

Made for Motion



Drive Technology

Couplings

Torque limiters

Clamping elements

Torque measuring systems

 **LARRIQUE**

 2902 1773

 [larrique_uy](https://www.instagram.com/larrique_uy)

 092 580 580

 [larrique](https://www.facebook.com/larrique)

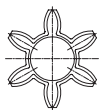
 www.larrique.com.uy

Properties of standard spiders

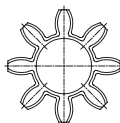
ROTEX® 14



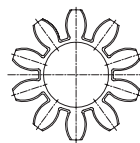
ROTEX® 19



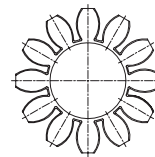
ROTEX® 24 - 65



ROTEX® 75 - 160







ROTEX® 180




Degree of hardness

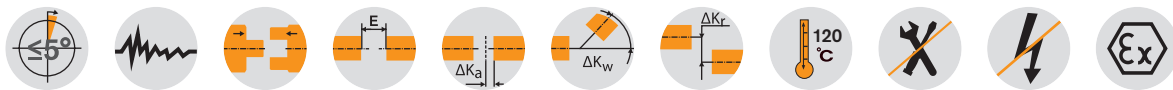
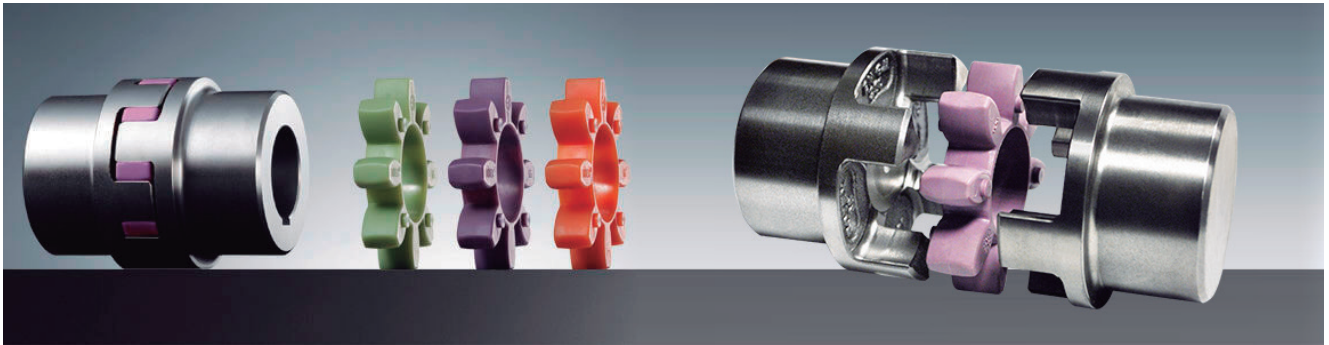


Spider type (Shore hardness)	92 Shore A (T-PUR®)	92 Shore A
	 T-PUR®	
Size	14 to 180	14 to 90
Material	T-PUR®	Polyurethane (PUR)
Permissible temperature range		
Permanent temperature	-40 °C to +120 °C	-40 °C to +90 °C
Short-term temperature	-40 °C to +150 °C	-40 °C to +120 °C
Properties	<ul style="list-style-type: none"> - significantly higher service life expectancy - very good temperature resistance - improved damping of vibrations - good damping, average flexibility - suitable for all hub materials 	<ul style="list-style-type: none"> - good damping, average flexibility - suitable for all hub materials

Spider type (Shore hardness)	98 Shore A (T-PUR®) ¹⁾	98 Shore A ¹⁾
	 T-PUR®	
Size	14 to 180	14 to 90
Material	T-PUR®	Polyurethane (PUR)
Permissible temperature range		
Permanent temperature	-40 °C to +120 °C	-30 °C to +90 °C
Short-term temperature	-40 °C to +150 °C	-40 °C to +120 °C
Properties	<ul style="list-style-type: none"> - significantly higher service life expectancy - very good temperature resistance - improved damping of vibrations - transmission of high torques with average damping - recommended hub material: steel, GJL and GJS 	<ul style="list-style-type: none"> - transmission of high torques with average damping - recommended hub material: steel, GJL and GJS

Spider type (Shore hardness)	64 Shore D (T-PUR®)
	 T-PUR®
Size	14 to 180
Material	T-PUR®
Permissible temperature range	
Permanent temperature	-40 °C to +120 °C
Short-term temperature	-40 °C to +150 °C
Properties	<ul style="list-style-type: none"> - significantly higher service life expectancy - very good temperature resistance - improved damping of vibrations - transmission of very high torques with low damping - recommended hub material: steel and GJS

Materials: aluminium + cast + sinter material



ROTEX® Sintered steel (Sint)

Size	Component	Spider ¹⁾ (component 2) Rated torque [Nm]			Finish bore D (min. - max.)	Dimensions [mm]											
		92 ShA	98 ShA	64 ShD		General											
						L	L1, L2	E	B1	S	DH	DI1	DN	N	G	T	T _A [Nm]
14	1a	7.5	12.5	—	0-16	35	11	13	10	1.5	30	10	30	—	M4	5	1.5
19	1a	10	17	—	0-24	66	25	16	12	2.0	40	18	40	—	M5	10	2
24	1a	35	60	—	0-28	78	30	18	14	2.0	56	27	56	—	M5	10	2

ROTEX® Aluminium diecast (Al-D)

19	1	10	17	—	6-19	66	25	16	12	2	41	18	32	20	M5	10	2
	1a				19-24								41				
24	1	35	60	—	9-24	78	30	18	14	2	56	27	40	24	M5	10	2
	1a				22-28								56				
28	1	95	160	—	10-28	90	35	20	15	2.5	66	30	48	28	M8	15	10
	1a				28-38								66				

ROTEX® Aluminium (Al-H)

5	1a	0.5	0.9	-	0-6	15	5	5	4	0.5	10	-	-	-	M2	2.5	-
7	1a	1.2	2.0	2.4	0-7	22	7	8	6	1.0	14	-	-	-	M3	3.5	-
9	1a	3.0	5.0	6.0	0-11	30	10	10	8	1.0	20	7.2	-	-	M4	5	1.5
12	1a	5.0	9.0	12	0-12	34	11	12	10	1.0	25	8.5	-	-	M4	5	1.5
14	1a	7.5	12.5	16	0-16	35	11	13	10	1.5	30	10.5	-	-	M4	5	1.5
19	1a	10	17	26	0-24	66	25	16	12	2.0	40	18	-	-	M5	10	2
24	1a	35	60	75	0-28	78	30	18	14	2.0	55	27	-	-	M5	10	2
28	1a	95	160	200	0-38	90	35	20	15	2.5	65	30	-	-	M8	15	10
38	1a	190	325	405	0-45	114	45	24	18	3.0	80	38	-	-	M8	15	10
42	1a	265	450	560	0-55	126	50	26	20	3.0	95	46	-	-	M8	20	10
48	1a	310	525	655	0-62	140	56	28	21	3.0	105	51	-	-	M8	20	10

The coupling is provided with a ROTEX® GS spider as a standard (ROTEX® standard spider available, if requested).

ROTEX® Cast iron (GJL)

38	1	190	325	405	12-40	114	45	24	18	3	80	38	66	37	M8	15	10
	1a				38-48								78				
42	1	265	450	560	12-48	126	50	26	20	3	95	46	75	40	M8	20	10
	1a				14-45								94				
48	1	310	525	655	14-55	176	75	28	21	3.5	105	51	85	45	M8	20	10
	1a				15-52								104				
55	1	410	685	825	15-62	188	80	30	22	4	120	60	98	52	M10	20	17
	1a				20-60								118				
65	1	625	940	1175	55-74	160	65	30	22	4	120	60	118	52	M10	20	17
75	1	1280	1920	2400	22-70	185	75	35	26	4.5	135	68	115	61	M10	20	17
90	1	2400	3600	4500	30-80	210	85	40	30	5	160	80	135	69	M10	25	17
90	1	2400	3600	4500	40-100	245	100	45	34	5.5	200	100	160	81	M12	30	40

ROTEX® Nodular iron (GJS)

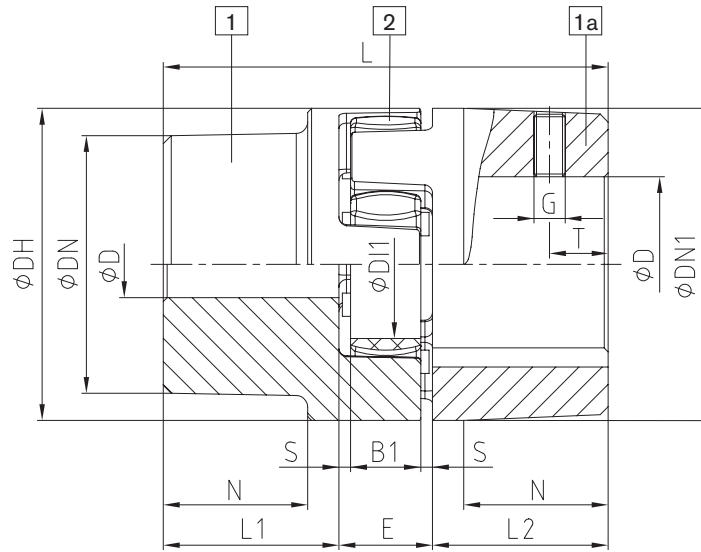
100	1	3300	4950	6185	50-115	270	110	50	38	6	225	113	180	89	M12	30	40
110	1	4800	7200	9000	60-125	295	120	55	42	6.5	255	127	200	96	M16	35	80
125	1	6650	10000	12500	60-145	340	140	60	46	7	290	147	230	112	M16	40	80
140	1	8550	12800	16000	60-160	375	155	65	50	7.5	320	165	255	124	M20	45	140
160	1	12800	19200	24000	80-185	425	175	75	57	9	370	190	290	140	M20	50	140
180	1	18650	28000	35000	85-200	475	195	85	64	10.5	420	220	325	156	M20	50	140

■ = Unless any material is specified in the order, it is defined with the calculation/order.

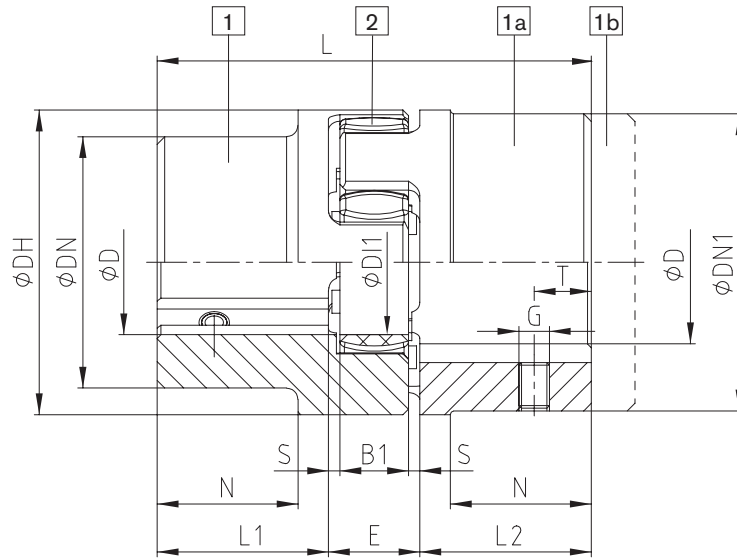
¹⁾ Maximum torque of the coupling T_{K max} = rated torque of the coupling T_{KN} x 2. For selection please see page 14 et seqq.

Ordering example:	ROTEX® 38	GJL	92 ShA	1a	Ø45	1	Ø25
		Coupling size	Material	Spider hardness	Component	Finish bore	Component

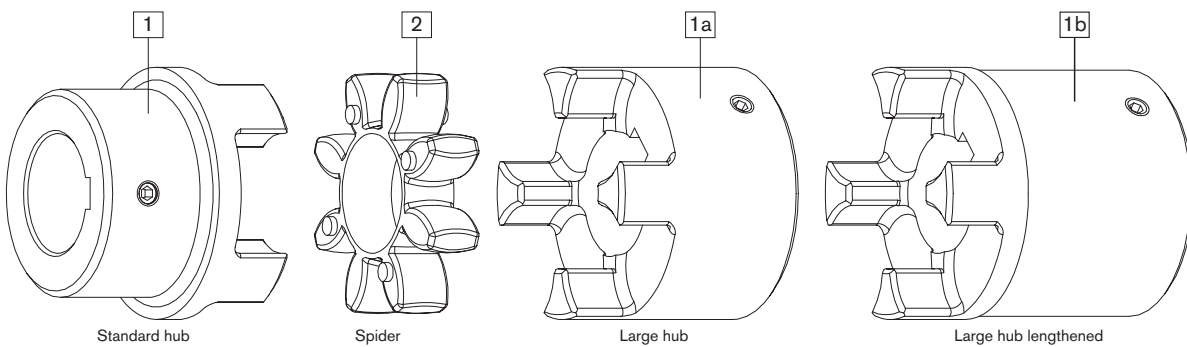
Components



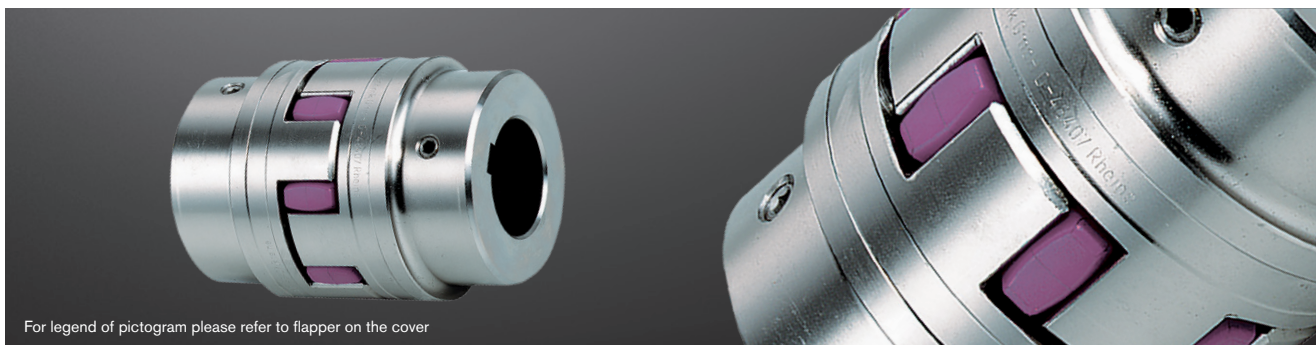
AI-D (thread opposite the keyway)



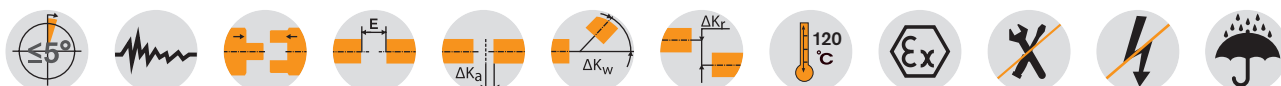
GJL / GJS (thread on the keyway)



Material steel/stainless steel



For legend of pictogram please refer to flapper on the cover



ROTEX® Steel (St)																		
Size	Component	Spider ¹⁾ (component 2) Rated torque [Nm]			Finish bore D (min. - max.)	Dimensions [mm]										Setscrew		
		92 ShA	98 ShA	64 ShD		General										G	T	T _A [Nm]
						L	L1, L2	E	B1	S	DH	DI1	DN	N				
14	1a	7.5	12.5	16	0-16	35	11	13	10	1.5	30	10	30	-	M4	5	1.5	
	50					18.5												
19	1a	10	17	21	0-25	66	25	16	12	2	40	18	40	-	M5	10	2	
	90					37												
24	1a	35	60	75	0-35	78	30	18	14	2	55	27	55	-	M5	10	2	
	118					50												
28	1a	95	160	200	0-40	90	35	20	15	2.5	65	30	65	-	M8	15	10	
	140					60												
38	1	190	325	405	0-48	114	45	24	18	3	80	38	70	27	M8	15	10	
	164					70	80						-					
42	1	265	450	560	0-55	126	50	26	20	3	95	46	85	28	M8	20	10	
	176					75	95						-					
48	1	310	525	655	0-62	140	56	28	21	3.5	105	51	95	32	M8	20	10	
	188					80	105						-					
55	1	410	685	825	0-75	160	65	30	22	4	120	60	110	37	M10	20	17	
	210					90	120						-					
65	1	625	940	1175	0-80	185	75	35	26	4.5	135	68	115	47	M10	20	17	
	235					100	135						-					
75	1	1280	1920	2400	0-95	210	85	40	30	5	160	80	135	53	M10	25	17	
	260					110	160						-					
90	1	2400	3600	4500	0-110	245	100	45	34	5.5	200	100	160	62	M12	30	40	
	295					125	200						-					
100	1	3300	4950	6185	0-115	270	110	50	38	6	225	113	180	89	M12	30	40	
110	1	4800	7200	9000	0-125	295	120	55	42	6.5	255	127	200	96	M16	35	80	
125	1	6650	10000	12500	60-145	340	140	60	46	7	290	147	230	112	M16	40	80	
140	1	8550	12800	16000	60-160	375	155	65	50	7.5	320	165	255	124	M20	45	140	
160	1	12800	19200	24000	80-185	425	175	75	57	9	370	190	290	140	M20	50	140	
180	1	18650	28000	35000	85-200	475	195	85	64	10.5	420	220	325	156	M20	50	140	

■ = Unless any material is specified in the order, it is defined with the calculation/order.
¹⁾ Maximum torque of the coupling T_{K max} = rated torque of the coupling T_{KN} x 2. For selection please see page 14 et seqq.

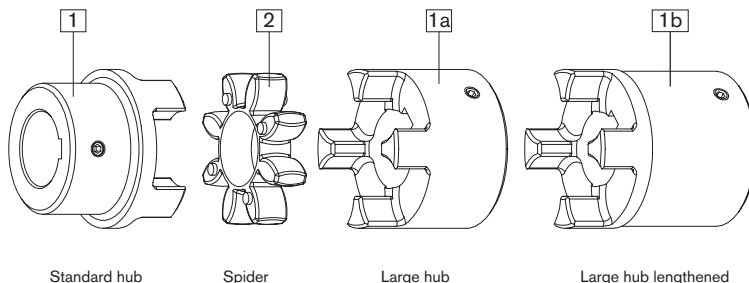
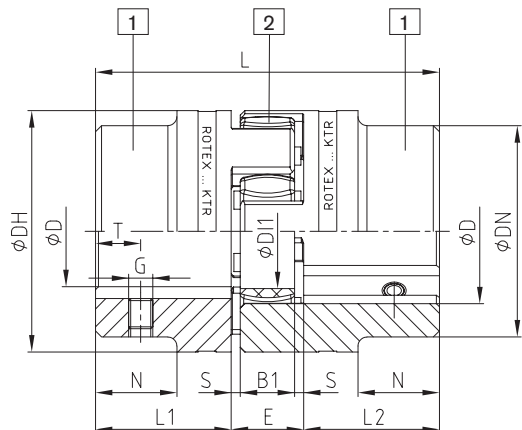
ROTEX® Stainless steel																		
Size	Material	Spider (component 2) Rated torque [Nm]			Finish bore D (min. - max.)	Dimensions [mm]										Setscrew		
		92 ShA	98 ShA	64 ShD		General										G	T	T _A [Nm]
						L	L1, L2	E	B1	S	DH	DI1	DN	N				
19	1.4305	10	17	21	0-25	66	25	16	12	2	40	18	40	-	M5	10	2	
24	1.4305	35	60	75	0-35	78	30	18	14	2	55	27	55	-	M5	10	2	
28	1.4305	95	160	200	0-40	90	35	20	15	2.5	65	30	65	-	M8	15	10	
38	1.4305	190	325	405	0-48	114	45	24	18	3	80	38	70	27	M8	15	10	
42	1.4305	265	450	560	0-55	126	50	26	20	3	95	46	85	28	M8	20	10	
48	1.4305	310	525	655	0-62	140	56	28	21	3.5	105	51	95	32	M8	20	10	

Material 1.4571 on request.

Ordering example:	ROTEX® 38	1.4305	92 ShA	1 - Ø45	1 - Ø25
	Coupling size	Material	Spider hardness	Component Finish bore	Component Finish bore

DIN EN 10204 - 3.1 and 3.2 material test certificate

Components



Steel (thread on the keyway)

ROTEX® Coupling hubs with test certificate¹⁾

Size	Component	Material ²⁾	Inspection certificate acc. to DIN EN 10204	Notch impact strength
19	1a	S355 ²⁾	3.1	>=27 J
24	1a	S355 ²⁾	3.1	>=27 J
28	1a	S355 ²⁾	3.1	>=27 J
38	1a	S355 ²⁾	3.1	>=27 J
42	1	S355 ²⁾	3.1	>=27 J
48	1	S355 ²⁾	3.1	>=27 J
55	1	S355 ²⁾	3.1	>=27 J
65	1	S355 ²⁾	3.1	>=27 J
75	1	S355 ²⁾	3.1/3.2	>=27 J
		42CrMoS4+QT ³⁾		
90	1	S355 ²⁾	3.1/3.2	>=27 J
		42CrMoS4+QT ³⁾		
100	1	S355 ²⁾	3.1/3.2	>=27 J
		42CrMoS4+QT ³⁾		
110	1	S355 ²⁾	3.1/3.2	>=27 J
		42CrMoS4+QT ³⁾		
120	1	S355 ²⁾	3.1/3.2	>=27 J
		42CrMoS4+QT ³⁾		
140	1	S355 ²⁾	3.1/3.2	>=27 J
		42CrMoS4+QT ³⁾		
160	1	S355 ²⁾	3.1/3.2	>=27 J
		42CrMoS4+QT ³⁾		
180	1	S355 ²⁾	3.1/3.2	>=27 J
		42CrMoS4+QT ³⁾		

¹⁾ S355 suitable for feather key connections, 42CrMoS4+QT for oil press-fits

²⁾ Notch impact strength with -40 °C

³⁾ Notch impact strength with -20 °C

Marine programme:

Hub materials S355J2+N and 42CrMo4+QT acc. to DIN EN 10204 - 3.1+3.2, size 75 - 180 available from stock.



UL



Use in fire pumps

ROTEX® couplings comply with the specifications of NFPA 20 standard for the installation of stationary pumps for fire protection and due to completion of the endurance tests required they also comply with the specifications of UL 448A, flexible couplings and connection shafts for stationary fire pumps.

Sizes available:

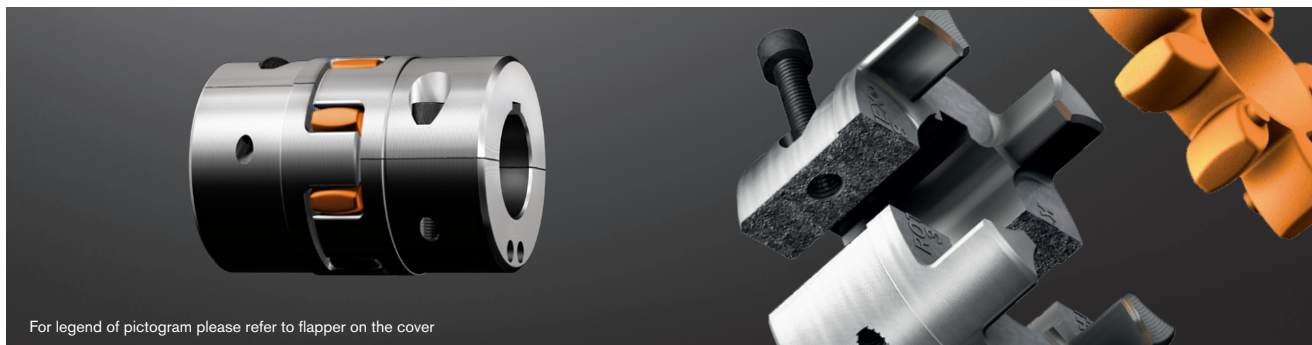


ROTEX® UL Listed									
Size	Component	Material	Spider (component 2) Rated torque [Nm] 92 ShA	Dimensions [mm]					
				Finish bore D (min. - max.)	L	L1, L2	E	DH	
42	1	St	265	18-55	126	50	26	95	
55	1	St	410	24-74	160	65	30	120	
65	1	St	625	24-80	185	75	35	135	
75	1	St	1280	24-95	210	85	40	160	
90	1	St	2400	30-110	245	100	45	200	

* for complete dimensions see table on page 40



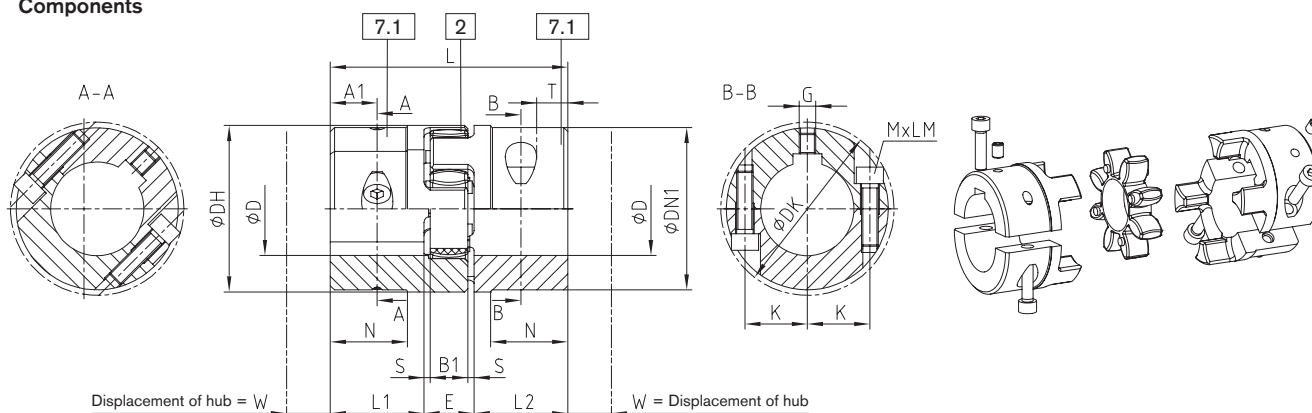
Drop-out center design coupling with SPLIT hubs



For legend of pictogram please refer to flapper on the cover



Components



Type SH

ROTEX® Type SH Sintered steel (Sinter)																		
Size	Finish bore D		Dimensions [mm]													Cap screws DIN EN ISO 4762		
	Min.	Max.	L	L1, L2	E	B1	S	DH	DN1	DK	N	K	A1	T	G	W	MxLM	Tightening torque T _A [Nm]
24	0	28	78	30	18	14	2.0	55	-	57.5	-	20	15	10	M5	12	M6x20	14
28	0	38	90	35	20	15	2.5	65	-	73	-	25	17.5	15	M8	12	M8x25	34

ROTEX® Type SH Cast iron (GJL)																		
Size	Finish bore D		Dimensions [mm]													Cap screws DIN EN ISO 4762		
	Min.	Max.	L	L1, L2	E	B1	S	DH	DN1	DK	N	K	A1	T	G	W	MxLM	Tightening torque T _A [Nm]
38	24	45	114	45	24	18	3.0	80	78	83.5	37	30	22.5	15		15	M8x30	34
42	24	55	126	50	26	20	3.0	95	94	97	40	30	25		M8	15	M10x35	67
48	24	60	140	56	28	21	3.5	105	104	108.5	45	35	28			15	M12x40	115
55	24	70	160	65	30	22	4.0	120	118	122	52	40	32.5	20		15	M12x45	115
65	28	70	185	75	35	26	4.5	135	115	123.5	61	45	37.5		M10	15	M12x40	115
	70	80							135	132.5		50						
75	40	80	210	85	40	30	5.0	160	135	147	69	51	42.5	25		20	M16x50	290
	80	90							160	158		57						
90	40	90	245	100	45	34	5.5	200	160	176	81	60	50	30	M12	20	M20x60	560
	90	110							200	197		72						

7.1 = SPLIT hub with feather keyway

Ordering example:	ROTEX® 38	SH	98 ShA	7.1	Ø38	7.1	Ø30
	Coupling size	Type	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

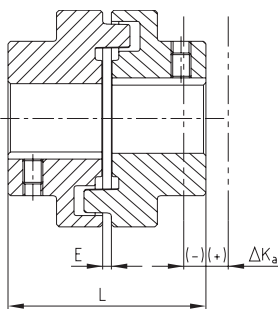
Technical data

POLY-NORM® Technical data													
Size	Torque [Nm]			Max. speed [rpm] with v = 35 m/s	Torsion angle with		Torsion spring stiffness C dyn. [Nm/rad]				Max. perm. displacement [mm] ¹⁾		
	Rated torque T _{KN}	Maximum torque T _{K max}	Vibratory torque T _{KW}		T _{KN}	T _{K max}	1.0 T _{KN}	0.75 T _{KN}	0.5 T _{KN}	0.25 T _{KN}	Axial ΔK _a	Radial ΔK _r	Angular ΔK _w
28	40	80	16	9650			0.52x10 ⁴	0.332x10 ⁴	0.187x10 ⁴	0.09x10 ⁴	± 1.0	0.20	1.2
32	60	120	24	8550	4.5	6.0	0.782x10 ⁴	0.499x10 ⁴	0.282x10 ⁴	0.135x10 ⁴	± 1.0	0.25	1.4
38	90	180	36	7650			1.35x10 ⁴	0.864x10 ⁴	0.489x10 ⁴	0.234x10 ⁴	± 1.0	0.25	1.5
42	150	300	60	6950			2.63x10 ⁴	1.68x10 ⁴	0.947x10 ⁴	0.453x10 ⁴	± 1.0	0.25	1.7
48	220	440	88	6300			2.99x10 ⁴	1.91x10 ⁴	1.08x10 ⁴	0.516x10 ⁴	± 1.5	0.30	1.8
55	300	600	120	5650			3.85x10 ⁴	2.46x10 ⁴	1.39x10 ⁴	0.664x10 ⁴	± 1.5	0.30	2.0
60	410	820	164	5150	4.0	5.5	6.76x10 ⁴	4.31x10 ⁴	2.32x10 ⁴	1.17x10 ⁴	± 1.5	0.30	2.2
65	550	1100	220	4750			8.18x10 ⁴	5.22x10 ⁴	2.7x10 ⁴	1.41x10 ⁴	± 1.5	0.35	2.4
75	850	1700	340	4200			12.29x10 ⁴	7.84x10 ⁴	4.06x10 ⁴	2.12x10 ⁴	± 1.5	0.40	2.7
85	1350	2700	540	3650			24.31x10 ⁴	15.51x10 ⁴	7.49x10 ⁴	4.19x10 ⁴	± 1.5	0.40	3.0
90	2000	4000	800	3300			36.16x10 ⁴	23.07x10 ⁴	11.14x10 ⁴	6.24x10 ⁴	± 1.5	0.45	3.4
100	2900	5800	1160	2950			54.82x10 ⁴	34.98x10 ⁴	16.89x10 ⁴	9.46x10 ⁴	± 3.0	0.50	3.9
110	3900	7800	1560	2650			79.23x10 ⁴	50.55x10 ⁴	24.4x10 ⁴	13.67x10 ⁴	± 3.0	0.60	4.3
125	5500	11000	2200	2350	2.5	3.5	102.3x10 ⁴	65.28x10 ⁴	31.52x10 ⁴	17.65x10 ⁴	± 3.0	0.60	4.8
140	7200	14400	2880	2100			164x10 ⁴	104.7x10 ⁴	50.85x10 ⁴	28.3x10 ⁴	± 3.0	0.60	5.5
160	10000	20000	4000	1900			209.1x10 ⁴	133.4x10 ⁴	64.82x10 ⁴	36.07x10 ⁴	± 3.0	0.65	6.1
180	13400	26800	5360	1650			267.1x10 ⁴	170.4x10 ⁴	82.79x10 ⁴	46.07x10 ⁴	± 3.0	0.65	6.0
200	19000	38000	7600	1450			159.5x10 ⁴	126.2x10 ⁴	96.24x10 ⁴	60.2x10 ⁴	± 4.0	0.65	7.8
220	30000	60000	12000	1300			218.8x10 ⁴	174x10 ⁴	128.7x10 ⁴	77.84x10 ⁴	± 4.0	0.70	8.7
240	43000	86000	17200	1200	1.5	2.1	567.9x10 ⁴	438.3x10 ⁴	301.6x10 ⁴	161.9x10 ⁴	± 4.0	0.70	9.6
260	55000	110000	22000	1000			663.8x10 ⁴	539.4x10 ⁴	382.2x10 ⁴	195.5x10 ⁴	± 4.0	0.85	11.3
280	67000	134000	26800	950			773.1x10 ⁴	628.1x10 ⁴	467.9x10 ⁴	266.2x10 ⁴	± 4.0	0.95	12.2

¹⁾ Displacement with n = 1500 rpm

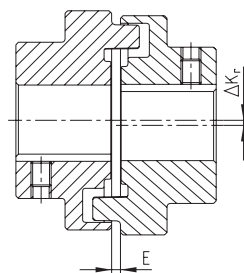
Radial and angular displacements may occur simultaneously. The combined sum of displacements must not exceed the values listed in the table. If requested, coupling is dynamically balanced (semi-key balancing G 6.3 with 1500 rpm). For circumferential speeds exceeding v = 20 m/s dyn. balancing is recommended.

Axial displacement ΔK_a

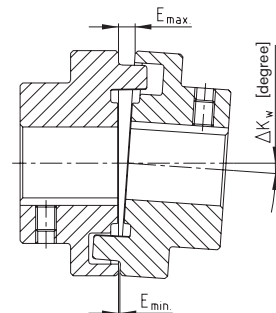


$L_{max./min.} = L + \Delta K_a$ [mm]

Radial displacement ΔK_r



Angular displacement ΔK_w



$\Delta K_w = E_{max.} - E_{min.}$ [mm]

Advice for assembly

With assembly the coupling halves must be mounted in that coupling and shaft are flush. Alignment must be made in that radial and angular displacement is as small as possible. The service life of coupling and bearings is extended by accurate alignment. Steps must be taken to ensure that the alignment condition does not change during any operating condition. Inevitable shaft displacements should not exceed the figures specified in the table. Angular and radial displacement may occur simultaneously. The combined sum of displacements must not exceed the values listed in the table above. See KTR assembly instructions, KTR standard 49510 on our homepage www.ktr.com.

General information about the elastomer

Material/hardness	Perbunan [NBR]/78 Shore A
Permanent temperature range [°C]	-30 to +80
Max. temperature (short time) [°C]	-50 to +120
Operating range	General engineering Pump industry ATEX applications Chemical industry Standard applications with average elasticity
Resistant to	Gasoline, diesel Acids, bases Use in the tropics (Salt) water (hot/cold) Oils, greases Propane, butane Natural gas, city gas

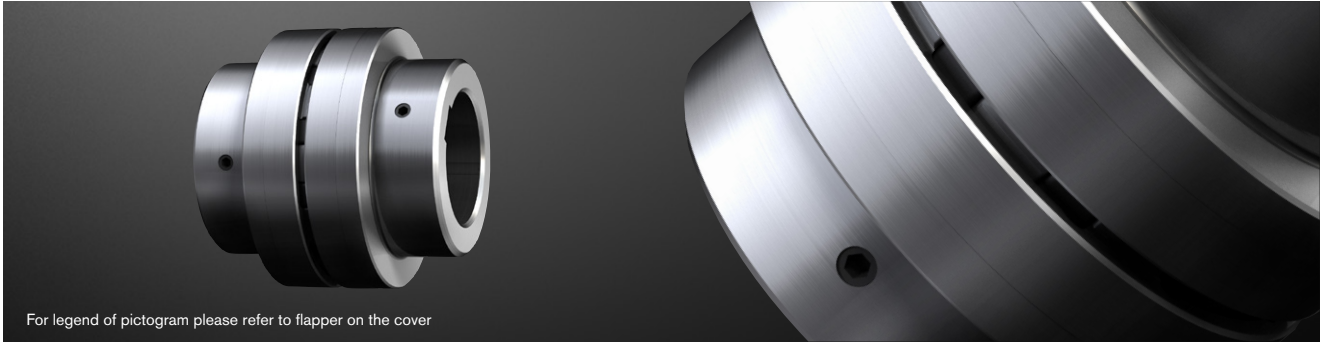


Elastomer ring NBR 78 Shore A

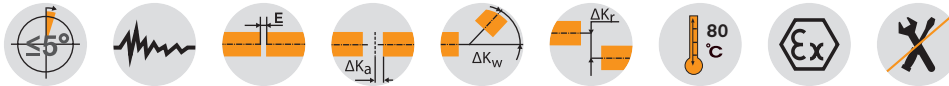
Elastomer ring Viton [FKM] 60 Shore A for the high-temperature range on request.

For continuously updated data please refer to our online catalogue at www.ktr.com

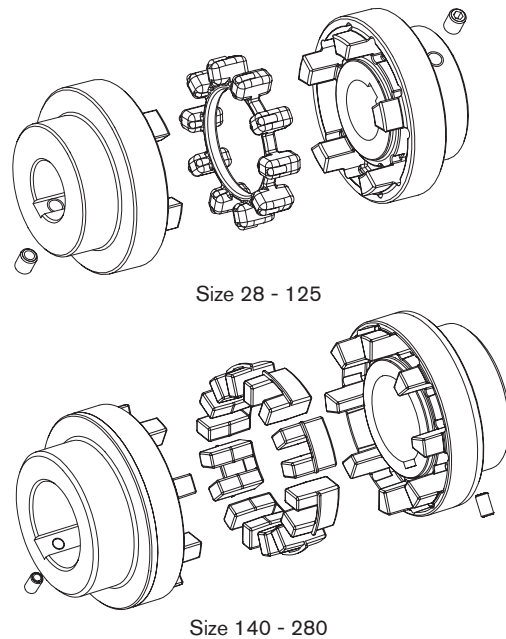
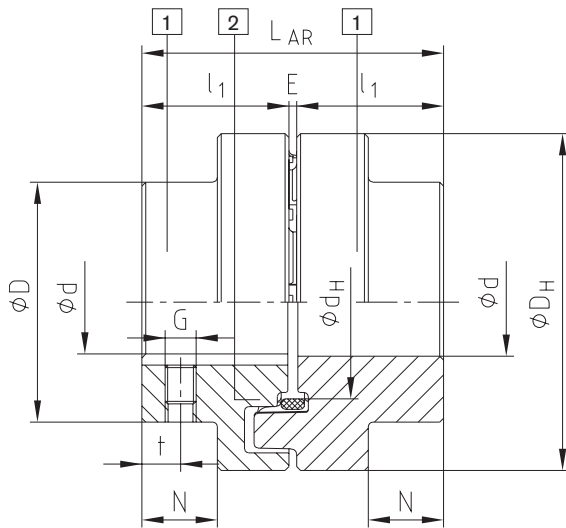
Two-part



For legend of pictogram please refer to flapper on the cover



Components



Size 28 - 125

Size 140 - 280

Components of type AR:
1 = Standard hub (GJL)
2 = Elastomer ring (up to size 180: NBR 78 ShA; from size 200: T-PUR® 84 ShA)

POLY-NORM® Type AR															
Size	Elastomer ring ¹⁾ (component ²⁾ Torque [Nm]		Max. finish bore d ²⁾	Dimensions [mm]										Mass moment of inertia ³⁾ [kgm ²]	Weight ³⁾ [kg]
	TKN	TK max		General							Setscrew ²⁾				
				LAR	l ₁	E	DH	D	d _H	N	G	t			
28	40	80	12-30	59	28	3	69	46	36.5	12	M5	7	0.0004	0.9	
32	60	120	12-35	68	32	4	78	53	41.5	14	M8	7	0.0008	1.4	
38	90	180	19-40	80	38	4	87	62	50	19.5	M8	10	0.0016	2.0	
42	150	300	19-45	88	42	4	96	69	55.5	20	M8	10	0.0026	2.7	
48	220	440	19-50	101	48	5	106	78	64	24	M8	15	0.0042	3.7	
55	300	600	19-60	115	55	5	118	90	73	29	M8	14	0.0070	5.5	
60	410	820	19-65	125	60	5	129	97	81	33	M8	15	0.0112	6.9	
65	550	1100	19-70	135	65	5	140	105	86	36	M10	20	0.0174	8.8	
75	850	1700	32-80	155	75	5	158	123	100	42.5	M10	20	0.028	13.5	
85	1350	2700	32-90	175	85	5	182	139	116	48.5	M10	25	0.052	19.5	
90	2000	4000	32-95	185	90	5	200	148	128	49	M12	25	0.090	23.2	
100	2900	5800	42-110	206	100	6	224	165	143	55	M12	25	0.160	31.9	
110	3900	7800	50-120	226	110	6	250	185	158	60	M16	30	0.317	38.0	
125	5500	11000	55-140	256	125	6	280	210	178	70	M16	35	0.570	55.2	
140	7200	14400	65-155	286	140	6	315	235	216	76.5	M20	35	1.030	92.6	
160	10000	20000	75-175	326	160	6	350	265	246	94.5	M20	45	1.746	126.9	
180	13400	26800	75-200	366	180	6	400	300	290	111.5	M20	50	3.239	181.8	
200	19000	38000	85-200	408	200	8	450	335	-	126	M24	50	5.728	263.7	
220	30000	60000	95-220	448	220	8	500	370	-	140	M24	50	9.489	355.9	
240	43000	86000	105-240	488	240	8	550	405	-	154	M24	50	14.963	466.3	
260	55000	110000	115-260	530	260	10	650	440	-	158	M24	60	29.504	672.2	
280	67000	134000	125-280	570	280	10	700	475	-	172	M24	60	42.451	836.6	

¹⁾ Standard material Perbunan [NBR] 78 Shore A, size 140 - 280 double tooth elastomers, for selection see page 14 et seqq.

²⁾ Bores H7 with keyway to DIN 6885 sheet 1 [JS9] and setscrew on the keyway

³⁾ Referring to average bore

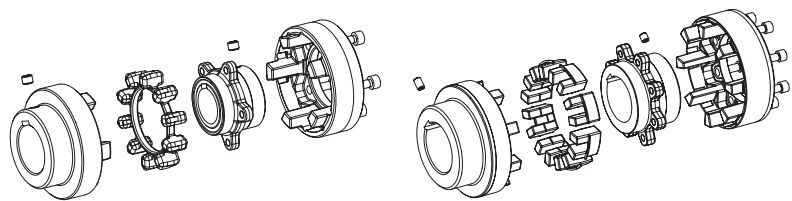
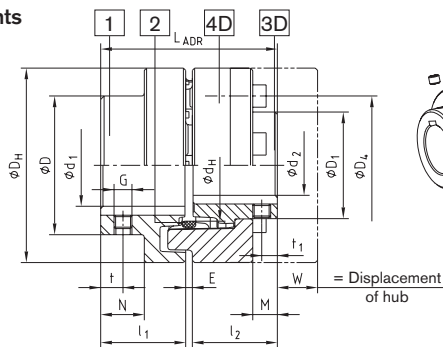
Three-part



For legend of pictogram please refer to flapper on the cover



Components



Size 38 - 125

Size 140 - 280

Components of type ADR (three-part):
1 = Standard hub* (GJL)
2 = Elastomer ring (up to size 180: NBR 78 ShA; from size 200: T-PUR® 84 ShA)
3D = Flange hub (GJS); 4D = Cam ring (GJL)
* To be used preferably on driving side

POLY-NORM® Type ADR

Size	Elastomer ring ¹⁾ (component 2) Torque [Nm]		Dimensions [mm]															
			Max. finish bore ²⁾		General										Setscrew			
	TKN	TK max	d ₁	d ₂	LADR	l ₁ , l ₂	E	D _H	D	D ₁	d _H	N	M	W	G	t	t ₁	T _A [Nm]
38	90	180	40	34	80	38	4	87	62	48	50	19.5	11.0	12	M8	10	7	10
42	150	300	45	38	88	42	4	96	69	54	55.5	20	12.0	16	M8	10	7	10
48	220	440	50	44	101	48	5	106	78	62	64	24	13.7	16	M8	15	7	10
55	300	600	60	50	115	55	5	118	90	72	73	29	18.7	15	M8	14	14	10
60	410	820	65	56	125	60	5	129	97	80	81	33	22.2	14	M8	15	15	10
65	550	1100	70	60	135	65	5	140	105	86	86	36	26.7	11	M10	20	20	17
75	850	1700	80	68	155	75	5	158	123	98	100	42.5	27.8	16	M10	20	20	17
85	1350	2700	90	78	175	85	5	182	139	112	116	48.5	33.7	18	M10	25	25	17
90	2000	4000	95	85	185	90	5	200	148	122	128	49	31.5	26	M12	25	25	40
100	2900	5800	110	95	206	100	6	224	165	136	143	55	37.5	28	M12	25	25	40
110	3900	7800	50-120	105	226	110	6	250	185	150	158	60	39.5	30	M16	30	30	80
125	5500	11000	55-140	115	256	125	6	280	210	168	178	70	48.0	35	M16	35	35	80
140	7200	14400	65-155	55-135	286	140	6	315	235	195	216	76.5	47.0	59	M20	35	35	140
160	10000	20000	75-175	65-155	326	160	6	350	265	225	246	94.5	65.0	43	M20	45	45	140
180	13400	26800	75-200	65-175	366	180	6	400	300	255	290	111.5	79.0	33	M20	50	50	140
200	19000	38000	85-200	73-200	408	200	8	450	335	290	320	126	95	7	M24	50	50	240
220	30000	60000	95-220	83-220	448	220	8	500	370	320	354	140	103	8	M24	50	50	240
240	43000	86000	105-240	93-240	488	240	8	550	405	350	388	154	119	1	M24	50	50	240
260	55000	110000	115-260	103-260	530	260	10	650	440	380	445	158	109	34	M24	60	60	240
280	67000	134000	125-280	113-280	570	280	10	700	475	410	478	172	109	29	M24	60	60	240

Selection of cap screws DIN EN ISO 4762 - 12.9

Size	M x l [mm]	z = number	Pitch z x angle	D ₄ [mm]	T _A [Nm] ³⁾	Size	M x l [mm]	z = number	Pitch z x angle	D ₄ [mm]	T _A [Nm] ³⁾
38	M6x16	5	5x72	62	10	110	M16x40	8	8x45	183	210
42	M8x16	5	5x72	69	25	125	M20x40	8	8x45	202	410
48	M8x20	6	6x60	78	25	140	M20x50	8	8x45	237	410
55	M8x20	6	6x60	88	25	160	M20x55	9	9x40	267	410
60	M8x20	6	6x60	98	25	180	M20x60	10	10x36	304	410
65	M10x20	6	6x60	104	49	200	M20x60	10	10x36	342	580
75	M10x25	6	6x60	120	49	220	M24x70	10	10x36	378	1000
85	M12x25	6	6x60	138	86	240	M27x70	10	10x36	416	1500
90	M16x30	6	6x60	149	210	260	M30x90	10	10x36	480	2000
100	M16x30	6	6x60	163	210	280	M30x90	10	10x36	520	2000

¹⁾ Standard material Perbunan [NBR] 78 Shore A, size 140 - 280 double tooth elastomers, for selection see page 14 et seqq.

²⁾ Bores H7 with keyway to DIN 6885 sheet 1 [JS9] and setscrew ³⁾ Screw tightening torques acc. to 8.8

Ordering example:	POLY-NORM® 65	ADR	d ₁ = Ø55	d ₂ = Ø60
	Coupling size	Type	Finish bore	Finish bore

Please note: torque increase



Years of experience with applications at customer sites and additional test series in the KTR test field in Rheine enabled us to determine potentials allowing for an increase of rated torques with some sizes of this series.

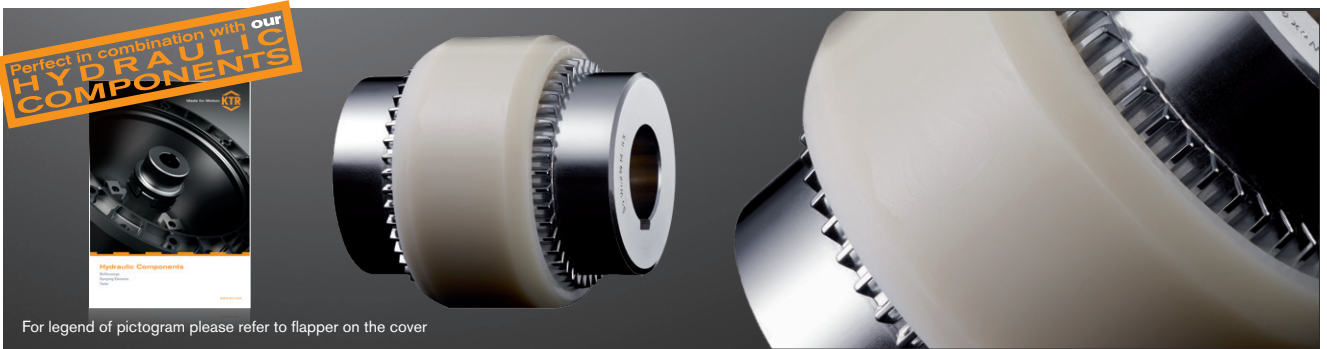
BoWex®



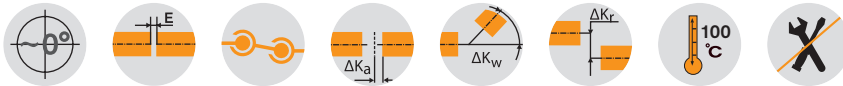
GEARex®



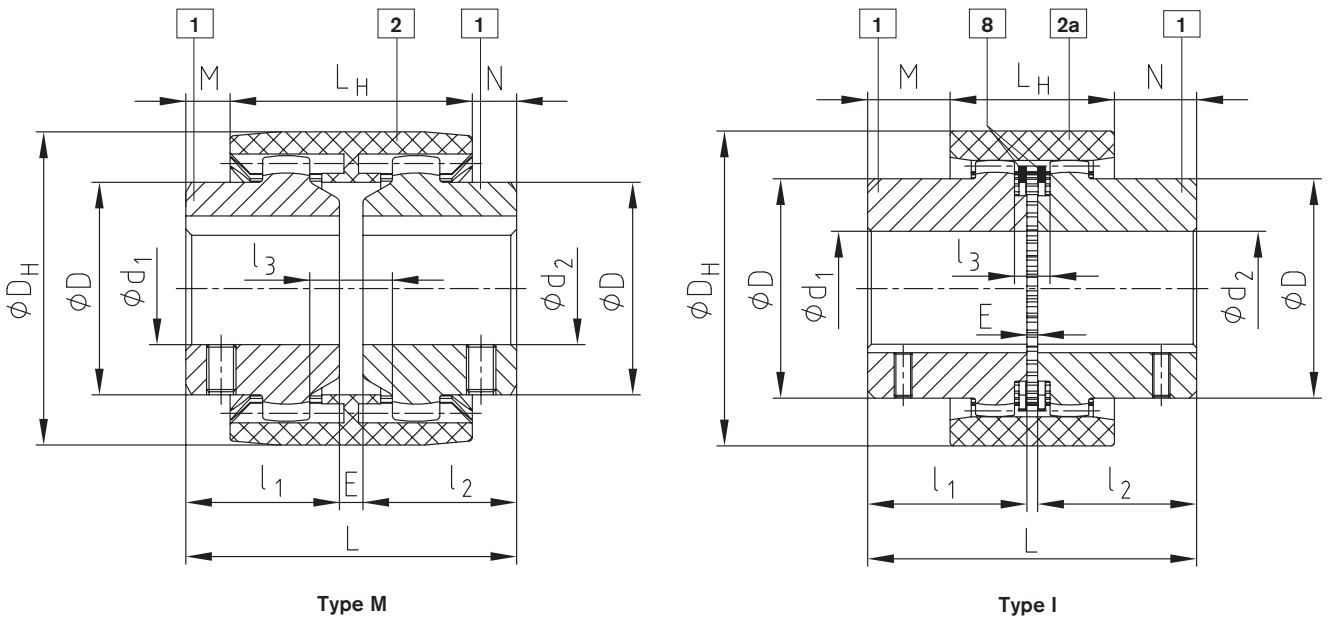
Compact and maintenance-free



For legend of pictogram please refer to flapper on the cover



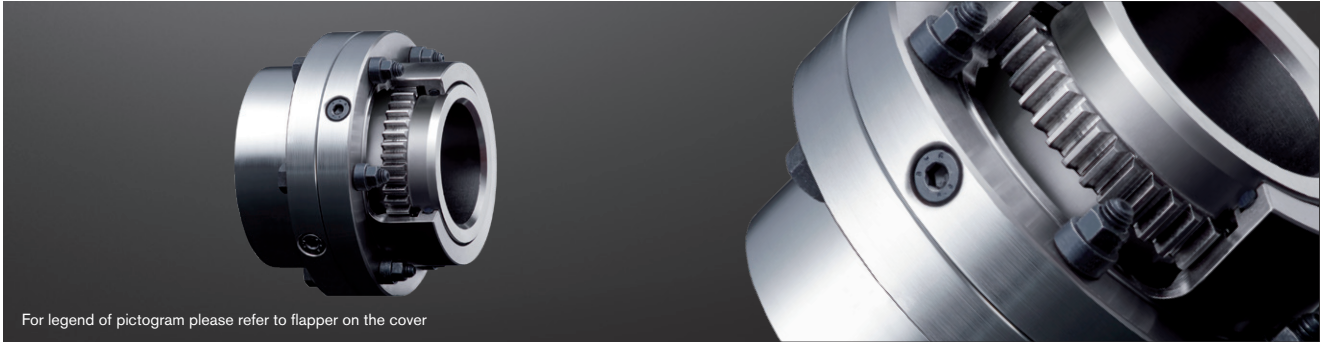
Components



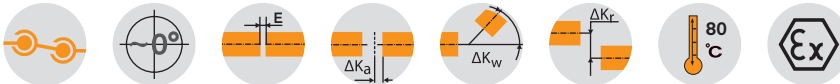
BoWex® type M, type I																								
Size	Torque [Nm]			Finish bore d1, d2		Dimensions [mm]													Weight with max. bore [kg]			Mass moment of inertia J with max. bore [kgcm ²]		
	T _{KN}	T _{K max.}	T _{KW}	Pilot bored	Max.	l ₁ , l ₂	E	L	L _H	M, N	l ₃	D	D _H	Tip circle ØD _Z hub	Number of teeth	Hub lengthened max. l ₁ , l ₂	Sleeve	Hub	Total	Sleeve	Hub	Total		
M-14	10	30	5	-	15	23	4	50	37	6.5	10	25	40	33	20	40	0.03	0.07	0.1	0.08	0.09	0.26		
M-19	16	48	8	-	20	25	4	54	37	8.5	10	32	47	39	24	40	0.03	0.1	0.23	0.15	0.16	0.47		
M-24	20	60	10	-	24	26	4	56	41	7.5	14	36	53	45	28	50	0.04	0.14	0.32	0.21	0.36	0.93		
M-28	45	135	23	-	28	40	4	84	46	19	13	44	65	54	34	55	0.08	0.33	0.74	0.65	1.22	3.09		
M-32	60	180	30	-	32	40	4	84	48	18	13	50	75	63	40	55	0.09	0.43	0.95	1.14	2.17	5.48		
M-38	80	240	40	-	38	40	4	84	48	18	13	58	83	69	44	60	0.13	0.55	1.23	1.58	3.55	8.68		
M-42	100	300	50	-	42	42	4	88	50	19	13	65	92	78	50	60	0.14	0.68	1.5	2.32	5.98	14.28		
M-48	140	420	70	-	48	50	4	104	50	27	13	68	95	78	50	60	0.23	0.79	1.81	3.9	7.22	18.34		
M-65	380	1140	190	21	65	55	4	114	68	23	16	96	132	110	42	70	0.55	1.9	4.35	21.2	31.8	84.8		
I-80	700	2100	350	31	90	90	6	186	93	46.5	20	124	178	145	46	-	1.13	5.2	11.53	68.9	150.8	370.5		
I-100	1200	3600	600	38	100	110	8	228	102	63	22	152	210	176	48	-	1.78	9.37	20.52	158.6	401.3	961.2		
I-125	2500	7500	1250	45	125	140	10	290	134	78	30	192	270	225	54	-	3.88	19.44	42.76	562.9	1362.3	3287.5		

Ordering example:	BoWex® M-28	d ₁ Ø20	d ₂ Ø28
	Size and type of coupling	Finish bore H7 keyway to DIN 6885 sheet 1 (JS9)	Finish bore H7 keyway to DIN 6885 sheet 1 (JS9)

Coupling in accordance with AGMA 9008-B00, high power density



For legend of pictogram please refer to flapper on the cover



Dimensions

Size	Pilot bore	Dimensions [mm]															
		Max. finish bore		Dimensions [mm]													
		d ₁ , d ₂	l ₁ , l ₂	Hub lengthened max. l ₁ , l ₂ ²⁾	E _{FA}	E _{FB}	E _{FAB}	L _{FA}	L _{FB}	L _{FAB}	L ₃	D	DA ₁	DA ₂	F ¹⁾	d ₃ ¹⁾	
10	26	50	43	105	3	21	12	89	107	98	55	67	111	83	74	52	
15	26	64	50	115	3	15	9	103	115	109	59	87	142	106	84	68	
20	31	80	62	130	3	31	17	127	155	141	79	108	174	129	104	85	
25	38	98	76	150	5	29	17	157	181	169	93	130	213	157	123	110	
30	44.5	112	90	170	5	33	19	185	213	199	109	153	240	181	148	130	
35	46	133	105	185	6	40	23	216	250	233	128	180	280	213	172	150	
40	52	158	120	215	6	42	24	246	282	264	144	214	318	249	192	175	
45	80	172	135	245	8	50	29	278	320	299	164	233	347	273	216	190	
50	80	192	150	295	8	56	32	308	356	332	182	260	390	308	241	220	
55	90	210	175	300	8	70	39	358	420	389	214	283	425.5	333	275	250	
60	100	232	190	305	8	84	46	388	464	426	236	312	457	364.5	316	265	
70	100	276	220	310	10	76	43	450	516	483	263	371	527	424	360	300	

Technical data

Size	Torque [Nm] ³⁾		Max. speed [rpm]	Weight with max. bore [kg]			Mass moment of inertia with max. bore [kgm ²]	Dowel screw (10.9)		
	T _{KN}	T _{KN} (42CrMo4)		Sleeve	Hub	Total		z	M	T _A [Nm]
10	930	1580	8500	0.75	0.55	2.75	0.004	6	M6	15
15	2000	3300	6400	1.50	1.10	5.60	0.015	8	M8	36
20	3500	6300	5400	2.40	2.10	9.50	0.037	6	M10	72
25	6500	11000	4500	4.30	3.60	16.60	0.096	6	M12	125
30	10000	17400	4000	5.70	6.20	25.00	0.178	8	M12	125
35	17000	28800	3500	9.50	9.90	40.90	0.410	8	M14	200
40	28500	48500	3100	11.60	16.00	57.50	0.746	8	M14	200
45	37000	62000	3000	15.40	21.40	76.40	1.163	10	M14	200
50	51000	86000	2500	25.30	29.50	113.50	2.229	8	M18	430
55	65000	110000	2300	31.00	40.20	149.00	3.415	14	M18	430
60	85000	145000	2100	32.10	52.80	175.70	4.514	14	M18	430
70	135000	240000	1850	42.50	85.50	265.50	9.212	16	M20	610

■ = Standard

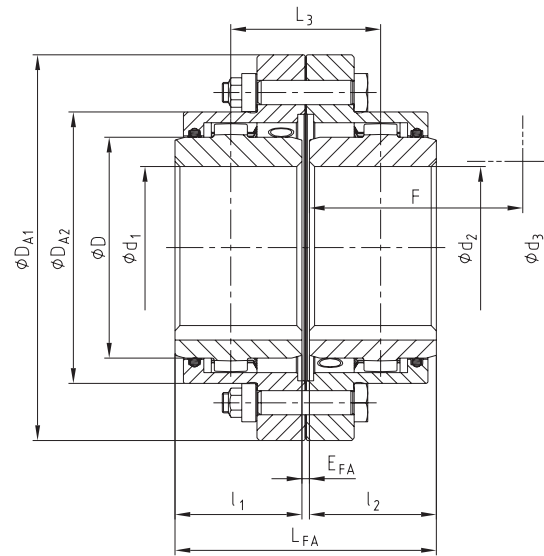
¹⁾ Space required to align the coupling and replace the gasket

²⁾ Lengthened hubs available as a standard for type FA only. For type FB and FAB lengthened hubs are available on request only.

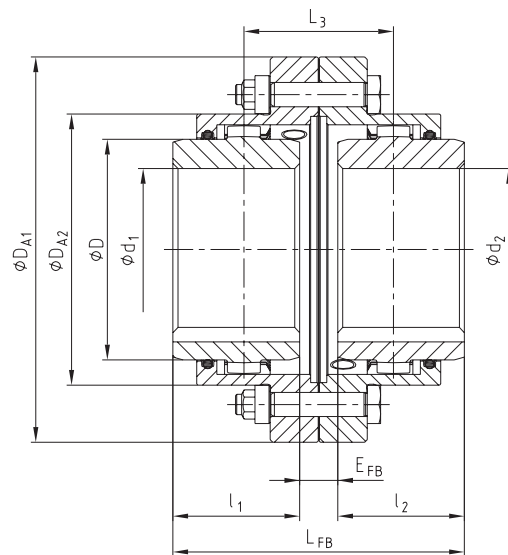
³⁾ Maximum torque of the coupling T_{K max} = rated torque of the coupling T_{KN} x 2. For selection see page 14 et seqq.

Ordering example:	GEARex® FA 10	d ₁ Ø50	d ₂ Ø50
	Type and size of coupling	Finish bore with keyway to DIN 6885 sheet 1	Finish bore with keyway to DIN 6885 sheet 1

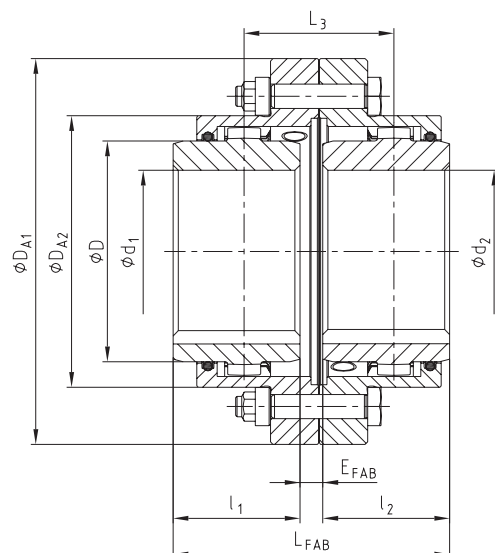
Type FA



Type FB



Type FAB



BoWex®

GEARex®