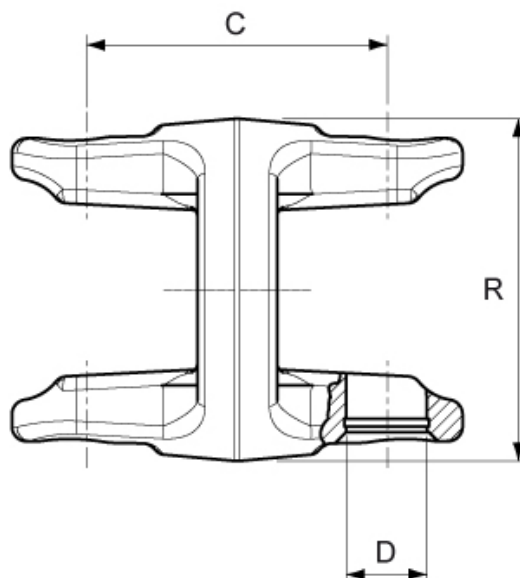
Dim.	TYPE	A [mm]	D [mm]	L [mm]	R [mm]	PIPE	CODE
3280	INNER PIPE FORK	30.8	23.8	85	75	0a	1002W19
	OUTER PIPE FORK	39.1				00a/00c	1002W17
3380	INNER PIPE FORK	40.1	27	98	92	1	1004W19
	OUTER PIPE FORK	48				0v	1004W17
3480	INNER PIPE FORK	49	30.2	105	97	2a	1006W39
	OUTER PIPE FORK	57.5		115		1b	1006W37

STAR PROFILE



Dim.	TYPE	A [mm]	D [mm]	L [mm]	R [mm]	PIPE	CODE
3480	INNER PIPE FORK	51	30.2	105	97	S4	1006W79
	OUTER PIPE FORK	61		115		S5	1006W77
3580	INNER PIPE FORK	51	34.9	122	114	S4	1008W79
	OUTER PIPE FORK	61				S5	1008W77

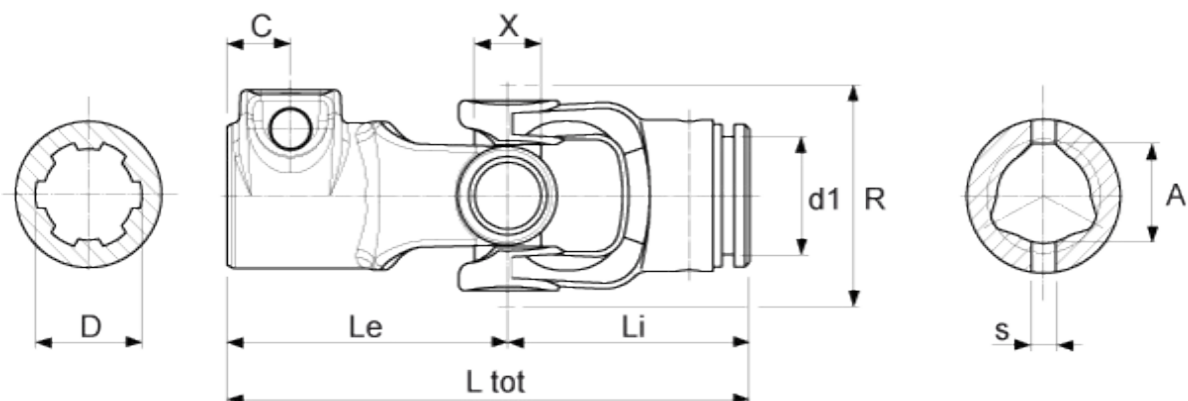
DOUBLE



Dim.	C [mm]	D [mm]	R [mm]	CODE
1	68	22	72	1701226
2	78	23.8	82	1702226
4	92	27	95	1704226
6	109	30.2	115	1706226

8.5 JOINTS FOR TRILOBE PIPES

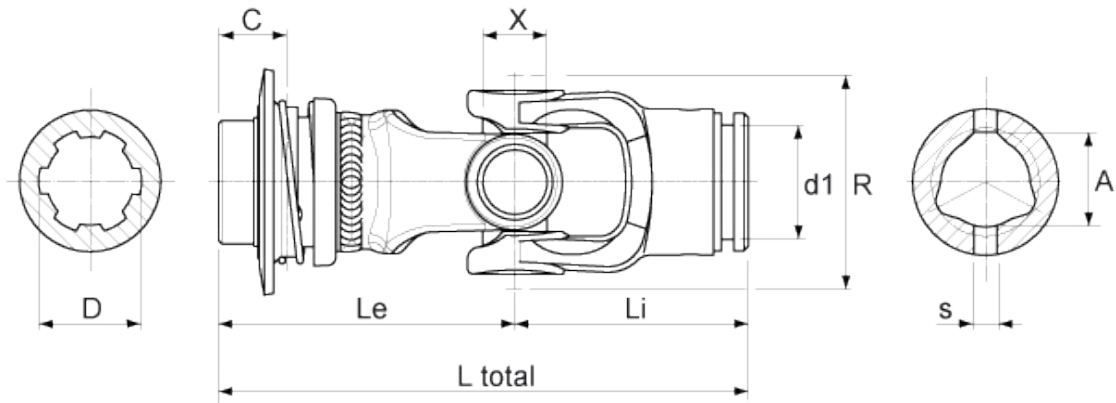
BUTTON ATTACHMENT



Dim.	TYPE	A [mm]	Li [mm]	B [mm]	S [mm]	D	Le [mm]	C [mm]	R [mm]	CODE
1	OUTER PIPE JOINT	32.4	80	20	8	1 3/8" Z6	93	21	67	1121060
	INNER PIPE JOINT	26.6				1 3/8" Z6				1121061
	OUTER PIPE JOINT	32.4				1 3/8" Z21				1121062
	INNER PIPE JOINT	26.6				1 3/8" Z21				1121063
2	OUTER PIPE JOINT	36.1	84			1 3/8" Z6	99		76	1122060
	INNER PIPE JOINT	29				1 3/8" Z6				1122061
	OUTER PIPE JOINT	36.1				1 3/8" Z21				1122062
	INNER PIPE JOINT	29				1 3/8" Z21				1122063
4	OUTER PIPE JOINT	43.4	92			1 3/8" Z6	108		92	1124060
	INNER PIPE JOINT	36.1				1 3/8" Z6				1124061
	OUTER PIPE JOINT	43.4				1 3/8" Z21				1124062
	INNER PIPE JOINT	36.1				1 3/8" Z21				1124063
5	OUTER PIPE JOINT	51.3	98			1 3/8" Z6	111		98	1125060
	INNER PIPE JOINT	44.7				1 3/8" Z6				1125061
	OUTER PIPE JOINT	51.3				1 3/8" Z21				1125062
	INNER PIPE JOINT	44.7				1 3/8" Z21				1125063
6	OUTER PIPE JOINT	53.6	107	24	10	1 3/8" Z6	118	112	1126060	
	INNER PIPE JOINT	44.7				1 3/8" Z6			1126061	
	OUTER PIPE JOINT	53.6				1 3/8" Z21			1126062	
	INNER PIPE JOINT	44.7				1 3/8" Z21			1126063	
	OUTER PIPE JOINT	53.6				1 3/4" Z6	123		24	1126065
	INNER PIPE JOINT	44.7				1 3/4" Z6				1126066
	OUTER PIPE JOINT	53.6				1 3/4" Z20				1126067
	INNER PIPE JOINT	44.7				1 3/4" Z20				1126068
7	OUTER PIPE JOINT	53.6				1 3/8" Z6			21	1127060
	INNER PIPE JOINT	44.7				1 3/8" Z6				1127061
	OUTER PIPE JOINT	53.6				1 3/8" Z21				1127062
	INNER PIPE JOINT	44.7				1 3/8" Z21				1127063
	OUTER PIPE JOINT	53.6				1 3/4" Z6	24			1127065
	INNER PIPE JOINT	44.7				1 3/4" Z6				1127066
	OUTER PIPE JOINT	53.6				1 3/4" Z20				1127067
	INNER PIPE JOINT	44.7				1 3/4" Z20				1127068

8	OUTER PIPE JOINT	62.7	120	26	10	1 3/8" Z6	126	21	124	1128060
	INNER PIPE JOINT	53.6	120	26	10	1 3/8" Z6	126	21	124	1128061
	OUTER PIPE JOINT	62.7	120	26	10	1 3/8" Z21	126	21	124	1128066
	INNER PIPE JOINT	53.6	120	26	10	1 3/8" Z21	126	21	124	1128067
	OUTER PIPE JOINT	62.7	120	26	10	1 3/4" Z6	133	24	124	1128062
	INNER PIPE JOINT	53.6	120	26	10	1 3/4" Z6	133	24	124	1128065
	OUTER PIPE JOINT	62.7	120	26	10	1 3/4" Z20	133	24	124	1128063
	INNER PIPE JOINT	53.6	120	26	10	1 3/4" Z20	133	24	124	1128068

PULL COLLAR ATTACHMENT

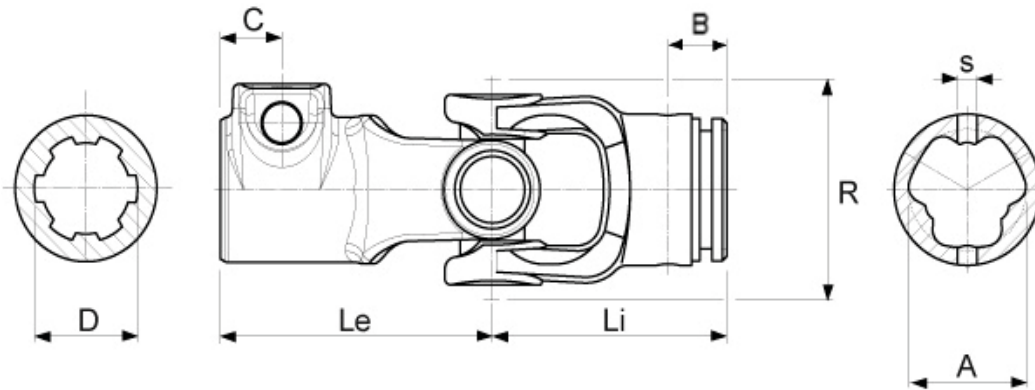


Dim.	TYPE	A [mm]	Li [mm]	B [mm]	S [mm]	D	Le [mm]	C [mm]	R [mm]	CODE			
1	OUTER PIPE JOINT	32.4	80	20	8	1 3/8" Z6	96	28.5	67	1121160			
	INNER PIPE JOINT	26.6				1 3/8" Z6				1121161			
	OUTER PIPE JOINT	32.4				1 3/8" Z21				1121162			
	INNER PIPE JOINT	26.6				1 3/8" Z21				1121163			
2	OUTER PIPE JOINT	36.1	84			1 3/8" Z6	102		76	1122160			
	INNER PIPE JOINT	29				1 3/8" Z6				1122161			
	OUTER PIPE JOINT	36.1				1 3/8" Z21				1122162			
	INNER PIPE JOINT	29				1 3/8" Z21				1122163			
4	OUTER PIPE JOINT	43.4	92			1 3/8" Z6	111		92	1124160			
	INNER PIPE JOINT	36.1				1 3/8" Z6				1124161			
	OUTER PIPE JOINT	43.4				1 3/8" Z21				1124162			
	INNER PIPE JOINT	36.1				1 3/8" Z21				1124163			
5	OUTER PIPE JOINT	51.3	98			24	10		1 3/8" Z6	114	28.5	98	1125160
	INNER PIPE JOINT	44.7							1 3/8" Z6				1125161
	OUTER PIPE JOINT	51.3							1 3/8" Z21				1125162
	INNER PIPE JOINT	44.7							1 3/8" Z21				1125163
6	OUTER PIPE JOINT	53.6	107	1 3/8" Z6	121			112	1126160				
	INNER PIPE JOINT	44.7		1 3/8" Z6					1126161				
	OUTER PIPE JOINT	53.6		1 3/8" Z21					1126162				
	INNER PIPE JOINT	44.7		1 3/8" Z21					1126163				
	OUTER PIPE JOINT	53.6		1 3/4" Z6	124				1126165				
	INNER PIPE JOINT	44.7		1 3/4" Z6					1126166				
	OUTER PIPE JOINT	53.6		1 3/4" Z20					1126167				
	INNER PIPE JOINT	44.7		1 3/4" Z20					1126168				
7	OUTER PIPE JOINT	53.6	107	1 3/8" Z6	121			28.5	112	1127160			
	INNER PIPE JOINT	44.7		1 3/8" Z6						1127161			
	OUTER PIPE JOINT	53.6		1 3/8" Z21						1127162			
	INNER PIPE JOINT	44.7		1 3/8" Z21						1127163			
	OUTER PIPE JOINT	53.6		1 3/4" Z6	124	1127165							
	INNER PIPE JOINT	44.7		1 3/4" Z6		1127166							
	OUTER PIPE JOINT	53.6		1 3/4" Z20		1127167							
	INNER PIPE JOINT	44.7		1 3/4" Z20		1127168							

8	OUTER PIPE JOINT	62.7	120	26	10	1 3/8" Z6	134	28.5	124	1128160
	INNER PIPE JOINT	53.6				1 3/8" Z6				1128161
	OUTER PIPE JOINT	62.7				1 3/8" Z21				1128162
	INNER PIPE JOINT	53.6				1 3/8" Z21				1128163
	OUTER PIPE JOINT	62.7				1 3/4" Z6	135			1128165
	INNER PIPE JOINT	53.6				1 3/4" Z6				1128166
	OUTER PIPE JOINT	62.7				1 3/4" Z20				1128167
	INNER PIPE JOINT	53.6				1 3/4" Z20				1128168

8.6 YORK PIPE JOINTS

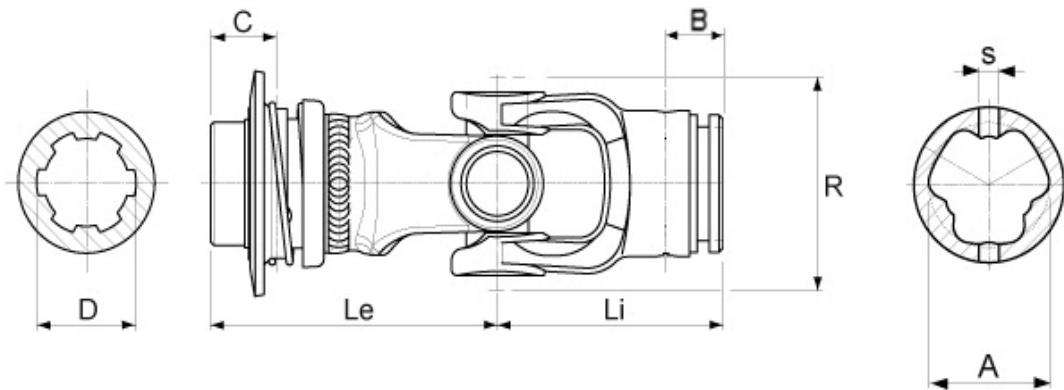
BUTTON ATTACHMENT



Dim.	TYPE	A [mm]	Li [mm]	B [mm]	S [mm]	D	Le [mm]	C [mm]	R [mm]	CODE	
4	OUTER PIPE JOINT	52.8	92	20	8	1 3/8" Z6	108		92	1124090	
	INNER PIPE JOINT	46.7				1 3/8" Z6				1124091	
	OUTER PIPE JOINT	52.8				1 3/8" Z21				1124092	
	INNER PIPE JOINT	46.7				1 3/8" Z21				1124093	
5	OUTER PIPE JOINT	52.8	98			1 3/8" Z6	111	21	98	1125090	
	INNER PIPE JOINT	46.7				1 3/8" Z6				1125091	
	OUTER PIPE JOINT	52.8				1 3/8" Z21				1125092	
	INNER PIPE JOINT	46.7				1 3/8" Z21				1125093	
6	OUTER PIPE JOINT	61	107	24	10	1 3/8" Z6	118		112	1126090	
	INNER PIPE JOINT	53.4				1 3/8" Z6				1126091	
	OUTER PIPE JOINT	61				1 3/8" Z21				1126092	
	INNER PIPE JOINT	53.4				1 3/8" Z21				1126093	
	OUTER PIPE JOINT	61				1 3/4" Z6	123			24	1126094
	INNER PIPE JOINT	53.4				1 3/4" Z6					1126095
	OUTER PIPE JOINT	61				1 3/4" Z20					1126096
	INNER PIPE JOINT	53.4				1 3/4" Z20					1126097
7	OUTER PIPE JOINT	61	107	24	10	1 3/8" Z6	118	21	112	1127090	
	INNER PIPE JOINT	53.4	107	24	10	1 3/8" Z6	118	21	112	1127091	
	OUTER PIPE JOINT	61	107	24	10	1 3/8" Z21	118	21	112	1127092	
	INNER PIPE JOINT	53.4	107	24	10	1 3/8" Z21	118	21	112	1127093	
	OUTER PIPE JOINT	61	107	24	10	1 3/4" Z6	123	24	112	1127094	
	INNER PIPE JOINT	53.4	107	24	10	1 3/4" Z6	123	24	112	1127095	
	OUTER PIPE JOINT	61	107	24	10	1 3/4" Z20	123	24	112	1127096	
	INNER PIPE JOINT	53.4	107	24	10	1 3/4" Z20	123	24	112	1127097	
8	OUTER PIPE JOINT	68.3	120	26	10	1 3/8" Z6	126	21	124	1128090	
	INNER PIPE JOINT	60.8	120	26	10	1 3/8" Z6	126	21	124	1128091	
	OUTER PIPE JOINT	68.3	120	26	10	1 3/8" Z21	126	21	124	1128092	
	INNER PIPE JOINT	60.8	120	26	10	1 3/8" Z21	126	21	124	1128093	
	OUTER PIPE JOINT	68.3	120	26	10	1 3/4" Z6	133	24	124	1128094	
	INNER PIPE JOINT	60.8	120	26	10	1 3/4" Z6	133	24	124	1128095	
	OUTER PIPE JOINT	68.3	120	26	10	1 3/4" Z20	133	24	124	1128096	
	INNER PIPE JOINT	60.8	120	26	10	1 3/4" Z20	133	24	124	1128097	

10	OUTER PIPE JOINT	73.9	135	26	10	1 3/8" Z6	141	21	136	112T090
	INNER PIPE JOINT	64.4	135	26	10	1 3/8" Z6	141	21	136	112T091
	OUTER PIPE JOINT	73.9	135	26	10	1 3/8" Z21	141	21	136	112T092
	INNER PIPE JOINT	64.4	135	26	10	1 3/8" Z21	141	21	136	112T093
	OUTER PIPE JOINT	73.9	135	26	10	1 3/4" Z6	145	24	136	112T094
	INNER PIPE JOINT	64.4	135	26	10	1 3/4" Z6	145	24	136	112T095
	OUTER PIPE JOINT	73.9	135	26	10	1 3/4" Z20	145	24	136	112T096
	INNER PIPE JOINT	64.4	135	26	10	1 3/4" Z20	145	24	136	112T097

PULL COLLAR ATTACHMENT

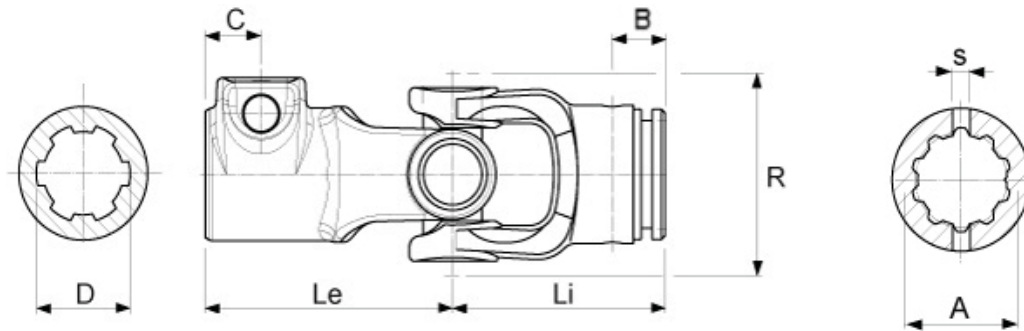


Dim.	TYPE	A [mm]	Li [mm]	B [mm]	S [mm]	D	Le [mm]	C [mm]	R [mm]	CODE			
4	OUTER PIPE JOINT	52.8	92	20	8	1 3/8" Z6	111	28.5	92	1124190			
	INNER PIPE JOINT	46.7				1 3/8" Z6				1124191			
	OUTER PIPE JOINT	52.8				1 3/8" Z21				1124192			
	INNER PIPE JOINT	46.7				1 3/8" Z21				1124193			
5	OUTER PIPE JOINT	52.8	98	24	10	1 3/8" Z6	114		28.5	98	1125190		
	INNER PIPE JOINT	46.7				1 3/8" Z6					1125191		
	OUTER PIPE JOINT	52.8				1 3/8" Z21					1125192		
	INNER PIPE JOINT	46.7				1 3/8" Z21					1125193		
6	OUTER PIPE JOINT	61	107	24	10	1 3/8" Z6	121	28.5		112	1126190		
	INNER PIPE JOINT	53.4				1 3/8" Z6					1126191		
	OUTER PIPE JOINT	61				1 3/8" Z21					1126192		
	INNER PIPE JOINT	53.4				1 3/8" Z21					1126193		
	OUTER PIPE JOINT	61			1 3/4" Z6	124	1 3/4" Z6		1126194				
	INNER PIPE JOINT	53.4					1 3/4" Z6		1126195				
	OUTER PIPE JOINT	61					1 3/4" Z20		1126196				
	INNER PIPE JOINT	53.4					1 3/4" Z20		1126197				
7	OUTER PIPE JOINT	61			1 3/8" Z6	121	1 3/8" Z6		121		28.5	112	1127190
	INNER PIPE JOINT	53.4					1 3/8" Z6						1127191
	OUTER PIPE JOINT	61					1 3/8" Z21						1127192
	INNER PIPE JOINT	53.4					1 3/8" Z21						1127193
	OUTER PIPE JOINT	61				1 3/4" Z6	124		1 3/4" Z6				1127194
	INNER PIPE JOINT	53.4							1 3/4" Z6				1127195
	OUTER PIPE JOINT	61							1 3/4" Z20				1127196
	INNER PIPE JOINT	53.4							1 3/4" Z20				1127197
8	OUTER PIPE JOINT	68.3	120	26		1 3/8" Z6	134	28.5	124	1128190			
	INNER PIPE JOINT	60.8				1 3/8" Z6				1128191			
	OUTER PIPE JOINT	68.3				1 3/8" Z21				1128192			
	INNER PIPE JOINT	60.8				1 3/8" Z21				1128193			
	OUTER PIPE JOINT	68.3		1 3/4" Z6	135	1 3/4" Z6	1128194						
	INNER PIPE JOINT	60.8				1 3/4" Z6	1128195						
	OUTER PIPE JOINT	68.3				1 3/4" Z20	1128196						
	INNER PIPE JOINT	60.8				1 3/4" Z20	1128197						

10	OUTER PIPE JOINT	73.9	135	26	10	1 3/8" Z6	147	28.5	136	112T190
	INNER PIPE JOINT	64.4				1 3/8" Z6				112T191
	OUTER PIPE JOINT	73.9				1 3/8" Z21				112T192
	INNER PIPE JOINT	64.4				1 3/8" Z21				112T193
	OUTER PIPE JOINT	73.9				1 3/4" Z6	152			112T194
	INNER PIPE JOINT	64.4				1 3/4" Z6				112T195
	OUTER PIPE JOINT	73.9				1 3/4" Z20				112T196
	INNER PIPE JOINT	64.4				1 3/4" Z20				112T197

8.7 GROOVED PIPE JOINTS

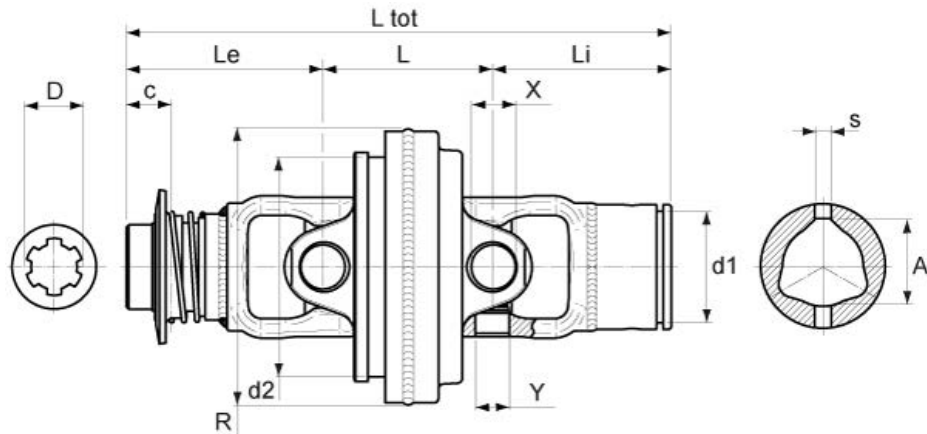
BUTTON ATTACHMENT



Dim.	TYPE	A [mm]	Li [mm]	B [mm]	S [mm]	D	Le [mm]	C [mm]	R [mm]	CODE	
4	INNER PIPE JOINT	CUNA 30 Z10	92	20	8	1 3/8" Z6	108	21	92	1124064	
	INNER PIPE JOINT	CUNA 30 Z10				1 3/8" Z21				1124074	
5	INNER PIPE JOINT	CUNA 35 Z12	98	24	10	1 3/8" Z6	111	21	98	1125064	
	INNER PIPE JOINT	CUNA 35 Z12				1 3/8" Z21				1125074	
6	INNER PIPE JOINT	CUNA 35 Z12	107			1 3/8" Z6	118	21	112	1126064	
	INNER PIPE JOINT	CUNA 35 Z12				1 3/8" Z21				1126074	
	INNER PIPE JOINT	CUNA 35 Z12				1 3/4" Z6	123	24	112	1126077	
	INNER PIPE JOINT	CUNA 35 Z12				1 3/4" Z20				1126078	
7	INNER PIPE JOINT	CUNA 40 Z14				1 3/8" Z6	118	21		112	1127074
	INNER PIPE JOINT	CUNA 40 Z14				1 3/8" Z21					1127075
	INNER PIPE JOINT	CUNA 40 Z14				1 3/4" Z6	123	24	1127077		
	INNER PIPE JOINT	CUNA 40 Z14				1 3/4" Z20			1127078		
8	INNER PIPE JOINT	CUNA 40 Z14	120			1 3/8" Z6	126	21	124	1128064	
	INNER PIPE JOINT	CUNA 40 Z14				1 3/8" Z21				1128074	
	INNER PIPE JOINT	CUNA 40 Z14		1 3/4" Z6	133	24	1128075				
	INNER PIPE JOINT	CUNA 40 Z14		1 3/4" Z20			1128076				
10	INNER PIPE JOINT	CUNA 45 Z16	135	1 3/8" Z6	141	21	136	112T064			
	INNER PIPE JOINT	CUNA 45 Z16		1 3/8" Z21				112T074			
	INNER PIPE JOINT	CUNA 45 Z16		1 3/4" Z6	145	24		112T075			
	INNER PIPE JOINT	CUNA 45 Z16		1 3/4" Z20				112T076			

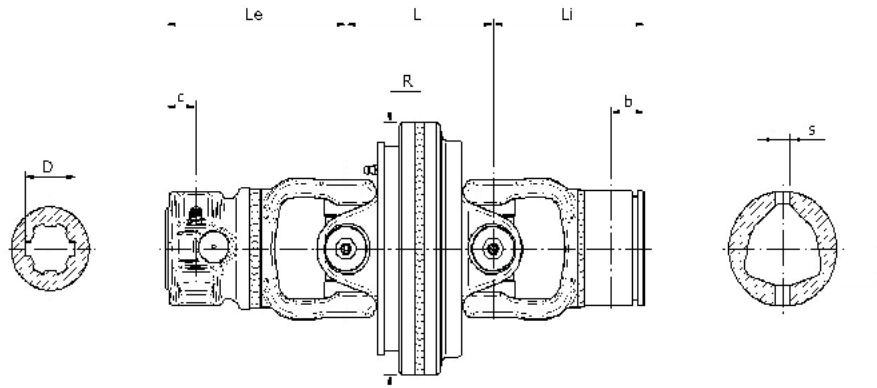
8.8 HOMOKINETIC JOINTS FOR TRILOBE PIPES

BUTTON ATTACHMENT



Dim.	TYPE	A [mm]	S [mm]	Li [mm]	B [mm]	Le [mm]	D	C [mm]	L [mm]	R [mm]	CODE
2	INNER PIPE JOINT	29	8	93	20	114	1 3/8" Z6	28.5	86	147	7102821
	OUTER PIPE JOINT	36.1					1 3/8" Z6				7102822
	INNER PIPE JOINT	29					1 3/8" Z21				7102831
	OUTER PIPE JOINT	36.1					1 3/8" Z21				7102832
4	INNER PIPE JOINT	36.1	8	101.2	20	122	1 3/8" Z6		95	151	7104821
	OUTER PIPE JOINT	43.4					1 3/8" Z6				7104822
	INNER PIPE JOINT	36.1					1 3/8" Z21				7104831
	OUTER PIPE JOINT	43.4					1 3/8" Z21				7104832
6	INNER PIPE JOINT	44.7	10	108.5	24	123.5	1 3/8" Z6		104	166	7106821
	OUTER PIPE JOINT	53.6					1 3/8" Z6				7106822
	INNER PIPE JOINT	44.7					1 3/8" Z21				7106831
	OUTER PIPE JOINT	53.6					1 3/8" Z21				7106832
	INNER PIPE JOINT	44.7				128	1 3/4" Z6				7106841
	OUTER PIPE JOINT	53.6					1 3/4" Z6				7106842
	INNER PIPE JOINT	44.7					1 3/4" Z20				7106851
	OUTER PIPE JOINT	53.6					1 3/4" Z20				7106852
8	INNER PIPE JOINT	53.6	10	122	26	133.5	1 3/8" Z6		118	184	7108821
	OUTER PIPE JOINT	62.7					1 3/8" Z6				7108822
	INNER PIPE JOINT	53.6					1 3/8" Z21				7108831
	OUTER PIPE JOINT	62.7					1 3/8" Z21				7108832
	INNER PIPE JOINT	53.6				138	1 3/4" Z6				7108841
	OUTER PIPE JOINT	62.7					1 3/4" Z6				7108842
	INNER PIPE JOINT	53.6					1 3/4" Z20				7108851
	OUTER PIPE JOINT	62.7					1 3/4" Z20				7108852

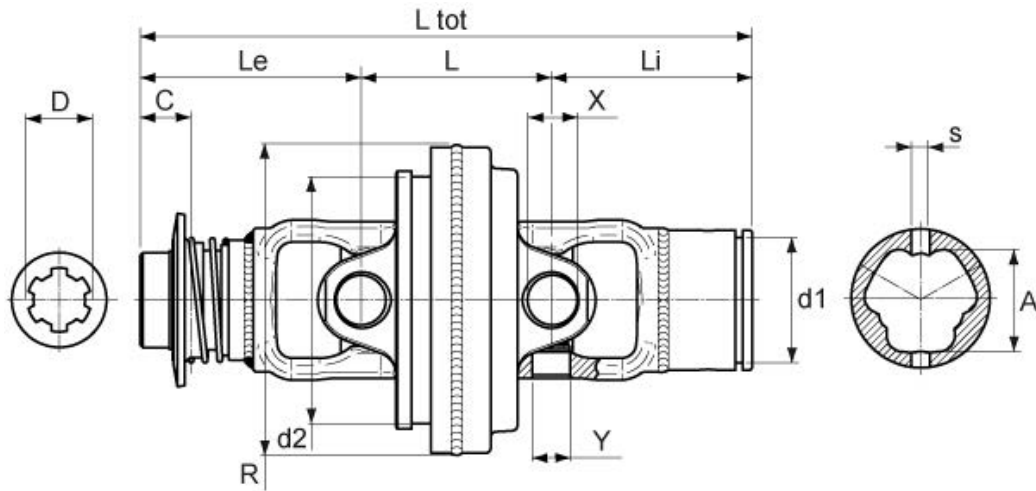
QUICK PIN



Dim.	TYPE	A [mm]	S [mm]	Li [mm]	B [mm]	Le [mm]	D	C [mm]	L [mm]	R [mm]	CODE	
2	INNER PIPE JOINT	29	8	93	20	112	1 3/8" Z6	21	86	147	7102721	
	OUTER PIPE JOINT	36.1					1 3/8" Z6				7102722	
	INNER PIPE JOINT	29					1 3/8" Z21				7102731	
	OUTER PIPE JOINT	36.1					1 3/8" Z21				7102732	
4	INNER PIPE JOINT	36.1		101.2	123	1 3/8" Z6	21		95	151	7104721	
	OUTER PIPE JOINT	43.4				1 3/8" Z6					7104722	
	INNER PIPE JOINT	36.1				1 3/8" Z21					7104731	
	OUTER PIPE JOINT	43.4				1 3/8" Z21					7104732	
6	INNER PIPE JOINT	44.7	10	108.5	24	128	1 3/8" Z6	24	104	166	7106721	
	OUTER PIPE JOINT	53.6					1 3/8" Z6				7106722	
	INNER PIPE JOINT	44.7					1 3/8" Z21				7106731	
	OUTER PIPE JOINT	53.6					1 3/8" Z21				7106732	
	INNER PIPE JOINT	44.7				130	1 3/4" Z6				24	7106741
	OUTER PIPE JOINT	53.6					1 3/4" Z6					7106742
	INNER PIPE JOINT	44.7					1 3/4" Z20					7106751
	OUTER PIPE JOINT	53.6					1 3/4" Z20					7106752
8	INNER PIPE JOINT	53.6		122	26	138	1 3/8" Z6	21	118	184	7108721	
	OUTER PIPE JOINT	62.7					1 3/8" Z6				7108722	
	INNER PIPE JOINT	53.6					1 3/8" Z21				7108731	
	OUTER PIPE JOINT	62.7					1 3/8" Z21				7108732	
	INNER PIPE JOINT	53.6				140	1 3/4" Z6	24			7108741	
	OUTER PIPE JOINT	62.7					1 3/4" Z6				7108742	
	INNER PIPE JOINT	53.6					1 3/4" Z20				7108751	
	OUTER PIPE JOINT	62.7					1 3/4" Z20				7108752	

8.9 HOMOKINETIC JOINTS FOR YORK PIPES

PULL COLLAR ATTACHMENT



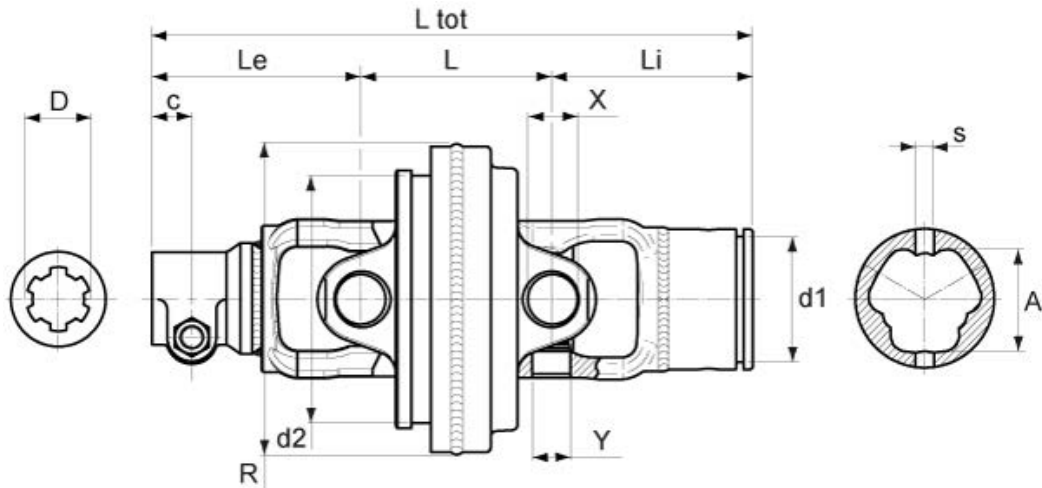
FOR INNER PIPE

Dim.	X [mm]	Y [mm]	A [mm]	s [mm]	Li [mm]	d1 [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	Ltot [mm]	R [mm]	d2 [mm]	CODE
6	27	32	53.4	10	108.5	59	120	1 3/8" Z6	28.5	104	332.5	166	134	7406621
	27	32	53.4	10	108.5	59	120	1 3/8" Z21	28.5	104	332.5	166	134	7406631
	27	32	53.4	10	108.5	59	128	1 3/4" Z6	28.5	104	340.5	166	134	7406641
	27	32	53.4	10	108.5	59	128	1 3/4" Z20	28.5	104	340.5	166	134	7206651
8	32	36	64.8	10	128	74.8	129.5	1 3/8" Z6	28.5	118	375.5	184	146	7408621
	32	36	64.8	10	128	74.8	129.5	1 3/8" Z21	28.5	118	375.5	184	146	7408631
	32	36	64.8	10	128	74.8	137.5	1 3/4" Z6	28.5	118	383.5	184	146	7408641
	32	36	64.8	10	128	74.8	129.5	1 3/4" Z20	28.5	118	383.5	184	146	7408651

FOR OUTER PIPE

Dim.	X [mm]	Y [mm]	A [mm]	s [mm]	Li [mm]	d1 [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	Ltot [mm]	R [mm]	d2 [mm]	CODE
6	27	32	61	10	108.5	68	120	1 3/8" Z6	28.5	104	332.5	166	134	7406622
	27	32	61	10	108.5	68	120	1 3/8" Z21	28.5	104	332.5	166	134	7406632
	27	32	61	10	108.5	68	128	1 3/4" Z6	28.5	104	340.5	166	134	7406642
	27	32	61	10	108.5	68	128	1 3/4" Z20	28.5	104	340.5	166	134	7406652
8	32	36	68.3	10	128	80.8	129.5	1 3/8" Z6	28.5	118	375.5	184	146	7408622
	32	36	68.3	10	128	80.8	129.5	1 3/8" Z21	28.5	118	375.5	184	146	7408632
	32	36	68.3	10	128	80.8	137.5	1 3/4" Z6	28.5	118	383.5	184	146	7408642
	32	36	68.3	10	128	80.8	129.5	1 3/4" Z20	28.5	118	383.5	184	146	7408652

QUICK PIN



FOR INNER PIPE

Dim.	X [mm]	Y [mm]	A [mm]	s [mm]	Li [mm]	d1 [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	Ltot [mm]	R [mm]	d2 [mm]	CODE
6	27	32	53.4	10	108.5	59	116.5	1 3/8" Z6	21	104	329	166	134	7406121
	27	32	53.4	10	108.5	59	116.5	1 3/8" Z21	21	104	329	166	134	7406131
	27	32	53.4	10	108.5	59	133.5	1 3/4" Z6	27	104	346	166	134	7406141
	27	32	53.4	10	108.5	59	133.5	1 3/4" Z20	27	104	346	166	134	7406151
8	32	36	64.8	10	128	74.8	126	1 3/8" Z6	21	118	372	184	146	7408121
	32	36	64.8	10	128	74.8	126	1 3/8" Z21	21	118	372	184	146	7408131
	32	36	64.8	10	128	74.8	143	1 3/4" Z6	27	118	389	184	146	7408141
	32	36	64.8	10	128	74.8	143	1 3/4" Z20	27	118	389	184	146	7408151

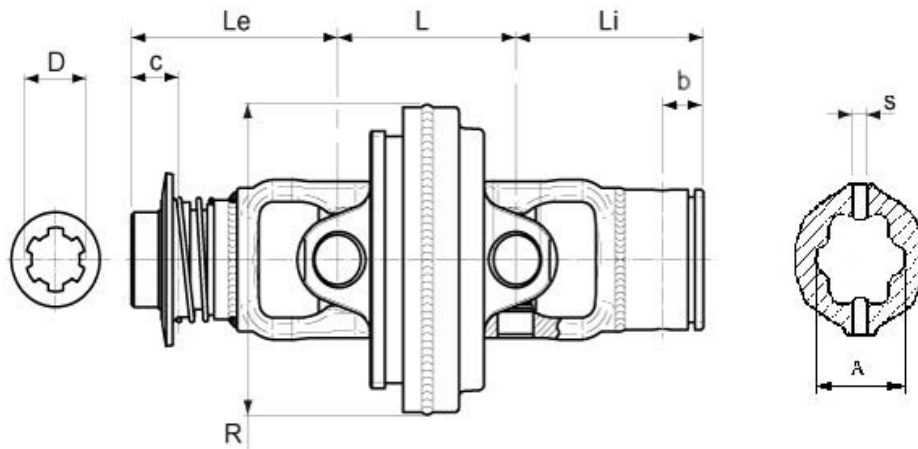
FOR OUTER PIPE

Dim.	X [mm]	Y [mm]	A [mm]	s [mm]	Li [mm]	d1 [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	Ltot [mm]	R [mm]	d2 [mm]	CODE
6	27	32	61	10	108.5	68	116.5	1 3/8" Z6	21	104	329	166	134	7406122
	27	32	61	10	108.5	68	116.5	1 3/8" Z21	21	104	329	166	134	7406132
	27	32	61	10	108.5	68	133.5	1 3/4" Z6	27	104	346	166	134	7406142
	27	32	61	10	108.5	68	133.5	1 3/4" Z20	27	104	346	166	134	7406152
8	32	36	68.3	10	128	80.8	126	1 3/8" Z6	21	118	372	184	146	7408122
	32	36	68.3	10	128	80.8	126	1 3/8" Z21	21	118	372	184	146	7408132
	32	36	68.3	10	128	80.8	143	1 3/4" Z6	27	118	389	184	146	7408142
	32	36	68.3	10	128	80.8	143	1 3/4" Z20	27	118	389	184	146	7408151

8.10

HOMOKINETIC JOINTS FOR GROOVED PIPES

PULL COLLAR ATTACHMENT



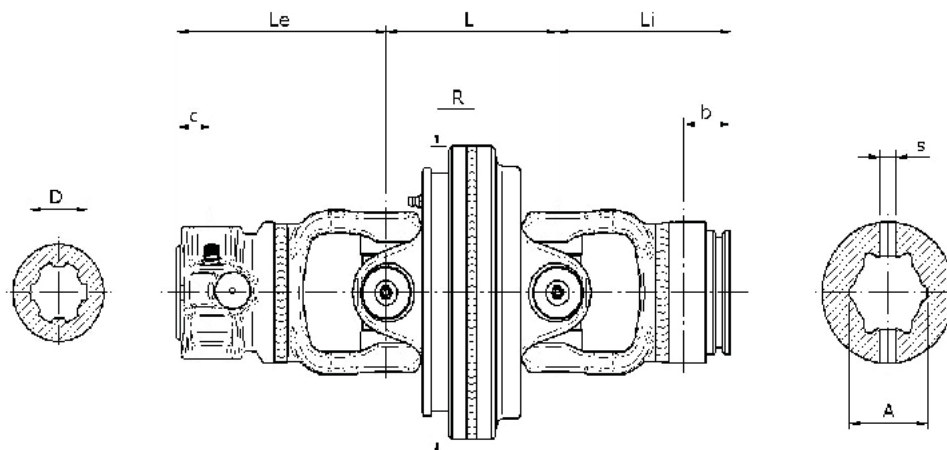
FOR INNER PIPE

Dim.	A [mm]	PIPE	s [mm]	Li [mm]	b [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	R [mm]	CODE
3480	51	S4	10	105	29	123.5	1 3/8" Z6	28.5	104	166	7W16425
							1 3/8" Z21				7W16435
						128	1 3/4" Z6				7W16445
							1 3/4" Z20				7W16455
3580	51	S4	10	122	28	133.5	1 3/8" Z6	28.5	118	184	7W18425
							1 3/8" Z21				7W18435
						138	1 3/4" Z6				7W18445
							1 3/4" Z20				7W18455

FOR OUTER PIPE

Dim.	A [mm]	PIPE	s [mm]	Li [mm]	b [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	R [mm]	CODE
3480	61	S5	10	115	39	123.5	1 3/8" Z6	28.5	104	166	7W16424
							1 3/8" Z21				7W16434
						128	1 3/4" Z6				7W16444
							1 3/4" Z20				7W16454
3580	61	S5	10	122	28	133.5	1 3/8" Z6	28.5	118	184	7W18424
							1 3/8" Z21				7W18434
						138	1 3/4" Z6				7W18444
							1 3/4" Z20				7W18454

QUICK PIN



FOR INNER PIPE

Dim.	A [mm]	PIPE	s [mm]	Li [mm]	b [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	R [mm]	CODE
3480	51	S4	10	105	29	128	1 3/8" Z6	21	104	166	7W16825
							1 3/8" Z21				7W16835
						130	1 3/4" Z6	24			7W16845
							1 3/4" Z20				7W16855
3580	51	S4	10	122	28	138	1 3/8" Z6	21	118	184	7W18825
							1 3/8" Z21				7W18835
						140	1 3/4" Z6	24			7W18845
							1 3/4" Z20				7W18855

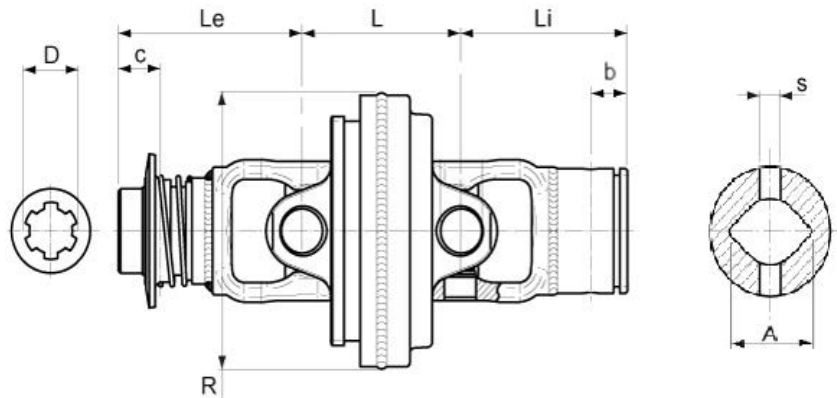
FOR OUTER PIPE

Dim.	A [mm]	PIPE	s [mm]	Li [mm]	b [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	R [mm]	CODE
3480	61	S5	10	115	39	128	1 3/8" Z6	21	104	166	7W16824
							1 3/8" Z21				7W16834
						130	1 3/4" Z6	24			7W16844
							1 3/4" Z20				7W16854
3580	61	S5	10	122	28	138	1 3/8" Z6	21	118	184	7W18824
							1 3/8" Z21				7W18834
						140	1 3/4" Z6	24			7W18844
							1 3/4" Z20				7W18854

8.11

HOMOKINETIC JOINTS FOR LEMON PIPES

PULL COLLAR ATTACHMENT



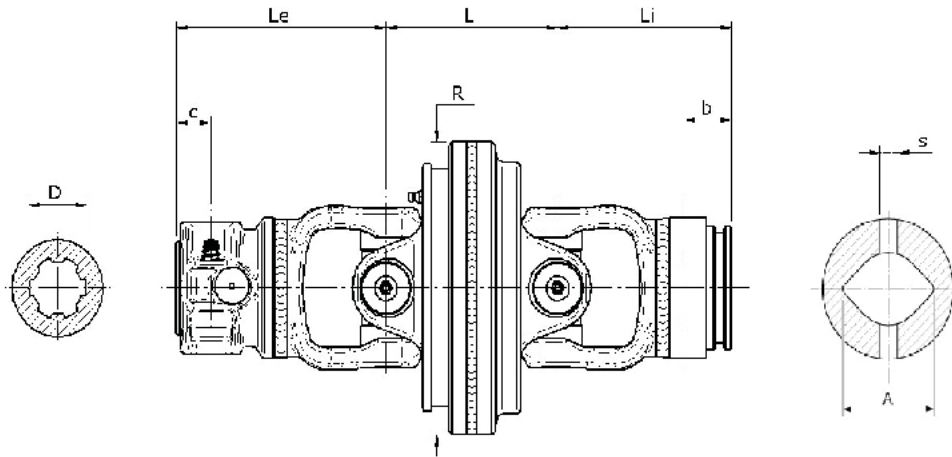
FOR INNER PIPE

Dim.	A [mm]	PIPE	s [mm]	Li [mm]	b [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	R [mm]	CODE
3280	30.8	00a/00c	8	85	18	114	1 3/8" Z6	28.5	86	147	7W12321
							1 3/8" Z21				7W12331
3380	40.1	0v	8	98	22	122	1 3/8" Z6		95	151	7W14323
							1 3/8" Z21				7W14333
3480	49	1b	10	105	29	123.5	1 3/8" Z6		104	166	7W16325
							1 3/8" Z21				7W16335
						128	1 3/4" Z6				7W16345
							1 3/4" Z20				7W16355

FOR OUTER PIPE

Dim.	A [mm]	PIPE	s [mm]	Li [mm]	b [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	R [mm]	CODE
3280	39.1	0a	8	85	18	114	1 3/8" Z6	28.5	86	147	7W12320
							1 3/8" Z21				7W12330
3380	48	1	8	98	22	122	1 3/8" Z6		95	151	7W14322
							1 3/8" Z21				7W14332
3480	57.5	2a	10	115	39	123.5	1 3/8" Z6		104	166	7W16324
							1 3/8" Z21				7W16334
						128	1 3/4" Z6				7W16344
							1 3/4" Z20				7W16354

QUICK PIN



FOR INNER PIPE

FOR INNER PIPE											CODE	
Dim.	A [mm]	PIPE	s [mm]	Li [mm]	b [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	R [mm]		
3280	30.8	00a/00c	8	85	18	112	1 3/8" Z6	21	86	147	7W12721	
							1 3/8" Z21				7W12731	
3380	40.1	0v		98	22	123	1 3/8" Z6		24	95	151	7W14723
							1 3/8" Z21					7W14733
3480	49	1b	10	105	29	128	1 3/8" Z6	104		166	7W16725	
							1 3/8" Z21				7W16735	
						130	1 3/4" Z6		7W16745			
							1 3/4" Z20		7W16755			

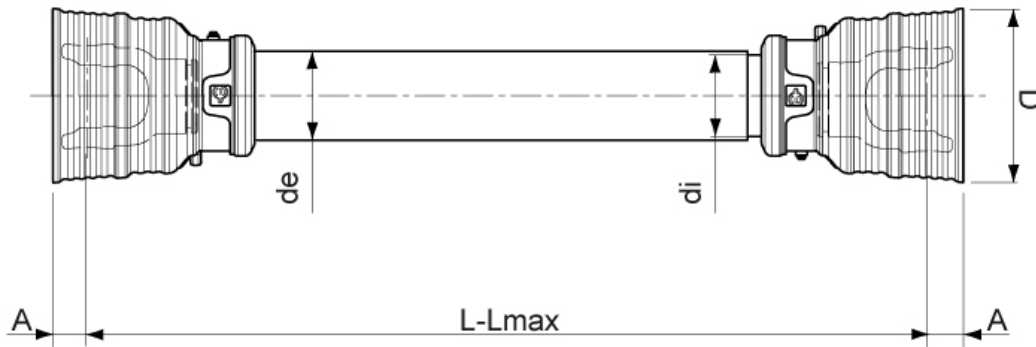
FOR OUTER PIPE

FOR OUTER PIPE											CODE
Dim.	A [mm]	PIPE	s [mm]	Li [mm]	b [mm]	Le [mm]	D [mm]	c [mm]	L [mm]	R [mm]	
3280	39.1	0a	8	85	18	122	1 3/8" Z6	21	86	147	7W12720
							1 3/8" Z21				7W12730
3380	48	1		98	22	123	1 3/8" Z6		95	151	7W14722
							1 3/8" Z21				7W14732
3480	57.5	2a	10	115	39	128	1 3/8" Z6	24	104	166	7W16724
							1 3/8" Z21				7W16734
						130	1 3/4" Z6				7W16744
							1 3/4" Z20				7W16754

8.12

COMPLETE PROTECTIONS PM14

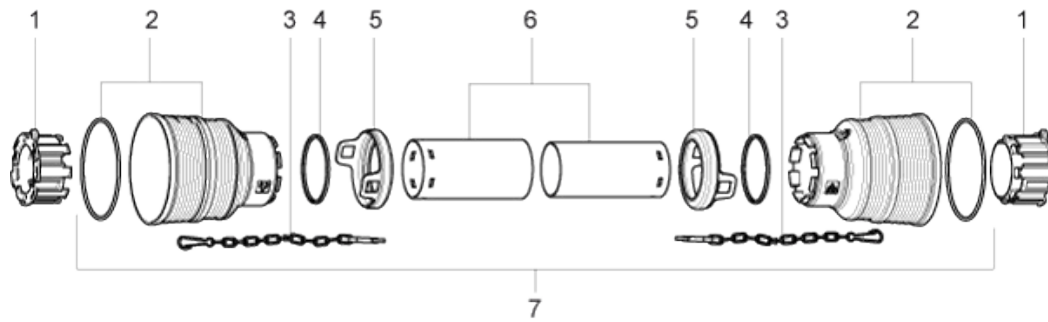
STANDARD-STANDARD



STANDARD - STANDARD

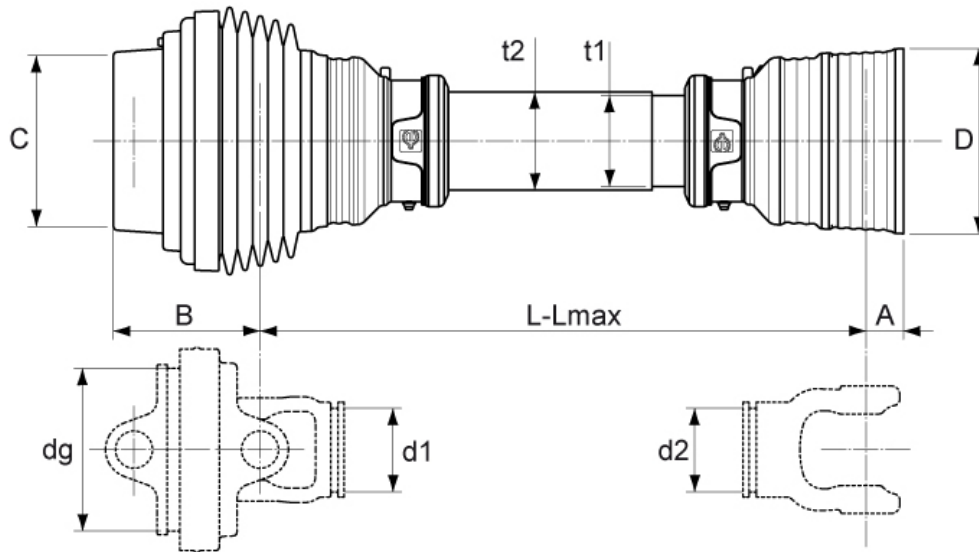
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	di [mm]	de [mm]	CODE	CODE EC RING NUT KIT
1	460	660	32.5 ÷ 52	130	61	66.5	96SS1026	1781799
	510	743	32.5 ÷ 52	130	61	66.5	96SS1031	1781799
	610	910	32.5 ÷ 52	130	61	66.5	96SS1041	1781799
	710	1077	32.5 ÷ 52	130	61	66.5	96SS1051	1781799
	810	1243	32.5 ÷ 52	130	61	66.5	96SS1061	1781799
	910	1410	32.5 ÷ 52	130	61	66.5	96SS1071	1781799
	1010	1577	32.5 ÷ 52	130	61	66.5	96SS1081	1781799
	1210	1910	32.5 ÷ 52	130	61	66.5	96SS1101	1781799
2	460	650	28.5	130	61	66.5	96SS2025	1782799
	510	737	28.5	130	61	66.5	96SS2030	1782799
	610	903	28.5	130	61	66.5	96SS2040	1782799
	710	1070	28.5	130	61	66.5	96SS2050	1782799
	810	1237	28.5	130	61	66.5	96SS2060	1782799
	910	1410	28.5	130	61	66.5	96SS2070	1782799
	1010	1570	28.5	130	61	66.5	96SS2080	1782799
	1210	1903	28.5	130	61	66.5	96SS2100	1782799
4	460	647	20.5 ÷ 34.5	130	61	66.5	96SS4024	1784799
	510	730	20.5 ÷ 34.5	130	61	66.5	96SS4029	1784799
	610	897	20.5 ÷ 34.5	130	61	66.5	96SS4039	1784799
	710	1063	20.5 ÷ 34.5	130	61	66.5	96SS4049	1784799
	810	1230	20.5 ÷ 34.5	130	61	66.5	96SS4059	1784799
	910	1397	20.5 ÷ 34.5	130	61	66.5	96SS4069	1784799
	1010	1563	20.5 ÷ 34.5	130	61	66.5	96SS4079	1784799
	1210	1897	20.5 ÷ 34.5	130	61	66.5	96SS4099	1784799

COMPONENTS



No.	Description	L [mm]	Dim.	Qty	CODE
1	RING NUT KIT	-	1	1	1781799
			2		1782799
			4		1784799
2	FULL STANDARD HOOD	-	1	2	1781703
			2		
			4		
3	ANTI-ROTATION CHAIN	-	1	2	1006065
			2		
			4		
4	STOP	-	1	2	1211735
			2		
			4		
5	SAFETY SLEEVE	-	1	2	1881709
			2		
			4		
6	INNER PIPE + OUTER PIPE	1210	1	1	9T1G101
			2		9T1G100
			4		9T1G099
7	BASE PROTECTION	1210	1	1	96SSL101
			2		96SSL100
			4		96SSL099

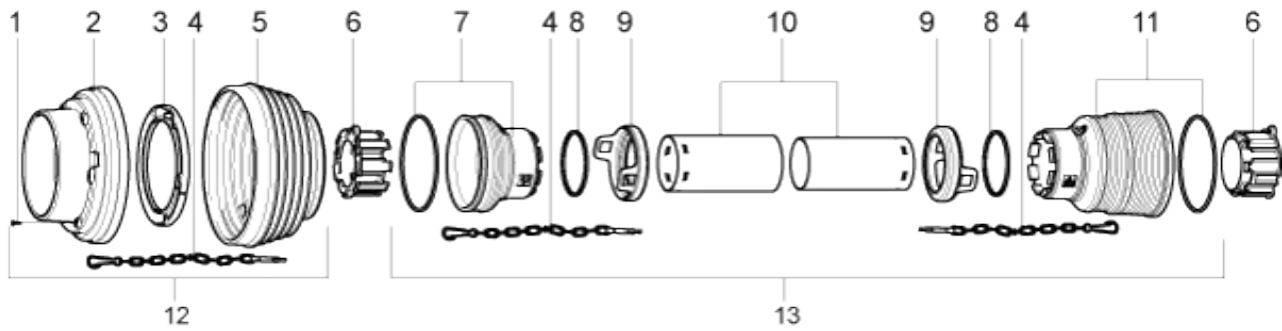
HOMOKINETIC-STANDARD



HOMOKINETIC - STANDARD

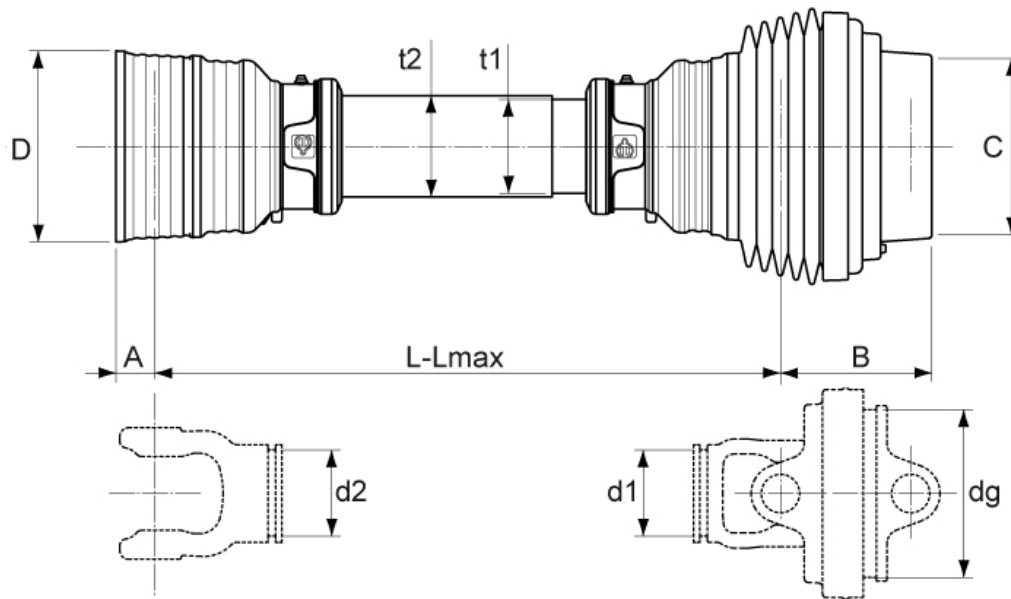
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	B [mm]	C [mm]	t1 [mm]	t2 [mm]	d1 [mm]	d2 [mm]	dg [mm]	CODE	CODE KIT EC RING NUTS
2	460	630	28.5	130	102	119	61	66.5	40	46	107	96GS2023	1782799
	510	730	28.5	130	102	119	61	66.5	40	46	107	96GS2028	
	610	896	28.5	130	102	119	61	66.5	40	46	107	96GS2038	
	710	1063	28.5	130	102	119	61	66.5	40	46	107	96GS2048	
	810	1230	28.5	130	102	119	61	66.5	40	46	107	96GS2058	
	910	1396	28.5	130	102	119	61	66.5	40	46	107	96GS2068	
	1010	1563	28.5	130	102	119	61	66.5	40	46	107	96GS2078	
	1210	1896	28.5	130	102	119	61	66.5	40	46	107	96GS2098	
4	460	630	21	130	118	138	61	66.5	46	53	124	96GS4022	1784799
	510	720	21	130	118	138	61	66.5	46	53	124	96GS4027	
	610	890	21	130	118	138	61	66.5	46	53	124	96GS4037	
	710	1050	21	130	118	138	61	66.5	46	53	124	96GS4047	
	810	1220	21	130	118	138	61	66.5	46	53	124	96GS4057	
	910	1390	21	130	118	138	61	66.5	46	53	124	96GS4067	
	1010	1556	21	130	118	138	61	66.5	46	53	124	96GS4077	
	1210	1890	21	130	118	138	61	66.5	46	53	124	96GS4097	

COMPONENTS



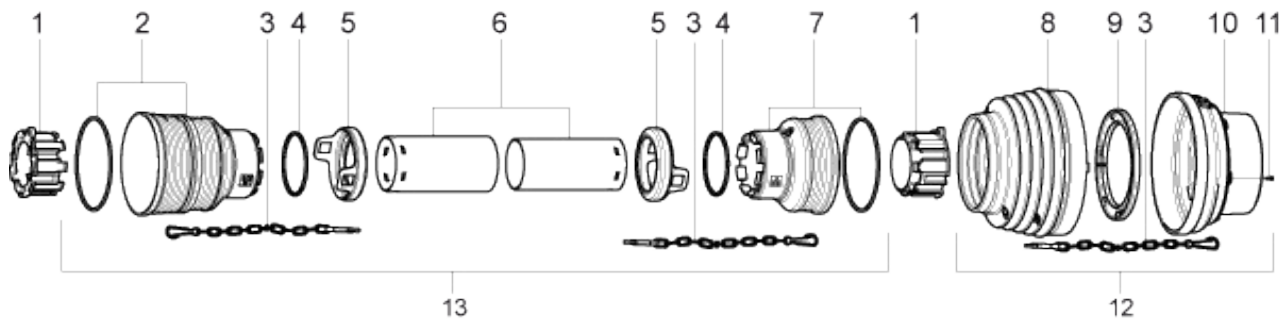
No.	Description	L [mm]	Dim.	Qty	CODE
1	SELF-THREAD. SCREW 2.9X13	-	2	6	6280309
			4		
2	GO2 PROTECTION HOOD	-	2	1	1782803
	GO4 PROTECTION HOOD		4		1784803
3	FIXING RING GO2	-	2	1	1782801
	FIXING RING GO4		4		1780430
4	ANTI-ROTATION CHAIN	-	2	3	1006065
			4		
5	GO2 PROTECTION BELLOWS	-	2	1	1882805
	GO4 PROTECTION BELLOWS		4		1884504
6	RING NUT KIT	-	2	1	1782799
			4		1784799
7	CAP OVERALL EXTRA SHORT	-	2	1	1781701
			4		
8	STOP	-	2	2	1211735
			4		
9	SAFETY SLEEVE	-	2	2	1881709
			4		
10	TOTAL PIPES	1210	2	1	9T1G098
			4		9T1G097
11	FULL STANDARD HOOD	-	2	1	1781703
			4		
12	GO2 GUARD	-	2	1	9490200
	GO4 GUARD		4		9490401
13	COMPLETE BASE GUARD	1210	2	1	96SEL098
			4		96SEL097

STANDARD-HOMOKINETIC



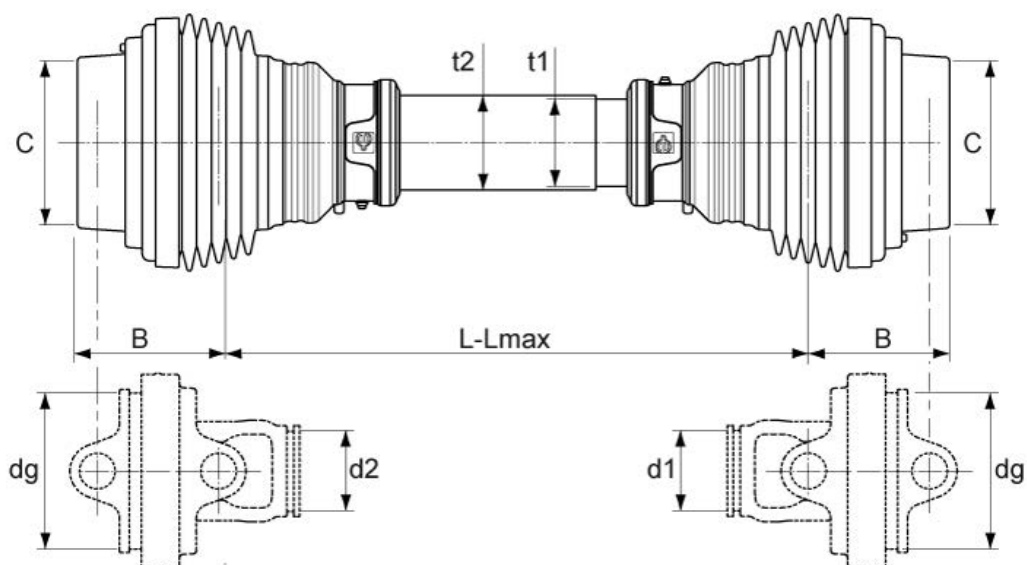
STANDARD-OMOKINETIC												CODE	CODE KIT EC RING NUTS
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	B [mm]	C [mm]	t1 [mm]	t2 [mm]	d1 [mm]	d2 [mm]	dg [mm]		
2	460	630	28.5	130	102	119	61	66.5	40	46	107	96GS2023	1782799
	510	730	28.5	130	102	119	61	66.5	40	46	107	96GS2028	
	610	896	28.5	130	102	119	61	66.5	40	46	107	96GS2038	
	710	1063	28.5	130	102	119	61	66.5	40	46	107	96GS2048	
	810	1230	28.5	130	102	119	61	66.5	40	46	107	96GS2058	
	910	1396	28.5	130	102	119	61	66.5	40	46	107	96GS2068	
	1010	1563	28.5	130	102	119	61	66.5	40	46	107	96GS2078	
	1210	1896	28.5	130	102	119	61	66.5	40	46	107	96GS2098	
4	460	630	21	130	118	138	61	66.5	46	53	124	96GS4022	1784799
	510	720	21	130	118	138	61	66.5	46	53	124	96GS4027	
	610	890	21	130	118	138	61	66.5	46	53	124	96GS4037	
	710	1050	21	130	118	138	61	66.5	46	53	124	96GS4047	
	810	1220	21	130	118	138	61	66.5	46	53	124	96GS4057	
	910	1390	21	130	118	138	61	66.5	46	53	124	96GS4067	
	1010	1556	21	130	118	138	61	66.5	46	53	124	96GS4077	
	1210	1890	21	130	118	138	61	66.5	46	53	124	96GS4097	

COMPONENTS



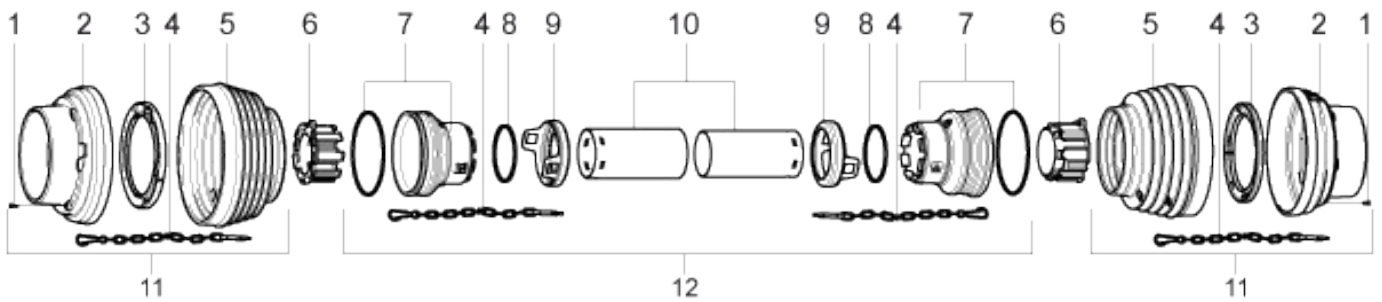
No.	Description	L [mm]	Dim.	Qty	CODE
1	RING NUT KIT	-	2	1	1782799
			4		1784799
2	STANDARD FULL CAP	-	2	1	1781703
			4		
3	ANTI-ROTATION CHAIN	-	2	3	1006065
			4		
4	STOP	-	2	2	1211735
			4		
5	SAFETY SLEEVE	-	2	2	1881709
			4		
6	TOTAL PIPES	1210	2	1	9T1G098
			4		9T1G097
7	EXTRA SHORT CAP OVERALL	-	2	1	1781701
			4		
8	GO2 PROTECTION BELLOWS	-	2	1	1882805
	GO4 PROTECTION BELLOWS		4		1884804
9	GO2 FIXING RING	-	2	1	1782801
	GO4 FIXING RING		4		1780430
10	GO2 PROTECTIVE CAP	-	2	1	1782803
	GO4 PROTECTIVE CAP		4		1784803
11	SELF-THREAD. SCREW 2.9 X 13	-	2	6	6280309
			4		
12	COMPLETE GO2 GUARD	-	2	1	9490200
	COMPLETE GO4 GUARD		4		9490401
13	COMPLETE BASE GUARD	1210	2	1	96SEL098
			4		96SEL097

HOMOKINETIC-HOMOKINETIC



HOMOKINETIC-HOMOKINETIC												CODE	CODE KIT EC RING NUTS
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	B [mm]	C [mm]	t1 [mm]	t2 [mm]	d1 [mm]	d2 [mm]	dg [mm]		
2	460	630	28.5	130	102	119	61	66.5	40	46	107	96GG2022	1782799
	510	730	28.5	130	102	119	61	66.5	40	46	107	96GG2027	
	610	896	28.5	130	102	119	61	66.5	40	46	107	96GG2037	
	710	1063	28.5	130	102	119	61	66.5	40	46	107	96GG2047	
	810	1230	28.5	130	102	119	61	66.5	40	46	107	96GG2057	
	910	1396	28.5	130	102	119	61	66.5	40	46	107	96GG2067	
	1010	1563	28.5	130	102	119	61	66.5	40	46	107	96GG2077	
	1210	1896	28.5	130	102	119	61	66.5	40	46	107	96GG2098	
4	460	630	21	130	118	138	61	66.5	46	53	124	96GG4021	1784799
	510	720	21	130	118	138	61	66.5	46	53	124	96GG4026	
	610	890	21	130	118	138	61	66.5	46	53	124	96GG4036	
	710	1050	21	130	118	138	61	66.5	46	53	124	96GG4046	
	810	1220	21	130	118	138	61	66.5	46	53	124	96GG4056	
	910	1390	21	130	118	138	61	66.5	46	53	124	96GG4066	
	1010	1556	21	130	118	138	61	66.5	46	53	124	96GG4077	
	1210	1890	21	130	118	138	61	66.5	46	53	124	96GG4097	

COMPONENTS

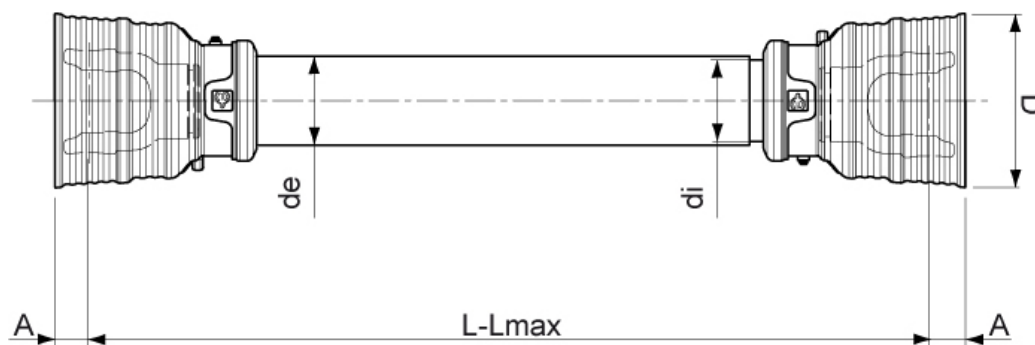


No.	Description	L [mm]	Dim.	Qty	CODE
1	SELF-THREAD. SCREW 2.9X13	-	2	12	6280309
			4		
2	GO2 PROTECTION HOOD	-	2	2	1782803
	GO4 PROTECTION HOOD		4		1784803
3	GO2 FIXING RING	-	2	2	1782801
	GO4 FIXING RING		4		1780430
4	ANTI-ROTATION CHAIN	-	2	4	1006065
			4		
5	GO2 PROTECTION BELLOWS	-	2	5	1882805
	GO4 PROTECTION BELLOWS		4	2	1884804
6	RING NUT KIT	-	2	1	1782799
			4		1784799
7	CAP OVERALL EXTRA SHORT	-	2	2	1781701
			4		
8	STOP	-	2	2	1211735
			4		
9	SAFETY SLEEVE	-	2	2	1881709
			4		
10	TOTAL PIPES	1210	2	1	9T1G097
			4		9T1G096
11	FULL STANDARD HOOD	-	2	1	1781703
			4		
12	GO2 GUARD	-	2	2	9490200
	GO4 GUARD		4		9490401
13	COMPLETE BASE GUARD	1210	2	1	96EEL097
			4		96EEL096

8.13

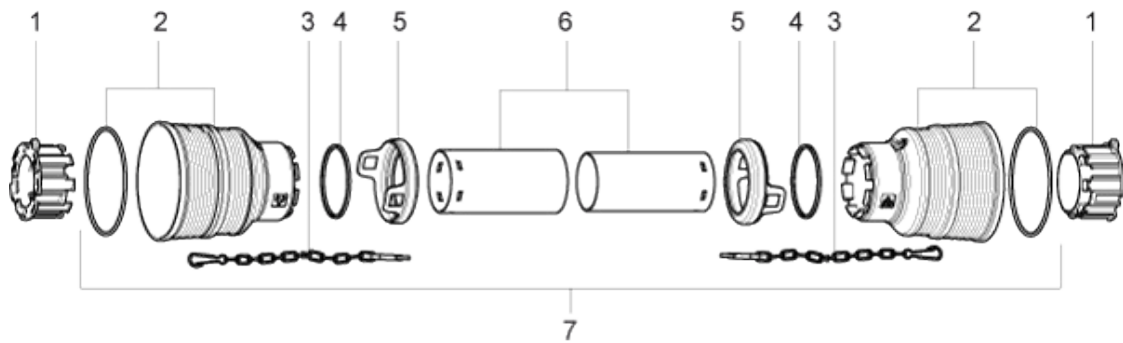
COMPLETE PROTECTIONS PM57

STANDARD-STANDARD



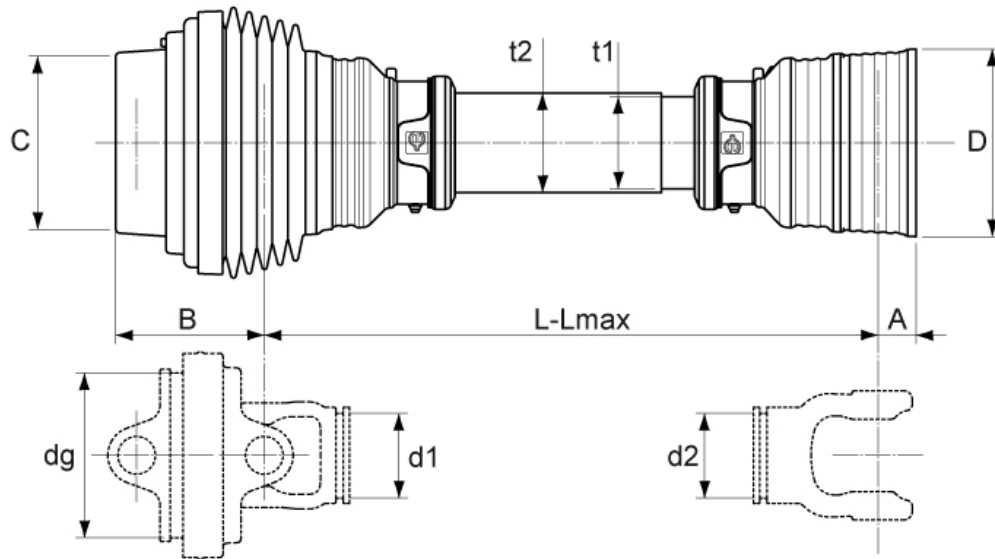
STANDARD - STANDARD							CODE	CODE KIT EC RING NUTS
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	di [mm]	de [mm]		
5	460	610	36	152	75	81	90SS5021	1785799
	510	710	36	152	75	81	90SS5026	1785799
	610	890	36	152	75	81	90SS5036	1785799
	710	1050	36	152	75	81	90SS5046	1785799
	810	1220	36	152	75	81	90SS5056	1785799
	910	1390	36	152	75	81	90SS5066	1785799
	1010	1550	36	152	75	81	90SS5076	1785799
	1210	1890	36	152	75	81	90SS5096	1785799
6	460	580	27.5	152	75	81	90SS6019	1786799
	510	680	27.5	152	75	81	90SS6024	1786799
	610	870	27.5	152	75	81	90SS6034	1786799
	710	1040	27.5	152	75	81	90SS6044	1786799
	810	1200	27.5	152	75	81	90SS6054	1786799
	910	1370	27.5	152	75	81	90SS6064	1786799
	1010	1540	27.5	152	75	81	90SS6074	1786799
	1210	1870	27.5	152	75	81	90SS6094	1786799

COMPONENTS



No.	Description	L [mm]	Dim.	Qty	CODE
1	RING NUT KIT	-	5	1	1785799
			6		1786799
2	FULL STANDARD HOOD	-	5	2	1781703
			6		
3	ANTI-ROTATION CHAIN	-	5	2	1006065
			6		
4	STOP	-	5	2	1215735
			6		
5	SAFETY SLEEVE	-	5	2	1885709
			6		
6	INNER PIPE + OUTER PIPE	1210	5	1	9T2G096
			6		9T2G094
7	BASE PROTECTION	1210	5	1	90SSM096
			6		90SSM094

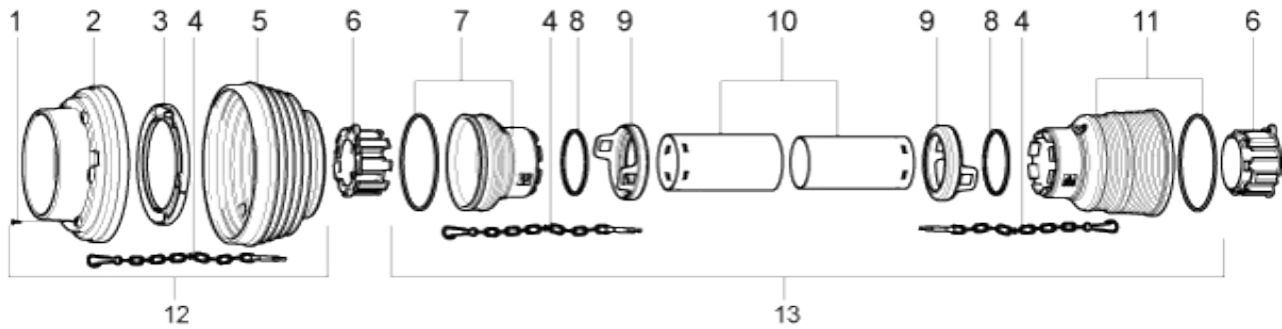
HOMOKINETIC-STANDARD



HOMOKINETIC - STANDARD

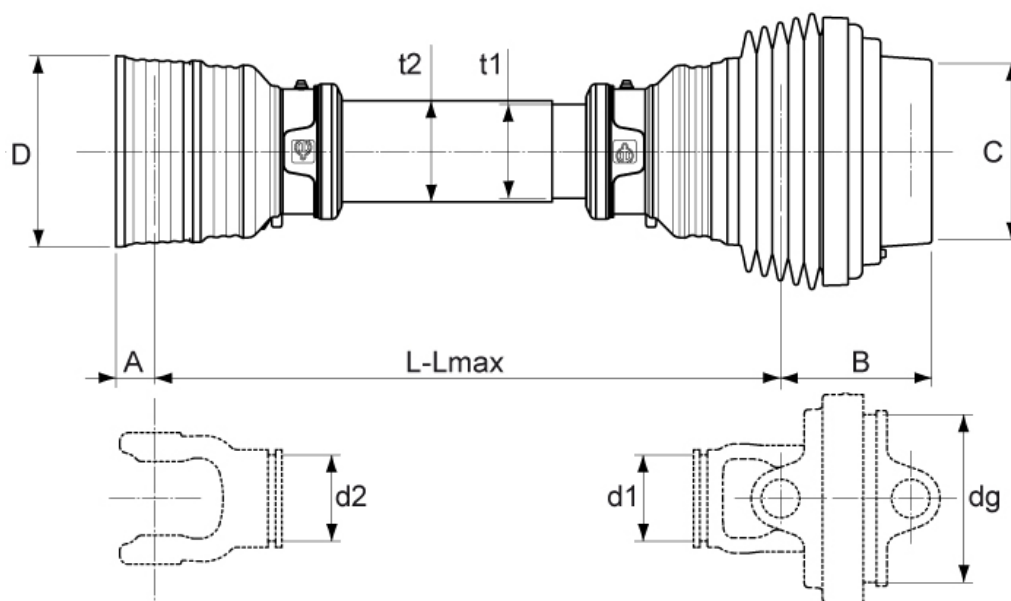
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	B [mm]	C [mm]	t1 [mm]	t2 [mm]	d1 [mm]	d2 [mm]	dg [mm]	CODE	CODE KIT EC RING NUTS
6	460	580	27.5	152	102	147	75	81	59	68	134	90GS6019	1786799
	510	680	27.5	152	102	147	75	81	59	68	134	90GS6024	
	610	870	27.5	152	102	147	75	81	59	68	134	90GS6034	
	710	1040	27.5	152	102	147	75	81	59	68	134	90GS6044	
	810	1200	27.5	152	102	147	75	81	59	68	134	90GS6054	
	910	1370	27.5	152	102	147	75	81	59	68	134	90GS6064	
	1010	1540	27.5	152	102	147	75	81	59	68	134	90GS6074	
	1210	1870	27.5	152	102	147	75	81	59	68	134	90GS6094	

COMPONENTS



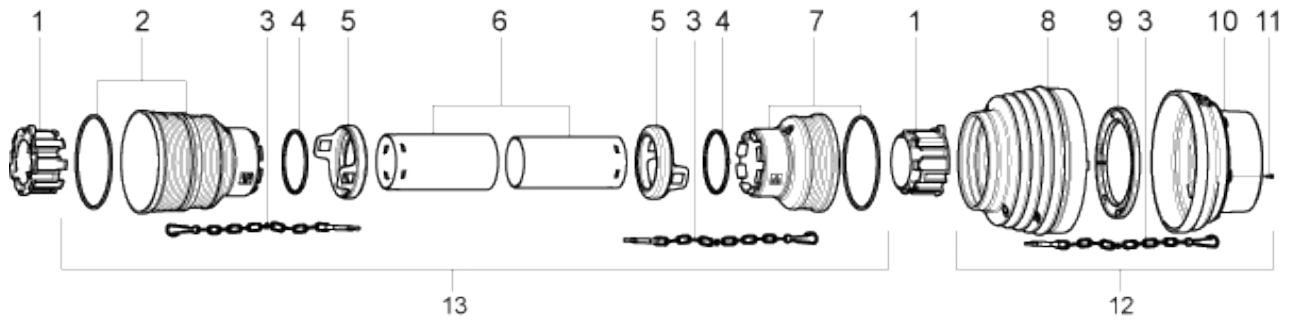
No.	Description	L [mm]	Dim.	Qty	CODE
1	SELF-THREAD. SCREW 2.9x13	-	6	6	6280313
2	GO6 PROTECTION CAP	-	6	1	1786803
3	GO6 FIXING RING	-	6	1	1786801
4	ANTI-ROTATION CHAIN	-	6	3	1006065
5	GO6 PROTECTION BELLOWS	-	6	1	1886804
6	RING NUT KIT	-	6	1	1786799
7	EXTRA SHORT CAP OVERALL	-	6	1	1785702
8	STOP	-	6	2	1215735
9	SAFETY SLEEVE	-	6	2	1885709
10	TOTAL PIPES	1210	6	1	9T2G094
11	FULL STANDARD HOOD	-	6	1	1785703
12	GO6 GUARD	-	6	1	9490601
13	COMPLETE BASE GUARD	1210	6	1	90CSM094

STANDARD-HOMOKINETIC



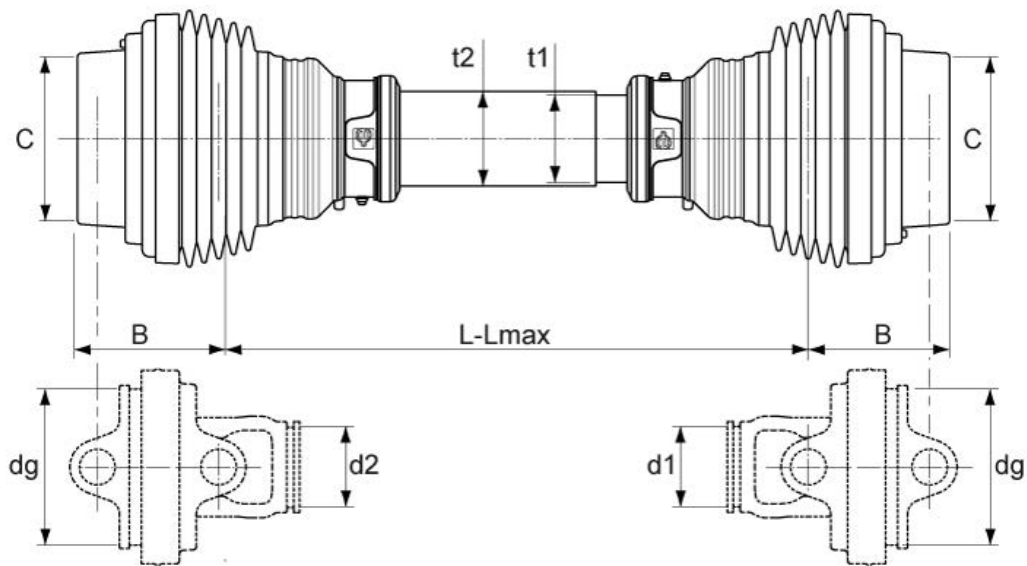
STANDARD-OMOKINETIC												CODE	CODE KIT EC RING NUTS
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	B [mm]	C [mm]	t1 [mm]	t2 [mm]	d1 [mm]	d2 [mm]	dg [mm]		
6	460	580	27.5	152	102	147	75	81	59	68	134	90SG6019	1786799
	510	680	27.5	152	102	147	75	81	59	68	134	90SG6024	
	610	870	27.5	152	102	147	75	81	59	68	134	90SG6034	
	710	1040	27.5	152	102	147	75	81	59	68	134	90SG6044	
	810	1200	27.5	152	102	147	75	81	59	68	134	90SG6054	
	910	1370	27.5	152	102	147	75	81	59	68	134	90SG6064	
	1010	1540	27.5	152	102	147	75	81	59	68	134	90SG6074	
	1210	1870	27.5	152	102	147	75	81	59	68	134	90SG6094	

COMPONENTS



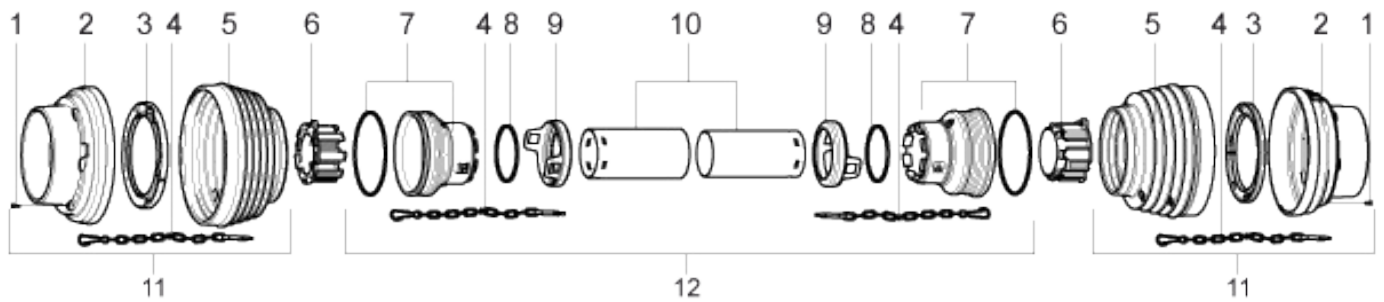
No.	Description	L [mm]	Dim.	Qty	CODE
1	RING NUT KIT	-	6	1	1786799
2	STANDARD FULL CAP	-	6	1	1785703
3	ANTI-ROTATION CHAIN	-	6	3	1006065
4	STOP	-	6	2	1215735
5	SAFETY SLEEVE	-	6	2	1885709
6	TOTAL PIPES	1210	6	1	9T2G094
7	CAP OVERALL EXTRA SHORT	-	6	1	1785702
8	GO6 PROTECTION BELLOWS	-	6	1	1886804
9	GO6 FIXING RING	-	6	1	1786801
10	GO6 PROTECTIVE CAP	-	6	1	1786803
11	SELF-THREAD. SCREW 2.9 X 13	-	6	6	6280313
12	COMPLETE GO6 GUARD	-	6	1	9490601F
13	COMPLETE BASE GUARD	1210	6	1	90SCM094

HOMOKINETIC-HOMOKINETIC



HOMOKINETIC-HOMOKINETIC												CODE	CODE KIT EC RING NUTS
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	B [mm]	C [mm]	t1 [mm]	t2 [mm]	d1 [mm]	d2 [mm]	dg [mm]		
6	460	570			102	147	75	81	59	68	134	90GG6018	1786799
	510	670			102	147	75	81	59	68	134	90GG6023	
	610	870			102	147	75	81	59	68	134	90GG6033	
	710	1038			102	147	75	81	59	68	134	90GG6043	
	810	1205			102	147	75	81	59	68	134	90GG6053	
	910	1370			102	147	75	81	59	68	134	90GG6063	
	1010	1540			102	147	75	81	59	68	134	90GG6073	
	1210	1870			102	147	75	81	59	68	134	90GG6093	

COMPONENTS

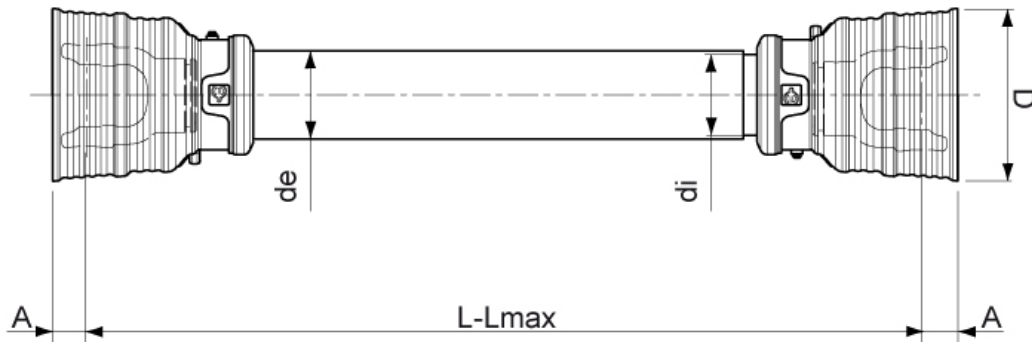


No.	Description	L [mm]	Dim.	Qty	CODE
1	SELF-THREAD. SCREW 2.9x13	-	6	12	6280313
2	GO6 PROTECTION CAP	-	6	2	1786803
3	GO6 FIXING RING	-	6	2	1786801
4	ANTI-ROTATION CHAIN	-	6	4	1006065
5	GO6 PROTECTION BELLOWS	-	6	2	1886804
6	RING NUT KIT	-	6	1	1786799
7	EXTRA CAP OVERALL SHORT	-	6	2	1785702
8	STOP	-	6	2	1215735
9	SAFETY SLEEVE	-	6	2	1885709
10	TOTAL PIPES	1210	6	2	9T2G093
11	GO2 GUARD	-	6	2	9490601F
12	COMPLETE BASE GUARD	1210	6	1	90CCM093

8.14

COMPLETE PROTECTIONS PM80E

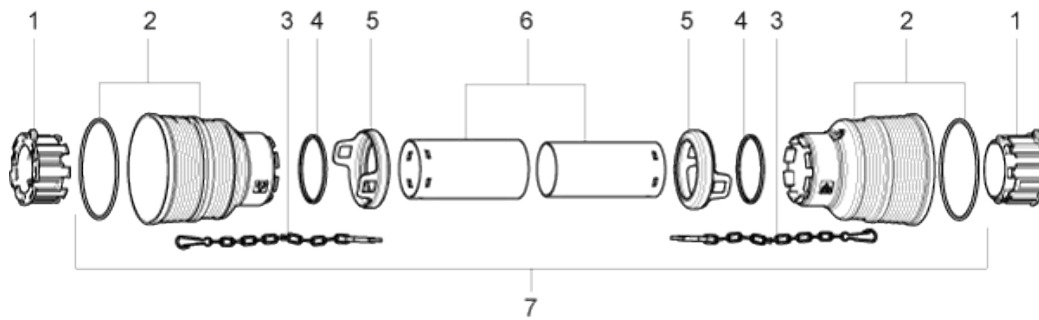
STANDARD-STANDARD



STANDARD - STANDARD

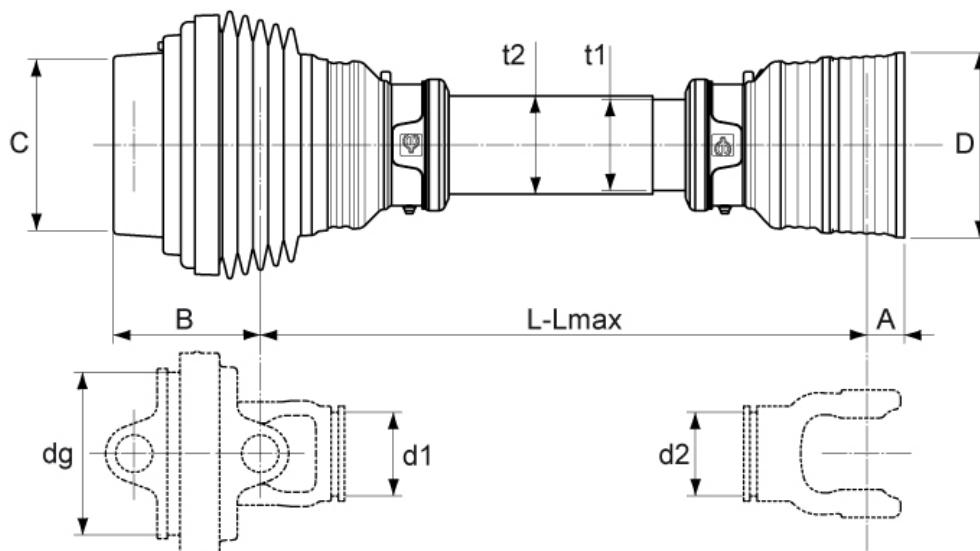
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	by [mm]	of [mm]	CODE	CODE EC RING NUT KIT
8	460	560	47.5	189	88	94	96SS8019	1788799
	510	660	47.5	189	88	94	96SS8021	1788799
	610	850	47.5	189	88	94	96SS8031	1788799
	710	1020	47.5	189	88	94	96SS8041	1788799
	810	1190	47.5	189	88	94	96SS8051	1788799
	910	1350	47.5	189	88	94	96SS8061	1788799
	1010	1520	47.5	189	88	94	96SS8071	1788799
	1210	1850	47.5	189	88	94	96SS8091	1788799
10	460	530	32.5	189	88	94	96SS8013	1788799
	510	630	32.5	189	88	94	96SS8018	1788799
	610	838	32.5	189	88	94	96SS8028	1788799
	710	1005	32.5	189	88	94	96SS8038	1788799
	810	1171	32.5	189	88	94	96SS8048	1788799
	910	1338	32.5	189	88	94	96SS8058	1788799
	1010	1505	32.5	189	88	94	96SS8068	1788799
	1210	1838	32.5	189	88	94	96SS8088	1788799

COMPONENTS



No.	Description	L [mm]	Dim.	Qty	CODE
1	RING NUT KIT	-	8	1	1788799
			10		
2	FULL STANDARD HOOD	-	8	2	1788003
			10		
3	ANTI-ROTATION CHAIN	-	8	2	1788065
			10		
4	STOP	-	8	2	1788035
			10		
5	SAFETY SLEEVE	-	8	2	1888009
			10		
6	INNER PIPE + OUTER PIPE	1210	8	1	9T4G091
			10		9T4G088
7	COMPLETE BASE GUARD	1210	8	1	96SSN091
			10		96SSN088

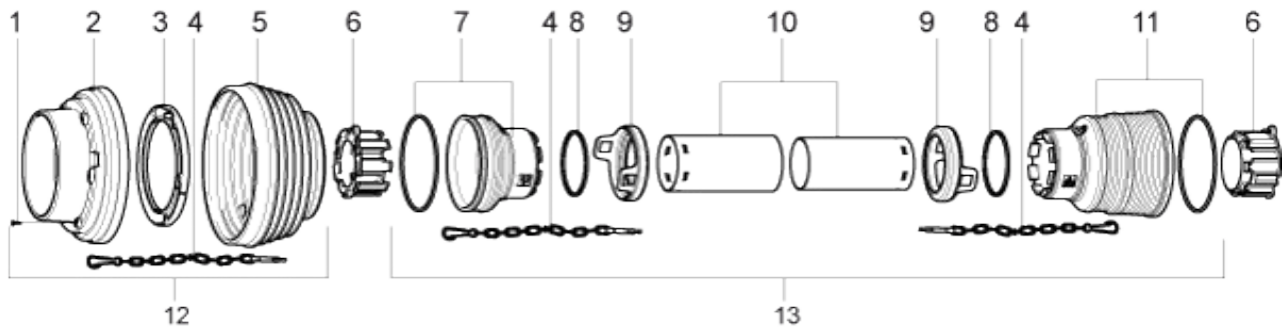
HOMOKINETIC-STANDARD



HOMOKINETIC - STANDARD

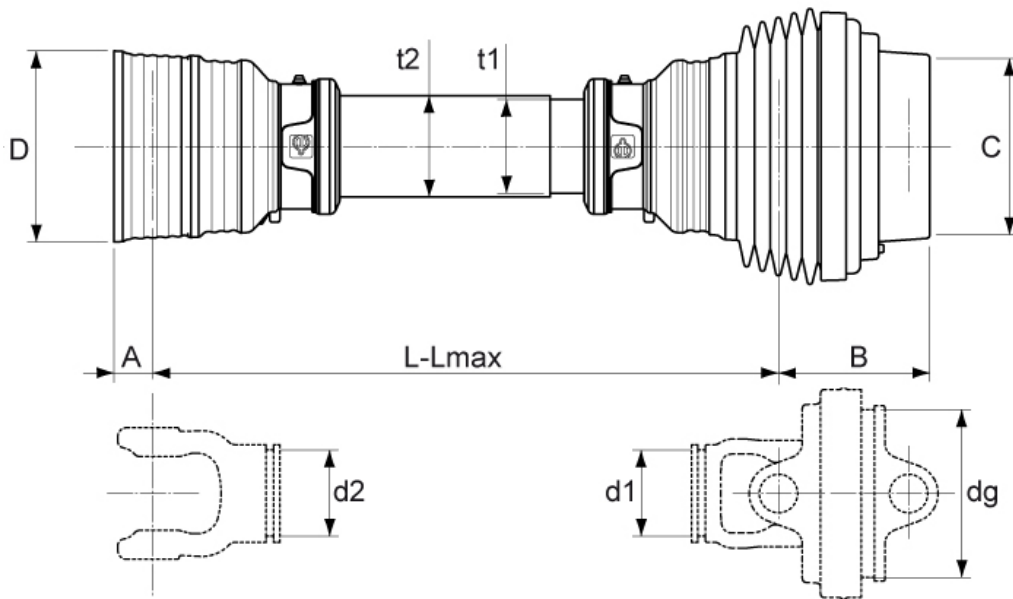
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	B [mm]	C [mm]	t1 [mm]	t2 [mm]	d1 [mm]	d2 [mm]	dg [mm]	CODE	CODE KIT EC RING NUTS
8	460	560	47.5	189	143	162	88	94	75	81	146	96GS8016	1788799
	510	660	47.5	189	143	162	88	94	75	81	146	96GS8021	
	610	856	47.5	189	143	162	88	94	75	81	146	96GS8031	
	710	1023	47.5	189	143	162	88	94	75	81	146	96GS8041	
	810	1189	47.5	189	143	162	88	94	75	81	146	96GS8051	
	910	1356	47.5	189	143	162	88	94	75	81	146	96GS8061	
	1010	1523	47.5	189	143	162	88	94	75	81	146	96GS8071	
	1210	1856	47.5	189	143	162	88	94	75	81	146	96GS8071	

COMPONENTS



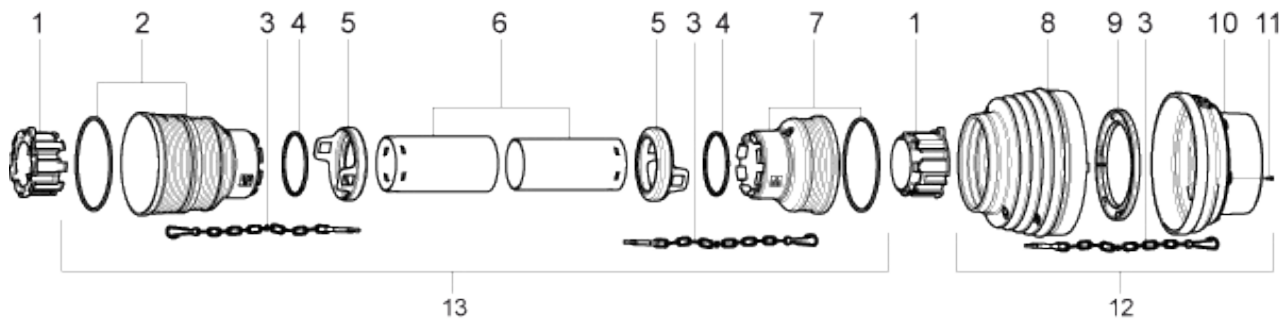
No.	Description	L [mm]	Dim.	Qty	CODE
1	SELF-THREAD. SCREW 2.9x13	-	8	8	6280313
2	GO8 PROTECTION CAP	-	8	1	1788803
3	GO8 FIXING RING	-	8	1	1786527
4	ANTI-ROTATION CHAIN	-	8	3	1788065
5	GO8 PROTECTION BELLOWS	-	8	1	1888804
6	RING NUT KIT	-	8	1	1788799
7	EXTRA CAP OVERALL SHORT	-	8	1	1788002
8	STOP	-	8	2	1788035
9	SAFETY SLEEVE	-	8	2	1888009
10	TOTAL PIPES	1210	8	1	9T4G091
11	GO2 GUARD	-	8	1	1788003
12	COMPLETE BASE GUARD	-	8	1	9490801
13	COMPLETE BASE GUARD	1210	8	1	96MSN091

STANDARD-HOMOKINETIC



STANDARD-OMOKINETIC												CODE	CODE KIT EC RING NUTS
Dim.	L [mm]	L max [mm]	A [mm]	D [mm]	B [mm]	C [mm]	t1 [mm]	t2 [mm]	d1 [mm]	d2 [mm]	dg [mm]		
8	460	560	47.5	189	143	162	88	94	75	81	146	96SG8016	1788799
	510	660	47.5	189	143	162	88	94	75	81	146	96SG8021	
	610	856	47.5	189	143	162	88	94	75	81	146	96SG8031	
	710	1023	47.5	189	143	162	88	94	75	81	146	96SG8041	
	810	1189	47.5	189	143	162	88	94	75	81	146	96SG8051	
	910	1356	47.5	189	143	162	88	94	75	81	146	96SG8061	
	1010	1523	47.5	189	143	162	88	94	75	81	146	96SG8071	
	1210	1856	47.5	189	143	162	88	94	75	81	146	96SG8071	

COMPONENTS



No.	Description	L [mm]	Dim.	Qty	CODE
1	RING NUT KIT	-	8	1	1788799
2	STANDARD FULL CAP	-	8	1	1788003
3	ANTI-ROTATION CHAIN	-	8	3	1788065
4	STOP	-	8	2	1788035
5	SAFETY SLEEVE	-	8	2	1888809
6	TOTAL PIPES	1210	8	1	9T4G091
7	CAP OVERALL EXTRA SHORT	-	8	1	1788002
8	GO8 PROTECTION BELLOWS	-	8	1	1888804
9	GO8 FIXING RING	-	8	1	1786527
10	GO8 PROTECTIVE CAP	-	8	1	1788803
11	SELF-THREAD. SCREW 2.9 X 13	-	8	6	6280313
12	COMPLETE GO8 GUARD	-	8	1	9490801
13	COMPLETE BASE GUARD	1210	8	1	96MSN091

9. GENERAL RULES ON USE AND SAFETY

GENERAL NOTES

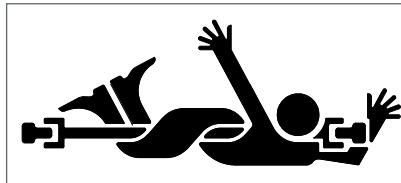
Before installing the cardan drive, make sure that it meets the appropriate requirements with regard to power, length, and any safety devices. The latter must be mounted on the machine side.

In addition, make sure that the transmission has the prescribed guard and that it is correctly integrated by the guards on the tractor side and on the machine side.

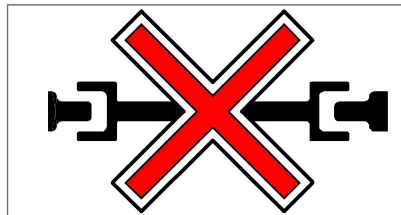
Also ensure that the transmission does not come into contact during its movement with parts of the tractor or machine. In particular, remove the tow bar of the tractor when not required and, in the case of towed machines, check that it does not come into contact with the transmission guard.

Winding hazard!!

Do not approach the area of action of the cardan drive. Do not wear shirts or clothing with handles that can be hooked by the transmission. Contact can cause very serious accidents.

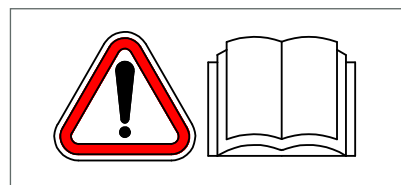


Do not work with the cardan drive without its guard or parts of it. Their safety would be severely compromised.

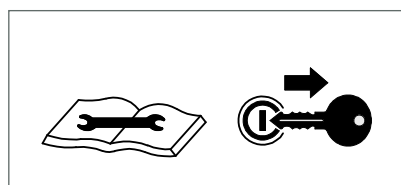


Carefully read the user manual of the cardan drive as well as those of the tractor and the operating machine before putting them into operation.

In particular, check if and what safety devices the operating machine requires and how they should be set if necessary.

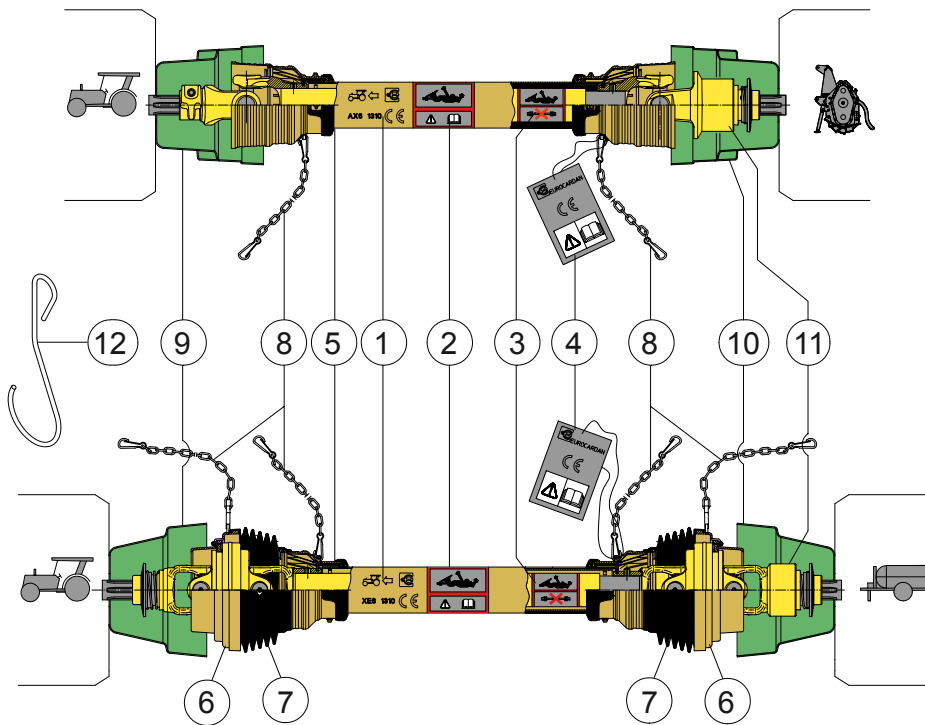


Before any maintenance operation, be sure to turn off the engine and remove the key from the tractor.



9.1 SCHEME AND DESCRIPTION OF THE LABELS

The diagram next to it represents the essential components of a cardan drive corresponding to the standards for the "CE" marking in the case of simple transmission or with homokinetic joints.



1. Identification of the shaft (series, size and length, year of production, indication of the mounting side, Eurocardan mark, CE mark);
2. External safety label;
3. Internal safety label;
4. Instruction booklet for installation, use and maintenance, with CE declaration of conformity;
5. Guard of the cardan shaft;
6. Guard of the homokinetic joint on the external side;
7. Protective bellows of the homokinetic joint on the inner side, connected to pieces 6 and 5, which guarantees complete coverage of the joint in any angular position;
8. Safety anti-rotation chains;
9. Guard of the tractor power take-off;
10. Guard of the machine's receiver shaft;
11. Safety device to be applied, if necessary, only on the machine side;
12. Cardan drive bracket detached from PTO.

All cardan drives of the EUROCARDAN are designed and manufactured in compliance with the strictest safety standards in force today.

In particular, to improve users' information on transmissions, illustrated adhesive labels are affixed with the purpose of drawing attention to the fundamental rules for the safe use of the transmission.

Normally two adhesives are applied: the first on the outer protection tube and the second, inside, on the outer tube of the transmission.

It is important to make the end user as aware as possible of compliance with safety regulations for greater and more effective accident prevention.

For the countries of the European Community, the shafts are marked "CE" and are equipped with stickers 1140010 on the outer protection tube and 1140011 on the outer tube of the transmission, as well as the use and maintenance manual depending on the guard used.

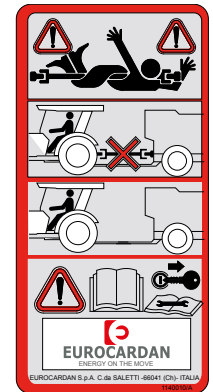
The meaning of the illustrations and the symbols adopted are described below

9.2 EXTERNAL AND INTERNAL LABEL

The external label (1140010) provides essential indications to use the cardan shaft safely, complying with the regulations in force in the country of destination. Meanwhile, the internal label (1140011) warns the user about the lack of accident protection and the presence of a risky situation. It also includes the internationally recognised 'DANGER' warning.

1. Winding hazard. Do not approach the area of action of the cardan drive. Do not wear shirts or clothing with handles that can be hooked by the transmission. Contact can cause very serious accidents;
2. Do not work under any circumstances with the shaft without its guard or parts of it. Also check the presence and efficiency of the guards on the tractor and on the machine. Replace all missing or damaged parts before using the transmission;
3. It is forbidden to approach the transmission while it is rotating. Before entering the area of action of the transmission, make sure that the engine is turned off and the key has been removed from the tractor;
4. Carefully read the user manual of the cardan drive as well as those of the tractor and the machine before putting them into operation. Before any maintenance operation, make sure that the engine is turned off and the key has been removed from the tractor;
5. Do not work with the cardan drive without its guard or parts of it. Any damaged or missing components must be immediately restored with original spare parts before starting the transmission;
6. Turn off the engine and remove the key from the tractor. Read the user manual carefully.

External label (1140010)



Internal label (1140011)



9.3 FOR THE USA AND CANADA

For the USA and Canada, the shafts are not marked "CE" and are equipped with stickers 1140001 on the external protection tube and 1140003 on the external transmission tube, as well as the use and maintenance booklet, depending on the guard used, which is added upon request.

It is necessary to specify the country in which the transmissions will be used at the time of the request in order to allow EUROCARDAN to configure them in compliance with the specific rules of the various countries.

1140001



1140003



9.4 OPERATION AND MAINTENANCE MANUAL

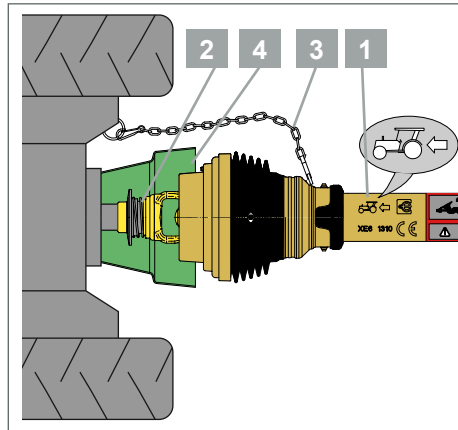
The "use and maintenance" manual provides explanations regarding the labels, information for correct and safe use of the cardan shaft, maintenance instructions and lubrication instructions. In addition, it is supplied with all the declarations of conformity required by the Machinery Directive 2006/42/EC.

Below are all the use and maintenance manuals attached to the cardan transmissions:

Guard	Instruction booklet code
PM14 - PM57 - PM80E CE	1140910 (to be verified)
PM14 - PM57 - PM80E	1140910A (to be verified)

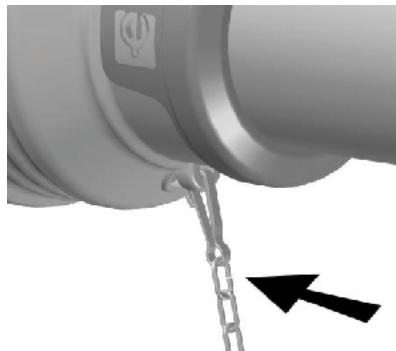


10. COMMISSIONING

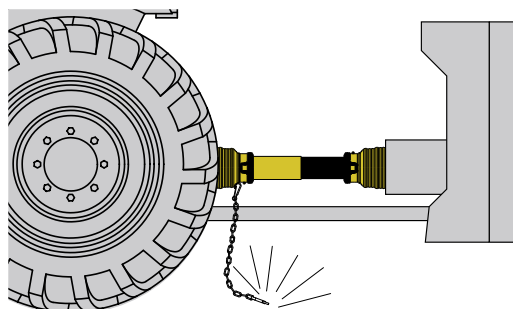


1. Make sure that the part of the cardan drive with the image of the tractor stamped on the protection tube is facing the tractor side;
2. Clean and lubricate the tractor and machine PTOs to facilitate transmission installation. Engage the end forks to the power take-offs of the tractor and operating machine, and ensure that they are correctly fixed by means of the relative attachment devices. Tighten any fixing bolts respecting the tightening table in the use and maintenance manual of the gimbal used;
3. Constrain the anti-rotation chains of the protection to fixed points of the tractor and the machine, adjusting their length so that they do not come into contact with moving parts, and do not hinder the articulation of the transmission in the various working conditions;
4. Check that the protections on the tractor side and machine side are installed correctly and that they overlap with that of the transmission, constituting an integrated system of guards as a whole.
5. Any missing or damaged parts must be immediately restored.

If the length of the chain is not adjusted correctly and the tension becomes excessive (e.g. during a machine manoeuvre), the safety mesh positioned on the protection side - recognisable as not welded - opens, causing the chain to detach from the protection. In this case, before putting the transmission back into operation, the damaged chain must be replaced with an original replacement.



It is forbidden to use the cardan drive without the anti-rotation chains and without them being correctly coupled to the drive, the tractor and the machine.



11. CARDAN SHAFT ADJUSTMENT

Eurocardan recommends not to modify your products, but to contact your dealer to indicate the nearest qualified service centre that will take care of this.

If it is necessary to shorten the pipes, proceed as follows:

1. Disassemble the guard as described in the paragraph "DISASSEMBLY and ASSEMBLY PROTECTION";
2. Connect the machine to the tractor by aligning the two PTOs;
3. Determine the length to be cut (L_t) following the procedure described:
 - Assess the maximum and minimum working lengths (fig. 9), raising and lowering the tool in the case of carried tools (fig. 10 and 11): in the case of tools towed during steering, there is the minimum length (fig. 12 and 13);
 - Make sure that at the maximum extension (L_{max}) an overlap of at least 1/3 of the length of the pipes is guaranteed (with a minimum overlap of at least 10 cm);
 - Make sure that at the minimum extension there is a space of at least 10 mm between the metal tube and the fork (fig. 9);
 - Calculate the length of the tube to be cut L_t as the difference between the initial length of the shaft L_i and the minimum distance between the grooves of the PTO L_{min} (fig. 9).
4. Cut the metal tubes of size L_t : with the help of a file, carefully remove the burrs from the ends of the tubes and clean the shavings;
5. Subsequently cut the plastic protection tubes of the same length L_t removed from the metal tubes;
6. Grease the inner metal tube and reassemble the guard.

If the transmission is equipped with a GS greasing system, the pipes can be shortened by a limited amount to avoid damaging the system.

If the transmission is of type BX (slotted telescopic) do not proceed with the cut but contact the nearest assistance centre.

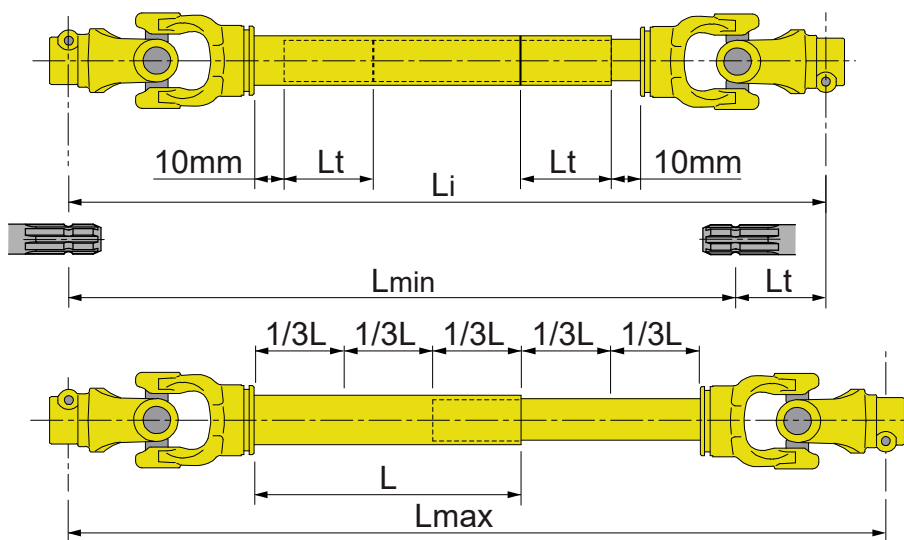


Fig. 9

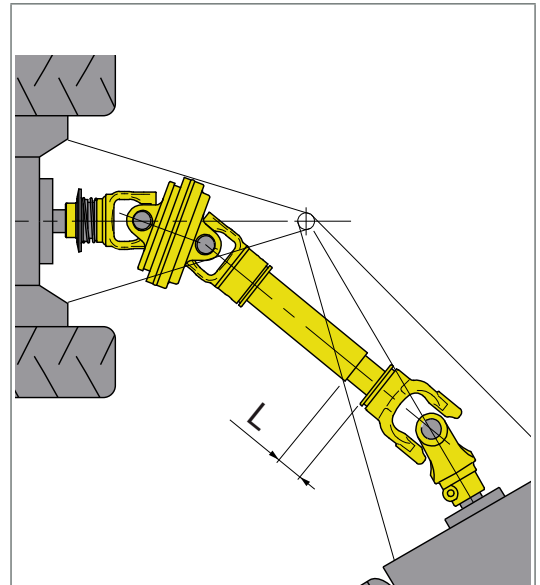


Fig. 12

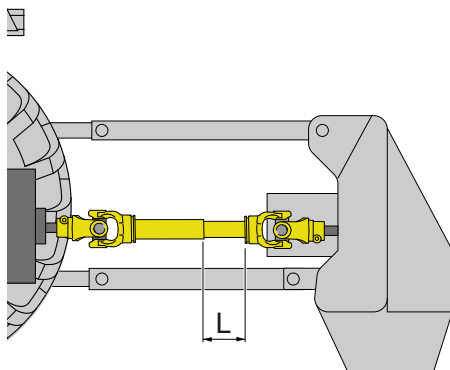


Fig. 10

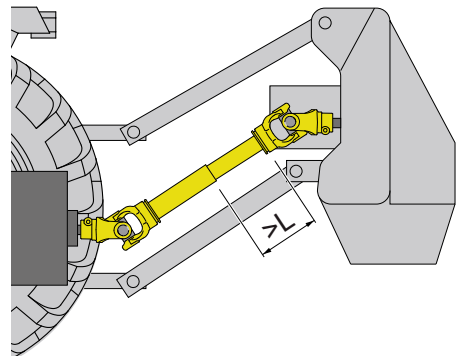


Fig. 11

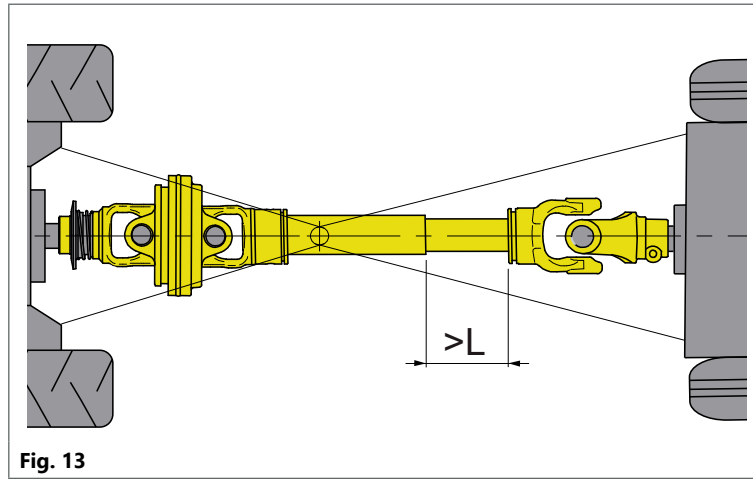


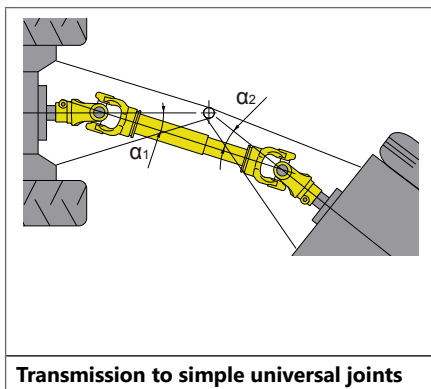
Fig. 13

Transmission to simple universal joints.

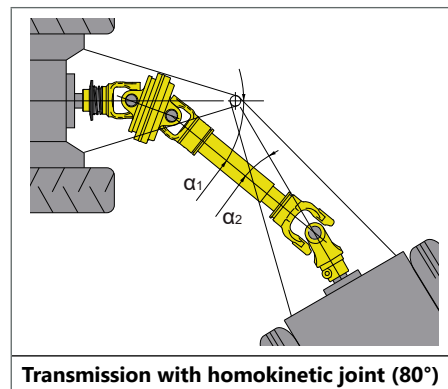
Work with joint angles (α_1 and α_2) equal and contained (not exceeding 16° at 540 rpm and 9° at 1000 rpm). Higher angles (up to 35°) are allowed only for short manoeuvres (e.g. steering) and in the absence of load. In the event of manoeuvres with joint angles greater than 35° , disconnect the PTO.

Transmission with homokinetic joint (80°).

Work with joint angles of the homokinetic joint (α_1) not exceeding 25° . Higher angles (up to 80°) are allowed only for short manoeuvres (e.g. steering) and in the absence of load. Exceeding the maximum angle of 80° leads to breakage of the joint. If the transmission has a simple joint, for the latter comply with the instructions relating to simple joints.



Transmission to simple universal joints



Transmission with homokinetic joint (80°)

For operating machines connected to the tractor with three-point attachment (Fig. 14), always position the machine so that the corners of the transmission joint that connects the tractor's drive socket to that of the machine are contained and equal to each other. Do not use the cardan drive as a support or as a step.

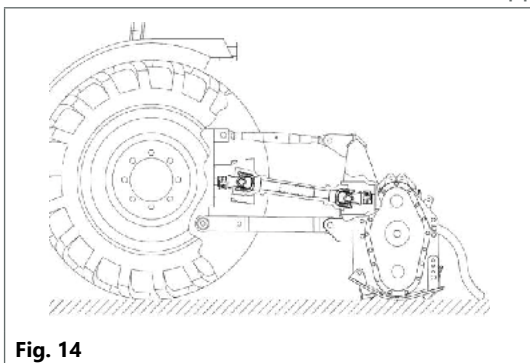


Fig. 14

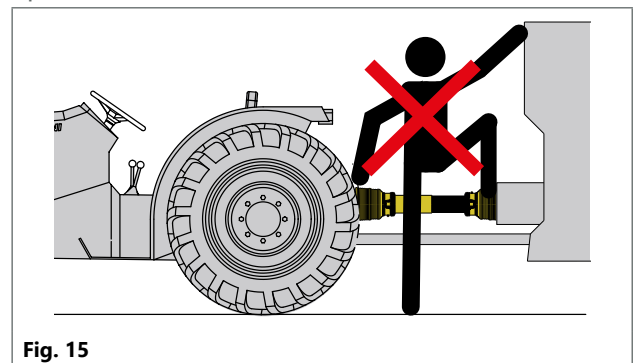
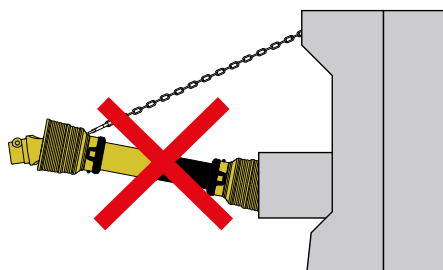
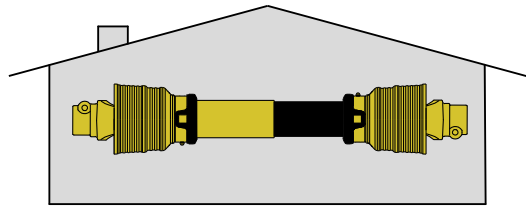


Fig. 15

Do not use the anti-rotation chain to support or transport the cardan drive when it is detached from the tractor. Use the appropriate support on the operating machine.

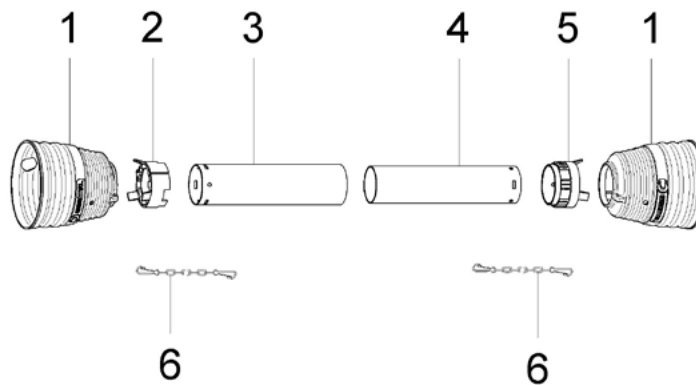


In case of long periods of inactivity, clean and grease the tree and store it away from atmospheric agents. Upon resumption of work, lubricate and check the efficiency of the various parts.



12. DISASSEMBLY AND ASSEMBLY OF THE UNIVERSAL SHAFT PROTECTION

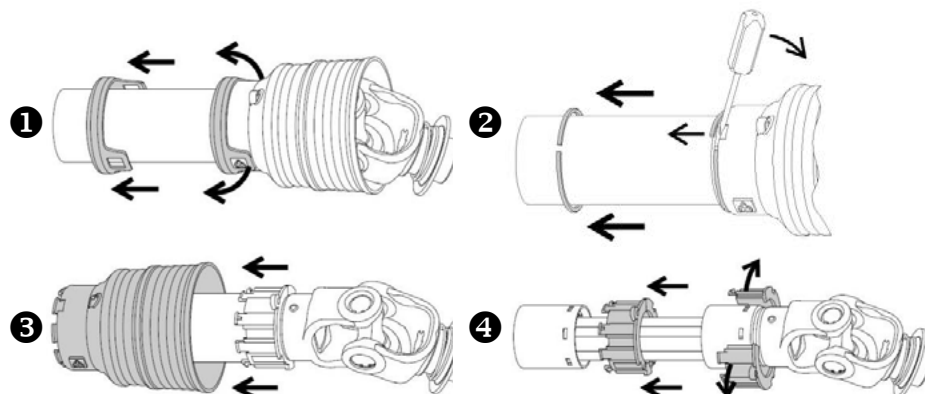
Accident protection consists of several components, many of which are made of plastic, characterised by a high resistance to UV rays and a good tolerance to temperature variations, such as:



- 1) Hood; 2) Connection ring nut for outer tube; 3) Outer tube; 4) Inner tube;
5) Connection ring nut for inner tube; 6) Anti-rotation chain.

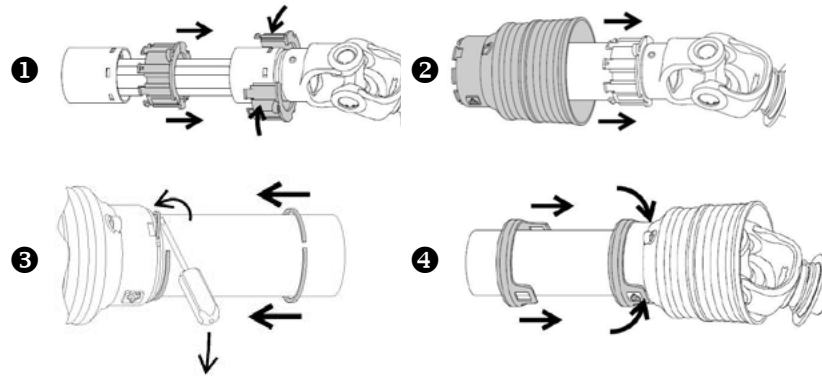
The assembly and disassembly of the guard are easy and intuitive operations, which can be carried out following the instructions below:

12.1 STANDARD PROTECTION SWABBING



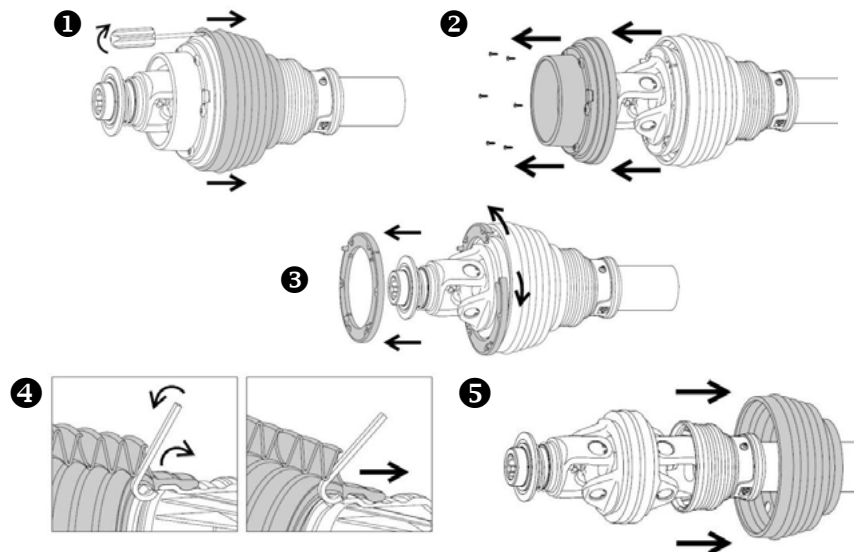
1. Using a flat screwdriver, widen the wings of the safety sleeve until it is disengaged from the two projections of the cap and remove it from the semi-joint;
2. Insert a flat screwdriver into the slot on the hood and pry out the end of the latch. Holding the latter with a finger, slide the tip of the screwdriver along the slot below the fastener until it is completely extracted;
3. Remove the cap from the semi-joint;
4. Widen the ring nut until it is disengaged from its seat on the inner fork and from the slots on the protection tube, then remove the ring nut and the tube from the semi-joint.

12.2 STANDARD PROTECTION ASSEMBLY



1. Insert the ring nut and tube on the semi-joint, spread the ring nut to insert it in its housing on the fork and simultaneously in the slots of the protection tube;
2. Insert the cap into the semi-joint in the correct angular position, i.e. aligning, for example, the anti-rotation chain fixing ring on the ring nut with the corresponding slot on the cap. The operation is terminated when the projections and the eyelets of the cap and ring ends match each other, creating the seat for the stop ring;
3. Thread the retainer over the tube until it reaches the base of the cap. With a flat screwdriver inserted between the protection tube and the retainer, use a lever to lift the end and insert it into the appropriate slot. Make sure that the end is placed in abutment on the centring projection of the stop located in the quarry. Continue the operation by rotating around the semi-joint until the latch is completely inserted into its housing;
4. Insert the safety sleeve on the semi-joint until the tabs of the sleeve snap on the respective projections of the hood.

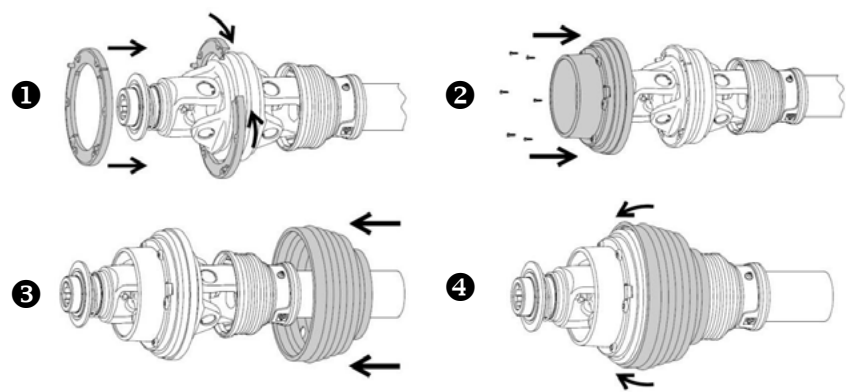
12.3 HOMOKINETIC GUARD DISASSEMBLY



1. Insert a flat screwdriver between the cap and bellows by levering under the flap of the latter, slide the tip of the screwdriver circumferentially resting it on the end of the cap so as to completely release the bellows from the cap itself;
2. Unscrew the hood fixing screws with a screwdriver and remove the hood from the joint;
3. Widen the ring nut to disengage it from its seat and remove it from the joint;
4. Through the greasing hole, lift and rest the adjoining part of the bellows tooth on the hood; release the aforementioned tooth from the hood gradually (for the entire circumference) by grabbing the bellows for the first fold and pulling it back slightly;
5. Remove the bellows from the hood.

12.4

HOMOKINETIC GUARD ASSEMBLY

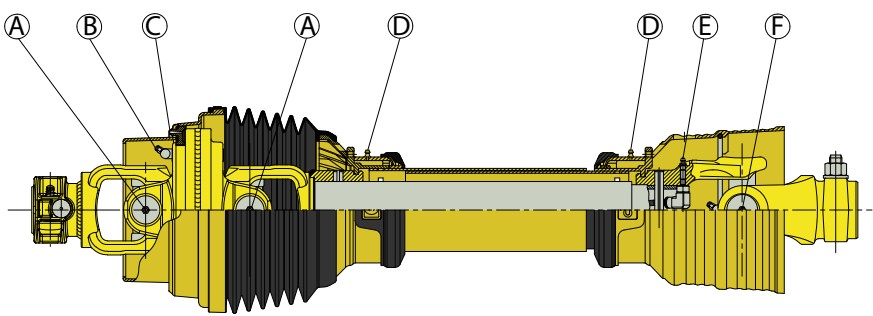


1. Insert the connecting ring nut in its seat;
2. Insert the hood by matching the appropriate holes on the projections of the ring nut and fix it on this with the screws;
3. Fit the bellows over the hood until the bellows tooth snaps over the end of the hood (reverse operation to that of the previous chapter "Disassembly and reassembly of the homokinetic guard"). Ensure that the parts are well adjacent and that they cannot slide past each other;
4. Using a flat screwdriver, hook part of the end of the bellows onto the homokinetic cap;
5. Continue the operation by rotating around the semi-joint until the bellows is completely inserted into the cap.

13. LUBRICATION AND MAINTENANCE

The lubrication of the rotating parts and telescopic elements is essential to ensure the correct operation of the components of the cardan drive, thus helping to ensure maximum durability over time. All components of the driveshaft should be inspected and, if necessary, the drive components lubricated before each use. While in operation, grease the shaft at the points indicated in the diagram, respecting the frequencies indicated (expressed in hours).

Hostile environments, such as aggressive or dusty environments, and particularly harsh conditions of use, may require more frequent lubrication than recommended. It is recommended to clean the transmission at the end of each use, then lubricate it using lithium grease for extreme pressures of NGLI grade. Lubrication of the gimbal and each semi-protection can be performed by aligning a hole of the protection with the respective grease nipple; the other grease nipples are located in easily accessible points, from which the grease can be applied as indicated in the figure below.



A: Homokinetic Cruise;

B: Homokinetic;

C: Homokinetic Cap;

D: Hose cap;

E: "GS" system;

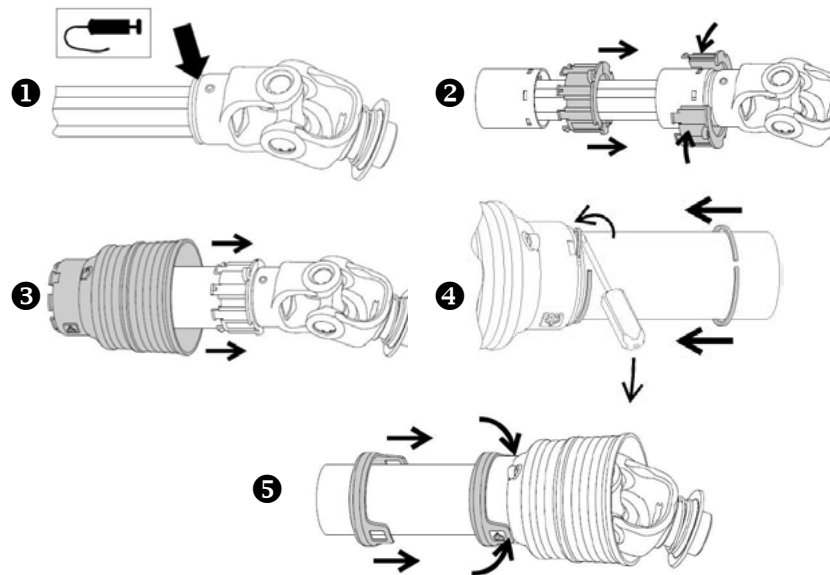
F: Fork Cruise.

LUBRICATION INTERVAL (HOURS)												
	A		B		C		D		E		F	
	Min*	Max	Min*	Max	Min*	Max	Min*	Max	Min*	Max	Min*	Max
MASTER	20	40	15	30	25	50	25	50	20	50	25	50

AMOUNT OF GREASE TO BE INJECTED							
	Pos.	A	B	C	D	E	F
	1	4.5g	-	4.5g	4.5g	4.5g	4.5g
	2	4.5g	12g	4.5g	4.5g	4.5g	4.5g

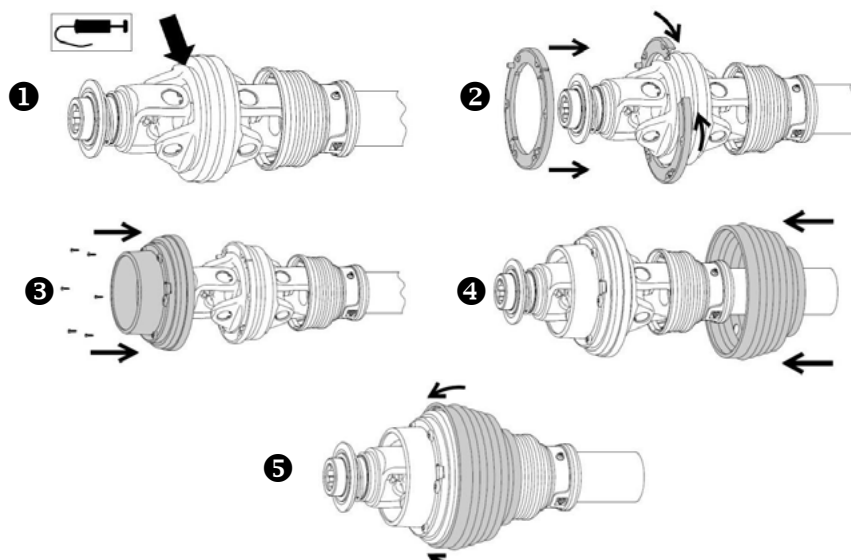
Size	4	6g	15g	4.5g	6g	4.5g	4.5g
	5	6g	-	6g	6g	6g	6g
	6	7.5g	18g	6g	7.5g	6g	6g
	7	7.5g	-	6g	7.5g	6g	6g
	8	9g	21g	7.5g	9g	7.5g	7.5g
	10	9g	24g	7.5g	9g	7.5g	7.5g

13.1 STANDARD GUARD LUBRICATION



1. Grease the seat of the connection ring on the inner fork;
2. Insert the ring nut and tube on the semi-joint, spread the ring nut to insert it in its housing on the fork and simultaneously in the slots of the protection tube;
3. Insert the cap into the semi-joint in the correct angular position, i.e. aligning, for example, the anti-rotation chain fixing ring on the ring nut with the corresponding slot on the cap. The operation is terminated when the projections and the eyelets of the cap and ring ends match each other, creating the seat for the stop ring;
4. Thread the retainer over the tube until it reaches the base of the cap. With a flat screwdriver inserted between the protection tube and the retainer, use a lever to lift the end and insert it into the appropriate slot. Make sure that the end is placed in abutment on the centring projection of the stop located in the quarry. Continue the operation by rotating around the semi-joint until the latch is completely inserted into its housing;
5. Insert the safety sleeve on the semi-joint until the tabs of the sleeve snap on the respective projections of the hood.

13.2 OMOCINETIC GUARD LUBRICATION



1. Grease the seat of the ring nut;
2. Insert the connecting ring nut in its seat;
3. Insert the hood by matching the appropriate holes on the projections of the ring nut and fix it on this with the screws;
4. Fit the bellows over the hood until the bellows tooth snaps over the end of the hood (reverse operation to that of the previous chapter "Disassembly and reassembly of the homokinetic guard"). Ensure that the parts are well adjacent and that they cannot slide past each other;
5. Using a flat screwdriver, hook part of the end of the bellows onto the homokinetic cap;
6. Continue the operation by rotating around the semi-joint until the bellows is completely inserted into the cap.

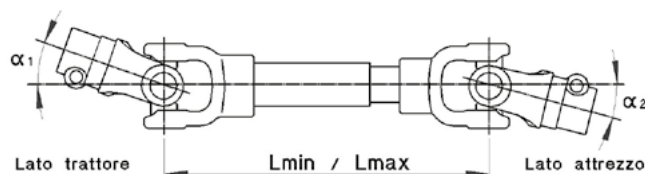


1. TECHNICAL QUESTIONNAIRE FOR THE CONFIGURATION OF CARDAN SHAFTS



Customer Code: _____

Date: _____



Application type

Power to be transmitted

	KW	CV
--	--------------------------------	--------------------------------

Transmitted torque

Nominal		Nm	Maximum		Nm
---------	----------------------	----	---------	----------------------	----

Rotation speed

Nominal		Rpm	Maximum		Rpm
---------	----------------------	-----	---------	----------------------	-----

Coupling angle

$\alpha 1$		°	$\alpha 2$		°
------------	----------------------	---	------------	----------------------	---

Distance between cruises

L min		mm	L max		mm
-------	----------------------	----	-------	----------------------	----

Expected Average Duration

H		hours
---	----------------------	-------

Homokinetic

NO ☐	YES (TRACTOR SIDE) ☐	YES (MACHINE SIDE) ☐
-----------------------------	---	---

		Tractor side			Machine side		
External forks	Internal profile	1"Z15 ☐	1"1/8 Z6 ☐	1"3/8 Z6 ☐	1"Z15 ☐	1"1/8 Z6 ☐	1"3/8 Z6 ☐
		1"3/8 Z21 ☐	1"3/4 Z6 ☐	1"3/4 Z20 ☐	1"3/8 Z21 ☐	1"3/4 Z6 ☐	1"3/4 Z20 ☐
		2" 1/4 Z22 ☐	D8x32x38 ☐		2" 1/4 Z22 ☐	D8x32x38 ☐	
		Other:			Other:		
	Type of attack	Quick Pin ☐	Button ☐		Quick Pin ☐	Button ☐	
		Conical clamp ☐	Pull Collar ☐		Conical clamp ☐	Pull Collar ☐	
		Bolt not interfering ☐	Bolt interfering ☐		Bolt not interfering ☐	Bolt interfering ☐	
		Other: ☐			Other: ☐		

TYPE AND SIZE OF CRUISES

STANDARD CRUISE	HOMOKINETIC CRUISE
A (mm) =	A (mm) =
D (mm) =	B (mm) =
	D (mm) =
	E (mm) =

TYPE AND SIZE OF PROFILES

THREE-FOILED		A (mm) =	GROOVED		A (mm) =	
		B (mm) =				
		S (mm) =				
		T (mm) =				
YORK		A (mm) =	LEMON		A (mm) =	
		B (mm) =				B (mm) =
		S (mm) =				C (mm) =
		T (mm) =				D (mm) =
STAR		A (mm) =			S (mm) =	
		R (mm) =				T (mm) =
		S (mm) =				

Guard

YES ☐

NO ☐

Freewheel

YES ☐

NO ☐

Torque limiter

YES ☐

NO ☐

Intervention pair

Nm

NO ☐

Type

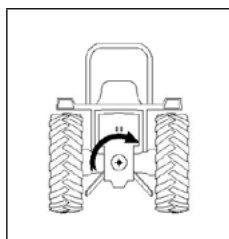
discs ☐

snap ☐

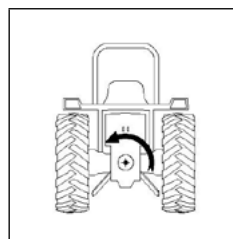
automatic ☐

bolted ☐

Rotation direction



☐ Right



☐ Left

Notes

Note: for configurations not provided for in this form, contact Eurocardan S.p.A.



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Rivenditore/Dealer

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