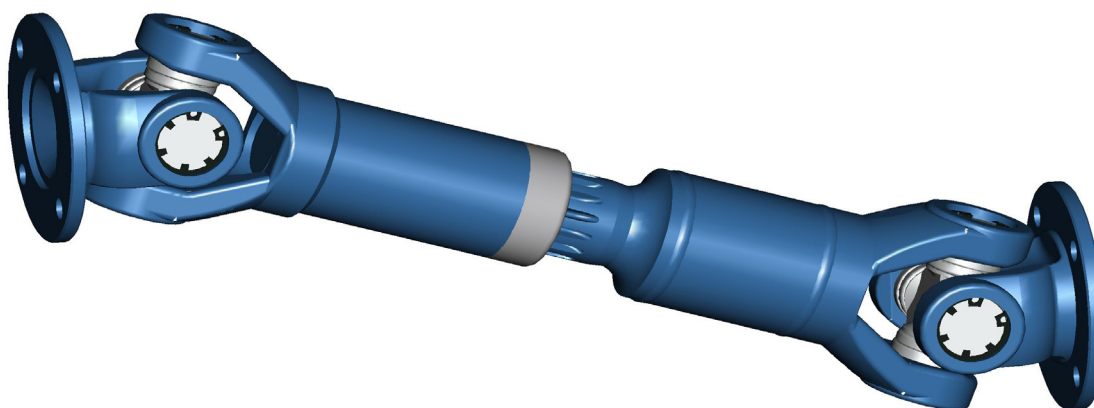


473系列 / Series 473



连接范围 Connection range	设计特点 Design features	建议应用于 Preferred application
- 转矩范围 T_{CS} 195 - 520 Nm - 法兰直径 58 - 90 mm	- 低维护 - 部分尼龙喷涂	普通机械建造车间
- Torque range T_{CS} 195 - 520 Nm - Flange diameter 58 - 90 mm	- Low maintenance - Partly rilsan coated	General machinery construction plants

设计 / Design

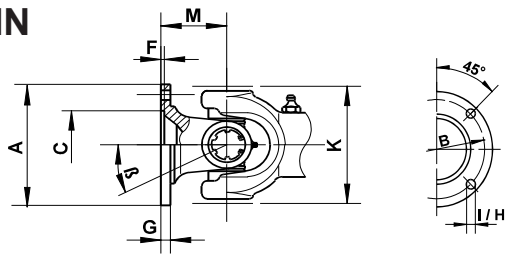
系列 Serie	T_{CS} [Nm]	T_K [Nm]	T_{dmax} [Nm]	0.01	0.02	0.02 IM	0.03	9.01	9.02	9.03	9.04	9.05	7.02		
473.10	195	150		•		•	•	•	•	•	•	•	•		
473.20	325	250		•		•	•	•	•	•	•	•	•		
473.30	520	400		•		•	•	•	•	•	•	•	•		
473.33			500		•		•	•			•		•		

473.10 - 473.30

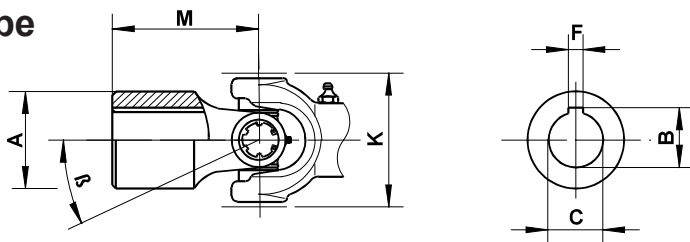
$T_{CS} = 195 - 520 \text{ Nm}$

连接多样性 / Variants of connection

DIN

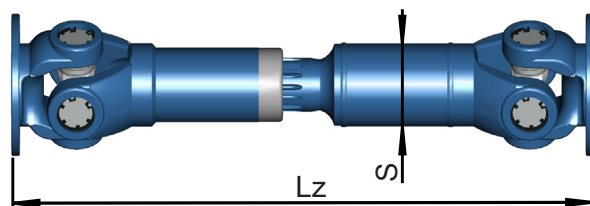


Nabe

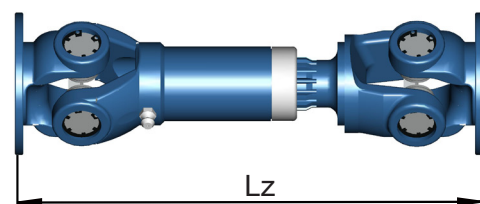


设计多样性 / Variants of design

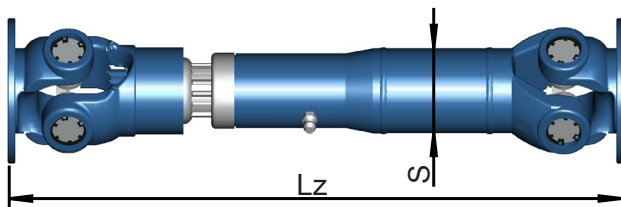
0.01



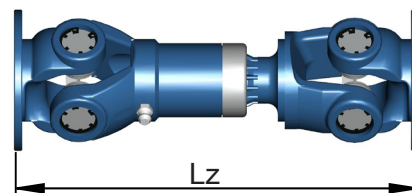
9.01



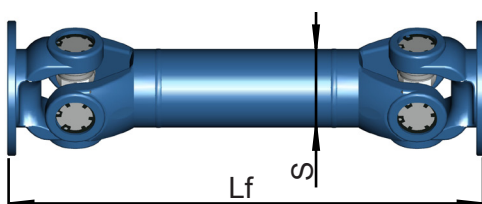
0.02
IM



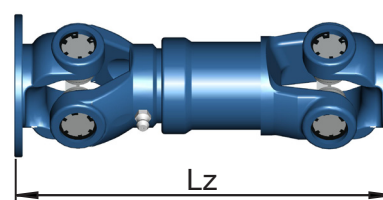
9.02



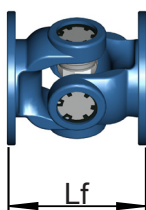
0.03



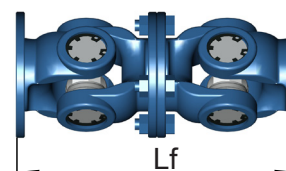
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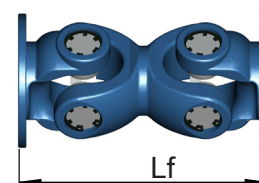
7.02



9.04



9.05



可应要求提供更多设计!

More designs available on request!



473.10 - 473.30
 $T_{CS} = 195 - 520 \text{ Nm}$

			473.10			473.20				473.30					
T _K	Nm	150			250				400						
T _{CS}	Nm	195			325				520						
L _c		1,0x10 ⁻⁷			1,4x10 ⁻⁶				4,4x10 ⁻⁶						
		DIN		Nabe	DIN			Nabe	DIN			Nabe			
T _{FR}	Nm	221	344	---	344	616	344		---	616	905	616		---	
K	mm	52			62					73					
β	°	30	30	30	25		35		30	25		35		25	
A	mm	58	65	32	65	75	65		40	75	90	75		53	
B ^{±0,1}	mm	47	52	22,6	52	62	52		28,2	62	74,5	62		33,2	
C ^{H7}	mm	30	35	20	35	42	35		25	42	47	42		30	
F	mm	1,5	1,7	6	1,7	2	1,7		8	2	2,5	2		8	
G	mm	3,5	4,5	---	4,5	5,5	4,5		---	6	6	6		---	
H ^{B11}	mm	5	6	---	6	6	6		---	6	8	6		---	
I		4	4	---	4	6	4		---	6	4	6		---	
M	mm	29	29	50	32	32	38		60	39	39	45		80	
S	mm	28x1,5			36x1,5						40x2				
W		22x19			25x22						25x22				
0.01	Lz _{min}	mm	245	245	287	280	280	292		336	312	312	324		394
	La	mm	35	35	35	40	40	60		60	40	40	40		40
	G _G	kg	1,29			2,07		2,1			2,8				
	G _R	kg	0,98	0,98	0,98	1,27	1,27	1,27		1,27	1,87	1,87	1,87		1,87
	Jm _G	kgm²	3,41x10 ⁻⁴			8,56x10 ⁻⁴		8,56x10 ⁻⁴			1,12x10 ⁻³				
	Jm _R	kgm²	1,7x10 ⁻⁴	1,7x10 ⁻⁴	1,7x10 ⁻⁴	3,8x10 ⁻⁴	3,8x10 ⁻⁴	3,8x10 ⁻⁴		3,8x10 ⁻⁴	6,8x10 ⁻⁴	6,8x10 ⁻⁴	6,8x10 ⁻⁴		6,8x10 ⁻⁴
	C _G	Nm/rad.	0,13x10 ⁴			0,19x10 ⁴		0,19x10 ⁴			0,41x10 ⁴				
	C _R	Nm/rad.	0,17x10 ⁴	0,17x10 ⁴	0,17x10 ⁴	0,38x10 ⁴	0,38x10 ⁴	0,38x10 ⁴		0,38x10 ⁴	0,7x10 ⁴	0,7x10 ⁴	0,7x10 ⁴		0,7x10 ⁴
0.02 IM	Lz _{max}	mm	455	455	497	700	700	712		756	720	720	732		802
	La _{max}	mm	210	210	210	225/400	225/400	225/400		225/400	225/400	225/400	225/400		225/400
	Lz _{min}	mm	325	325	360	380	380	390		435	400	400	412		482
	La _{min}	mm	80	80	80	80	80	80		80	80	80	80		80
0.03	Lf _{min}	mm	150	150	192	180	180	182		231	196	196	208		288
	G _G	kg	0,83	0,83		0,83		0,9			2,06				
	Jm _G	kgm²	2,86x10 ⁻⁴			2,86x10 ⁻⁴		2,86x10 ⁻⁴			5,35x10 ⁻⁴				
	C _G	Nm/rad.													
9.01	Lz _{max}	mm	210	255		255	267		311	315	327		397		
	La _{max}	mm	35	35		40	50		40	45	45		45		
9.02	Lz _{max}	mm	190	235		215	227		271	235	221	267		317	
	La _{max}	mm	25	25		25	25		25	25	25	40		25	
9.03	Lz _{max}	mm	190	232		240			296	250	250			332	
	La _{max}	mm	35	35		50			50	45	45			45	
	Lz _{min}	mm	165	207		180			236	200	200			282	
	La _{min}	mm	20	20		20			20	20	20			20	
9.04	Lf	mm	116	158		128	152		184	156	180			238	
9.05	Lf	mm	110	152		120	120		176	133	145			215	
						124	124		180	144	156			226	
7.02	Lf	mm	58	100		64	76		120	78	90			160	

中心连接 / Center connection

T_k = 目录转矩
 T_{CS} = 功能极限扭矩
 T_{FR} = 摩擦转矩
 L_c = 承载力系数
 W = 渐开线花键
 G_G = Lz_{min} 轴的重量
 G_R = 每1000mm管的重量
 IM = 超大运转

T_k = Catalogue torque
 T_{CS} = Functional limit torque
 T_{FR} = Friction torque
 L_c = Bearing capacity factor
 W = Involute spline
 G_G = Weight of shaft for Lz_{min}
 G_R = Weight per 1000mm tube
 IM = Extra large movement

Jm_G = Lz_{min} 轴承的转动惯量
 Jm_R = 每1000mm管道的转动惯量
 C_G = Lz_{min} 轴承的扭转刚度
 C_R = 每1000mm钢管的扭转刚度

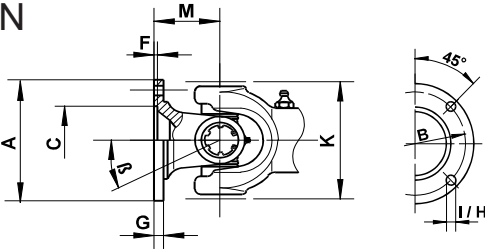
Jm_G = Moment of inertia of shaft for Lz_{min}
 Jm_R = Moment of inertia per 1000 mm tube
 C_G = Torsional stiffness of shaft for Lz_{min}
 C_R = Torsional stiffness per 1000 mm tube



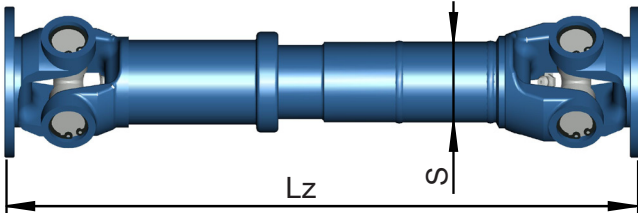
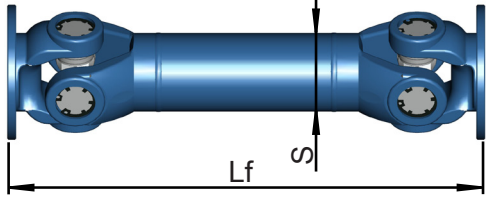
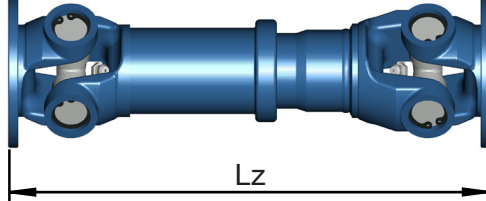
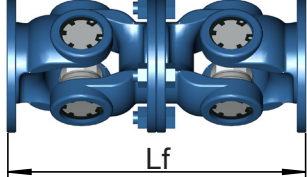
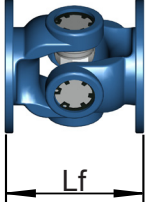
473.33

$T_{dmax} = 500 \text{ Nm}$

连接多样性 / Variants of connection

DIN		

设计多样性 / Variants of design

0.02			
0.03			
9.01			
9.04			
7.02			

可应要求提供更多设计!
More designs available on request!



$$T_{dmax} = 500 \text{ Nm}$$

		473.33									
$T_{s_{max}}$	Nm	900									
T_d	Nm	150									
L_c		$9,53 \times 10^{-6}$									
		DIN									
T_{FR}	Nm	616									
K	mm	70									
β	°	25									
A	mm	75									
$B_{\pm 0,1}$	mm	62									
C^{H7}	mm	42									
F	mm	2,2									
G	mm	5,5									
$H^{+0,2}$	mm	6									
I		6									
M	mm	36									
S	mm	40x2									
W		28x1,5x17									
0.02	Lz_{min}	mm	310								
	La	mm	70								
	G_G	kg									
	G_R	kg	1,87								
	Jm_G	kgm ²									
	Jm_R	kgm ²									
	C_G	Nm/rad.									
	C_R	Nm/rad.									
0.03	Lf_{min}	mm	205								
	G_G	mm									
	Jm_G	mm									
	C_G	mm									
9.01	Lz	mm	282								
	La	mm	70								
9.04	Lf	mm	144								
7.02	Lf	mm	72								

T_d = 目录转矩
 $T_{s_{max}}$ = 疲劳转矩
 $T_{d_{max}}$ = 功能极限扭矩
 T_{FR} = 摩擦转矩
 L_c = 承载力系数
 W = 渐开线花键
 $G_G = Lz_{min}$ 轴的重量
 G_R = 每1000mm管的重量
 IM = 超大运转

T_d = Catalogue torque
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 $T_{d_{max}}$ = Functional limit torque
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$Jm_G = Lz_{min}$ 轴承的转动惯量
 Jm_R = 每1000mm管道的转动惯量
 $C_G = Lz_{min}$ 轴承的扭转刚度
 C_R = 每1000mm 钢管的扭转硬度、刚度

Jm_G = Moment of inertia of shaft for Lz_{min}
 Jm_R = Moment of inertia per 1000 mm tube
 C_G = Torsional stiffness of shaft for Lz_{min}
 C_R = Torsional stiffness per 1000 mm tube



法兰连接 FLANGE CONNECTIONS

法兰螺栓
 Flange boltings

六角形螺母:
 短模型与DIN931/10.9相似
 六角螺帽
 与DIN980/10相似
 自锁

Hexago bolt:
 short model similar to DIN931/10.9
 Hexagon nut:
 similar to DIN980/10
 self-locking

		DIN			
A	mm	58	65	75	90
Ta	Nm	8,5	14	14	35
d		M5	M6	M6	M8
L	mm	13	16	18	23
V	mm	6	7	7	11
S	mm	8	10	10	13
I		4	4	6	8

配对法兰
 Companion flanges

		DIN			
A	mm	58	65	75	90
B ^{±0,1}	mm	47	52	62	74,5
C ^{H7}	mm	30	35	42	47
F	°	1,4	1,6	1,9	2,3
G	mm	5	6	6	8
H ^{+0,2}	mm	5,1	6,1	6,1	8,1
I		4	4	6	4
J	mm	37,6	41,6	51,6	60,0
D	mm	34	40	46	52
d ^{H7}	mm	20	25	30	35
K ^{P9}	mm	6	8	8	10
T	mm	22,8	28,3	33,3	38,3
L	mm	30	40	48	50

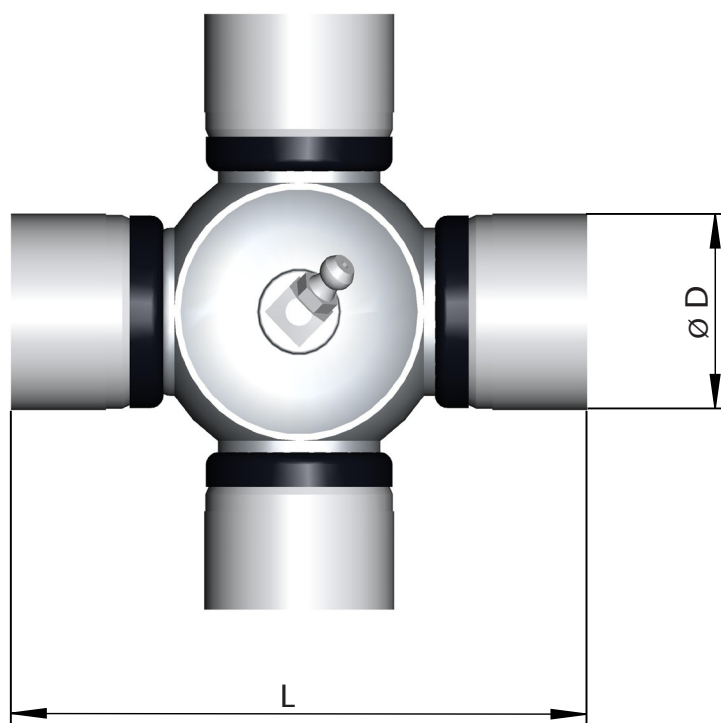
A =法兰-Ø
 Ta =拧紧扭矩
 I =螺栓孔数量

 A = Flange-Ø
 Ta = Thigtening torque
 I = Number of bolt holes

以上测量值是标准测量值
 应您的要求我们可以生产出配对螺栓。

 The given measurements are standard measurements.
 At your request we can produce companion flanges according to your requirement.

473.10 - 473.33 ZAPFENKREUZE



	Ø D	L
10	15,0	40,1
20	19,0	48,0
30	22,0	58,9
33	22,0	58,2

我们的产品范围: OUR PRODUCT RANGE:

- 最大静转矩 为70.000Nm的万向轴,法兰直径为58mm-285mm 。
 - 应用于工业的等速传动轴最大静转矩为67.000Nm,法兰直径为74mm到275mm。 - 驱动轴可加长到6000mm。
 - 根据您的需求配有配对法兰。
 - 快速释放耦合以轻松快速的分离联合轴和链接设备。
 - 高度弹性联轴器吸收发射振动波。
-
- Cardan shafts with max. static torque of 70.000 Nm and flange diameter from 58 mm to 285 mm.
 - CV shafts for industrial applications with max. static torque of 67.000 Nm and flange diameter from 74 mm to 275 mm.
 - Driveshaft lengths of up to 6000mm are possible.
 - Companion flanges according to your requirements.
 - Quick release coupling for easy and fast disconnection of joint shafts and connected devices.
 - High flexible couplings to absorb emitted vibrations.

我们的服务:

OUR SERVICE:

- 为所有传动轴提供修理和维护服务。
 - 生产万向轴和等速传动轴。
 - 专业人士为我们服务中心提出核心建议。
 - 建造评估万向轴，等速传动轴和MIS 轴。
 - 计算寿命和扭转振动。
 - 有我们的专家现场支持解决方案。
 - ATEX-合格证明类型2和3。
-
- Repair and maintenance service for all driveshafts.
 - Manufacture of cardan shafts and CV shafts.
 - Expert advice from qualified personnel at our Service centres.
 - Construction and calculation of cardan shafts, CV shafts and MIS shafts for your application.
 - Life time and torsional vibration calculation.
 - Solution oriented on the spot support with our experts.
 - ATEX - conformity certificate category 2 and 3.