



CENTAMAX

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CENTAMAX

ROBUST. FOR TORSIONALLY ACTIVE DRIVES.

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THE CENTAMAX COUPLING SERIES AT A GLANCE

Being a robust coupling with high torsional flexibility, CENTAMAX is the best choice for a safe resonance-free operation of drives susceptible to torsional vibration.

The torsional elasticity of this steady selling design shifts critical resonances below operation speed. The drive thus is subject to minor continuous vibratory torques, protecting coupled units.

The CENTAMAX convinces by efficient ventilation: the high thermal capacity (HTC) design features a superior allowable power loss compared to conventional couplings. This not only ensures a long lifetime, but also the use of smaller cost effective coupling sizes in many cases.

Features

Robust

High flexibility with linear characteristics

High allowable power loss

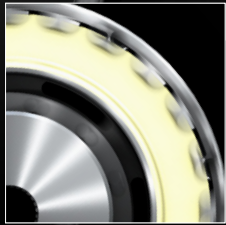
Available with fail safe device

Areas of Application



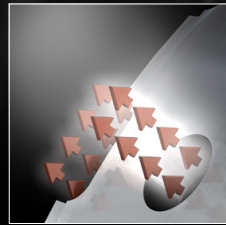
torque range	0.1 to 45 kNm
elastic material	NR/Si/CENTALAN HT
temperature range	NR -45° to +80°C Si -45° to +120°C
	CENTALAN HT -25° to +100°C, short term +120°C

CENTAMAX SYSTEM



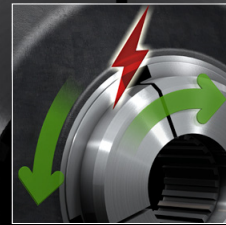
TORSIONAL ELASTICITY

The rubber elements for the CENTAMAX are available in different degrees of Shore hardness. This enables the torsional flexibility of the couplings to be adapted with utmost variability to the specific application. Torsional vibrations and impacts are reliably dampened and resonances shifted to uncritical ranges.



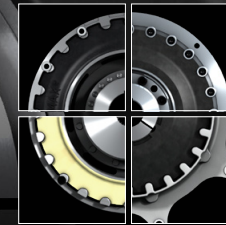
VENTILATION

All CENTAMAX couplings are effectively ventilated. The HTC-coupling type features a superior allowable power loss compared to conventional couplings.



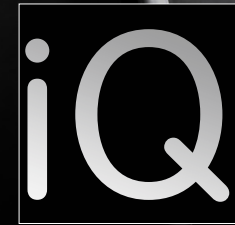
PROTECTION

It's better to bend than to break: upon extreme load by mal-synchronisation or in case of short-circuits the coupling slips through. This protects engine and coupled units from overload.



ASSEMBLY

Many couplings of the CENTAMAX Series are available as plug-in versions for axial assembly offering a minimum mounting effort. The hubs can be customized to any kind of mounting and application condition.



QUALITY

When the going gets tough, quality is priceless. With an exemplary Quality Management, CENTA ensures products that withstand the roughest assignments. CENTA's coupling systems are more than the sum of their parts. CENTA entertains the vision of intelligent products that meet the highest requirements in terms of design and quality.

CENTAMAX

COUPLING COMPONENTS

CENTAMAX COMPONENTS

RUBBER ELEMENTS

The CENTAMAX rubber elements are made of high quality natural rubber or silicone - for high ambient temperatures.

Our synthetical elastomer CENTALAN HT (high temperature) material is developed to meet the dynamic characteristics of natural rubber mixtures. With CENTALAN HT applications subject to operation in critical high temperature can be operated at ease. Cost effective silicone elements can be substituted. This new development ensures effective resistance to UV-light, ozone and oxygen as well as chemicals, steam and hot water. Longer operation times and life cycles are possible due to the improved aging resistance of the elastomer. Typical areas of applications are encapsulated drives subject to high temperatures.

Temperature range

NR -45° to +80°C

Si -45° to +120°C

CENTALAN HT -25° to +100°C, short termed +120°C



CENTAMAX COMPONENTS

HUBS

Are offered to meet all traditional connections the hubs can be customized to any kind of application. The CENTALOC clamping has been developed to prevent wear and frictional corrosion on not backlashfree hub to shaft connections. This clamping system is available in various sizes for the CENTAMAX couplings type S. Coupling type G is available with a taper lock bush for easy and fast assembly.

FLANGES

The CENTAMAX is an optimum for flange connection to flywheels or flange housings of Diesel engines. The couplings are available for SAE and non-standardized flywheels.

FAIL SAFE DEVICE

CENTAMAX couplings are optionally available with an additional fail-safe device. In case of damage to the rubber elements, the fail-safe device prevents disconnection of any coupled units. In order to ensure fulfilling the emergency operation requirements which numerous classification societies demand for marine single engine main propulsions the torque of the system has to be reduced in case of damage.



CENTAMAX

TYPES



Type S

Transmission of the torque to the rubber element by the means of an interlocked outer part. Very reliable design for the transmission of high torques with compact dimensioning. Available with CENTALAN HT elastomer and for flywheel-flange or shaft-shaft connection as well as with CENTALOC clamping system. Various special designs can be met on request. Plug-in version for easy assembly.



Type G

Developed for torsionally active generator drives. Transmission of the torque to the rubber element by the means of an interlocked outer part. Available with CENTALAN HT elastomer. Equipped with a taper lock bush for easy and fast assembly. Generator connections according DIN 6281. Plug-in version for easy assembly.



Type HTC

Optimized for even higher allowable power loss. Transmission of the torque by the means of an interlocked outer part to a lean and split rubber element. For the transmission of high torques. Available with CENTALAN HT elastomer. Allows for the use of small couplings for many applications and plug-in assembly.



Type B

Specially designed for free mounted drives. Backlash-free torque transmission via a steel flange onto a precompressed rubber element. For the transmission of medium torques. Available with CENTALAN HT elastomer and as flywheel-shaft or shaft-shaft connections. Radial exchange of the elements without the need to remove coupled units is possible.

CENTAMAX-S

AT A GLANCE



Robust coupling with high torsional flexibility. For resonance-free operation of drives susceptible to torsional vibration.

Torque transmission via a toothed outer ring onto a rubber element. Highly reliable and rupture-proof design for the transmission of high torques in a compact design.

Characterised by high torsional flexibility with linear characteristic. Dampens torsional vibrations and shocks and compensates axial, radial and angular misalignments. Effectively ventilated and with high allowable energy loss. In silicon design, additionally oil resistant and suitable for higher temperatures.

Blind assembly for minimum axial mounting effort. With flywheel connections acc. to SAE. Also available for non-standard flywheels.

Features

- High torsional flexibility
- Compact dimensioning
- Effective ventilation
- High allowable power loss

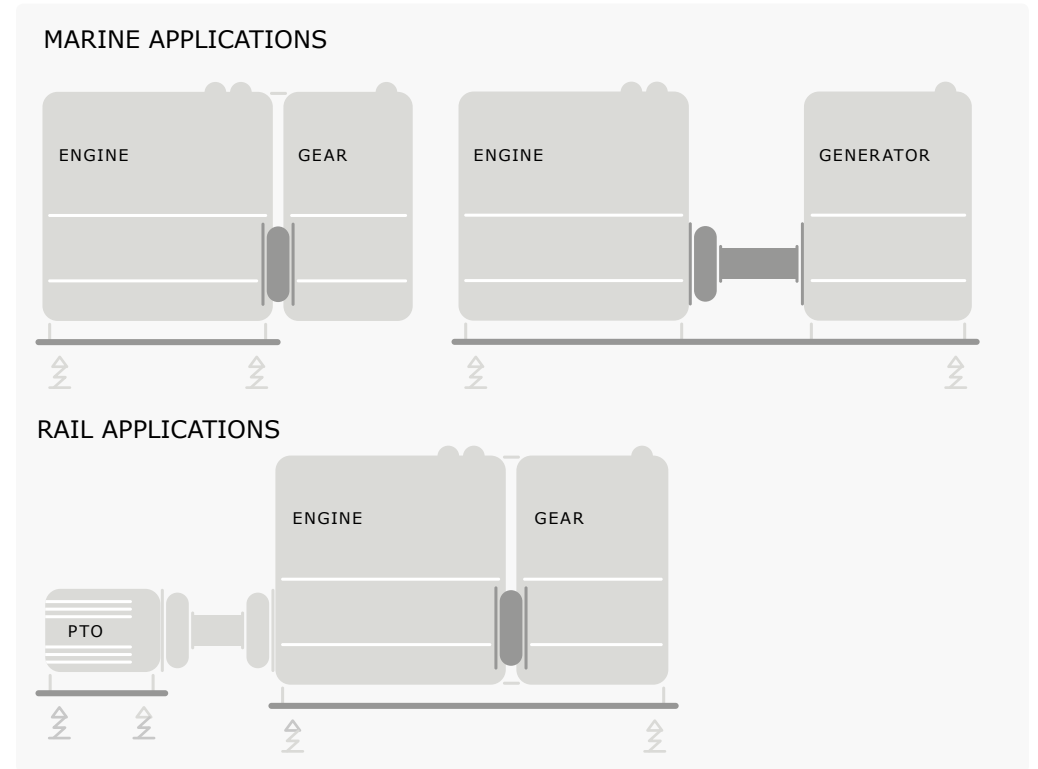
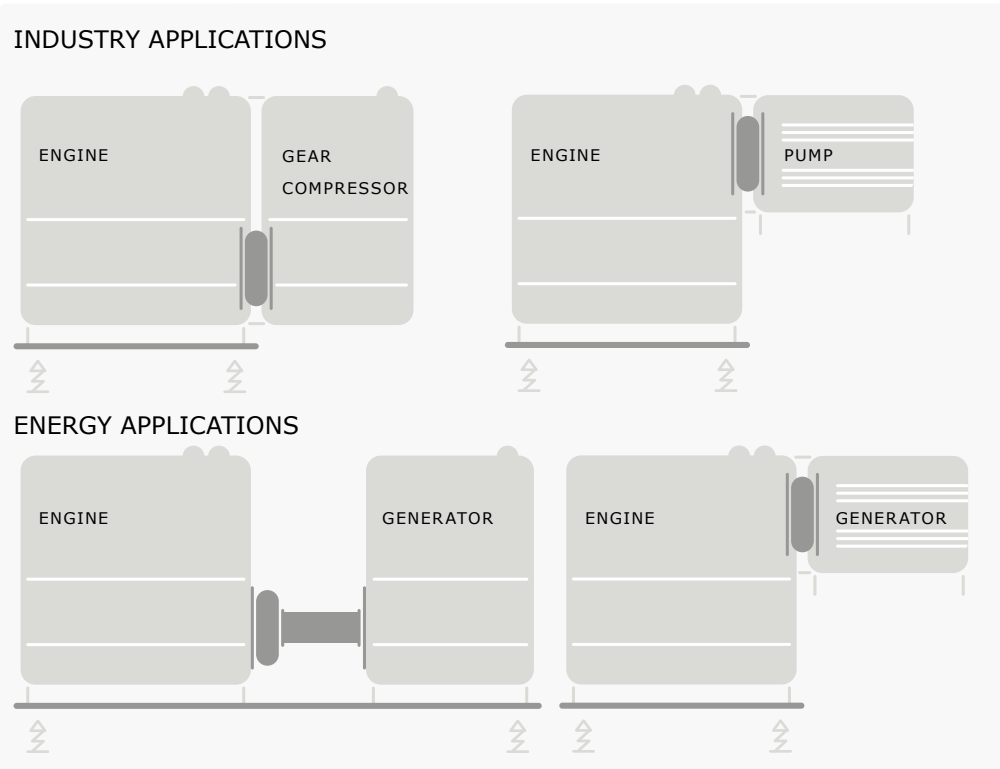
Areas of Application



torque range	0.1 to 24 kNm
elastic material	NR/Si/CENTALAN HT
temperature range	NR -45° to +80°C Si -45° to +120°C
	CENTALAN HT -25° to +100°C, short term +120°C

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APPLICATIONS



CENTAMAX-S

TECHNICAL DATA

Questions on product selection?

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

CENTAMAX-S

NR



TECHNICAL DATA		↓ SIZES 120-1800			→ SIZES 2400-5000		→ SIZES 7000-12000		→ SIZE 18000		
1	2	3	4		5	6		7	8	9	
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE/ø
120	35	100	150	250	40	30	35	150	0,52	5000	6,5
	40	110	165	280	44	35	40	200	0,52		
	50	120	180	300	48	55	65	300	1,05	4500	7,5
	60	140	210	350	56	60	70	500	1,10	4500	8
	70	150	225	400	60	65	75	800	1,15		
240	50	250	375	500	100	75	95	925	1,05	4000	8
	60	300	450	600	120	85	110	1400	1,10	3600	10
	70	350	525	750	140	95	125	2250	1,15	3500	11,5
400	50	400	600	800	160	130	215	1600	1,05		
	60	500	750	1000	200	140	230	2500	1,10	3600	10
	70	550	825	1100	220	150	250	4000	1,15		
800	50	700	1050	1400	280	210	380	2800	1,05	3600	10
	60	850	1275	1700	340	215	395	4200	1,10	3500	11,5
	70	950	1425	2000	380	225	405	6800	1,15	3000	14
1200	50	1000	1500	2000	400	230	465	4500	1,05	3500	11,5
	60	1200	1800	2400	480	240	480	7000	1,10	3000	14
	70	1300	1950	3000	520	245	495	11700	1,15		
1600	50	1450	2175	2900	580	250	565	6000	1,05	3200	11,5
	60	1800	2700	3600	720	260	585	9000	1,10		
	70	2000	3000	4000	800	270	605	13500	1,15	3000	14
1800	50	1800	2700	3600	720	265	660	7600	1,05	3200	11,5
	60	2000	3000	5000	800	275	685	11500	1,10	3000	14
	70	2500	3750	6300	1000	285	705	17500	1,15	3000	475

Standard sizes in bold

CENTAMAX-S

NR



TECHNICAL DATA		↓ SIZES 2400-5000			→ SIZES 120-1800			→ SIZE 7000-12000		→ SIZE 18000	
1	2	3	4		5	6		7	8	9	
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE/ø
2400	50	2000	3000	4000	800	285	775	10000	1,05	3000	14
	60	2500	3750	5000	1000	295	800	15000	1,10	3000	18
	70	2800	4200	6000	1120	305	830	22500	1,15	2500	475
2600	50	2500	3750	5000	1000	315	930	9500	1,05	3000	14
	60	2700	4050	6000	1080	325	965	13500	1,10	2500	16
	70	3000	4500	7000	1200	335	995	22000	1,15	2300	18
2800	50	2800	4200	6000	1120	265	570	25000	1,05	3000	14
	60	3000	4500	7500	1200	275	590	37500	1,10	2500	18
	70	3200	4800	8000	1280	285	610	63000	1,15	3000	475
3500	50	3200	4800	6500	1280	350	1080	16000	1,05	3000	14
	60	3500	5250	8000	1400	360	1120	24000	1,10	3000	18
	70	3800	5700	8500	1520	375	1155	38000	1,15	2500	475
4000	50	4000	6000	8000	1600	320	800	34000	1,05	3000	14
	60	4500	6750	11000	1800	330	830	50000	1,10	3000	18
	70	5000	7500	12500	2000	340	855	80000	1,15	3000	18
	72	5500	8250	12500	2200	365	915	112000	1,25	3000	18
5000	75	6000	9000	12500	2400	400	1000	168000	1,40	2500	475
	50	4500	6750	9000	1800	370	925	17000	1,05	3000	14
	60	5000	7500	10000	2000	385	955	27000	1,10	3000	18
	70	6000	9000	12000	2400	395	990	45000	1,15	3000	18
	72	6500	9750	12000	2600	420	1050	57000	1,25	3000	18
	75	7000	10500	12000	2800	460	1150	90000	1,40	2500	475

Standard sizes in bold

CENTAMAX-S

NR



TECHNICAL DATA		↓ SIZES 7000-12000			→ SIZE 120-1800			→ SIZES 2400-5000			→ SIZE 18000	
1	2	3	4		5	6		7	8	9		
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE/ø	
7000	50	6300	9450	12600	2520	500	1590	28500	1,05	2500	18	
	60	7000	10500	14000	2800	520	1645	45000	1,10			
	70	7900	11850	15800	3160	535	1700	67000	1,15			
	72	8700	13050	15800	3480	570	1815	95000	1,25			
	75	9500	14250	15800	3800	645	2050	160000	1,40			
8000	50	8000	12000	16000	3200	480	1390	60000	1,05	2500	18	
	60	9000	13500	22000	3600	495	1440	80000	1,10			
	70	10000	15000	25000	4000	515	1485	130000	1,15			
	72	11000	16500	25000	4400	545	1580	182000	1,25			
	75	12000	18000	25000	4800	615	1785	273000	1,40			
9000	50	8000	12000	16000	3200	400	1090	51000	1,05	2500	18	
	60	9000	13500	22000	3600	415	1130	68000	1,10			
	70	10000	15000	25000	4000	430	1165	110000	1,15			
	72	11000	16500	25000	4400	455	1240	155000	1,25			
	75	12000	18000	25000	4800	515	1400	232000	1,40			
10000	72	13800	20700	25000	5520	560	1780	195000	1,25	2500	18	
	75	15000	22500	25000	6000	610	1940	330000	1,40	2300	21	
										2000	24	
12000	50	12500	18750	25000	5000	620	2400	79000	1,05	2300	21	
	60	14000	21000	28000	5600	640	2475	115000	1,10			
	70	15000	22500	30000	6000	665	2575	188000	1,15			
	72	16500	24750	30000	6600	705	2730	263000	1,25			

Standard sizes in bold

CENTAMAX-S

NR



TECHNICAL DATA		↓ SIZE 18000			→ SIZES 120-1800		→ SIZES 2400-5000		→ SIZES 7000-12000		
1	2	3	4		5	6		7	8	9	
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE/ø
18000	50	16000	24000	32000	6400	600	2250	115000	1,05	2300 2000	21 24
	60	18000	27000	36000	7200	620	2330	170000	1,10		
	70	20000	30000	40000	8000	640	2410	282000	1,15		
	72	22000	33000	40000	8800	685	2570	395000	1,25		
	75	24000	36000	40000	9600	770	2890	590000	1,40		
	80	24000	36000	40000	9600	770	2890	800000	1,40		

Standard sizes in bold

CENTAMAX-S

NR

DOUBLE ELEMENT COUPLINGS



TECHNICAL DATA

↓ SIZES 4000-18000

1	2	3	4		5	6		7	8	9			
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE/ø		
4000	50	8000	12000	16000	3200	640	1600	68000	1,05	2300	14		
	60	9000	13500	22000	3600	660	1655	100000	1,10				
	70	10000	15000	25000	4000	685	1710	160000	1,15				
	72	11000	16500	25000	4400	730	1825	224000	1,25				
	75	12000	18000	25000	4800	800	2000	336000	1,40			2500	18
8000	50	16000	24000	32000	6400	960	2785	120000	1,05	2300	18		
	60	18000	27000	44000	7200	995	2880	160000	1,10				
	70	20000	30000	50000	8000	1025	2980	260000	1,15			2300	21
	72	22000	33000	50000	8800	1090	3160	364000	1,25			2000	24
	75	24000	36000	50000	9600	1235	3580	546000	1,40				
10000	72	27600	41400	50000	11040	1120	3560	390000	1,25	2300	18		
										2300	21		
	75	30000	45000	50000	12000	1220	3880	660000	1,40	2000	24		
12000	50	25000	37500	50000	10000	1240	4800	158000	1,05	2000	21		
	60	28000	42000	56000	11200	1280	4950	230000	1,10				
	70	30000	45000	60000	12000	1330	5150	376000	1,15			2000	24
	72	33000	49500	60000	13200	1410	5460	526000	1,25				
18000	50	32000	48000	60000	12800	1200	4440	230000	1,05	2000	21		
	60	36000	54000	60000	14400	1240	4595	340000	1,10				
	70	40000	60000	60000	16000	1285	4750	564000	1,15				
	72	44000	60000	60000	17600	1365	5280	790000	1,25			2000	24
	75	48000	60000	60000	19200	1540	5960	1180000	1,40				
	80	48000	60000	60000	19200	1540	5960	1600000	1,40				

CENTAMAX-S

SILIKON



TECHNICAL DATA			↓ SIZES 800-4000					→ SIZES 5000-18000							
1 Size	2 Rubber quality [Shore A]	3 Nominal torque T_{KN} [Nm]	4 Maximum torque		5 Continuous vibratory torque T_{KV} [Nm]	6 Permissible power loss		7 Dynamic torsional stiffness					8 Relative damping ψ	9 Speed n_{max} [min ⁻¹]	Flange size SAE/ø
			T_{Kmax1} [Nm]	T_{Kmax} [Nm]		P_{KV} [W]	P_{KVZ} [W]	C_{Tdyn} [Nm/rad]							
								10% T_{KN}	25% T_{KN}	50% T_{KN}	75% T_{KN}	100% T_{KN}			
800	50	700	1050	1400	280	315	565	2000	2100	2500	3100	4400	1,20	3600	10
	60	850	1275	1700	340	325	585	3000	3200	3600	4800	6700	1,25	3500	11,5
1200	50	1000	1500	2000	400	345	695	3900	4100	4500	5600	7800	1,20	3500	11,5
	60	1200	1800	2400	480	355	720	5500	5800	6700	9100	12500	1,25	3000	14
1600	50	1450	2175	2900	580	375	845	4900	5200	5700	7000	9300	1,20	3200	11,5
	60	1800	2700	3600	720	390	875	6500	6900	7800	10200	13800	1,25	3000	14
1800	50	1800	2700	3600	720	415	1035	6300	6600	7300	9100	12600	1,20	3200	11,5
	60	2000	3000	5000	800	430	1070	8900	9400	11000	14000	19500	1,25	3000	14
	70	2500	3750	6300	1000	445	1105	11200	12800	16000	24000	32500	1,25	3000	475
2400	50	2000	3000	4000	800	430	1170	8000	8400	9000	11300	15300	1,20	3000	14
	60	2500	3750	5000	1000	445	1210	10800	11300	13500	18200	25000	1,25	3000	475
2600	50	2500	3750	5000	1000	475	1400	8500	9300	9500	12500	18800	1,20	3000	14
	60	2700	4050	5400	1080	490	1450	12500	13000	15400	21000	30400	1,25	2300	18
2800	50	2800	4200	5600	1120	400	860	21000	23000	25000	32500	42500	1,20	3000	14
	60	3000	4500	6000	1200	415	890	30300	31800	37500	50600	69500	1,25	3000	475
3500	50	3200	4800	6400	1280	525	1615	14000	14500	15600	20000	27800	1,20	3000	14
	60	3500	5250	7000	1400	545	1670	18500	19300	22800	30000	40500	1,25	2300	18
4000	50	4000	6000	8000	1600	480	1200	29000	31500	37000	47500	67000	1,20	3000	14
	60	4500	6750	9000	1800	495	1240	39500	41000	48500	65500	94000	1,25	2300	18

Standard sizes in bold

CENTAMAX-S

SILIKON



TECHNICAL DATA			↓ SIZES 5000-18000					→ SIZES 800-4000							
1 Size	2 Rubber quality [Shore A]	3 Nominal torque T_{KN} [Nm]	4 Maximum torque		5 Continuous vibratory torque T_{KW} [Nm]	6 Permissible power loss		7 Dynamic torsional stiffness					8 Relative damping ψ	9 Speed n_{max} [min ⁻¹]	Flange size SAE/ø
			T_{Kmax1} [Nm]	T_{Kmax} [Nm]		P_{KV} [W]	P_{KVZ} [W]	C_{Tdyn} [Nm/rad]							
								10% T_{KN}	25% T_{KN}	50% T_{KN}	75% T_{KN}	100% T_{KN}			
5000	50	5000	7500	10000	2000	555	1390	13100	13800	15500	22700	36000	1,20	3000	14
	60	5500	8250	11000	2200	575	1440	17500	19000	23500	33500	49000	1,25	3000	475
	70	6000	9000	12000	2400	595	1485	31000	33500	44000	64000	92000	1,25	2500	18
7000	50	6300	9450	12600	2520	750	2385	23800	25500	28000	37500	56000	1,20	2500	18
	60	7000	10500	14000	2800	775	2470	32000	33000	40000	55000	77000	1,25	2500	18
8000	50	8000	12000	16000	3200	720	2090	51000	54000	60000	78000	105000	1,20	2500	18
	60	9000	13500	18000	3600	745	2165	60000	62000	75000	103500	147000	1,25	2300	21
9000	50	8000	12000	16000	3200	600	1630	49000	52000	62000	85000	125000	1,20	2500	18
	60	9000	13500	18000	3600	620	1685	54400	56500	68000	95000	132000	1,25	2300	21
10000	50	10000	15000	20000	4000	750	2385	50500	53500	59500	77400	104000	1,20	2500	18
	60	11000	16500	22000	4400	775	2460	69000	72000	86000	122000	185000	1,25	2300	21
	70	12500	18750	25000	5000	800	2542	100000	106000	140000	200000	284000	1,25	2000	24
12000	50	12500	18750	25000	5000	930	3600	60400	71000	79000	103000	138000	1,20	2300	21
	60	14000	21000	28000	5600	960	3715	92000	95500	115000	160000	220000	1,25	2000	24
18000	50	16000	24000	32000	6400	900	3330	98000	103500	115000	150000	200000	1,20	2300	21
	60	18000	27000	36000	7200	930	3445	136000	141000	170000	245000	330000	1,25	2000	24

Standard sizes in bold

CENTAMAX-S

CENTALAN HT



TECHNICAL DATA

↓ **SIZES 800-3500**

→ SIZES 4000-18000

1	2	3	4		5	6		7*	8	9	
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE/ø
800	50	700	1050	1400	280	265	470	2800	1,00	3600	10
	60	850	1275	1700	340	275	485	4200	1,10	3500	11,5
	70	950	1425	2000	380	285	505	6800	1,10	3000	14
1200	50	1000	1500	2000	400	290	585	4500	1,00	3500	11,5
	60	1200	1800	2400	480	300	605	7000	1,10	3000	14
	70	1300	1950	3000	520	310	625	11700	1,10	3000	14
1600	50	1450	2175	2900	580	315	710	6000	1,00	3200	11,5
	60	1800	2700	3600	720	325	735	9000	1,10	3000	14
1800	50	1800	2700	3600	720	330	820	7600	1,00	3200	11,5
	60	2000	3000	5000	800	340	850	11500	1,10	3000	14
	70	2500	3750	6300	1000	355	875	17500	1,10	3000	475
2400	50	2000	3000	4000	800	355	965	10000	1,00	3000	14
	60	2500	3750	5000	1000	365	1000	15000	1,10	3000	475
	70	2800	4200	6000	1120	380	1035	22500	1,10	2500	18
2600	50	2500	3750	5000	1000	395	1165	9500	1,00	3000	14
	60	2700	4050	6000	1080	410	1205	13500	1,10	2500	16
2800	50	2800	4200	6000	1120	330	710	25000	1,00	3000	14
	60	3000	4500	7500	1200	340	735	37500	1,10	2500	18
	70	3200	4800	8000	1280	355	760	63000	1,10	3000	475
3500	50	3200	4800	6500	1280	440	1355	16000	1,00	3000	14
	60	3500	5250	8000	1400	455	1405	24000	1,10	3000	475
	70	3800	5700	8500	1520	470	1450	38000	1,10	2500	18

Standard sizes in bold
* conditionally

CENTAMAX-S

CENTALAN HT

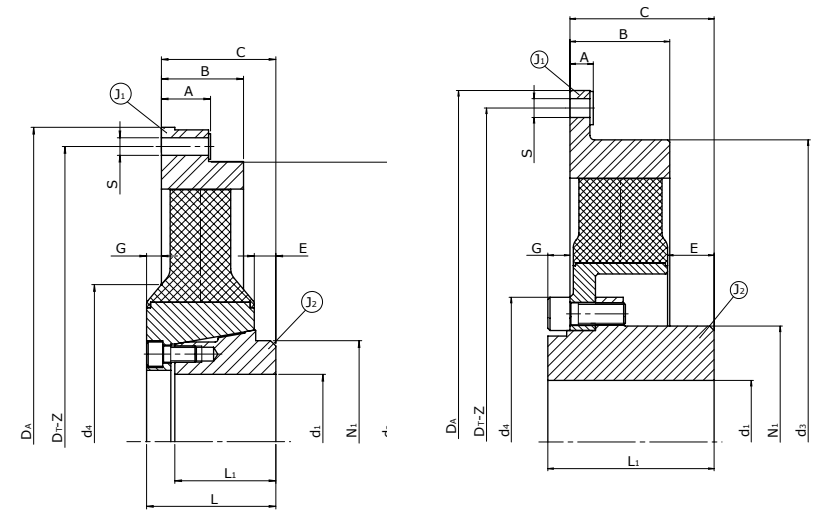


TECHNICAL DATA		↓ SIZES 4000-18000			→ SIZES 800-3500						
1	2	3	4		5	6*		7*	8	9	
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE/ø
4000	50	4000	6000	8000	1600	400	1000	34000	1,00	3000	14
	60	4500	6750	11000	1800	415	1035	50000	1,10	3000	475
	70	5000	7500	12500	2000	430	1070	80000	1,10	2500	18
5000	50	4500	6750	9000	1800	465	1165	17000	1,00	3000	14
	60	5000	7500	10000	2000	480	1205	27000	1,10	3000	475
	70	6000	9000	12000	2400	500	1245	45000	1,10	2500	18
7000	50	6300	9450	12600	2520	625	1990	28500	1,00	2500	18
	60	7000	10500	14000	2800	645	2060	45000	1,10	2500	18
	70	7900	11850	15800	3160	670	2130	67000	1,10	2500	18
8000	50	8000	12000	16000	3200	600	1740	60000	1,00	2500	18
	60	9000	13500	22000	3600	620	1800	80000	1,10	2500	21
	70	10000	15000	25000	4000	640	1860	130000	1,10	2000	24
9000	50	8000	12000	16000	3200	500	1360	51000	1,00	2500	18
	60	9000	13500	22000	3600	520	1410	68000	1,10	2300	21
18000	50	16000	24000	32000	6400	750	2775	115000	1,00	2300	21
	60	18000	27000	36000	7200	775	2870	170000	1,10	2000	24
	70	20000	30000	40000	8000	805	2970	282000	1,10	2000	24

Standard sizes in bold
* conditionally

CENTAMAX-S

TYPE SA



Size 120-2400

Size 2600-18000

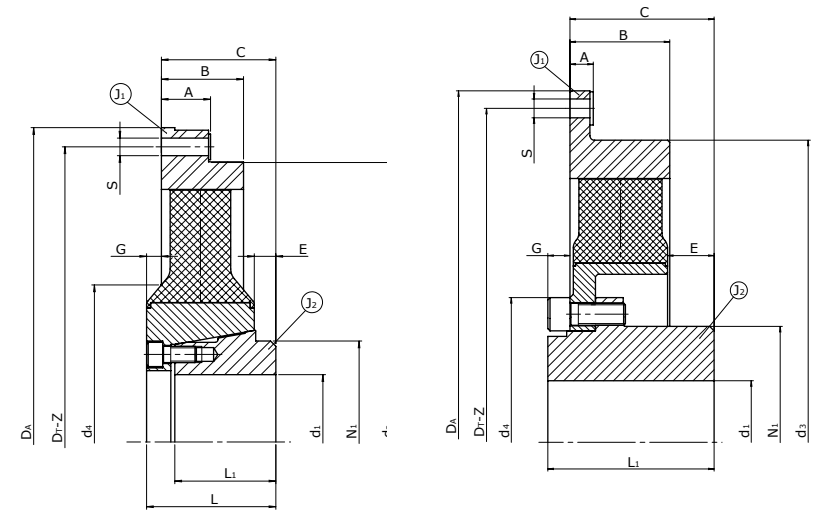
DIMENSIONS			↓ SIZES 120-2800										→ SIZES 3500-18000									
Size	Dimensions											Flange dimensions				Moments of inertia and masses						
	A	B	C	d ₁ max	d ₃ *	d ₄	E	G	L	L ₁	N ₁	SAE/Ø	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂ [kgm ²]	m ₁ [kg]	m ₂ [kg]	m _{total} [kg]	
120	5	43	64	42	-	-	20	-	56	42	67	6,5	215,9	200,0	6x60°	9	0,010	0,002	1,1	1,3	2,4	
	4	43	64	42	-	-	20	-	56	42	67	7,5	241,3	222,3	6x60°	9	0,013	0,002	1,3	1,3	2,6	
	6,6	43	64	42	-	-	20	-	56	42	67	8	263,5	244,5	6x60°	11	0,013	0,002	1,3	1,3	2,6	
240	27,2	46	75	50	-	50	26	-	75	60	73	8	263,5	244,5	6x60°	11	0,018	0,004	1,6	2,5	4,1	
	10	46	75	50	-	50	26	-	75	60	73	10	314,3	295,3	8x45°	10,5	0,026	0,004	1,9	2,5	4,4	
	10	46	75	50	225	-	27	-	75	60	73	11,5	352,4	333,4	8x45°	11	0,039	0,004	2,4	2,5	4,9	
400	26,2	45	75	6	-	131	25	5	80	65	90	10	314,3	295,3	8x45°	10,5	0,056	0,023	2,9	6,6	9,5	
800	41,2	50	82	70	316	143	18	2	84	66	107	10	314,3	295,3	8x45°	10,5	0,056	0,023	2,9	6,6	9,5	
	27,2	39	71	70	351	180	18	13	84	66	107	11,5	352,4	333,4	8x45°	11	0,058	0,021	2,8	6,6	9,4	
	11,5	46	74	70	466,7	170	18	10	84	66	107	14	466,7	438,2	8x45°	13	0,134	0,021	4,6	6,6	11,2	
1200	27,2	39	65	70	351	185	18	8	84	66	107	11,5	352,4	333,4	8x45°	11	0,065	0,039	3,1	9,2	12,3	
	11,5	46	74	70	466,7	192	18	10	84	66	107	14	466,7	438,2	8x45°	13	0,137	0,039	4,7	9,2	13,9	
	14,2	68	113	105	418	-	24,5	-	106	85	150	11,5	352,4	333,4	8x45°	11	0,228	0,086	6,9	13,6	20,5	
1600	36,5	61	93	105	464	223,1	24,5	13	106	85	150	14	466,7	438,2	8x45°	13	0,223	0,086	6,1	13,6	19,7	
1800	27,2	64	92	79	350,4	225	18	10	104	75	122	11,5	352,4	333,4	8x45°	10,5	0,099	0,068	4,6	13,8	18,4	
	12,5	78	100	79	466,7	181	18	4	104	75	122	14	466,7	438,2	8x45°	13	0,149	0,070	6,2	13,8	20,0	
	23	83,5	111,5	79	-	-	18	-	104	75	122	475	475,0	450,0	12x30°	11	0,803	0,069	21,9	13,8	35,7	
2400	36,5	61	85	105	263,7	248	16	11	96	75	150	14	466,7	438,2	8x45°	13	0,234	0,137	6,3	17,9	24,2	
	13,5	61	83	105	571,5	256	16	13	96	75	150	18	571,5	542,9	6x60°	17	0,422	0,136	9,1	17,9	27,0	
	13,5	61	93	105	571,5	256	26	13	96	85	150	18	571,5	542,9	6x60°	17	0,422	0,137	9,1	18,0	27,1	
2600	32,5	70	96	110	465	255	20	8	-	100	162	14	466,7	438,2	8x45°	13	0,278	0,195	6,3	20,3	26,6	
	17,5	70	96	110	465	255	20	8	-	100	162	16	517,5	489,0	8x45°	13	0,445	0,195	9,3	20,3	29,6	
	17,5	70	96	110	465	255	20	8	-	100	162	18	571,5	542,9	12x30°	17	0,588	0,195	11,2	20,3	31,5	
2800	36,5	61	93	110	417	204	33	11	-	100	162	14	466,7	438,2	8x45°	13	0,209	0,200	5,2	19,3	24,5	
	13,5	61	93	110	417	204	33	11	-	100	162	18	571,5	542,9	6x60°	17	0,396	0,203	8,0	19,3	27,3	
	13,2	61	93	110	417	204	33	8	-	100	162	475	475,0	450,0	12x30°	11	0,219	0,203	5,4	19,3	24,7	

Standard sizes in bold

*Position of measure d₃ depends on coupling size

CENTAMAX-S

TYPE SA



Size 800–2400

Size 2800–18000

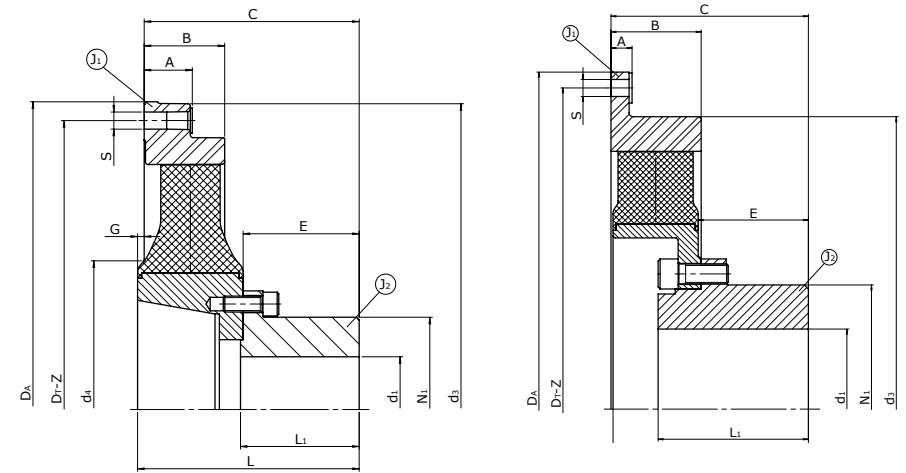
DIMENSIONS			↓ SIZES 3500-18000										→ SIZES 120-2800									
Size	Dimensions											Flange dimensions				Moments of inertia and masses						
	A	B	C	d ₁ max	d ₃ *	d ₄	E	G	L	L ₁	N ₁	SAE/Ø	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂ [kgm ²]	m ₁ [kg]	m ₂ [kg]	m _{total} [kg]	
3500	32,5	70	93	110	429	305	20	11	-	100	162	14	466,7	438,2	8x45°	13	0,312	0,218	7,2	21,4	28,6	
	71,2	85	96	110	-	290	11	4	100	100	162	475	475,0	450,0	12x30°	11	0,466	0,218	10,3	21,4	31,7	
	17,5	70	95	110	465	297	20	9	-	100	162	18	571,5	542,9	12x30°	17	0,615	0,218	12,3	21,4	33,7	
4000	32,5	70	109	140	429	260	42	16	-	125	218	14	466,7	438,2	8x45°	13	0,261	0,428	5,7	32,7	38,4	
	71,2	85	111	140	-	260	26	14	-	125	218	475	475,0	450,0	12x30°	11	0,422	0,428	8,8	32,7	41,5	
	17,5	70	109	140	465	260	42	16	-	125	218	18	571,5	542,9	12x30°	17	0,572	0,428	10,7	32,7	43,4	
5000	32,5	70	93	110	429	283	10	16	-	105	162	14	466,7	438,2	8x45°	13	0,313	0,234	7,3	23,0	30,3	
	71,2	85	101	110	-	290	10	8	-	105	162	475	475,0	450,0	12x30°	11	0,474	0,233	10,5	23,0	33,5	
	17,5	70	93	110	465	283	10	12	-	105	162	18	571,5	542,9	12x30°	17	0,624	0,235	12,2	23,0	35,2	
7000	51,5	80	123	140	523	324	40	2	-	125	218	18	571,5	542,9	12x30°	17	0,761	0,547	11,9	37,4	49,3	
	95	-	130	175	600	300	42	20	-	150	248	18	571,5	542,9	12x30°	17	1,049	1,032	14,1	52,3	66,4	
	21	90	130	175	584	300	42	20	-	150	248	21	673,1	641,4	12x30°	17	1,437	1,033	18,3	52,3	70,6	
8000	21	90	130	175	584	300	42	20	-	150	248	21	673,1	641,4	12x30°	17	1,437	1,033	18,3	52,3	70,6	
	53	80	125	170	517	300	42	23	-	150	248	18	571,5	542,9	12x30°	17	0,757	0,967	11,5	52,1	63,6	
	95	-	130	175	600	300	42	20	130	110	248	18	571,5	542,9	12x30°	17	1,000	1,335	13,3	55,7	69,0	
10000	21	90	130	175	584	300	42	20	-	110	248	21	673,1	641,4	12x30°	17	1,389	1,335	17,4	55,7	73,1	
	21	90	130	175	584	300	42	20	-	110	248	24	733,4	692,2	12x30°	19,5	1,755	1,401	20,2	61,9	82,1	
	141	-	200	170	680	300	65	18	-	200	248	21	673,1	641,4	12x30°	17	2,960	1,772	31,6	80,1	111,7	
12000	108	137	200	175	657	300	65	18	-	200	248	24	733,4	692,2	12x30°	19,5	4,318	1,772	43,0	79,6	122,6	
	141	-	200	175	680	300	65	18	-	200	248	21	673,1	641,4	24x15°	17	3,093	2,017	33,9	80,9	114,8	
	108,8	137	200	175	657	300	65	18	-	200	248	24	733,4	692,2	12x30°	19,5	4,460	2,017	45,4	80,8	126,2	

Standard sizes in bold

*Position of measure d3 depends on coupling size

CENTAMAX-S

TYPE SB



Size 800–2400

Size 2800–18000

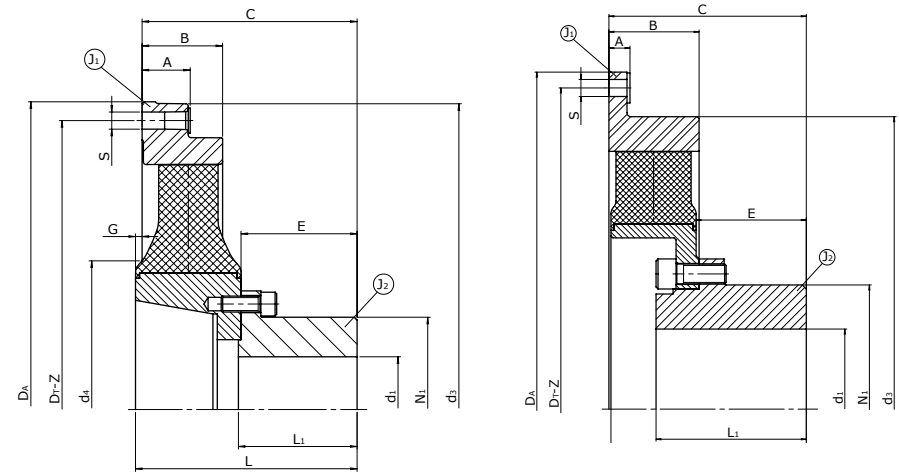
DIMENSIONS			↓ SIZES 240-3500										→ SIZES 4000-18000								
Size	Dimensions											Flange dimensions				Moments of inertia and masses					
	A	B	C	d ₁ max	d ₃ *	d ₄	E	G	L	L ₁	N ₁	SAE/Ø	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂	m ₁	m ₂ [kg]	m _{total}
240	27,2	46	113	45	262	-	58	-	106	60	66	8	263,5	244,5	6x60°	11	0,018	0,004	1,6	2,5	4,1
	10	46	113	45	225	-	58	-	106	60	66	10	314,3	295,3	8x45°	11	0,026	0,004	1,9	2,5	4,4
	10	46	113	45	225	-	58	-	106	60	66	11,5	352,4	333,4	8x45°	11	0,039	0,004	2,4	2,5	4,9
400	26,2	45	117	55	-	118,3	63	1	118	65	85	10	314,3	295,3	8x45°	10,5	0,038	0,011	2,3	4,4	6,7
	40,2	50	122	65	316	164	64	8	130	66	100	10	314,3	295,3	8x45°	11	0,056	0,024	2,9	6,8	9,7
800	27,2	39	117	65	351	180	64	13	130	66	100	11,5	352,4	333,4	8x45°	11	0,058	0,024	2,8	6,8	9,6
	11,5	46	117	65	317	183	64	13	130	66	100	14	466,7	438,2	8x45°	13	0,134	0,024	4,6	6,8	11,4
1200	27,2	39	113	65	351	178	64	6	130	66	100	11,5	352,4	333,4	8x45°	11	0,065	0,039	3,1	9,3	12,4
	11,5	46	120	65	463,7	193	64	10	130	66	100	14	466,7	438,2	8x45°	13	0,137	0,039	4,7	9,3	14,0
1600	14,2	68	175	100	418	-	88	-	169,5	90	140	11,5	352,4	333,4	8x45°	11	0,228	0,086	6,9	13,7	20,6
	36,5	61	168	100	463,7	187	88	1,5	169,5	90	140	14	466,7	438,2	8x45°	13	0,223	0,086	6,1	13,7	19,8
1800	27,2	64	162	79	320	225	88	12	174	90	120	11,5	352,4	333,4	8x45°	11	0,099	0,072	4,6	14,6	19,2
	12,5	78	162	79	320	225	88	12	174	90	120	14	466,7	438,2	8x45°	11	0,150	0,072	6,2	14,6	20,8
	23	83,5	181,5	79	-	-	88	-	174	90	120	475	475,0	450,0	12x30°	11	0,803	0,072	21,9	14,6	36,5
2400	36,5	61	163	100	463,7	226	88	5	168	90	140	14	466,7	438,2	8x45°	13	0,234	0,140	6,3	18,8	25,1
	13,2	61	163	100	-	227	88	5	168	90	140	475	475,0	450,0	12x30°	11	0,245	0,140	6,5	18,8	25,3
2400	13,5	61	163	100	571,5	226	88	5	168	90	140	18	571,5	542,9	6x60°	17	0,422	0,140	9,1	18,8	27,9
	32,5	70	135	110	465	255	59	4	139	100	162	14	466,7	438,2	8x45°	13	0,278	0,195	6,3	20,3	26,6
2600	17,5	70	135	110	465	255	59	4	139	100	162	16	517,5	489,0	8x45°	13	0,445	0,195	9,3	20,3	29,6
	17,5	70	135	110	465	255	59	4	139	100	162	18	571,5	542,9	6x60°	17	0,588	0,195	11,2	20,3	31,5
	36,5	61	130	110	417	-	71	-	126	100	162	14	466,7	438,2	8x45°	13	0,210	0,203	5,3	19,3	24,6
2800	13,5	61	130	110	417	-	71	-	126	100	162	18	571,5	542,9	6x60°	17	0,396	0,203	8,0	19,3	27,3
	13,2	61	130	110	417	-	69	-	126	100	162	475	475,0	450,0	12x30°	11	0,219	0,203	5,4	19,3	24,7
3500	32,5	70	135	110	429	292	59	4	139	100	162	14	466,7	438,2	8x45°	13	0,312	0,203	7,4	21,4	28,8
	71,2	85	135	110	-	290	50	4	100	100	162	475	475,0	450,0	12x30°	11	0,466	0,218	10,3	21,4	31,7
3500	17,5	70	135	110	465	292	59	4	139	100	162	18	571,5	542,9	12x30°	17	0,615	0,219	12,1	21,4	33,5

Standard sizes in bold

*Position of measure d₃ depends on coupling size

CENTAMAX-S

TYPE SB



Size 800-2400

Size 2800-18000

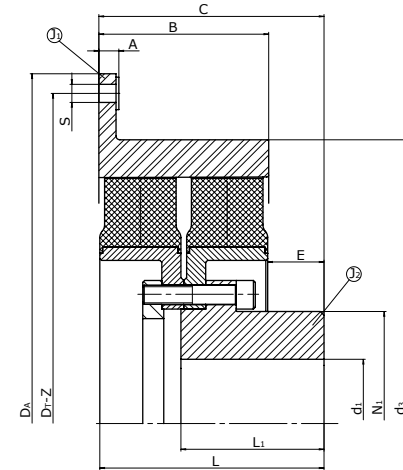
DIMENSIONS			↓ SIZES 4000-18000										→ SIZES 240-3500									
Size	Dimensions											Flange dimensions				Moments of inertia and masses						
	A	B	C	d ₁ max	d ₃ *	d ₄	E	G	L	L ₁	N ₁	SAE/Ø	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂ [kgm ²]	m ₁ [kg]	m ₂ [kg]	m _{total} [kg]	
4000	32,5	70	161	140	429	-	94	-	159	125	218	14	466,7	438,2	8x45°	13	0,263	0,426	5,8	33,1	38,9	
	71,2	85	111	140	-	260	26	14	125	125	218	475	475,0	450,0	12x30°	11	0,422	0,426	8,8	33,1	41,9	
	17,5	70	161	140	465	-	94	-	159	125	218	18	571,5	542,9	12x30°	17	0,578	0,429	10,8	33,1	43,9	
5000	32,5	70	147	110	429	-	64	-	159	105	162	14	466,7	438,2	8x45°	13	0,313	0,234	7,3	23,0	30,3	
	71,2	85	155	110	-	290	16	4	159	105	162	475	475,0	450,0	12x30°	11	0,474	0,233	10,5	23,0	33,5	
	17,5	70	147	110	465	283	64	12	159	105	162	18	571,5	542,9	12x30°	17	0,620	0,239	12,3	23,0	35,3	
7000	53	80	159	140	523	324	76	2	161	125	218	18	571,5	542,9	12x30°	17	0,768	0,547	11,9	37,4	49,3	
8000	95	-	197	175	600	-	110	-	195	150	248	18	571,5	542,9	12x30°	17	1,049	1,033	14,1	52,5	66,6	
	21	90	197	175	584	-	110	-	195	150	248	21	673,1	641,4	12x30°	17	1,437	1,033	18,3	52,5	70,8	
	21	90	197	175	584	-	110	-	195	150	248	24	733,4	692,2	12x30°	19,5	1,834	1,033	21,5	52,5	74,0	
9000	53	80	125	170	517	300	110	-	195	150	248	18	571,5	542,9	12x30°	17	0,757	0,967	11,5	52,1	63,6	
	95	-	197	175	600	-	110	-	195	150	248	18	571,5	542,9	12x30°	17	1,000	1,369	13,3	61,8	75,1	
	21	90	197	175	584	197	110	-	195	150	248	21	673,1	641,4	12x30°	17	1,389	1,369	17,4	61,8	79,2	
10000	21	90	197	175	584	197	110	-	195	150	248	24	733,4	692,2	12x30°	19,5	1,755	1,369	20,2	61,8	82,0	
	141	-	310	175	680	-	176	-	306	200	248	21	673,1	641,4	12x30°	17	2,960	1,754	31,6	71,3	102,9	
	108	137	310	175	731,6	-	176	-	306	200	248	24	733,4	692,2	12x30°	19,5	4,318	1,754	43,0	71,3	114,3	
18000	141	-	310	175	680	310	176	-	306	200	248	21	673,1	641,4	24x15°	17	3,093	2,017	33,9	80,9	114,8	
	108	137	310	175	680	310	176	-	306	200	248	24	733,4	692,2	12x30°	19,5	4,460	2,017	45,4	80,9	126,3	

Standard sizes in bold

*Position of measure d₃ depends on coupling size

CENTAMAX-S

TYPE SD



DIMENSIONS

↓ SIZES 4000-18000

Size	Dimensions											Flange dimensions				Moments of inertia and masses					
	A	B	C	d ₁ max	d ₃ *	d ₄	E	G	L	L ₁	N ₁	SAE	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂	m ₁	m ₂	m _{total}
4000	126,5	145	220	150	465	-	80	-	214	150	210	14	466,7	438,2	8x45°	13	0,675	0,689	14,6	46,0	60,6
	17,5	145	220	150	465	-	80	-	214	150	210	18	571,5	542,9	12x30°	17	0,898	0,689	17,6	46,0	63,6
8000	181,0	181	318	170	-	-	139	-	315	230	235	18	571,5	542,9	12x30°	17	2,074	1,890	28,0	91,0	119,0
	21,0	192,5	318	170	595	-	139	-	315	230	235	21	673,1	641,4	12x30°	17	2,646	1,890	34,6	91,0	125,6
10000	21,0	192,5	318	170	595	-	139	-	315	230	235	24	733,4	692,2	12x30°	19	3,044	1,890	37,8	91,0	128,8
	181,0	181	320	170	-	-	139	-	315	230	235	18	571,5	542,9	12x30°	17	1,978	2,630	26,2	110,4	136,6
12000	21,0	192,5	320	170	-	-	139	-	315	230	235	21	673,1	641,4	12x30°	17	2,550	2,630	32,9	110,4	143,3
	21,0	192,5	320	170	595	-	139	-	315	230	235	24	733,4	692,2	12x30°	19	2,948	2,630	36,1	110,4	146,5
18000	274,0	274	390	165	-	-	115	-	381	250	232	21	673,1	641,4	12x30°	17	5,824	3,153	62,2	129,1	191,3
	108,0	291	390	165	680	-	115	-	381	250	232	24	733,4	692,2	12x30°	19	7,692	3,153	78,6	129,1	207,7
18000	274,0	274	390	165	-	-	115	-	381	250	232	21	673,1	641,4	24x15°	17	6,335	3,674	69,1	131,2	200,3
	108,0	291	390	165	595	-	115	-	381	250	232	24	733,4	692,2	12x30°	19	7,710	3,637	80,8	131,2	212,0

*Position of measure d₃ depends on coupling size

CENTAMAX-G

AT A GLANCE



Robust coupling with high torsional flexibility. For quick and easy mounting in drives subject to torsional vibration particularly on gensets.

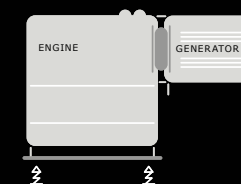
Transmission of torque via toothed outer ring onto a rubber element. Additionally equipped with a taper locking bush for quick and easy installation. Highly dependable and fail-safe design. Characterised by high torsional flexibility with linear characteristic. dampens torsional vibrations and shocks and compensates axial, radial and angular misalignments. Effectively ventilated and with high allowable energy loss.

Blind assembly for minimum mounting effort. With flywheel connections acc. to SAE. Also available for engine and generator connections acc. to DIN 6281.

Features

- High torsional flexibility
- High allowable power loss
- High flexibility in all directions
- Backlash-free torque transmission

Areas of Application



torque range	1,2 bis 7 kNm
elastic material	NR/SI/CENTALAN HT
temperature range	NR -45° to +80°C
	Si -45° to +120°C
	CENTALAN HT -25° to +100°C, short term +120°C

CENTAMAX-G

TECHNICAL DATA

Questions on product selection?

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

CENTAMAX-G

NR

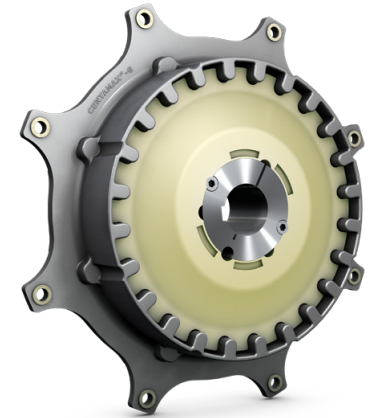


TECHNICAL DATA			↓ SIZES 1400-4600									
1	2	3	4		5	6		7	8	9		
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE	Hub types
1400	50	1200	1800	2400	480	270	680	5600	1,05	3200 3000	11,5 14	Stiebel
	60	1400	2100	3500	560	280	700	8500	1,10			
1800	50	1800	2700	3600	720	265	660	7600	1,05	3200 3000	11,5 14	Taper 3535 Stiebel
	60	2000	3000	5000	800	275	685	11500	1,10			
	70	2500	3750	6300	1000	285	705	17500	1,15			
	72	2600	3900	6500	1040	300	745	23000	1,25			
3200	50	3150	4725	6300	1260	350	1160	17000	1,05	3000	14	Stiebel
	60	3500	5250	8800	1400	360	1190	25000	1,10	2500	18	
4600	50	4600	6900	9200	1840	340	1100	26500	1,05	3000 2500	14 18	Taper 4545
	60	5200	7800	13000	2080	350	1130	39000	1,10			
	70	6300	9450	16800	2520	370	1200	60000	1,15			
	72	6600	9900	17000	2640	390	1260	80000	1,25			
	75	7000	10500	17500	2800	410	1320	140000	1,40			

Standard sizes in bold

CENTAMAX-G

SILIKON



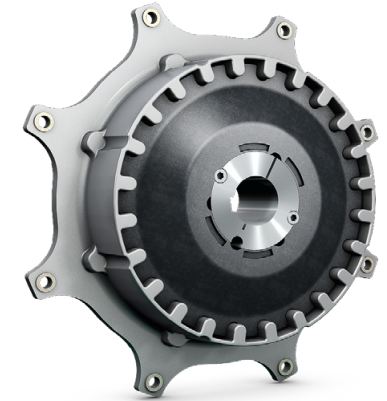
TECHNICAL DATA

↓ SIZES 1400-3200

1 Size	2 Rubber quality [Shore A]	3 Nominal torque T_{KN} [Nm]	4 Maximum torque		5 Continuous vibratory torque T_{KV} [Nm]	6 Permissible power loss		7 Dynamic torsional stiffness					8 Relative damping ψ	9 Speed		Flange size SAE/ ϕ	Hub types
			T_{Kmax1} [Nm]	T_{Kmax} [Nm]		P_{KV} [W]	P_{KVZ} [W]	C_{Tdyn} [Nm/rad]						n_{max} [min ⁻¹]			
								10% T_{KN}	25% T_{KN}	50% T_{KN}	75% T_{KN}	100% T_{KN}					
1400	50	1200	1800	2400	480	405	1020	4700	4950	5500	6800	9350	1,05	3200	11,5	Stiebel	
												3000		14			
1800	50 60	1800 2000	2700	3600	720	400	990	6300	6600	7300	9100	12600	1,05 1,10	3200	11,5	Stiebel	
			3000	5000				800	415	1030	8900	9400		11000	14000		19500
3200	50	3150	4725	6300	1260	525	1740	12400	13000	14500	17800	24500	1,05	3000	14	Stiebel	

CENTAMAX-G

CENTALAN HT



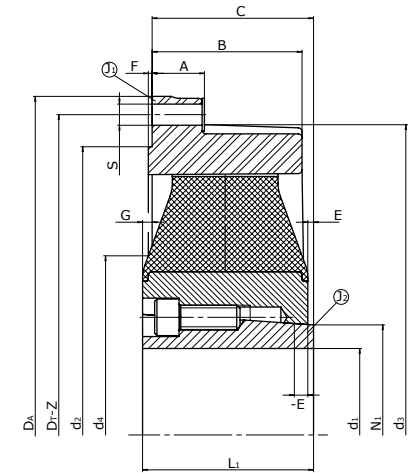
TECHNICAL DATA

↓ SIZES 1400-4600

1	2	3	4		5	6		7	8	9		
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE	Hub types
1400	50	1200	1800	2400	480	340	850	5600	1,00	3200	11,5	Stiebel
	60	1400	2100	3500	560	350	875	8500	1,10	3000	14	
1800	50	1800	2700	3600	720	335	825	7600	1,00	3200 3000	11,5 14	Taper 3535 Stiebel
	60	2000	3000	5000	800	345	855	11500	1,10			
	70	2500	3750	6300	1000	365	900	17500	1,10			
	72	2600	3900	6500	1040	390	965	23000	1,15			
3200	50	3150	4725	6300	1260	440	1450	17000	1,00	3000	14	Stiebel
	60	3500	5250	8800	1400	450	1490	25000	1,10	2500	18	
4600	50	4600	6900	9200	1840	425	1375	26500	1,00	3000 2500	14 18	Taper 4545
	60	5200	7800	13000	2080	440	1415	39000	1,10			
	70	6300	9450	16800	2520	465	1500	60000	1,10			
	72	6600	9900	17000	2640	490	1575	80000	1,15			
	75	7000	10500	17500	2800	515	1650	140000	1,20			

Standard sizes in bold

CENTAMAX-G



DIMENSIONS				↓ SIZES 1400-4600																			
Size	A	B	C	Dimensions									Flange dimensions				Moments of inertia and masses						
				d ₁ max	d ₂	d ₃	d ₄	E	F	G	L ₁	N ₁	SAE	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂ [kgm ²]	m ₁ [kg]	m ₂ [kg]	m _{total} [kg]	
1400	27,2	78	81	65	300	318	197	-10	2	5	76	-	11,5	352,4	333,4	8x45°	11	0,114	0,036	5,4	9,1	14,5	
	12,5	78	81	65	390	318	187	-10	2	5	76	-	14	466,7	138,2	8x45°	13	0,157	0,034	6,7	8,9	15,6	
1800	27,2	78	84	90	300	318	187	3	2	5	89	114,6	11,5	352,4	333,4	8x45°	11	0,112	0,061	5,2	11,3	16,5	
	12,5	78	84	90	390	318	187	3	2	5	89	114,6	14	466,7	438,2	8x45°	13	0,150	0,061	6,2	11,3	17,5	
3200	15,5	85	93	100	-	410	316	0	-	9	102	131,8	14	466,7	138,2	8x45°	13	0,157	0,034	6,7	8,9	15,6	
	5,5	71	79	100	466,7	410	316	0	27	23	102	131,8	18	575,5	542,9	12x30°	17	0,331	0,332	12,0	31,9	43,9	
4600	15,5	85	105	110	-	410	316	12	-	9	114	146,0	14	466,7	438,2	12x30°	13	0,310	0,332	8,4	31,9	40,3	
	5,5	71	91	110	466,7	410	316	12	27	23	114	146,0	18	571,5	542,9	12x30°	17	0,331	0,332	12,0	31,9	43,9	

Standard sizes in bold

CENTAMAX-HTC

AT A GLANCE



Robust coupling with high torsional flexibility. For resonance-free operation of drives susceptible to torsional vibration.

Torque transmission via a toothed outer ring onto a rubber element. Highly reliable and rupture-proof design for the transmission of high torques in a compact design.

Characterised by high torsional flexibility with linear characteristic. Dampens torsional vibrations and shocks and compensates axial, radial and angular misalignments. Effectively ventilated and with high allowable energy loss.

Blind assembly for minimum axial mounting effort. With flywheel connections acc. to SAE. Also available for non-standard flywheels.

Features

- High flexibility in design
- High flexibility in all directions
- Effective ventilation
- High allowable power loss

Areas of Application



torque range	5.4 to 45 kNm
elastic material	NR/CENTALAN HT
temperature range	-45° to +80°C CENTALAN HT -25° to +100°C, short term +120°C

CENTAMAX-HTC

TECHNICAL DATA

Questions on product selection?
We will gladly assist → www.centa.info/contact

CENTAMAX-HTC

NR



TECHNICAL DATA			↓ SIZES 5600-30000								
1	2	3	4		5	6		7	8	9	
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE/ø
5600	50	5400	8100	10800	2160	720	2330	36000	1,05	3000 2500	14 18
	60	5800	8700	11600	2320	745	2410	52000	1,10		
	70	6800	10200	13600	2720	770	2490	80000	1,15		
	72	7300	10900	14600	2920	820	2650	107000	1,25		
	75	7800	11700	15600	3120	890	2880	187000	1,40		
10000	70	12500	18750	25000	5000	1100	3495	126000	1,15	2500 3000	18 21
	72	13800	20700	25000	5520	1170	3720	183000	1,25		
	75	15000	22500	25000	6000	1275	4050	310000	1,40		
18000	50	16000	24000	32000	6400	1170	3490	108000	1,05	2300 2000	21 24
	60	18000	27000	36000	7200	1210	4540	160000	1,10		
	70	20000	30000	40000	8000	1250	4690	265000	1,15		
	72	22000	33000	40000	8800	1330	4990	370000	1,25		
	75	24000	36000	40000	9600	1450	5440	555000	1,40		
30000	80	24000	36000	40000	9600	1450	5440	750000	1,40	2000	24
	50	31000	46500	62000	12400	1800	6750	253000	1,05		
	60	35000	52500	70000	14000	1860	6975	374000	1,10		
	70	40000	60000	80000	16000	1925	7220	620000	1,15		
	72	42000	63000	84000	16800	2050	7690	870000	1,25		
	75	45000	67500	90000	18000	2230	8370	1300000	1,40		

Standard sizes in bold

CENTAMAX-HTC

CENTALAN HT



TECHNICAL DATA

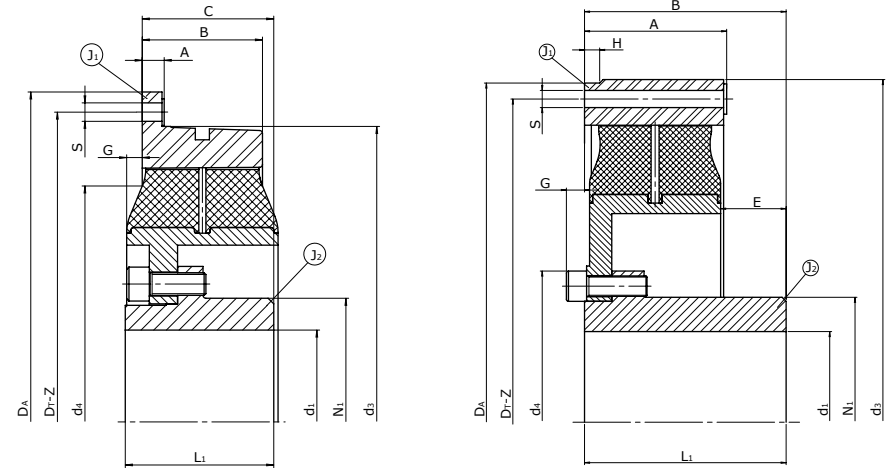
↓ SIZES 5600-30000

1	2	3	4		5	6		7	8	9	
Size	Rubber quality [Shore A]	Nominal torque T_{KN} [Nm]	Maximum torque T_{Kmax1} T_{Kmax} [Nm]		Continuous vibratory torque T_{KW} [Nm]	Permissible power loss P_{KV} P_{KVZ} [W]		Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	Relative damping ψ	Speed n_{max} [min ⁻¹]	Flange size SAE/ø
5600	50	5400	8100	10800	2160	900	2910	36000	1,00	3000 2500	14 18
	60	5800	8700	11600	2320	930	3010	52000	1,10		
	70	6800	10200	13600	2720	960	3110	80000	1,10		
	72	7300	10900	14600	2920	1025	3310	107000	1,15		
	75	7800	11700	15600	3120	1110	3600	187000	1,20		
10000	70	12500	18750	25000	5000	1375	4370	126000	1,10	2500 3000	18 21
	72	13800	20700	25000	5520	1460	4650	183000	1,15		
	75	15000	22500	25000	6000	1595	5060	310000	1,20		
18000	50	16000	24000	32000	6400	1460	4360	108000	1,00	2300 2000	21 24
	60	18000	27000	36000	7200	1510	5675	160000	1,10		
	70	20000	30000	40000	8000	1560	5860	265000	1,10		
	72	22000	33000	40000	8800	1660	6240	370000	1,15		
	75	24000	36000	40000	9600	1810	6800	555000	1,20		
30000	50	31000	46500	62000	12400	2250	8440	253000	1,00	2000	24
	60	35000	52500	70000	14000	2325	8720	374000	1,10		
	70	40000	60000	80000	16000	2410	9025	620000	1,10		
	72	42000	63000	84000	16800	2560	9610	870000	1,15		
	75	45000	67500	90000	18000	2790	10460	1300000	1,20		

Standard sizes in bold

CENTAMAX-HTC

TYPE A

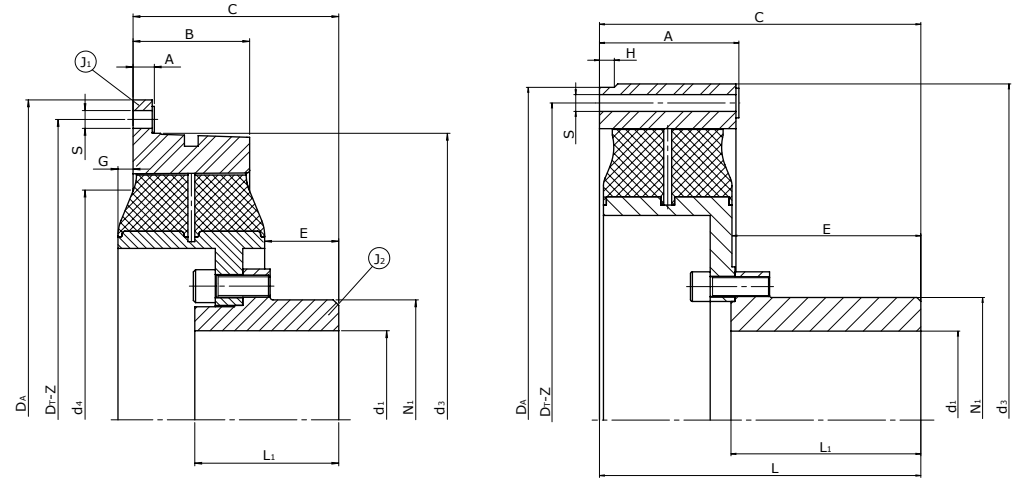


DIMENSIONS				↓ SIZES 5600-30000																	
Size	Dimensions											Flange dimensions				Moments of inertia and masses					
	A	B	C	d ₁ max	d ₃	d ₄	E	G	H	L ₁	N ₁	SAE	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂ [kgm ²]	m ₁ [kg]	m ₂ [kg]	m _{total} [kg]
5600	15,5	85	95	125	418	-	-1	11	-	105	175	14	466,7	438,2	8x45°	13	0,301	0,287	8,1	24,6	32,7
	5,5	71	81	125	418	-	-1	27	-	105	175	18	571,5	542,9	12x30°	17	0,500	0,287	11,4	24,6	36,0
10000	95	-	130	175	600	300	42	20	20	150	248	18	571,5	542,9	12x30°	17	0,923	1,152	12,3	60,3	72,6
	21	90	130	175	584	300	42	20	-	150	248	21	673,1	641,4	12x30°	17	1,321	1,100	16,5	52,9	69,4
18000	141	-	200	175	680	300	65	18	15	200	248	21	673,1	641,4	12x30°	17	2,925	2,045	32,0	81,1	113,1
	108	137	200	175	686	300	65	18	-	200	248	24	733,4	692,2	12x30°	20	4,305	2,045	43,7	81,1	124,8
30000	191	-	272	260	740	396	90	6	12	250	395	24	733,4	692,2	24x15°	20	4,774	7,344	40,4	190,4	230,8

Standard sizes in bold

CENTAMAX-HTC

TYPE B



DIMENSIONS				↓ SIZES 5600-18000																		
Size	Dimensions											Flange dimensions				Moments of inertia and masses						
	A	B	C	d ₁ max	d ₃	d ₄	E	G	H	L ₁	N ₁	SAE	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂ [kgm ²]	m ₁ [kg]	m ₂ [kg]	m _{total} [kg]	
5600	15,5	85	150	125	418	-	54	11	-	105	175	14	466,7	438,2	8x45°	13	0,298	0,287	8,1	24,6	32,7	
10000	21	90	260	175	584	-	170	-	-	210	248	21	673,1	641,4	12x30°	17	1,437	1,118	17,7	63,0	80,7	
18000	108	137	200	175	686	-	176	18	-	200	248	24	733,4	692,2	12x30°	20	4,460	2,045	45,4	81,1	126,5	

Standard sizes in bold

CENTAMAX-B

AT A GLANCE



Robust coupling with high torsional flexibility. For resonance-free operation of drives susceptible to torsional vibration.

Torque transmission via a toothed outer ring onto a rubber element. highly reliable and rupture-proof design for the transmission of high torques in a compact design.

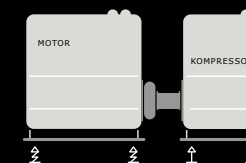
Characterised by high torsional flexibility with linear characteristic. Dampens torsional vibrations and shocks and compensates axial, radial and angular misalignments. Effectively ventilated and with high allowable energy loss. In silicon design, additionally oil resistant and suitable for higher temperatures.

Blind assembly for minimum axial mounting effort. With flywheel connections acc. to SAE. Also available for non-standard flywheels.

Features

- Effective ventilation
- Blind assembly
- Temperature resistant
- Flexible torsional elasticity

Areas of Application



torque range	0.7 to 15 kNm
elastic material	NR/SI/CENTALAN HT
temperature range	NR -45° to +80°C Si -45° to +120°C CENTALAN HT -25° to +100°C, short term +120°C

CENTAMAX-B

TECHNICAL DATA

Questions on product selection?

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

CENTAMAX-B

NR



TECHNICAL DATA

↓ **SIZES 800-4000**

→ SIZES 5000-18000

1 Size	2 Rubber quality [Shore A]	3 Nominal torque T_{KN} [Nm]	4 Maximum torque		5 Continuous vibratory torque T_{KW} [Nm]	6 Permissible power loss		7 Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	8 Relative damping ψ	Flange size SAE/ ϕ
			T_{Kmax} [Nm]	T_{Kmax0} [Nm]		P_{KV} [W]	P_{KVZ} [W]			
800	50	700	1050	1400	280	210	380	2800	1,05	11,5
	60	850	1275	1700	340	215	395	4200	1,10	14
1200	50	1000	1500	2000	400	230	465	4500	1,05	11,5
	60	1200	1800	2400	480	240	480	7000	1,10	14
1600	50	1450	2175	2900	580	250	565	6000	1,05	14
	60	1800	2700	3600	720	260	585	9000	1,10	16 18
2400	50	2000	3000	4000	800	285	775	10000	1,05	14
	60	2500	3750	5000	1000	295	800	15000	1,10	16 18
2600	50	2500	3750	5000	1000	315	930	9500	1,05	14
	60	2700	4050	6000	1080	325	965	13500	1,10	16 18
2800	50	2800	4200	6000	1120	265	570	25000	1,05	14
	60	3000	4500	7500	1200	275	590	37500	1,10	16 18
3500	50	3200	4800	6500	1280	350	1080	16000	1,05	14
	60	3500	5250	8000	1400	360	1120	24000	1,10	16 18
4000	50	4000	6000	8000	1600	320	800	34000	1,05	14
	60	4500	6750	11000	1800	330	830	50000	1,10	16 18

CENTAMAX-B

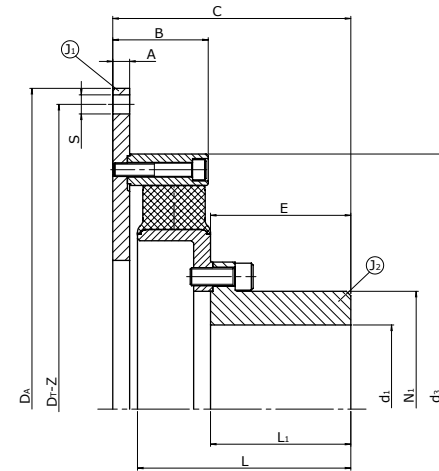
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TECHNICAL DATA **↓ SIZES 5000-18000** → SIZES 800-4000

1 Size	2 Rubber quality [Shore A]	3 Nominal torque T_{KN} [Nm]	4 Maximum torque		5 Continuous vibratory torque T_{KW} [Nm]	6 Permissible power loss		7 Dynamic torsional stiffness C_{Tdyn} [Nm/rad]	8 Relative damping ψ	Flange size SAE/ø
			T_{Kmax} [Nm]	T_{Kmax0} [Nm]		P_{KV} [W]	P_{KVZ} [W]			
5000	50	4500	6750	9000	1800	370	925	17000	1,05	14
	60	5000	7500	10000	2000	385	955	27000	1,10	16 18
7000	50	6300	9450	12600	2520	500	1590	28500	1,05	18
	60	7000	10500	14000	2800	520	1645	45000	1,10	21
8000	50	8000	12000	16000	3200	480	1390	60000	1,05	18
	60	9000	13500	22000	3600	495	1440	80000	1,10	21 24
12000	50	12500	18750	25000	5000	620	2400	79000	1,05	21
	60	14000	21000	28000	5600	640	2475	115000	1,10	24
18000	50	16000	24000	32000	6400	600	2250	115000	1,05	21
	60	18000	27000	36000	7200	620	2330	170000	1,10	24

CENTAMAX-B

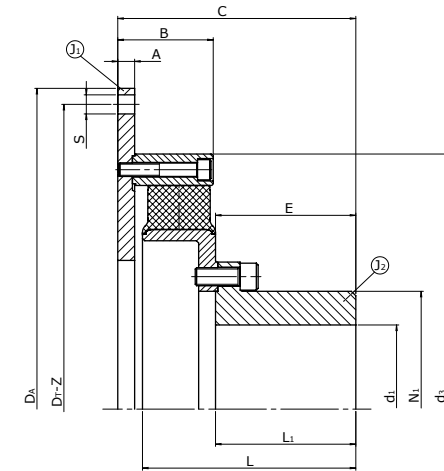


DIMENSIONS

↓ SIZES 800-2800

Size	Dimensions									Flange dimensions					Moments of inertia and masses					
	A	B	C	d ₁ max	d ₃	E	L	L ₁	N ₁	SAE	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂ [kgm ²]	m ₁ [kg]	m ₂ [kg]	m _{total}	
800	15	87	150	65	326	64	130	66	100	11,5	352,4	333,4	8x45°	11	0,331	0,028	17,3	9,3	26,6	
										14	466,7	438,2	8x45°	13	0,705					35,4
1200	15	87	150	65	326	64	130	66	100	11,5	352,4	333,4	8x45°	11	0,338	0,051	17,5	12,2	29,7	
										14	466,7	438,2	8x45°	13	0,708					38,4
1600	15	87	188	100	425	88	168	90	140	14	466,7	438,2	8x45°	11	0,933	0,106	28,1	19,8	47,9	
										16	517,5	489,0	8x45°	13	1,214					52,5
										18	571,5	542,9	6x60°	17	1,618					57,9
2400	15	87	188	100	425	88	168	90	140	14	466,7	438,2	8x45°	11	0,947	0,155	28,4	23,8	52,2	
										16	517,5	489,0	8x45°	13	1,227					56,9
										18	571,5	542,9	6x60°	17	1,631					62,3
2600	15	98	212	105	454,5	103	183	105	154	14	466,7	438,2	8x45°	11	1,056	0,201	27,9	27,4	55,3	
										16	517,5	489,0	8x45°	13	1,337					59,9
										18	571,5	542,9	6x60°	17	1,741					65,3
2800	15	87	188	105	425	103	158	105	154	14	466,7	438,2	8x45°	11	0,916	0,218	26,3	26,2	52,5	
										16	517,5	489,0	8x45°	13	1,197					57,1
										18	571,5	542,9	6x60°	17	1,601					62,5

CENTAMAX-B

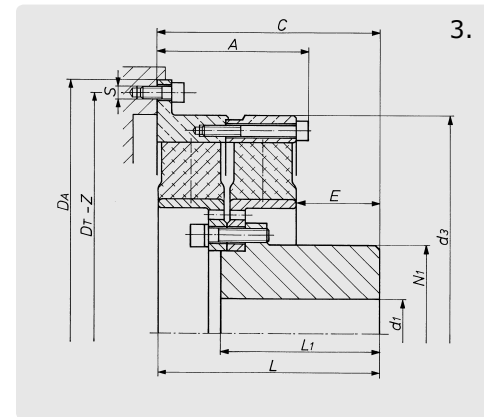
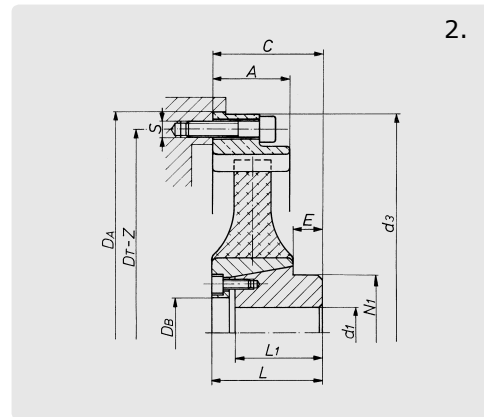
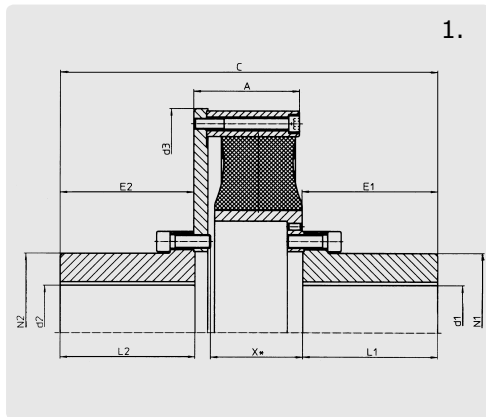


DIMENSIONS

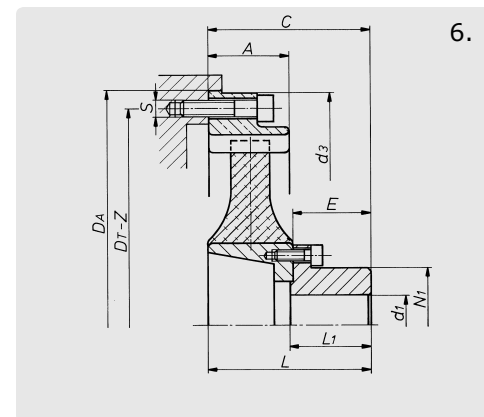
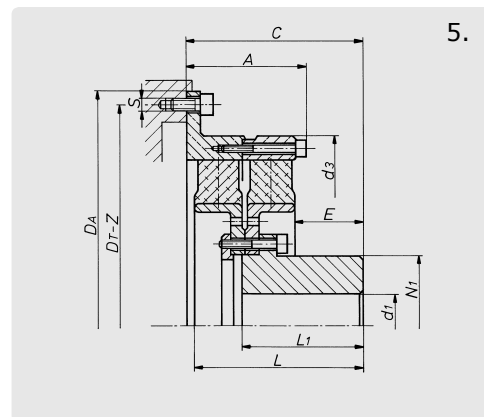
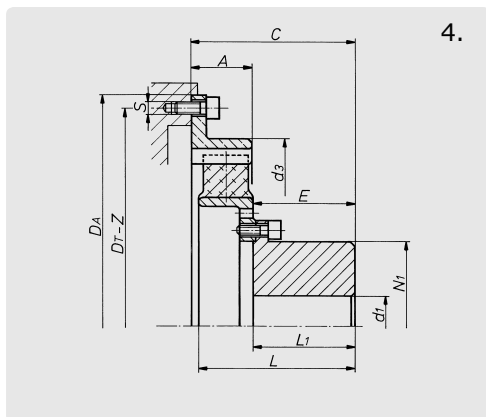
↓ SIZES 3500-18000

Size	Dimensions									Flange dimensions					Moments of inertia and masses				
	A	B	C	d ₁ max	d ₃	E	L	L ₁	N ₁	SAE	D _A	D _T	Z	S	J ₁ [kgm ²]	J ₂	m ₁	m ₂ [kg]	m _{total}
3500	15	98	212	105	454,5	103	183	105	154	14	466,7	438,2	8x45°	11	1,076	0,221	33,3	28,2	56,9
										16	517,5	489,0	8x45°	13	1,357				
										18	571,5	542,9	12x30°	17	1,761				
4000	15	85	212	140	454,5	125	190	125	210	14	466,7	438,2	8x45°	11	0,948	0,445	28,4	44,6	73,0
										16	517,5	489,0	8x45°	13	1,228				
										18	571,5	542,9	12x30°	17	1,632				
5000	15	111	227	105	454,5	103	198	105	154	14	466,7	438,2	8x45°	11	1,177	0,223	34,8	31,1	65,9
										16	517,5	489,0	8x45°	13	1,468				
										18	571,5	542,9	12x30°	17	1,862				
7000	15	98	232	140	544	123	208	125	210	18	571,5	542,9	12x30°	17	1,938	0,613	37,9	51,9	89,8
										21	673,1	641,4	12x30°	17	3,078				
8000	18	111	265	170	576	151	236	150	235	18	571,5	542,9	12x30°	17	2,805	1,058	47,1	70,5	117,6
										21	673,1	641,4	12x30°	17	4,325				
										24	733,4	692,2	12x30°	19	5,621				
12000	16	157	362	170	658	201	331	200	235	21	673,1	641,4	12x30°	17	7,082	1,711	93,5	106	199,5
										24	733,4	692,2	12x30°	19	8,454				
18000	16	157	362	170	658	201	331	200	235	21	673,1	641,4	12x30°	17	7,082	1,711	93,5	106	199,5
										24	733,4	692,2	12x30°	19	8,454				

CENTAMAX VARIANTS

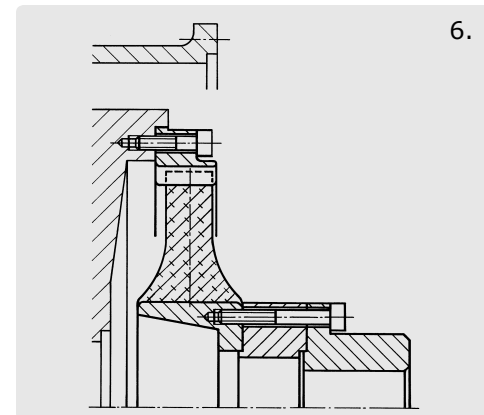
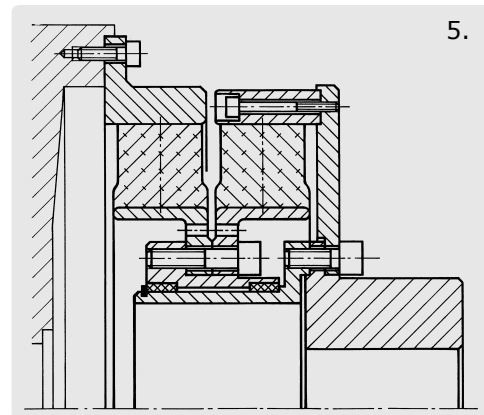
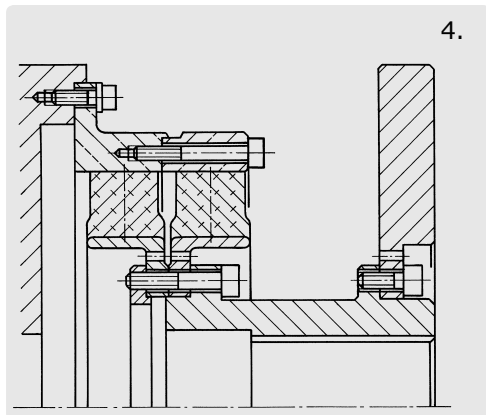
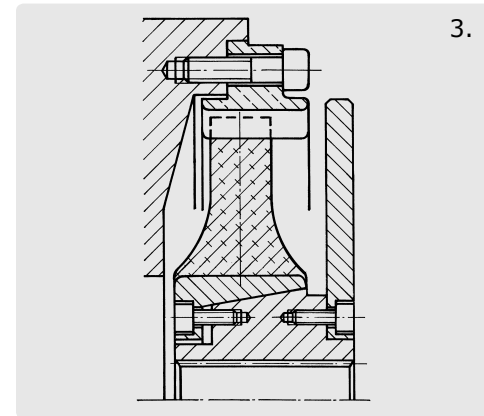
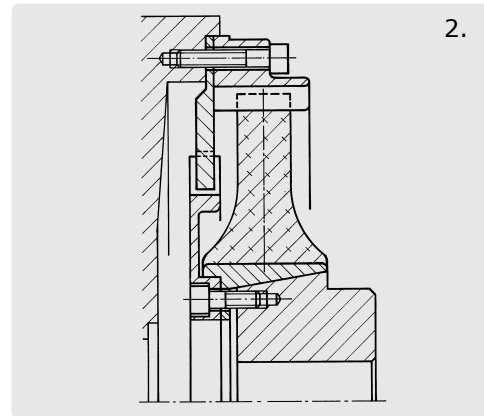
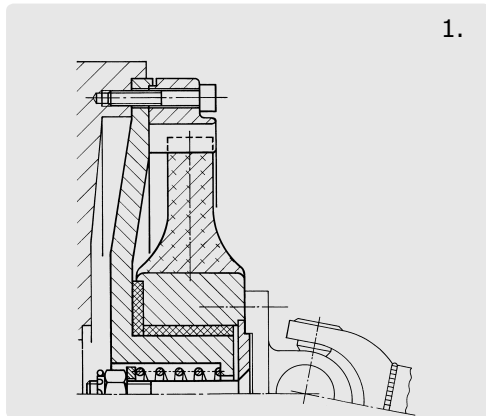


- 1. BBEW, BCEW
- 2. SB
- 3. SD
- 4. SCE
- 5. SDE
- 6. SBE



CENTAMAX

SPECIAL TYPES



1. As intermediate coupling for cardan shafts.
2. With failsafe feature for classified ship propulsion with only one engine.
3. with 3 special features:
 - a) outer ring protudes into flywheel for short overall length.
 - b) inner hub elongated towards engine for longer spline engagement.
 - c) with secondary extra inertia for low resonance speeds.
4. CM-8000-SDE, drop-out type, with special hub and additional inertia.
5. Drop-out-type, with 2 elements in line, giving double torsional elasticity, half torsional stiffness.
6. Drop-out-type, with spacer for deep flywheels or flywheel housing.

EXPLANATION OF THE TECHNICAL DATA

This appendix shows all explanations of the technical data for all CENTA products.

the green marked explanations are relevant for this catalog:

1	Size	Page APP-2
2	Rubber quality	Page APP-2
3	Nominal torque	Page APP-2
4	Maximum torque	Page APP-2
5	Continuous vibratory torque	Page APP-2
6	Permissible power loss	Page APP-2
7	Dynamic torsional stiffness	Page APP-3
8	Relative damping	Page APP-3
9	Speed	Page APP-3
10	Permissible axial displacement	Page APP-3
11	Axial stiffness	Page APP-4
12	Permissible radial displacement	Page APP-4
13	Radial stiffness	Page APP-4
14	Permissible angular displacement	Page APP-4
15	Angular stiffness	Page APP-4

Are these technical explanations up to date?
click here for an update check!

CENTAMAX

EXPLANATION OF THE TECHNICAL DATA

1
Size

This spontaneously selected figure designates the size of the coupling.

2
Rubber quality Shore A

This figure indicates the nominal shore hardness of the elastic element. The nominal value and the effective value may deviate within given tolerance ranges.

3
Nominal torque T_{KN} [kNm]

Average torque which can be transmitted continuously over the entire speed range.

4
Maximum torque [kNm]

T_{Kmax} This is the torque that may occur occasionally and for a short period up to 1.000 times and may not lead to a substantial temperature rise in the rubber element.

In addition the following maximum torques may occur:

$\Delta T_{Kmax} = 1,8 \times T_{KN}$	Peak torque range (peak to peak) between maximum and minimum torque, e.g. switching operation.
$T_{Kmax1} = 1,5 \times T_{KN}$	Temporary peak torque (e.g. passing through resonances). ΔT_{Kmax} or T_{Kmax1} may occur 50.000 times alternating or 100.000 times swelling.
$T_{Kmax2} = 4,5 \times T_{KN}$	Transient torque rating for very rare, extraordinary conditions (e.g. short circuits).

5
Continuous vibratory torque T_{KW} [kNm]

Amplitude of the continuously permissible periodic torque fluctuation with a basic load up to the value T_{KN} .

The frequency of the amplitude has no influence on the permissible continuous vibratory torque. Its main influence on the coupling temperature is taken into consideration in the calculation of the power loss.

Operating torque T_{Bmax} [kNm]

The maximum operating torque results of T_{KN} and T_{KW} .

6
Permissible Power Loss P_{KV} [kW] or [W]

Damping of vibrations and displacement results in power loss within the rubber element.

The permissible power loss is the maximum heat (converted damping work into heat), which the rubber element can dissipate continuously to the environment (i.e. without time limit) without the maximum permissible temperature being exceeded.

The given permissible power loss refers to an ambient temperature of 30° C.

If the coupling is to be operated at a higher ambient temperature, the temperature factor S_{EPKV} has to be taken into consideration in the calculation.

The coupling can momentarily withstand an increase of the permissible power loss for a short period under certain operation modes (e.g. misfiring).

P_{KVZ} [kW]

Defines an individual and proven guide for power loss under misfiring. This value acknowledges general information of the engine suppliers, in particular the real appearance of misfiring and implemented control and protection devices. Values on request.

CENTAMAX

EXPLANATION OF THE TECHNICAL DATA

7
<p>Dynamic torsional stiffness</p> <p>C_{Tdyn} [kNm/rad]</p>

The dynamic torsional stiffness is the relation of the torque to the torsional angle under dynamic loading.

The torsional stiffness may be linear or progressive depending on the coupling design and material.

The value given for couplings with linear torsional stiffness considers following terms:

- Pre-load: 50% of T_{KN}
- Amplitude of vibratory torque: 25% of T_{KN}
- Ambient temperature: 20°C
- Frequency: 10 Hz

For couplings with progressive torsional stiffness only the pre-load value changes as stated.

The tolerance of the torsional stiffness is $\pm 15\%$ if not stated otherwise.

The following influences need to be considered if the torsional stiffness is required for other operating modes:

- Temperature
Higher temperature reduces the dynamic torsional stiffness.
Temperature factor $S_{t,C_{Tdyn}}$ has to be taken into consideration in the calculation.
- Frequency of vibration
Higher frequencies increase the torsional stiffness.
By experience the dynamic torsional stiffness is 30% higher than the static stiffness. CENTA keeps record of exact parameters.
- Amplitude of vibratory torque
Higher amplitudes reduce the torsional stiffness, therefore small amplitudes result in higher dynamic stiffness. CENTA keeps record of exact parameters.

8
<p>Relative damping</p> <p>ψ</p>

The relative damping is the relationship of the damping work to the elastic deformation during a cycle of vibration.

The larger this value $[\psi]$, the lower is the increase of the continuous vibratory torque within or close to resonance.

The tolerance of the relative damping is $\pm 20\%$, if not otherwise stated.

The relative damping is reduced at higher temperatures.

Temperature factor $S_{t,\psi}$ has to be taken into consideration in the calculation.

The vibration amplitude and frequency only have marginal effect on the relative damping.

9
<p>Speed</p> <p>[min⁻¹]</p>

n_{max} The maximum speed of the coupling element, which may occur occasionally and for a short period (e.g. overspeed).

The characteristics of mounted parts may require a reduction of the maximum speed (e.g. outer diameter or material of brake discs).

n_d The maximum permissible speed of highly flexible coupling elements is normally 90% thereof.

10
<p>Permissible axial displacement</p> <p>[mm]</p>

ΔK_a The continuous permissible axial displacement of the coupling.

This is the sum of displacement by assembly as well as static and dynamic displacements during operation.

The maximum axial displacement of the coupling, which may occur occasionally for a short period (e.g. extreme load).

$\Delta K_{a,max}$ The concurrent occurrence of different kinds of displacements is handled in technical documents (displacement diagrams, data sheets, assembly instructions).

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EXPLANATION OF THE TECHNICAL DATA

11		12		13		14		15	
Axial stiffness [kN/mm]		Permissible radial displacement [mm]		Radial stiffness [kN/mm]		Permissible angular displacement [$\frac{1}{4}^\circ$]		Angular stiffness [kNm/ $^\circ$]	
C_a	The axial stiffness determines the axial reaction force on the input and output sides upon axial displacement.	ΔK_r	The continuous permissible radial displacement of the coupling. This is the sum of displacement by assembly as well as static and dynamic displacements during operation. The continuous permissible radial displacement depends on the operation speed and may require adjustment (see diagrams S_n of the coupling series).	C_r	The radial stiffness determines the radial reaction force on the input and output sides upon radial displacement.	ΔK_w	The continuous permissible angular displacement of the coupling. This is the sum of displacement by assembly as well as static and dynamic displacements during operation. The continuous permissible angular displacement depends on the operation speed and may require adjustment (see diagrams S_n of the coupling series).	C_w	The angular stiffness determines the restoring bending moment on the input and output sides upon angular displacement.
$C_{a\ dyn}$	By experience the dynamic stiffness is higher than the static one. The factor depends on the coupling series.	$\Delta K_{r\ max}$	The maximum radial displacement of the coupling, which may occur occasionally and for a short period without consideration of the operation speed (e.g. extreme overload). The concurrent occurrence of different kinds of displacements is handled in technical documents (displacement diagrams, data sheets, assembly instructions).	$C_{r\ dyn}$	By experience the dynamic stiffness is higher than the static one. The factor depends on the coupling series.	$\Delta K_{w\ max}$	The maximum angular displacement of the coupling, which may occur occasionally and for a short period without consideration of the operation speed (e.g. extreme overload). The concurrent occurrence of different kinds of displacements is handled in technical documents (displacement diagrams, data sheets, assembly instructions).	$C_{w\ dyn}$	By experience the dynamic stiffness is higher than the static one. The factor depends on the coupling series.

CENTAMAX

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Rev. CM-EN-02-18

1. This catalog supersedes previous editions.

This catalog shows the extent of our CENTAX®-SEC 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 Power Transmission is now part of Rexnord.
As a global leader in premium couplings,
Rexnord provides the same high quality customer
solutions and service you've come to expect
from CENTA since 1970.

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