



CENTA-SCS

SMART CLAMPING SET

ENGLISH

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CENTA-SCS

SYSTEM

At a glance

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Product application: Which feature for which coupling

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AT A GLANCE

Compared to conventional clamping sets, the CENTA-SCS clamping set for the friction-locked connection of rotor shaft and gear shaft, shows various advantages for the application in wind turbines. It is much lighter in weight, shows compact space saving dimensions in diameter and connecting length as well as cost benefit.

The design meets the CCV specifications for low temperatures in operation ranges of -40 to $+70^{\circ}$ C as well as the corrosion standards acc. ISO 12944/C3 centre - C4.

Assembly can be either done by a torque wrench or hydraulic device.

Features

- friction locked
- light weight
- extremely compact build

Areas of Application



Torque range

- up to 13.400 kNm
- higher torques on request

Temperature range

- $- 40^{\circ}$ up to $+ 70^{\circ}$ C

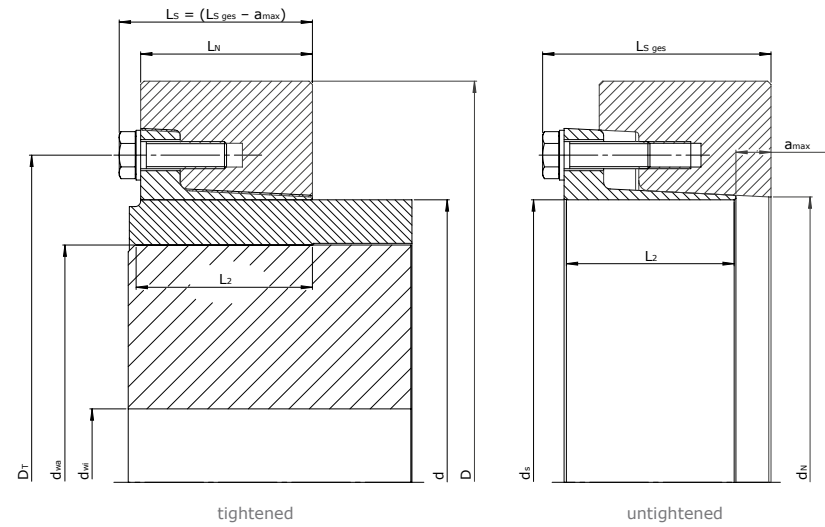
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TECHNICAL DATA AND DIMENSIONS

Questions on product selection?

We will gladly assist → www.centa.info/contact

CENTA-SCS SHORT VERSION



TECHNICAL DATA AND DIMENSIONS

↓ SIZES 480-620

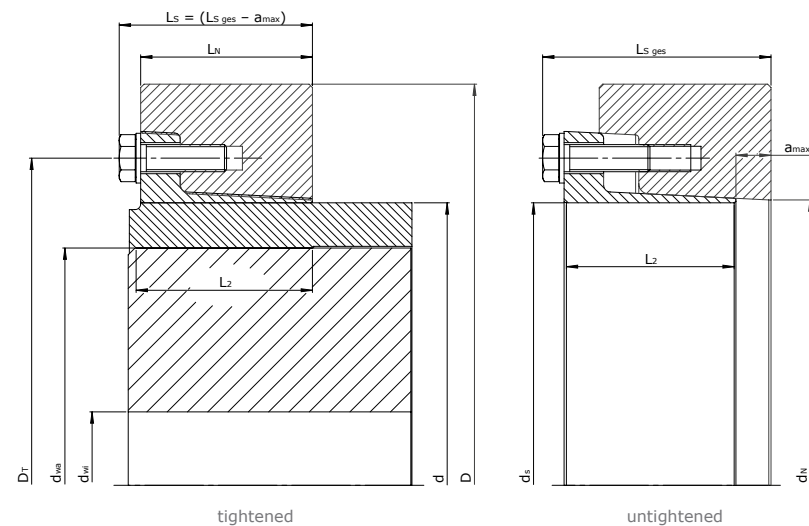
Size	Maximum torque * TKmax [kNm]	Maximum axial load ** Fax [kN]	Shaft diameter			a _{max}	D	Dimensions						Weight m [kg]	Bolts		
			d	d _{wa}	d _{wi}			d _s	L ₂	L _N	L _{S ges}	D _T	S		n		
480 - 410	1083	5182		410													
480 - 420	1147	5358	480	420	105	30,1	680	485	480	150	152	201,4	220	559	M24	22	
480 - 430	1213	5536		430													
500 - 420	1138	5316		420													
500 - 430	1204	5494	500	430	125	31,1	710	505	500	150	152	202,4	241	579	M24	23	
500 - 440	1272	5674		440													
500 - 450	1343	5853		450													
530 - 450	1328	5787		450													
530 - 460	1400	5969	530	460	130	32,4	740	537	530	164	166	217,7	276	608	M24	25	
530 - 470	1474	6152		470													
530 - 480	1550	6336		480													
560 - 480	1551	6336		480													
560 - 490	1628	6519	560	490	130	34,2	780	567	560	164	166	219,5	305	641	M24	26	
560 - 500	1708	6701		500													
560 - 510	1784	6862		510													
590 - 510	1915	7364		510													
590 - 520	2005	7564	590	520	155	36,2	840	597	590	169	172	231,2	384	682	M30	20	
590 - 530	2098	7765		530													
590 - 540	2193	7966		540													
620 - 540	2148	7800		540													
620 - 550	2243	8000	620	550	170	37,9	880	626	620	169	172	232,9	419	714	M30	20	
620 - 560	2341	8199		560													
620 - 570	2441	8400		570													

* Maximum transmissible torque TKmax only valid with axial load Fax= 0

** Maximum transmissible axial load Fax only valid with torque TKmax= 0

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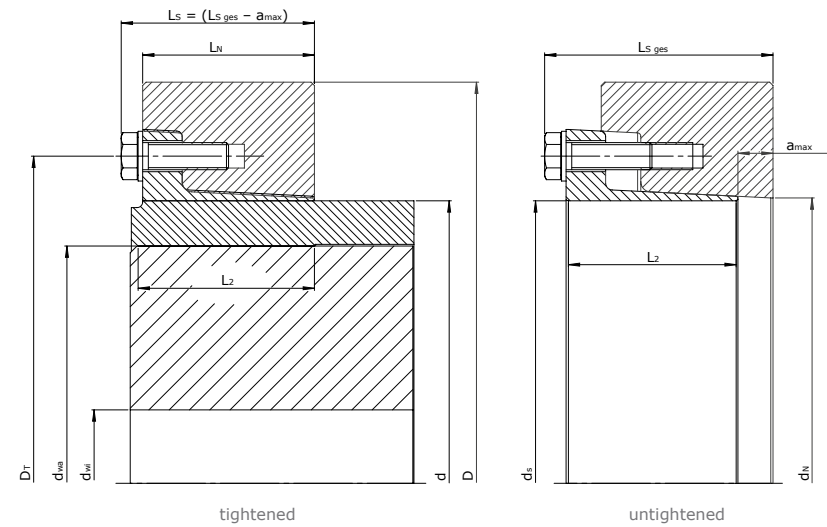
TECHNICAL DATA AND DIMENSIONS			↓ SIZES 660-840														
Size	Maximum torque	Maximum axial load	Shaft diameter			Dimensions							Weight	Bolts			
	T_{Kmax} [kNm]	F_{ax} [kN]	d	d_{wa}	d_{wi}	a_{max}	D	d_N	d_s	L_2	L_N	$L_{S ges}$	m [kg]	D_T	S	n	
660 - 570	2334	8031		570													
660 - 580	2432	8224		580													
660 - 590	2533	8418	660	590	175	39,5	910	666	660	179	182	244,5	449	751	M30	20	
660 - 600	2634	8612		600													
660 - 610	2739	8807		610													
700 - 610	2736	8795		610													
700 - 620	2842	8990	700	620	190	41,8	965	706	700	179	182	246,8	501	794	M30	23	
700 - 630	2951	9185		630													
700 - 640	3051	9349		640													
750 - 640	3114	9542		640													
750 - 650	3230	9746		650													
750 - 660	3348	9950	750	660	210	44,6	1025	756	750	189	192	259,6	587	845	M30	24	
750 - 670	3469	10155		670													
750 - 680	3591	10359		680													
800 - 680	3546	10224		680													
800 - 690	3668	10427		690													
800 - 700	3794	10629	800	700	220	47,5	1090	805	800	189	192	262,5	659	901	M30	26	
800 - 710	3922	10832		710													
800 - 720	4051	11034		720													
800 - 730	4183	11237		730													
840 - 730	4552	12228		730													
840 - 740	4698	12449		740													
840 - 750	4846	12671	840	750	220	50,0	1160	845	840	200,5	204	282,1	815	952	M36	21	
840 - 760	4997	12893		760													
840 - 770	5149	13115		770													

* Maximum transmissible torque T_{Kmax} only valid with axial load $F_{ax} = 0$

** Maximum transmissible axial load F_{ax} only valid with torque $T_{Kmax} = 0$

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TECHNICAL DATA AND DIMENSIONS

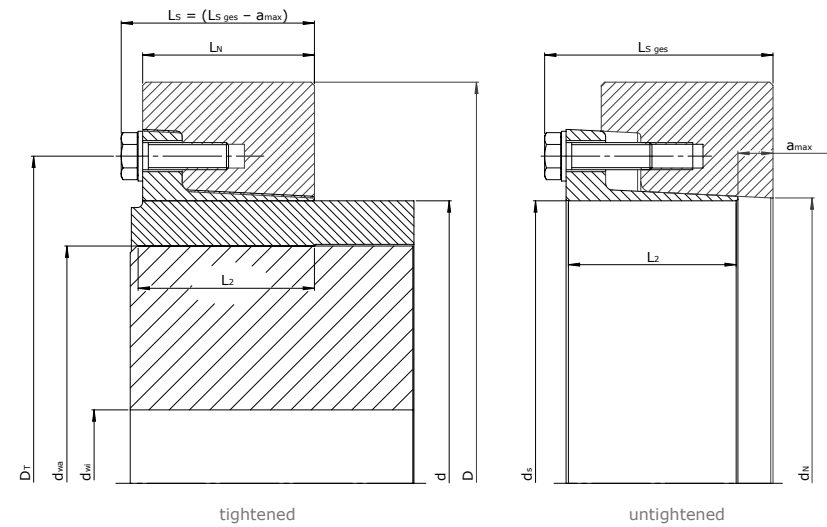
↓ SIZES 890-1050

Size	Maximum torque * TKmax [kNm]	Maximum axial load ** Fax [kN]	Shaft diameter			Dimensions							Weight m [kg]	Bolts		
			d	dwa	dwi	a_max	D	dN	ds	L2	LN	LS ges		DT	S	n
890 - 770	5027	12803	890	770	235	52,6	1220	895	890	201	204	284,7	887	1003	M36	21
890 - 780	5178	13019		780												
890 - 790	5332	13235		790												
890 - 800	5488	13452		800												
890 - 810	5645	13668		810												
890 - 820	5806	13885	820													
940 - 820	5796	13861	940	820	260	55,6	1280	945	940	208,5	212	295,7	999	1060	M36	23
940 - 830	5962	14086		830												
940 - 840	6131	14311		840												
940 - 850	6301	14537		850												
940 - 860	6475	14764		860												
940 - 870	6650	14989	870													
990 - 870	6467	14575	990	870	265	57,3	1340	994	990	209	212	297,4	1079	1100	M36	24
990 - 880	6639	14795		880												
990 - 890	6814	15015		890												
990 - 900	6992	15235		900												
990 - 910	7172	15455		910												
990 - 920	7355	15677	920													
1050 - 920	7557	16107	1050	920	275	61,5	1420	1059	1050	222,5	226	315,6	1287	1174	M36	27
1050 - 930	7746	16334		930												
1050 - 940	7939	16562		940												
1050 - 950	8134	16790		950												
1050 - 960	8332	17018		960												
1050 - 970	8531	17246	970													

* Maximum transmissible torque TKmax only valid with axial load Fax = 0

** Maximum transmissible axial load Fax only valid with torque TKmax = 0

CENTA-SCS LONG VERSION



TECHNICAL DATA AND DIMENSIONS

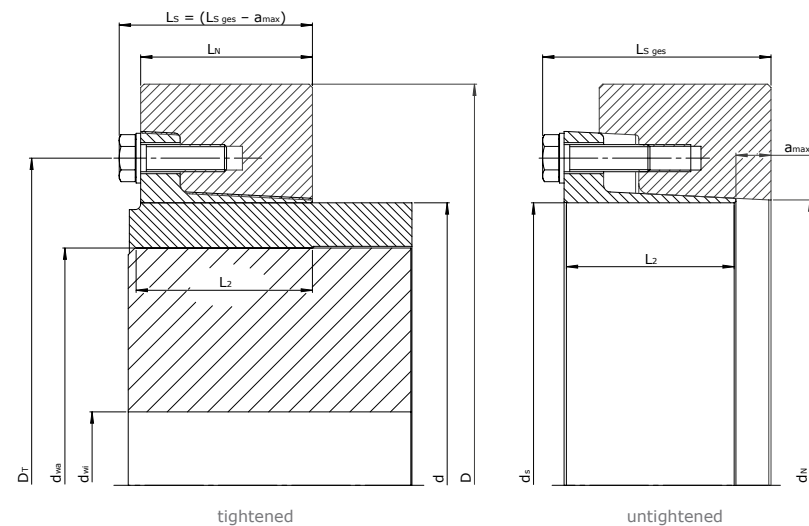
↓ SIZES 480-590

Size	Maximum torque * T _{Kmax} [kNm]	Maximum axial load ** F _{ax} [kN]	Shaft diameter			Dimensions								Weight m [kg]	Bolts		
			d	d _{wa}	d _{wi}	a _{max}	D	d _N	d _s	L ₂	L _N	L _{S ges}	D _T		S	n	
480 - 380	1322	6856	480	380	95	29,3	734	485	480	188	190	242,3	367	561	M30	22	
480 - 390	1409	7087		390	97												
480 - 400	1491	7313		400	100												
480 - 410	1570	7512		410	102												
500 - 400	1496	7360	500	400	100	30,8	761	507	500	188	190	243,8	392	589	M30	22	
500 - 410	1567	7522		410	102												
500 - 420	1655	7753		420	105												
500 - 430	1746	7989		430	107												
530 - 430	1963	8978	530	430	107	32,8	804	537	530	211	213	268,8	487	621	M30	24	
530 - 440	2072	9237		440	110												
530 - 450	2181	9503		450	112												
530 - 460	2284	9764		460	115												
560 - 450	2123	9276	560	450	112	34,7	843	566	560	211	213	270,7	528	652	M30	26	
560 - 460	2230	9528		460	115												
560 - 470	2340	9788		470	117												
560 - 480	2452	10042		480	120												
590 - 470	2602	10875	590	470	117	36,4	890	596	590	231	233	296,4	646	689	M33	24	
590 - 480	2726	11155		480	120												
590 - 490	2855	11443		490	122												
590 - 500	2985	11724		500	125												

* Maximum transmissible torque T_{Kmax} only valid with axial load F_{ax}= 0

** Maximum transmissible axial load F_{ax} only valid with torque T_{Kmax}= 0

CENTA-SCS LONG VERSION



TECHNICAL DATA AND DIMENSIONS

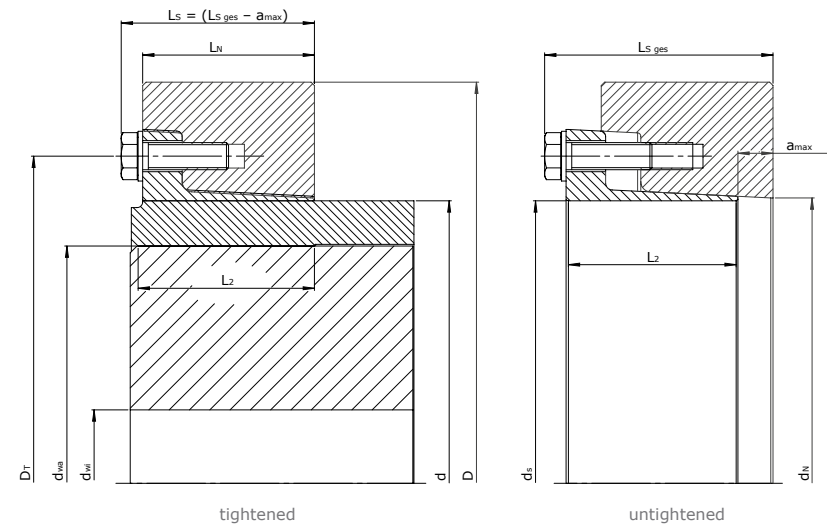
↓ SIZES 620-750

Size	Maximum torque * T_{Kmax} [kNm]	Maximum axial load ** F_{ax} [kN]	Shaft diameter			Dimensions							Weight m [kg]	Bolts		
			d	d_{wa}	d_{wi}	a_{max}	D	d_N	d_s	L_2	L_N	$L_{s ges}$		D_T	S	n
620 - 500	3159	12404	620	500	125	38,5	930	626	620	248	250	315,5	750	726	M33	28
620 - 510	3276	12610		510	127											
620 - 520	3420	12910		520	130											
620 - 530	3569	13219		530	132											
620 - 540	3720	13521		540	135											
660 - 530	3485	12899	660	530	132	40,3	978	666	660	252	255	322,3	828	764	M33	28
660 - 540	3632	13193		540	135											
660 - 550	3785	13496		550	137											
660 - 560	3938	13792		560	140											
660 - 570	4097	14097		570	142											
700 - 560	3861	13522	700	560	168	42,5	1030	706	700	252	255	324,5	908	810	M33	30
700 - 570	4016	13816		570	171											
700 - 580	4173	14111		580	174											
700 - 600	4498	14701		600	180											
750 - 600	4948	16477		750	600											
750 - 610	5131	16495	610		183											
750 - 620	5318	16818	620		186											
750 - 630	5507	17142	630		189											
750 - 640	5675	17387	640		192											
750 - 650	5852	17654	650		195											

* Maximum transmissible torque T_{Kmax} only valid with axial load $F_{ax}=0$

** Maximum transmissible axial load F_{ax} only valid with torque $T_{Kmax}=0$

CENTA-SCS LONG VERSION



TECHNICAL DATA AND DIMENSIONS

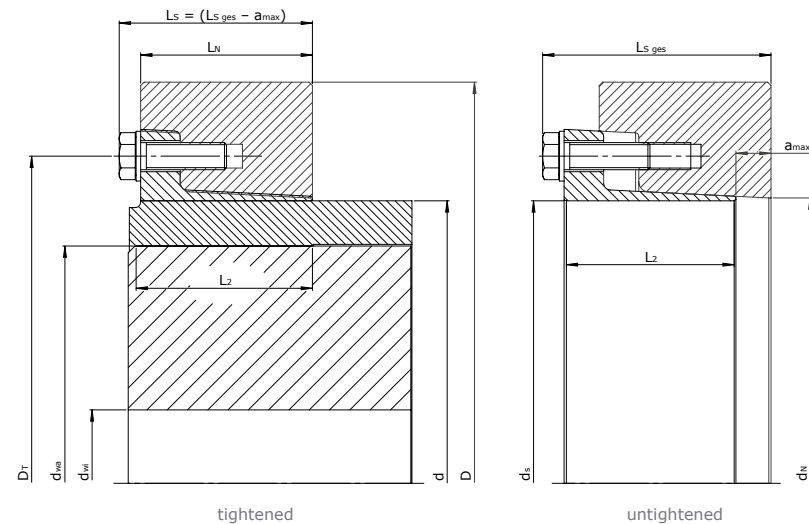
↓ GRÖßEN 800-850

Size	Maximum torque * T_{Kmax} [kNm]	Maximum axial load ** F_{ax} [kN]	Shaft diameter			Dimensions							Weight m [kg]	Bolts		
			d	d_{wa}	d_{wi}	a_{max}	D	d_N	d_s	L_2	L_N	$L_{S ges}$		D_T	S	n
800 - 640	5649	17308	800	640	204	48,4	1164	810	800	288	291	366,4	1295	923	M33	36
800 - 650	5844	17629		650	208											
800 - 660	6045	17961		660	211											
800 - 670	6250	18293		670	214											
800 - 680	6459	18626		680	217											
800 - 700	6884	19285		700	224											
820 - 650	6917	20868	820	650	107	49,8	1220	829	820	323	325	403,3	1689	968	M36	38
820 - 660	7154	21255		660	108											
820 - 670	7393	21638		670	110											
820 - 680	7637	22021		680	112											
820 - 690	7886	22411		690	113											
820 - 700	8138	22796		700	115											
820 - 650	6965	21012	820	650	107	47,9	1180	829	820	357	360	436,4	1621	935	M36	36
820 - 660	7206	21409		660	108											
820 - 670	7449	21800		670	110											
820 - 680	7696	22193		680	112											
820 - 690	7950	22592		690	113											
820 - 700	8206	22986		700	115											
850 - 650	6071	18316	850	650	195	50,8	1241	859	850	302	305	384,3	1556	979	M36	36
850 - 670	6491	18998		670	201											
850 - 680	6706	19339		680	204											
850 - 700	7148	20025		700	210											
850 - 730	7839	21057		730	219											

* Maximum transmissible torque T_{Kmax} only valid with axial load $F_{ax} = 0$

** Maximum transmissible axial load F_{ax} only valid with torque $T_{Kmax} = 0$

CENTA-SCS LONG VERSION



TECHNICAL DATA AND DIMENSIONS

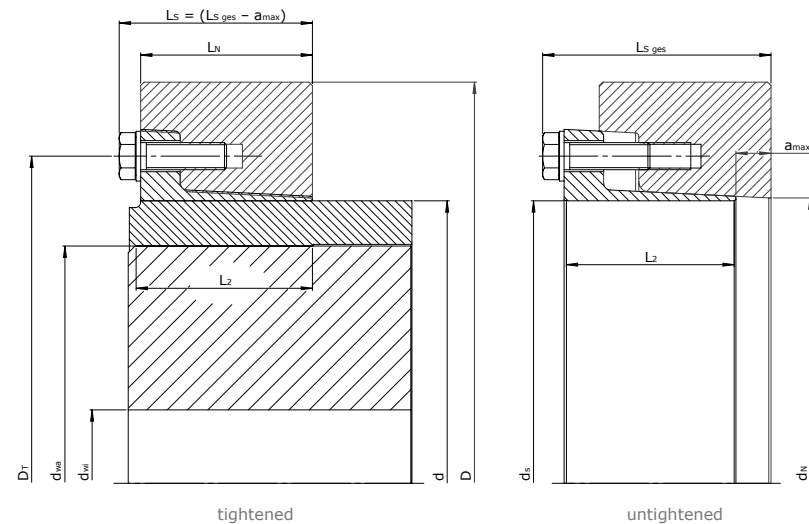
↓ GRÖßEN 900-950

Size	Maximum torque * T_{Kmax} [kNm]	Maximum axial load ** F_{ax} [kN]	Shaft diameter			Dimensions							Weight m [kg]	Bolts		
			d	d _{wa}	d _{wi}	a _{max}	D	d _N	d _s	L ₂	L _N	L _{S ges}		D _T	S	n
900 - 700	7146	20018	900	700	210	53,4	1294	915	900	322	325	406,9	1752	1029	M36	40
900 - 720	7603	20705		720	216											
900 - 730	7837	21050		730	219											
900 - 740	8074	21395		740	222											
900 - 750	8316	21741		750	225											
900 - 760	8556	22088		760	228											
950 - 750	8314	21737	950	750	225	55,9	1359	965	950	326	329	413,4	1936	1080	M36	42
950 - 770	8807	22427		770	231											
950 - 780	9059	22772		780	234											
950 - 790	9314	23120		790	237											
950 - 800	9574	23466		800	240											
950 - 820	10038	24004		820	246											
950 - 750	8566	22395	950	750	380	55,90	1396	965	950	356	359	443,4	2337	1099	M36	42
950 - 770	9078	23117		770	390											
950 - 780	9340	23479		780	395											
950 - 790	9605	23842		790	400											

* Maximum transmissible torque T_{Kmax} only valid with axial load $F_{ax} = 0$

** Maximum transmissible axial load F_{ax} only valid with torque $T_{Kmax} = 0$

CENTA-SCS LONG VERSION



PERMISSIBLE LOADS AND DIMENSIONS

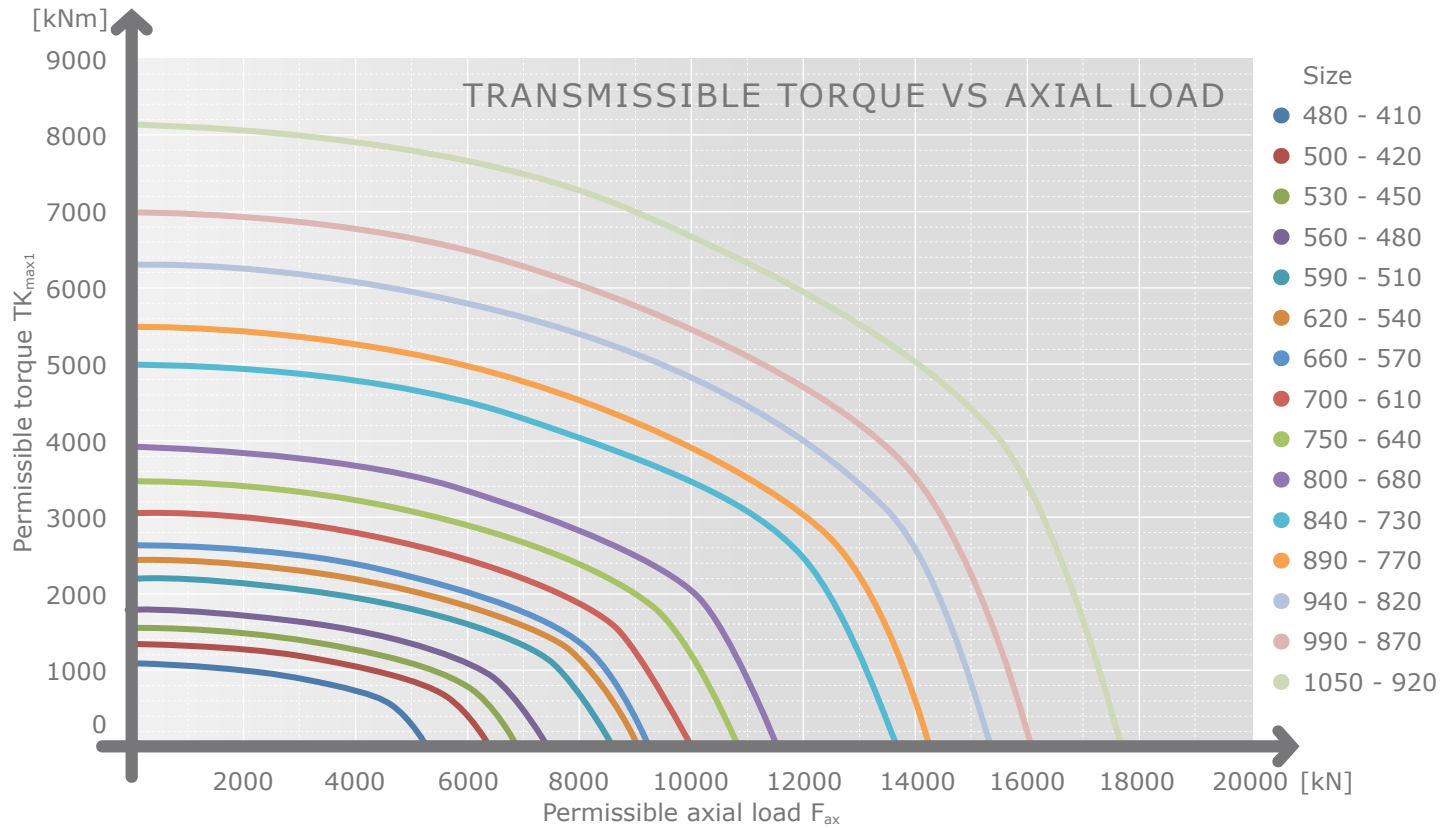
↓ GRÖßEN 950-1050

Size	Maximum torque * T_{Kmax} [kNm]	Maximum axial load ** F_{ax} [kN]	Shaft diameter			a_{max}	D	Dimensions						Weight m [kg]	Bolts		
			d	d_{wa}	d_{wi}			d_N	d_s	L_2	L_N	$L_{S ges}$	D_T		S	n	
950 - 750	8551	22356	950	750	380	54,35	1371	961	950	372	375	457,9	2285	1088	M36	42	
950 - 770	9064	23082		770	390												
950 - 780	9327	23447		780	395												
950 - 790	9594	23812		790	400												
1000 - 800	9617	23571	1000	800	240	56,8	1420	1015	1000	344	347	432,3	2197	1137	M36	44	
1000 - 820	10119	24198		820	246												
1000 - 830	10393	24554		830	249												
1000 - 840	10671	24910		840	252												
1000 - 850	10953	25266		850	255												
1000 - 860	11239	25624		860	258												
1050 - 850	11261	25979	1050	850	255	55,9	1481	1065	1050	383	386	470,4	2617	1188	M36	46	
1050 - 870	11857	26723		870	261												
1050 - 880	12161	27097		880	264												
1050 - 890	12469	27470		890	267												
1050 - 900	12781	27845		900	270												
1050 - 920	13417	28596		920	276												

* Maximum transmissible torque T_{Kmax} only valid with axial load $F_{ax} = 0$

** Maximum transmissible axial load F_{ax} only valid with torque $T_{Kmax} = 0$

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Rev. CENTA-SCS-EN-02-17

1. This catalog supersedes previous editions.

This catalog shows the extent of our coupling range at the time of printing. This program is still being extended with further sizes and series. Any changes due to technological progress are reserved.

We reserve the right to amend any dimensions or detail specified or illustrated in this publication without notice and without incurring any obligation to provide such modification to such couplings previously delivered. Please ask for an application drawing and current data before making a detailed coupling selection.

2. We would like to draw your attention to the need of preventing accidents or injury. No safety guards are included in our supply.

3. TRADEMARKS

CENTA, the CENTA logo, Centacone, CENTADISC, CENTAFIT, Centaflex, CENTALINK, Centalock, Centaloc, Centamax, Centastart, CENTAX and HYFLEX are registered trademarks of CENTA Antriebe Kirschey GmbH in Germany and other countries.

Other product and company names mentioned herein may be trademarks of their respective companies.

4. Torsional responsibility

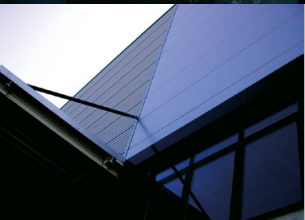
The responsibility for ensuring the torsional vibration compatibility of the complete drive train, rests with the final assembler. As a component supplier CENTA is not responsible for such calculations, and cannot accept any liability for gear noise/-damage or coupling damage caused by torsional vibrations.

CENTA recommends that a torsional vibration analysis (TVA) is carried out on the complete drive train prior to start up of the machinery. In general torsional vibration analysis can be undertaken by engine manufacturers, consultants or classification societies. CENTA can assist with such calculations using broad experience in coupling applications and torsional vibration analysis.

5. Copyright to this technical dokument is held by CENTA Antriebe Kirschey GmbH.

6. The dimensions on the flywheel side of the couplings are based on the specifications given by the purchaser. The responsibility for ensuring dimensional compatibility rests with the assembler of the drive train. CENTA cannot accept liability for interference between the coupling and the flywheel or gearbox or for damage caused by such interference.

7. All technical data in this catalog are according to the metric SI system. All dimensions are in mm. All hub dimensions (N , N_1 and N_2) may vary, depending on the required finished bore. All dimensions for masses (m), inertias (J) and centres of gravity (S) refer to the maximum bore diameter.



CENTA is the leading producer of flexible couplings for rail, industrial, marine and power generating applications. Worldwide.

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