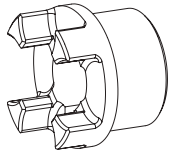


Hub types

Due to the numerous applications of ROTEX® for many different applications and mounting situations, this coupling system is available with various hub types. These types mainly differ in that they offer either positive or frictionally engaged connections, but mounting situations like, for example, gear shafts with integrated transmission cams or similar applications are covered, too.



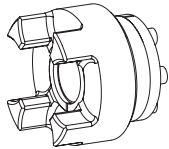
Type 1.0 hub with feather keyway and setscrew

Positive locking power transmission, permissible torque depending on the permissible surface pressure. Not suitable for backlash-free power transmission with heavily reversing operation.

Type 1.1 hub without feather keyway with setscrew

Non-positive torque transmission for crimp and glued connections. (No ATEX-release)

Type 1.3 hub with spline bore (see page 20)

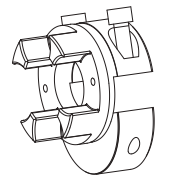


Type 4.2 hub with CLAMPEX® clamping set KTR 250

Frictionally engaged, backlash-free shaft-hub-connection for the transmission of average torques.

Type 4.1 for CLAMPEX® clamping set KTR 200
Type 4.3 for CLAMPEX® clamping set KTR 400

Frictionally engaged, backlash-free shaft-hub-connection for the transmission of high torques.

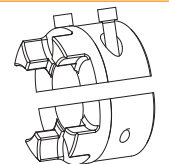


Type 7.5 clamping hub type DH without feather keyway for double-cardanic connection

Frictionally engaged, backlash-free shaft-hub-connection for radial assembly of coupling. Transmittable torques depending on bore diameter (For ATEX category 3 only)

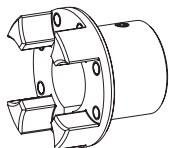
Type 7.6 clamping hub type DH with feather keyway for double-cardanic connection

Positive locking power transmission with additional friction fit for radial assembly of coupling. The frictional engagement avoids or reduces the reverse backlash. Surface pressure of the keyway connection is reduced.



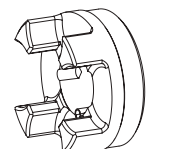
Type 7.0 SPLIT hub without feather keyway

Split hub made of cast iron. Frictionally engaged, backlash-free shaft-hub-connection. Transmittable torques depending on bore diameter (For ATEX category 3 only)



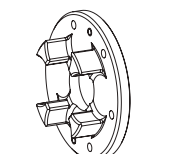
FNN hub

Coupling hub to be connected to an attachment such as brake drum, brake disk and fan.



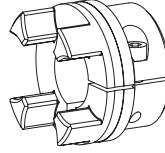
TB1 hub/TB2 hub

Coupling hub for taper clamping bushes. TB1 screwed on cam side. TB2 screwed externally.



Mitnehmerflansch Ausf. 3b

Driving flange to connect to customer's component. Abmessungen siehe Seite 38



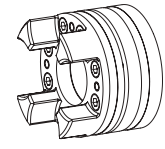
Type 2.0 clamping hub single slotted without feather keyway

Frictionally engaged, backlash-free shaft-hub-connection. Transmittable torques depending on bore diameter (see page 34). (For ATEX category 3 only)

Type 2.1 clamping hub single slotted with feather keyway

Positive locking power transmission with additional frictionally engaged condition. The frictional engagement avoids or reduces the reverse backlash. Surface pressure of the keyway connection is reduced.

Type 2.3 clamping hub with spline bore (see page 29/30)

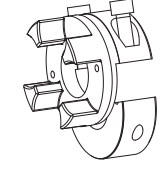


Type 6.0 clamping ring hub (see ROTEX® GS series)

Integrated frictionally engaged shaft-hub-connection for the transmission of higher torques. Screwing on elastomer side. For details about torque and dimensions see page 29. Suitable for high speeds.

Type 6.5 clamping ring hub (see ROTEX® GS series)

Design like 6.0, except for clamping screws externally. As an example for radial disassembly of intermediate pipe (special design).

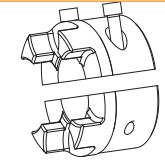


Type 7.8 clamping hub type H without feather keyway

Frictionally engaged, backlash-free shaft-hub-connection for radial assembly of coupling. Transmittable torques depending on bore diameter (For ATEX category 3 only)

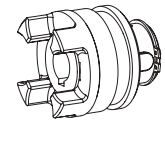
Type 7.9 clamping hub type H with feather keyway

Positive locking power transmission with additional friction fit for radial assembly of coupling. The frictional engagement avoids or reduces the reverse backlash. Surface pressure of the keyway connection is reduced.



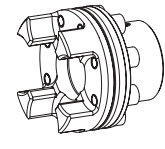
Type 7.1 SPLIT hub with feather keyway

Split hub made of cast iron. Positive locking power transmission with additional frictionally engaged condition. The frictional engagement avoids or reduces the reverse backlash. Surface pressure of the keyway connection is reduced.



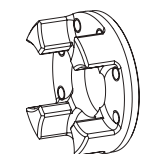
SD hub shifting hub

Coupling hub for separating or switching on the driving/driven machine with standstill of the machine. Can be combined with slip ring and shiftable linkage.



Type 3Na + 4N Driving flange with flange type K

For type AFN and BFN:
With type AFN the spider can be replaced while being assembled without having to disassemble the driving and driven side.

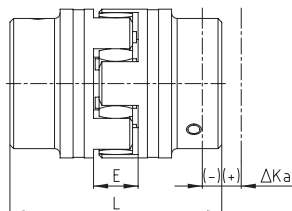


Mitnehmerflansch Ausf. 3Na

Driving flange to connect to customer's component. Abmessungen siehe Seite 38

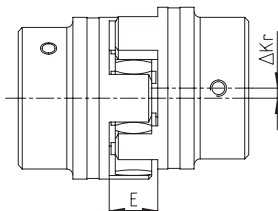
Displacements

Axial displacement ΔK_a

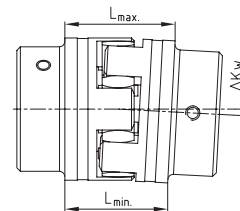


$$L_{\max} = L + \Delta K_a$$

Radial displacement ΔK_r



Angular displacement ΔK_w [degrees]



$$\Delta K_w [\text{mm}] = L_{\max} - L_{\min}$$

Displacements for spider 92 and 98 Shore-A

ROTEX® Size	14	19	24	28	38	42	48	55	65	75	90	100	110	125	140	160	180
Max. axial displacement ΔK_a [mm]	-0,5 +1,0	-0,5 +1,2	-0,5 +1,4	-0,7 +1,5	-0,7 +1,8	-1,0 +2,0	-1,0 +2,1	-1,0 +2,2	-1,0 +2,6	-1,5 +3,0	-1,5 +3,4	-1,5 +3,8	-2,0 +4,2	-2,0 +4,6	-2,0 +5,0	-2,5 +5,7	-3,0 +6,4
Max. radial displacement with n=1500 RPM ΔK_r [mm]	0,17	0,20	0,22	0,25	0,28	0,32	0,36	0,38	0,42	0,48	0,50	0,52	0,55	0,60	0,62	0,64	0,68
Max. angular displacement with n=1500 RPM ΔK_w [degrees]	1,2	1,2	0,9	0,9	1,0	1,0	1,1	1,1	1,2	1,2	1,2	1,2	1,3	1,3	1,2	1,2	1,2
ΔK_w [mm]	0,67	0,82	0,85	1,05	1,35	1,70	2,00	2,30	2,70	3,30	4,30	4,80	5,60	6,50	6,60	7,60	9,00

Displacements for spider 64 Shore-D

ROTEX® size	14	19	24	28	38	42	48	55	65	75	90	100	110	125	140	160	180
Max. axial displacement ΔK_a [mm]	-0,5 +1,0	-0,5 +1,2	-0,5 +1,4	-0,7 +1,5	-0,7 +1,8	-1,0 +2,0	-1,0 +2,1	-1,0 +2,2	-1,0 +2,6	-1,5 +3,0	-1,5 +3,4	-1,5 +3,8	-2,0 +4,2	-2,0 +4,6	-2,0 +5,0	-2,5 +5,7	-3,0 +6,4
Max. radial displacement with n=1500 RPM ΔK_r [mm]	0,11	0,13	0,15	0,18	0,21	0,23	0,25	0,27	0,30	0,34	0,36	0,37	0,40	0,43	0,45	0,46	0,49
Max. angular displacement with n=1500 RPM ΔK_w [degrees]	1,1	1,1	0,8	0,8	0,9	0,9	1,0	1,0	1,1	1,1	1,1	1,1	1,2	1,2	1,1	1,1	1,1
ΔK_w [mm]	0,57	0,76	0,76	0,90	1,25	1,40	1,80	2,00	2,50	3,00	3,80	4,30	5,30	6,00	6,10	7,10	8,00

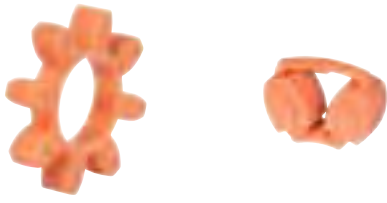
Displacements for spider PA, PEEK

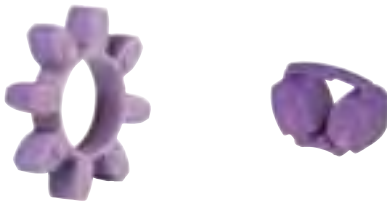
ROTEX® size	14	19	24	28	38	42	48	55	65	75	90	100	110	125	140
Max. axial displacement ΔK_a [mm]	-0,5 +1,0	-0,5 +1,2	-0,5 +1,4	-0,7 +1,5	-0,7 +1,8	-1,0 +2,0	-1,0 +2,1	-1,0 +2,2	-1,0 +2,6	-1,5 +3,0	-1,5 +3,4	-1,5 +3,8	-2,0 +4,2	-2,0 +4,6	-2,0 +5,0
Max. radial displacement with n=1500 RPM ΔK_r [mm]	0,08	0,10	0,11	0,12	0,14	0,16	0,18	0,19	0,21	0,24	0,25	0,26	0,27	0,30	0,31
Max. angular displacement with n=1500 RPM ΔK_w [degrees]	0,60	0,45	0,45	0,50	0,50	0,55	0,55	0,55	0,60	0,60	0,60	0,60	0,65	0,65	0,60
ΔK_w [mm]	0,33	0,41	0,42	0,52	0,67	0,85	1,00	1,15	1,35	1,65	2,15	2,40	2,80	3,25	3,30

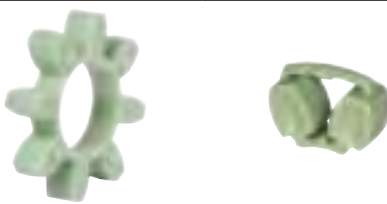
The above-mentioned figures of displacement of flexible ROTEX® couplings are standard values taking into account the load of the coupling up to the rated torque TKN and an operating speed n = 1500 rpm along with an ambient temperature of + 30° C.

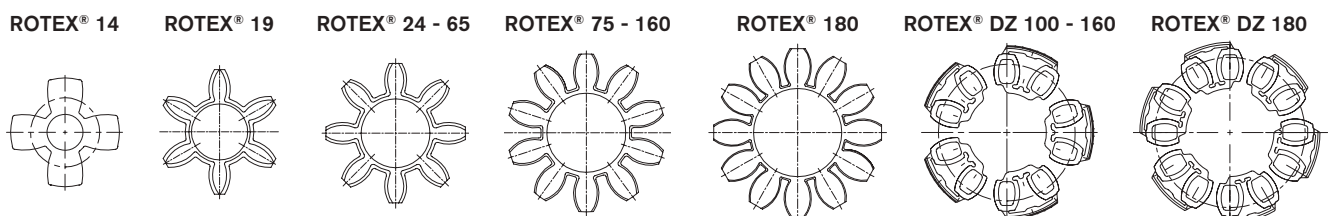
The displacement figures may only be used one by one - if they appear simultaneously, they must be limited in proportion. Care should be taken to maintain the distance dimension E accurately in order to allow for axial clearance of the coupling while in operation. Detailed mounting instructions are shown on our homepage (www.ktr.com).

Properties of standard spiders

Spider type (Shore hardness)	92 Shore-A (T-PUR®)	DZ 92 Shore-A (T-PUR®)	92 Shore-A
	 T-PUR®		
Size	14 to 180	100 to 180	14 to 90
Material	T-PUR®		Polyurethane (PUR)
Permissible temperature range	-50 °C to +120 °C		-40 °C to +90 °C
Permanent temperature	-50 °C to +150 °C		-50 °C to +120 °C
Short-term temperature			
Properties	– significantly higher service life expectancy – very good temperature resistance – improved damping of vibrations – good damping, average elasticity – suitable for all hub materials		– good damping, average elasticity – suitable for all hub materials

Spider type (Shore hardness)	98 Shore-A (T-PUR®) 1)	DZ 98 Shore-A (T-PUR®)	98 Shore-A 1)
	 T-PUR®		
Size	14 to 180	100 to 180	14 to 90
Material	T-PUR®		Polyurethane (PUR)
Permissible temperature range	-50 °C to +120 °C		-30 °C to +90 °C
Permanent temperature	-50 °C to +150 °C		-40 °C to +120 °C
Short-term temperature			
Properties	– 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		– transmission of high torques with average damping – recommended hub material: steel, GJL and GJS

Spider type (Shore hardness)	64 Shore-D (T-PUR®)	DZ 64 Shore-D (T-PUR®)	64 Shore-D
	 T-PUR®		
Size	14 to 180	100 to 180	14 to 90
Material	T-PUR®		Polyurethane (PUR)
Permissible temperature range	-50 °C to +120 °C		-30 °C to +110 °C
Permanent temperature	-50 °C to +150 °C		-30 °C to +130 °C
Short-term temperature			
Properties	– 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		– transmission of very high torques with low damping – suitable to shift critical speeds – resistant to hydrolysis – recommended hub material: steel and GJS



Technical data of standard spiders

92 Shore-A spider made of T-PUR® and PUR														
ROTEX® size	Max. speed		Twist angle φ with		Torque [Nm]			Damping power PKW [W] 1)	Relative damping ψ	Resonance factor VR	Torsion spring stiffness C dyn. [Nm/rad]			
	V=35 m/s casted material	V=40 m/s steel	TKN	TK max	Rated (TKN)	Max (TK max)	Vibratory (TKW)				1.0 TKN	0.75 TKN	0.5 TKN	0.25 TKN
14	22200	25400	6,4°	10°	7,5	15	2,0	–			0,38x10³	0,31x10³	0,24x10³	0,14x10³
19	16700	19000			10	20	2,6	4,8			1,28x10³	1,05x10³	0,80x10³	0,47x10³
24	12100	13800			35	70	9,1	6,6			4,86x10³	3,98x10³	3,01x10³	1,79x10³
28	10100	11500			95	190	25	8,4			10,90x10³	8,94x10³	6,76x10³	4,01x10³
38	8300	9500			190	380	49	10,2			21,05x10³	17,26x10³	13,05x10³	7,74x10³
42	7000	8000			265	530	69	12,0			23,74x10³	19,47x10³	14,72x10³	8,73x10³
48	6350	7250			310	620	81	13,8			36,70x10³	30,09x10³	22,75x10³	13,49x10³
55	5550	6350			410	820	107	15,6	0,80	7,90	50,72x10³	41,59x10³	31,45x10³	18,64x10³
65	4950	5650	3,2°	5°	625	1250	163	18,0			97,13x10³	79,65x10³	60,22x10³	35,70x10³
75	4150	4750			1280	2560	333	21,6			113,32x10³	92,92x10³	70,26x10³	41,65x10³
90	3300	3800			2400	4800	624	30,0			190,09x10³	155,87x10³	117,86x10³	69,86x10³
100	2950	3350			3300	6600	858	36,0			253,08x10³	207,53x10³	156,91x10³	93,01x10³
110	2600	2950			4800	9600	1248	42,0			311,61x10³	255,52x10³	193,20x10³	114,52x10³
125	2300	2600			6650	13300	1729	48,0			474,86x10³	389,39x10³	294,41x10³	174,51x10³
140	2050	2350			8550	17100	2223	54,6			660,49x10³	541,60x10³	409,50x10³	242,73x10³
160	1800	2050			12800	25600	3328	75,0			890,36x10³	730,10x10³	552,03x10³	327,21x10³
180	1550	1800			18650	37300	4849	78,0			2568,56x10³	2106,22x10³	1592,51x10³	943,95x10³

98 Shore-A spider made of T-PUR® and PUR														
ROTEX® size	Max. speed		Twist angle ϕ with		Torque [Nm]			Damping power PKW [W] 1)	Relative damping ψ	Resonance factor VR	Torsion spring stiffness C dyn. [Nm/rad]			
	V=35 m/s casted material	V=40 m/s steel	TKN	TK max	Rated (TKN)	Max (TK max)	Vibratory (TKW)				1.0 TKN	0.75 TKN	0.5 TKN	0.25 TKN
14	22200	25400	6,4°	10°	12,5	25	3,3	–			0,56x10³	0,46x10³	0,35x10³	0,21x10³
19	16700	19000			17	34	4,4	4,8			2,92x10³	2,39x10³	1,81x10³	1,07x10³
24	12100	13800			60	120	16	6,6			9,93x10³	8,14x10³	6,16x10³	3,65x10³
28	10100	11500			160	320	42	8,4			26,77x10³	21,95x10³	16,60x10³	9,84x10³
38	8300	9500			325	650	85	10,2			48,57x10³	39,83x10³	30,11x10³	17,85x10³
42	7000	8000			450	900	117	12,0			54,50x10³	44,69x10³	33,79x10³	20,03x10³
48	6350	7250			525	1050	137	13,8			65,29x10³	53,54x10³	40,48x10³	24,00x10³
55	5550	6350			685	1370	178	15,6	0,80	7,90	94,97x10³	77,88x10³	58,88x10³	34,90x10³
65	4950	5650	3,2°	5°	940	1880	244	18,0			129,51x10³	106,20x10³	80,30x10³	47,60x10³
75	4150	4750			1920	3840	499	21,6			197,50x10³	161,95x10³	122,45x10³	72,58x10³
90	3300	3800			3600	7200	936	30,0			312,20x10³	256,00x10³	193,56x10³	114,73x10³
100	2950	3350			4950	9900	1287	36,0			383,26x10³	314,27x10³	237,62x10³	140,85x10³
110	2600	2950			7200	14400	1872	42,0			690,06x10³	565,85x10³	427,84x10³	253,60x10³
125	2300	2600			10000	20000	2600	48,0			1343,64x10³	1101,79x10³	833,06x10³	493,79x10³
140	2050	2350			12800	25600	3328	54,6			1424,58x10³	1168,16x10³	883,24x10³	523,54x10³
160	1800	2050			19200	38400	4992	75,0			2482,23x10³	2035,43x10³	1538,98x10³	912,22x10³
180	1550	1800			28000	56000	7280	78,0			3561,45x10³	2920,40x10³	2208,10x10³	1308,84x10³

64 Spider 64 Shore-D made of T-PUR® and PUR														
ROTEX® size	Max. speed		Twist angle ϕ with		Torque [Nm]			Damping power PKW [W] 1)	Relative damping ψ	Resonance factor VR	Torsion spring stiffness C dyn. [Nm/rad]			
	V=35 m/s casted material	V=40 m/s steel	TKN	TK max	Rated (TKN)	Max (TK max)	Vibratory (TKW)				1.0 TKN	0.75 TKN	0.5 TKN	0.25 TKN
14	22200	25400	4,5°	7,0°	16	32	4,2	9,0			0,76x10³	0,62x10³	0,47x10³	0,28x10³
19	16700	19000			21	42	5,5	7,2			5,35x10³	4,39x10³	3,32x10³	1,97x10³
24	12100	13800			75	150	19,5	9,9			15,11x10³	12,39x10³	9,37x10³	5,55x10³
28	10100	11500			200	400	52	12,6			27,52x10³	22,57x10³	17,06x10³	10,12x10³
38	8300	9500			405	810	105	15,3			70,15x10³	57,52x10³	43,49x10³	25,78x10³
42	7000	8000			560	1120	146	18,0			79,86x10³	65,49x10³	49,52x10³	29,35x10³
48	6350	7250			655	1310	170	20,7			95,51x10³	78,32x10³	59,22x10³	35,10x10³
55	5550	6350			825	1650	215	23,4			107,92x10³	88,50x10³	66,91x10³	39,66x10³
65	4950	5650	2,5°	3,6°	1175	2350	306	27,0	0,75	8,50	151,09x10³	123,90x10³	93,68x10³	55,53x10³
75	4150	4750			2400	4800	624	32,4			248,22x10³	203,54x10³	153,90x10³	91,22x10³
90	3300	3800			4500	9000	1170	45,0			674,52x10³	553,11x10³	418,20x10³	247,89x10³
100	2950	3350			6185	12370	1608	54,0			861,17x10³	706,16x10³	533,93x10³	316,48x10³
110	2600	2950			9000	18000	2340	63,0			1138,59x10³	933,64x10³	705,92x10³	418,43x10³
125	2300	2600			12500	25000	3250	72,0			1435,38x10³	1177,01x10³	889,93x10³	527,50x10³
140	2050	2350			16000	32000	4160	81,9			1780,73x10³	1460,20x10³	1104,05x10³	654,42x10³
160	1800	2050			24000	48000	6240	112,5			3075,80x10³	2522,16x10³	1907,00x10³	1130,36x10³
180	1550	1800			35000	70000	9100	117,0			6011,30x10³	4929,27x10³	3727,01x10³	2209,15x10³

Temperature factor St											
	-50 °C	-30 °C +30 °C	+40 °C	+50 °C	+60 °C	+70 °C	+80 °C	+90 °C	+100 °C	+110 °C	+120 °C
T-PUR®	1,0	1,0	1,1	1,2	1,3	1,45	1,6	1,8	2,1	2,5	3,0
PUR	—	1,0	1,2	1,3	1,4	1,55	1,8	2,2	—	—	—

Unless explicitly specified in your order, we will supply spiders with Shore hardness 92 Sh-A T-PUR®.

For circumferential speeds exceeding V = 30 m/s, dyn. balancing is necessary For circumferential speeds exceeding V = 35 m/s only steel or nodular iron.

1) With +30 °C

Technical data and properties of special spiders

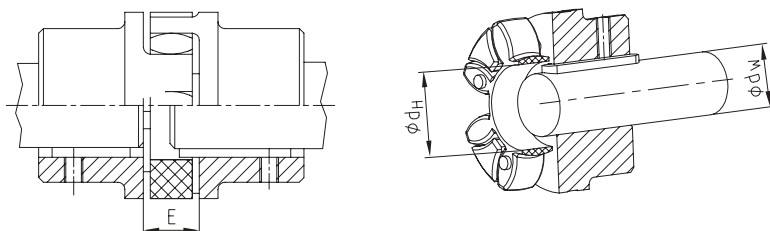
		
Spider type	PA	PEEK
Material	Polyamide	Polyetheretherketone
Permissible temperature range Permanent temperature Short-term temperature	-20 °C to +130 °C 1) -30 °C to +150 °C 1)	up to +180 °C (ATEX to +160 °C) up to +250 °C
Properties	– small twisting angle and high torsion spring stiffness – transmission of very high torques with very low damping – good resistance to chemicals 1) – recommended hub material: steel – high restoring forces with displacements	– small twisting angle and high torsion spring stiffness – transmission of very high torques with very low damping – highly temperature-resistant, resistant to hydrolysis – good resistance to chemicals – recommended hub material: steel – high restoring forces with displacements

¹⁾ different properties depending on compound

Torques			
	PA, PEEK		
	TKN [Nm]	TK max [Nm]	TKW [Nm]
14	22	44	5,5
19	30	60	8,0
24	105	210	27,5
28	280	560	73
38	565	1130	147
42	785	1570	204
48	915	1830	238
55	1200	2400	312
65	1645	3290	427
75	2560	5130	667
90	6300	12600	1640
100	8650	17300	2250
110	10500	21000	2730
125	13000	26000	3380

Temperature factor St												
	-50 °C	-30 °C +30 °C	+40 °C	+50 °C	+60 °C	+70 °C	+80 °C	+90 °C	+100 °C	+110 °C	+120 °C	+180 °C
PA	–	1,0	1,15	1,25	1,4	1,6	1,9	2,3	3,0	–	–	–
PEEK	–	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0	1,0

Installation of spider

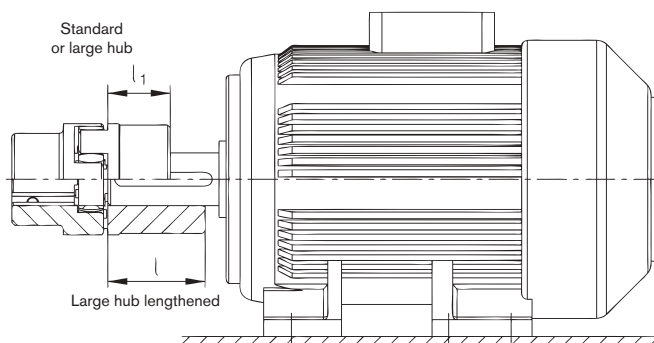


Shaft $\varnothing d_H$ with feather key (acc. to DIN 6885 sheet 1) protruding into the spider $\varnothing d_H$

Mounting dimension																	
ROTEX® Size	14	19	24	28	38	42	48	55	65	75	90	100	110	125	140	160	180
Distance dimension E	13	16	18	20	24	26	28	30	35	40	45	50	55	60	65	75	85
Dimension dH	10	18	27	30	38	46	51	60	68	80	100	113	127	147	165	190	220
Dimension dW 2)	7	12	20	22	28	36	40	48	55	65	80	95	100	120	135	160	185

²⁾ 2) If the shaft diameter is smaller than or equal to dimension d_H , one shaft end or both shaft ends may protrude with the feather keyway in the spider.

Selection of standard IEC motors



ROTEX® couplings for standard IEC motors, protection class IP 54/IP 55 (spider 92 Shore A)

A. C. motor 50 Hz		Motor output n= 3000 RPM 2 poles		ROTEX® coupling size	Motor output n= 1500 RPM 4 poles		ROTEX® coupling size	Motor output n= 1000 RPM 6 poles		ROTEX® coupling size	Motor output n= 750 RPM 8 poles		ROTEX® coupling size
Size	Shaft end d x l [mm]	2-pole	4, 6, 8 pole		Output P [kW]	Torque T [Nm]		Output P [kW]	Torque T [Nm]		Output P [kW]	Torque T [Nm]	
56	9 x 20			9 ¹⁾	0,09	0,32	9 ¹⁾	0,037	0,43	9 ¹⁾			
					0,12	0,41		0,045	0,52				
63	11 x 23			14	0,18	0,62	14	0,06	0,7	14			
					0,25	0,86		0,09	1,1				
71	14 x 30			19	0,37	1,3	19	0,18	2	19	0,09	1,4	14
					0,55	1,9		0,25	2,8		0,12	1,8	
80	19 x 40			24	0,75	2,5	24	0,37	3,9	24	0,18	2,5	19
					1,1	3,7		0,55	5,8		0,25	3,5	
90S	24 x 50			28	1,5	5	28	0,75	8	28	0,37	5,3	24
90L					2,2	7,4		1,1	12		0,55	7,9	
100L	28 x 60			38	2,2	15	38	1,5	15	38	0,75	11	28
					3	20		2,2	22		1,1	16	
112M				42	4	13	42	2,2	22	42	1,5	21	
					5,5	18		3	30		2,2	30	
132S	38 x 80			55	7,5	25	55	4	40	55	3	40	28
								5,5	55				
132M													
160M	42 x 110			65	11	36	65	7,5	75	65	4	54	38
					15	49		11	109		5,5	74	
160L				75	18,5	60	75	15	98	75	7,5	100	
180M	48 x 110			90	22	71	90	18,5	121	90	11	145	42
								22	144		15	198	
180L													
200L	55 x 110			100	30	97	100	18,5	181	100	15	198	42
					37	120		22	215				
225S	55 x 110	60 x 140		110			110			110	18,5	244	48
225M					45	145		30	293		22	290	
250M	60 x 140	65 x 140		125	55	177	125	37	361	125	30	392	65
					75	241		45	438		37	483	
280S		75 x 140		140	90	289	140	55	535	140	45	587	75
					110	353		75	727		55	712	
280M													
315S	65 x 140	80 x 170		160	132	423	160	90	873	160	75	971	90
					160	513		110	1070		90	1170	
315M													
315L				180	200	641	180	132	1280	180	110	1420	
								160	1550		132	1710	
315		85 x 170		200	250	802	200	200	1930	200	160	2070	100
					315	1010		250	2410		200	2580	
355	75 x 140	95 x 170		225	355	1140	225	315	3040	225	250	3220	110
					400	1280		400	3850		315	4060	
					560	1790		450	4330		355	4570	
400	80 x 170	110 x 210		250	630	2020	250	500	4810	250	400	5150	140
					710	2270		560	5390		450	5790	
					800	2560		630	6060		500	6420	
450	90 x 170	120 x 210		280	900	2880	280	710	6830	280	560	7190	160
					1000	3200		800	7690		630	8090	

The coupling selection is based on an ambient temperature up to 30 °C. For the selection there is a minimum safety factor of 2 of the max. coupling torque (TKmax.). A detailed selection is possible according to catalogue, page 10 et seqq. Drives with periodical torque curves must be selected according to DIN 740 part 2. If requested, KTR will perform the selection. Torque T = rated torque according to Siemens catalogue M 11 · 1994/95..

¹⁾ Dimensions see series ROTEX® GS

²⁾ Motor hub made of steel see page 36

Cylindrical bores and spline bores

Stock programme of cylindrical finish bores [mm] H7 feather keyway to DIN 6885 sheet 1 [JS9] and thread for setscrews

ROTEX® Size/material	Un- bo- red	Ø6	Ø8	Ø9	Ø10	Ø11	Ø12	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60	Ø65	Ø70	Ø75	Ø80	Ø85	Ø90	Ø100
14	Sint	●	●	●	●	●	●	●	●	●																										
	Al-H	●	●	●	●	●	●	●	●	●																										
19	Sint	●																																		
	Al-D	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
24	Al-D	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●			●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
28	Al-D	●								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●								●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
38	GJL	●								●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●								●		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
42	GJL	●												●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●												●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
48	GJL	●															●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●															●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
55	GJL	●																●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●																●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
65	GJL	●																	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●																	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
75	GJL	●																		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●																		●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●	●
90	GJL	●																						●	●	●	●	●	●	●	●	●	●	●	●	●
	St	●																						●	●	●	●	●	●	●	●	●	●	●	●	●

Basic programme SAE involute spline

Spline code	Size	Pitch circle	Pitch	No. of teeth	Angle	Spline code	Size	Pitch circle	Pitch	No. of teeth	Angle
PH-S	$\frac{5}{8}$ "	14,28	16/32	9	30°	PS-S	1 $\frac{1}{2}$ "	35,98	12/24	17	30°
PI-S	$\frac{3}{4}$ "	17,46	16/32	11	30°	PD-S	1 $\frac{1}{2}$ "	36,51	16/32	23	30°
PB-S	$\frac{7}{8}$ "	20,63	16/32	13	30°	PE-S	1 $\frac{3}{4}$ "	42,86	16/32	27	30°
PB-BS	1"	23,81	16/32	15	30°	PK	1 $\frac{3}{4}$ "	41,275	8/16	13	30°
PJ	1 $\frac{1}{8}$ "	26,98	16/32	17	30°	PT-C ¹⁾	2"	47,625	8/16	15	30°
PC-S	1 $\frac{1}{4}$ "	29,63	12/24	14	30°	PQ-C ¹⁾	2 $\frac{1}{4}$ "	53,975	8/16	17	30°
PA-S	1 $\frac{3}{8}$ "	33,33	16/32	21	30°						

Basic programme spline bores to DIN 5482

Size	Pitch circle	Pitch	No. of teeth	Profile correction	Size	Pitch circle	Pitch	No. of teeth	Profile correction
A 17 x 14	14,40	1,6	9	+0,600 ²⁾	A 35 x 31	31,50	1,75	18	+0,676
A 20 x 17	19,20	1,6	12	-0,2	A 40 x 36	38,00	1,9	20	+0,049
A 25 x 22	22,40	1,6	14	+0,550	A 45 x 41	44,00	2	22	+0,181
A 28 x 25	26,25	1,75	15	+0,302	A 50 x 45	48,00	2	24	+0,181
A 30 x 27	28,00	1,75	16	+0,327					

Basic programme spline bores to DIN 5480

Spline code	Pitch circle	Pitch	No. of teeth	Spline code	Pitch circle	Pitch	No. of teeth
20 x 1 x 18 x 7H	18,0	1	18	40 x 2 x 18 x 8H	36,0	2	18
20 x 1,25 x 14 x 7H	17,5	1,25	14	45 x 2 x 21 x 7H	41,0	2	21
25 x 1,25 x 18 x 7H	22,5	1,25	18	48 x 2 x 22 x 9H	44,0	2	22
28 x 1,25 x 21 x 7H	26,25	1,25	21	50 x 2 x 24 x 8H	48,0	2	24
30 x 2 x 14 x 7H	26,0	2	14	60 x 2 x 28 x 8H	56,0	2	28
32 x 2 x 14 x 8H	28,0	2	14	75 x 3 x 24 x 7H	72,0	3	24
35 x 2 x 16 x 8H	32,0	2	16	80 x 3 x 25 x 8H	75,0	3	25

Basic programme spline bores acc. to DIN 9611 (p.t.o. shaft spline)

Size	Width of keyway	No. of teeth	Tip circle	Root circle
1 $\frac{3}{8}$ "	8,69	6	34,93	29,65
1 $\frac{3}{8}$ "	—	21	34,95	34,80 ³⁾
1 $\frac{3}{4}$ "	11,07	6	44,45	37,74
1 $\frac{3}{4}$ "	—	20	45,20	40,20

Spline clamping hubs are often adapted to the shafts of hydraulic pumps/hydraulic motors. Please ask us about the corresponding hub length of the spline code!

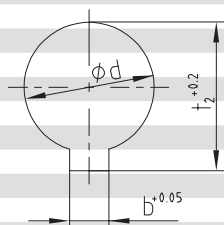
¹⁾ For clamping hubs only, for plug-in hubs use code PT or PQ.

²⁾ Profile correction different from DIN

³⁾ Similar to code PA-S

Inch bores and taper bores

ROTEX® Size					Stock programme inch bores									
Material					19	24	28	38	42	48	55	65	75	90
Code	Ød	Ød inch	b ^{+0,05}	t ₂ ^{+0,2}	St	St	St	GJL	GJL	GJL	GJL	GJL	GJL	GJL
Tb	9,5 ^{+0,03}	3/8	3,17	11,1										
DNB	11,11 ^{M7}	7/16	2,4	12,5										
T	12,69 ^{H7}	1/2	4,75	14,6										
Ta	12,7 ^{+0,03}	1/2	3,17	14,3	●	●								
DNC	13,45 ^{H7}	17/32	3,17	14,9										
Do	14,29 ^{+0,03}	9/16	3,17	15,6										
E	15,87 ^{+0,03}	5/8	3,17	17,5										
Es	15,88 ^{+0,03}	5/8	4,00	17,7	●	●	●							
Ed	15,87 ^{+0,03}	5/8	4,75	18,1	●	●								
DNH	17,465 ^{H7}	11/16	4,75	19,6										
Ad	19,02 ^{+0,03}	3/4	3,17	20,7										
A	19,05 ^{+0,03}	3/4	4,78	21,3	●	●	●	●						
Gs	22,22 ^{+0,03}	7/8	4,78	24,4	●									
G	22,22 ^{+0,03}	7/8	4,75	24,7	●	●	●	●	●					
F	22,22 ^{+0,03}	7/8	6,38	25,2		●	●	●	●	●				
Gd	22,225 ^{M7}	7/8	4,76	24,7		●								
Gf	23,80 ^{+0,03}	15/16	6,35	26,8										
Bs	25,38 ^{+0,03}	1	6,37	28,3		●	●	●	●					
H	25,40 ^{+0,03}	1	4,78	27,8										
Hs	25,40 ^{+0,03}	1	6,35	28,7			●							
R	26,95 ^{+0,03}	1 1/16	4,78	29,3										
Sa	28,575 ^{M7}	1 1/8	6,35	31,7		●	●							
Sb	28,58 ^{+0,03}	1 1/8	6,35	31,5			●	●						
Sd	28,58 ^{+0,03}	1 1/8	7,93	32,1										
Js	31,75 ^{+0,03}	1 1/4	6,35	34,6										
K	31,75 ^{K7}	1 1/4	7,93	35,5			●	●	●	●	●	●		
Ma	34,925 ^{M7}	1 3/8	7,93	38,7			●							
RH1	34,93 ^{M7}	1 3/8	9,55	37,8										
Cb	36,50 ^{+0,03}	1 7/16	9,55	40,9										
Ca	38,07 ^{+0,03}	1 1/2	7,93	42,0										
C	38,07 ^{+0,03}	1 1/2	9,55	42,5			●	●	●	●	●	●	●	
Nb	41,275 ^{M7}	1 5/8	9,55	45,8				●	●					
Ls	44,42 ^{+0,03}	1 3/4	9,55	48,8										
L	44,45 ^{K7}	1 3/4	11,11	49,4										
Lu	47,625 ^{M7}	1 7/8	12,7	53,5					●	●	●			
Da	49,20 ^{+0,03}	1 15/16	12,7	55,0										
Ds	50,77 ^{+0,03}	2	12,7	56,4										
D	50,80 ^{+0,03}	2	12,7	55,1										
Pa	53,975 ^{M7}	2 1/8	12,7	60,0								●		
U	57,10 ^{+0,03}	2 1/4	12,7	62,9										
Ub	60,325 ^{M7}	2 3/8	15,875	67,6										
Wd	85,725 ^{M7}	3 3/8	22,225	95,8										
Wf	92,075 ^{M7}	3 5/8	22,225	101,9										

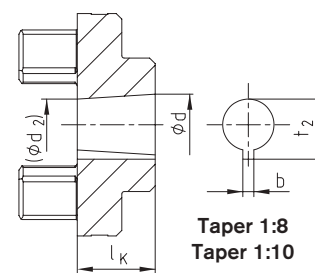
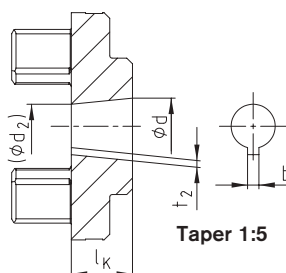


Basic programme taper 1:8					
Code	d ^{+0,05}	(d2)	b ^{JS9}	t ₂ ^{+0,1}	l _K
N/ 1	9,7	7,575	2,4 ^{+0,05}	10,85	17,0
N/ 1c	11,6	9,5375	3 ^{JS9}	12,90	16,5
N/ 1e	13,0	10,375	2,4 ^{+0,05}	13,80	21,0
N/ 1d	14,0	11,813	3 ^{JS9}	15,50	17,5
N/ 1b	14,3	11,8625	3,2 ^{+0,05}	5,65	19,5
N/ 2	17,287	14,287	3,2 ^{+0,05}	18,24	24,0
N/ 2a	17,287	14,287	4 ^{JS9}	18,94	24,0
N/ 2b	17,287	14,287	3 ^{JS9}	18,34	24,0
N/ 3	22,002	18,502	4 ^{JS9}	23,40	28,0
N/ 4	25,463	20,963	4,78 ^{+0,05}	27,83	36,0
N/ 4b	25,463	20,963	5 ^{JS9}	28,23	36,0
N/ 4a	27,0	22,9375	4,78 ^{+0,05}	28,80	32,5
N/ 4g	28,45	23,6375	6 ^{JS9}	29,32	38,5
N/ 5	33,176	27,676	6,38 ^{+0,05}	35,39	44,0
N/ 5a	33,176	27,676	7 ^{JS9}	35,39	44,0

For code N/6 and N/6a keywidth parallel to the taper.

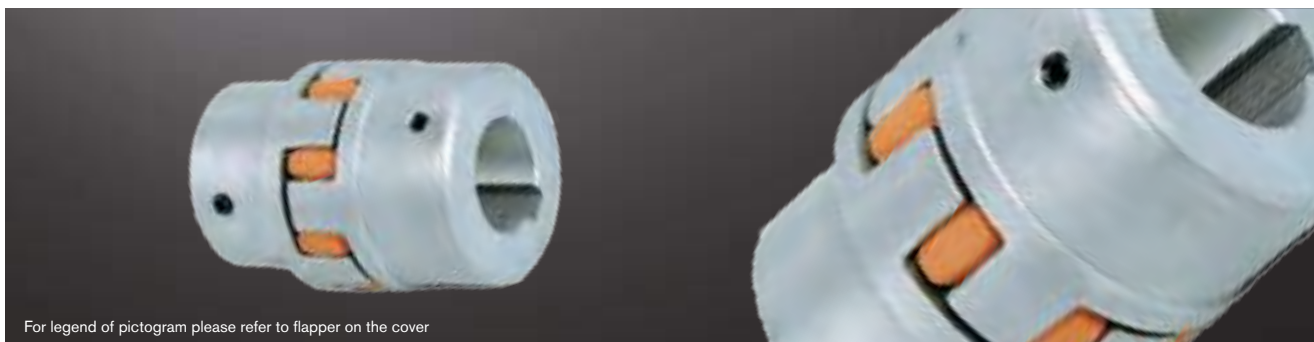
Basic programme taper 1:10					
Code	d ^{+0,05}	(d2)	b ^{JS9}	t ₂ ^{+0,1}	l _K
CX	19,95	16,75	5 ^{JS9}	22,08	32
DX	24,95	20,45	6 ^{JS9}	26,68	45
EX	29,75	24,75	8 ^{JS9}	31,88	50

Basic programme taper 1:5					
Code	d ^{+0,05}	(d2)	b ^{JS9}	t ₂ ^{+0,1}	l _K
A-10	9,85	7,55	2 ^{JS9}	1,0	11,5
B-17	16,85	13,15	3 ^{JS9}	1,8	18,5
C-20	19,85	15,55	4 ^{JS9}	2,2	21,5
Cs-22	21,95	17,65	3 ^{JS9}	1,8	21,5
D-25	24,85	19,55	5 ^{JS9}	2,9	26,5
E-30	29,85	23,55	6 ^{JS9}	2,6	31,5
F-35	34,85	27,55	6 ^{JS9}	2,6	36,5
G-40	39,85	32,85	6 ^{JS9}	2,6	35,0



ROTEX® Standard Flexible jaw couplings

Material cast + powder metal



For legend of pictogram please refer to flapper on the cover



ROTEX® Sintered steel (Sint)																	
Size	Component	Spider (part 2) 1) Rated torque [Nm]			Finish bore d	Dimensions [mm]											
						General										Thread for setscrew	
		92 Sh-A	98 Sh-A			L	l ₁ ; l ₂	E	b	s	D _H	d _H	D	N	G	t	T _A [Nm]
14	1a	7,5	12,5		ungeb.: 8, 10, 11, 12, 14, 15, 16	35	11	13	10	1,5	30	10	30	M4	5	1,5	1,5
19	1a	10	17		ungeb.: 14, 16, 19, 20, 22, 24	66	25	16	12	2,0	40	18	40	M5	10	2	2
24	1a	35	60		ungeb.: Ø 24	78	30	18	14	2,0	56	27	40	M5	10	2	2

ROTEX® Aluminium diecast (Al-D)																	
Size	Component	Spider (part 2) 1) Rated torque [Nm]			Finish bore d (min-max)	Dimensions [mm]										Thread for setscrew	
						General										G	t
		92 Sh-A	98 Sh-A	64 Sh-D		L	l ₁ ; l ₂	E	b	s	D _H	D _Z	d _H	D; D ₁	N		
19	1	10	17	—	6-19	66	25	16	12	2	41	—	18	32	20	M5	10
	1a				19-24									41			
24	1	35	60	—	9-24	78	30	18	14	2	56	—	27	40	24	M5	10
	1a				22-28									56			
28	1	95	160	—	10-28	90	35	20	15	2,5	66	—	30	48	28	M8	15
	1a				28-38									66			

ROTEX® Cast iron (GJL)																	
Size	Component	Spider (part 2) 1) Rated torque [Nm]			Finish bore d (min-max)	Dimensions [mm]										Thread for setscrew	
						General										G	t
		92 Sh-A	98 Sh-A	64 Sh-D		L	l ₁ ; l ₂	E	b	s	D _H	D _Z	d _H	D; D ₁	N		
38	1	190	325	405	12-40	114	45	24	18	3	80	—	38	66	37	M8	15
	1a				38-48									78			
42	1b	265	450	560	12-48	164	70	26	20	3	95	—	46	62	40	M8	20
	1				14-45									75			
48	1a	310	525	655	42-55	126	50	28	21	3,5	105	—	51	94	45	M8	20
	1b				14-55									65			
55	1	410	685	825	15-52	140	56	30	22	4	120	—	60	85	52	M10	20
	1a				48-62									104			
65	1b	625	940	1175	15-62	188	80	35	26	4,5	135	—	68	69	61	M10	20
	1				20-60									98			
75	1a	1280	1920	2400	55-74	160	65	40	30	5	160	—	80	118	69	M10	25
	1b				22-70									115			
90	1	2400	3600	4500	30-80	210	85	45	34	5,5	200	—	100	135	81	M12	30
	1a				40-97									160			

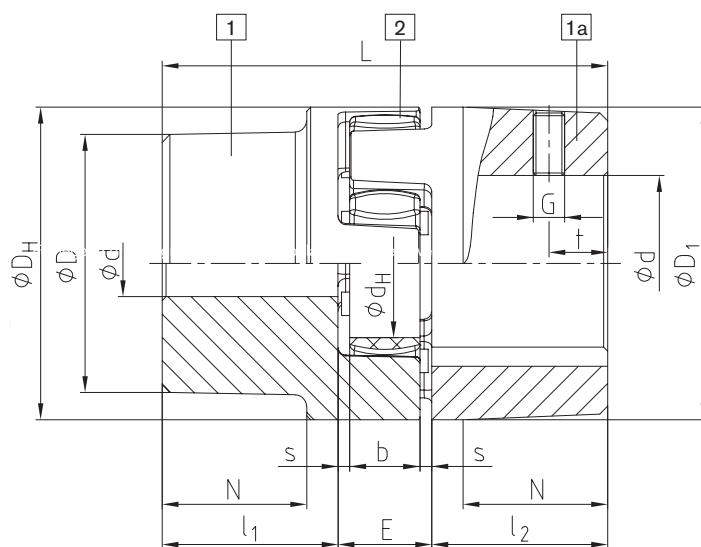
ROTEX® Nodular iron (GJS)																	
Size	Component	Spider (part 2) 1) Rated torque [Nm]			Finish bore d (min-max)	Dimensions [mm]										Thread for setscrew	
						General										G	t
		92 Sh-A	98 Sh-A	64 Sh-D		L	l ₁ ; l ₂	E	b	s	D _H	D _Z	d _H	D; D ₁	N		
100	1	3300	4950	6185	50-115	270	110	50	38	6	225	246	113	180	89	M12	30
110	1	4800	7200	9000	60-125	295	120	55	42	6,5	255	276	127	200	96	M16	35
125	1	6650	10000	12500	60-145	340	140	60	46	7	290	315	147	230	112	M16	40
140	1	8550	12800	16000	60-160	375	155	65	50	7,5	320	345	165	255	124	M20	45
160	1	12800	19200	24000	80-185	425	175	75	57	9	370	400	190	290	140	M20	50
180	1	18650	28000	35000	85-200	475	195	85	64	10,5	420	450	220	325	156	M20	50

■ = If no material is specified in the order, it is stipulated in the calculation/order.

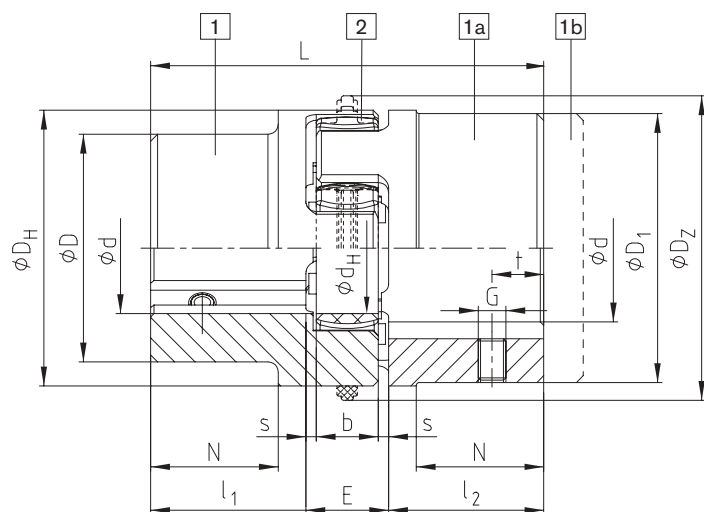
¹⁾ Maximum torque of the coupling T_{Kmax}. = rated torque of the coupling T_K rated x 2. For selection see page 10 et seqq.

Ordering example:	ROTEX® 38						
	Coupling size	Material	Spider hardness	Component	Finish bore	Component	Finish bore

Components

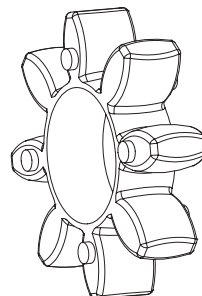


AL-D (thread opposite to the keyway)

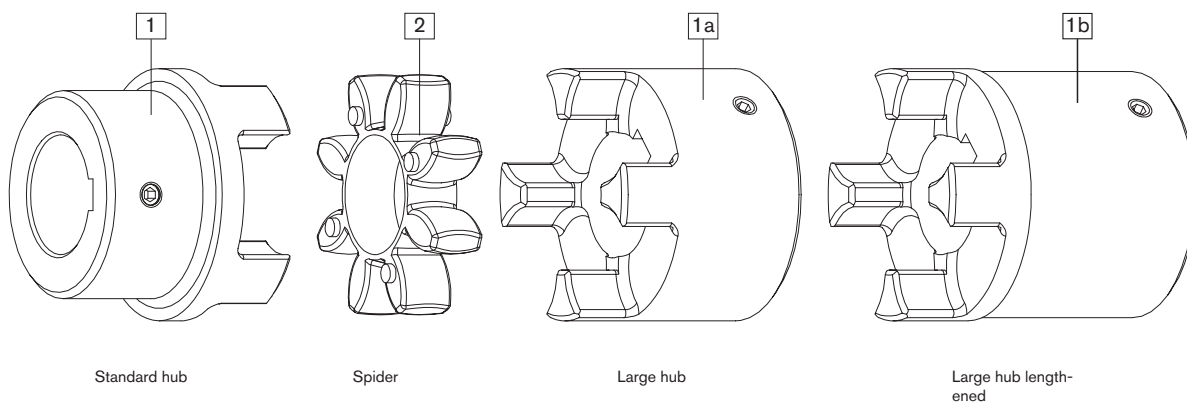
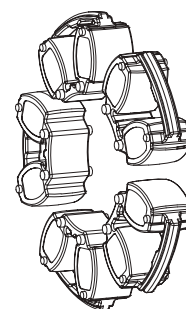


GJL / GJS (thread on the keyway)

Spider
Hardness 92Sh-A, 98Sh-A,
64Sh-D
Standard from size
14 - 180



Elements DZ
Hardness 92Sh-A and
98Sh-A size 100 - 180



Standard hub

Spider

Large hub

Large hub length-
ened

ROTEX® Standard Flexible jaw couplings

Material steel / UL / marine



For legend of pictogram please refer to flapper on the cover



ROTEX® Steel (St)																	
Size	Component	Spider (part 2) rated torque [Nm]			Finish bore d (min-max)	Dimensions [mm]											
						General										Thread for setscrew	
		92 Sh-A	98 Sh-A	64 Sh-D		L	l ₁ ; l ₂	E	b	s	D _H	d _H	D	N	G	t	T _A [Nm]
14	1a	7,5	12,5	16	0-16	35	11	13	10	1,5	30	10	30	—	M4	5	1,5
	1b					50	18,5										
19	1a	10	17	21	0-25	66	25	16	12	2	40	18	40	—	M5	10	2
	1b					90	37										
24	1a	35	60	75	0-35	78	30	18	14	2	55	27	55	—	M5	10	2
	1b					118	50										
28	1a	95	160	200	0-40	90	35	20	15	2,5	65	30	65	—	M8	15	10
	1b					140	60										
38	1	190	325	405	0-48	114	45	24	18	3	80	38	70	27	M8	15	10
	1b					164	70						80	—			
42	1	265	450	560	0-55	126	50	26	20	3	95	46	85	28	M8	20	10
	1b					176	75						95	—			
48	1	310	525	655	0-62	140	56	28	21	3,5	105	51	95	32	M8	20	10
	1b					188	80						105	—			
55	1	410	685	825	0-74	160	65	30	22	4	120	60	110	37	M10	20	17
	1b					210	90						120	—			
65	1	625	940	1175	0-80	185	75	35	26	4,5	135	68	115	47	M10	20	17
	1b					235	100						135	—			
75	1	1280	1920	2400	0-95	210	85	40	30	5	160	80	135	53	M10	25	17
	1b					260	110						160	—			
90	1	2400	3600	4500	0-110	245	100	45	34	5,5	200	100	160	62	M12	30	40
	1b					295	125						200	—			
100	1	3300	4950	6185	0-115	270	110	50	38	6	225	113	150	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

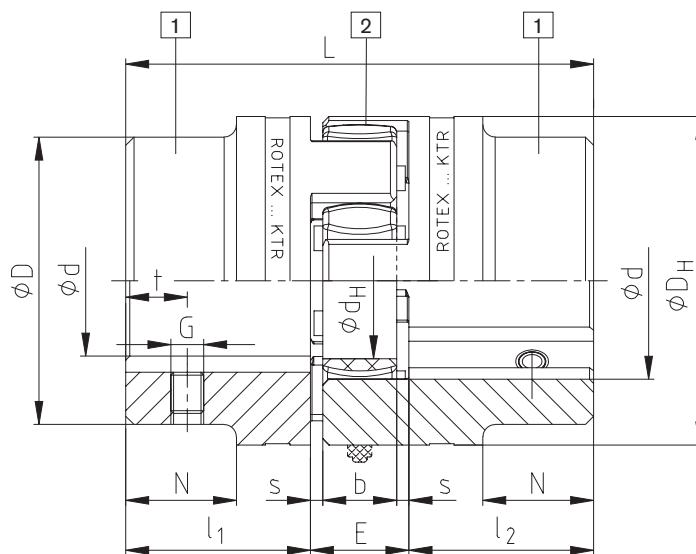
■ = If no material is specified in the order, it is stipulated in the calculation/order.

¹⁾ Maximum torque of coupling T_{Kmax}. = rated torque of coupling T_{K rated} x 2. For selection see page 10 et seqq.

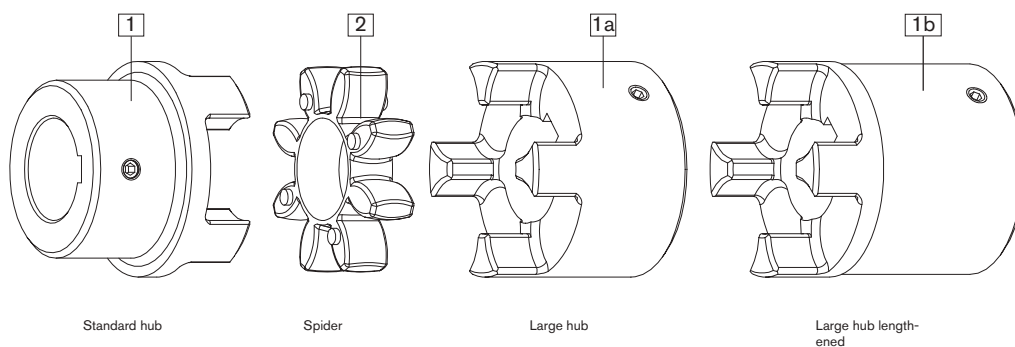
Ordering
example:

ROTEX® 38	St	92 Sh-A	1 – Ø 45		1 – Ø 25	
Coupling size	Material	Spider hardness	Component	Finish bore	Component	Finish bore

Components



Steel (thread on the keyway)



Marine programme:

Hub materials S355J2+N and 42CrMo4+QT acc. to DIN EN10204-3.1+3.2 size 75-180 available from stock.



Use in fire extinguisher pumps

ROTEX® couplings comply with the specifications of NFPA 20 standard for the installation of stationary pumps for fire protection and on completion of the necessary permanent tests they also comply with the specifications of UL 448A, flexible couplings and connection shafts for stationary fire extinguisher pumps.

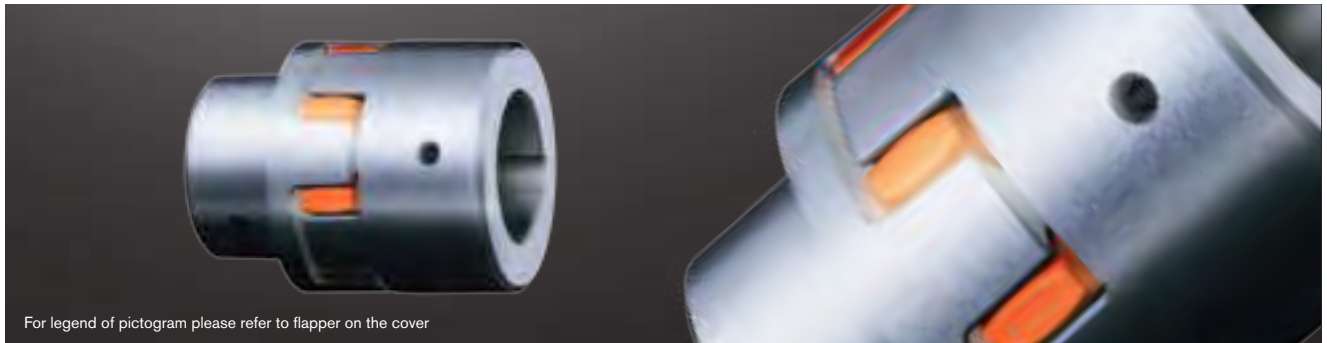
Sizes available:

ROTEX® UL-Listed								
Size	Component	Material	Spider (part 2)	Dimensions [mm]				
			Rated torque [Nm]	Finish bore d (min-max)	L	l ₁ ; l ₂	E	D _H
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

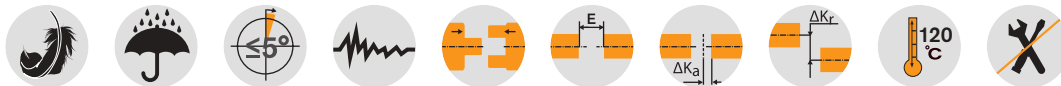
* For complete dimensions see table on page 36

ROTEX® Standard Flexible jaw couplings

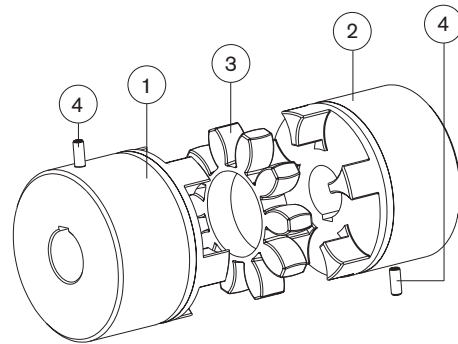
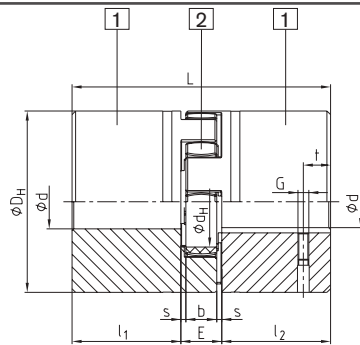
Material aluminium



For legend of pictogram please refer to flapper on the cover



Components



ROTEX® Aluminium (AL-H)

Size	Component	Spider (part 2) Rated torque [Nm]		Dimensions [mm]											
				Finish bore d (max)	General									Thread for setscrew	
		92 Sh-A GS	98 Sh-A GS		L	l ₁ ; l ₂	E	b	s	D _H	d _H	N	G	t	T _A [Nm]
5	1	0,5	0,9	6	15	5	5	4	0,5	10	-	M2	2,5	-	2
7	1	1,2	2,0	7	22	7	8	6	1,0	14	-	M3	3,5	0,6	2
9	1	3,0	5,0	11	30	10	10	8	1,0	20	7,2	M4	5	1,5	10
12	1	5,0	9,0	12	34	11	12	10	1,0	25	8,5	M4	5	1,5	10
14	1	7,5	12,5	16	35	11	13	10	1,5	30	10,5	M4	5	1,5	10
19	1	10	17	24	66	25	16	12	2,0	40	18	M5	10	2	10
24	1	35	60	28	78	30	18	14	2,0	55	27	M5	10	2	17
28	1	95	160	38	90	35	20	15	2,5	65	30	M8	15	10	17
38	1	190	325	45	114	45	24	18	3,0	80	38	M8	15	10	17
42	1	265	450	55	126	50	26	20	3,0	95	46	M8	20	10	40
48	1	310	525	62	140	56	28	21	3,0	105	51	M8	20	10	40

As a standard the coupling is provided with a ROTEX®-GS spider (ROTEX® standard spider is available on request, too)

Ordering example:

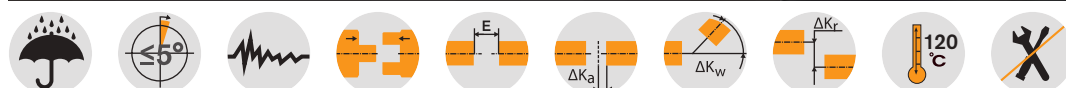
ROTEX® 19	Al-H	92 Sh-A GS	1 - Ø 15		1 - Ø 20	
Coupling size	Material	Spider hardness	Component	Finish bore	Component	Finish bore

ROTEX® Standard Flexible jaw couplings

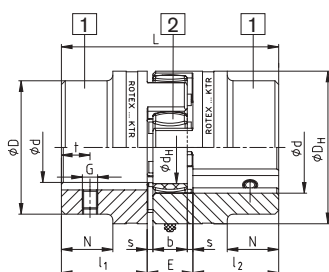
Material steel with CDP coating, stainless steel



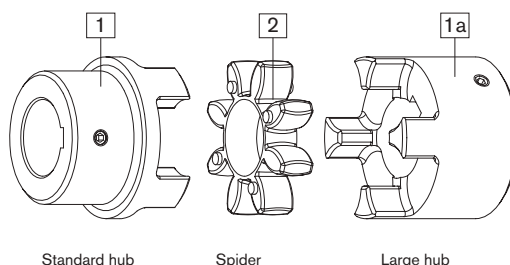
For legend of pictogram please refer to flapper on the cover



Components



Steel (thread on the keyway)



ROTEX® with CDP coating ¹⁾																			
Size	Component	Spider (part 2) Rated torque [Nm]			Finish bore d (min-max)	Dimensions [mm]											Thread for setscrew		
						General													
		92 Sh-A	98 Sh-A	64 Sh-D		L	l ₁ ; l ₂	E	b	s	D _H	d _H	D	N	G	t	T _A [Nm]		
19	1a	10	17	21	0-25	66	25	16	12	2	40	18	40	–	M5	10	2		
24	1a	35	60	75	0-35	78	30	18	14	2	55	27	55	–	M5	10	2		
28	1a	95	160	200	0-40	90	35	20	15	2,5	65	30	65	–	M8	15	10		
38	1a	190	325	405	0-48	114	45	24	18	3	80	38	70	27	M8	15	10		
42	1a	265	450	560	0-55	126	50	26	20	3	95	46	85	28	M8	20	10		
48	1a	310	525	655	0-62	140	56	28	21	3,5	105	51	95	32	M8	20	10		
55	1a	410	685	825	0-74	160	65	30	22	4	120	60	110	37	M10	20	17		
65	1a	625	940	1175	0-80	185	75	35	26	4,5	135	68	115	47	M10	20	17		
75	1a	1280	1920	2400	0-95	210	85	40	30	5	160	80	135	53	M10	25	17		
90	1a	2400	3600	4500	0-110	245	100	45	34	5,5	200	100	160	62	M12	25	40		
100	1	3300	4950	6185	0-115	270	110	50	38	6	225	113	150	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		

¹⁾ Corrosion protection class to DIN EN ISO 12944: Min. C4, heavy - long

ROTEX® Stainless steel																		
Size	Material	Spider (part 2) Rated torque [Nm]			Finish bore d (min - max)	Dimensions [mm]												Thread for setscrew
						General												
		92 Sh-A	98 Sh-A	64 Sh-D		L	l ₁ ; l ₂	E	b	s	D _H	d _H	D	N	G	t	T _A [Nm]	
19	1.4305	10	17	21	0-25	66	25	16	12	2	40	18	40	-	M5	10	2	
24	1.4571	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	1.4571	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	1.4571	310	525	655	0-62	140	56	28	21	3,5	105	51	95	32	M8	20	10	

Ordering
example:

ROTEX® 38	St+KTL	92 Sh-A	1 - Ø 45	1 - Ø 25
Coupling size	Material	Spider hardness	Component	Finish bore

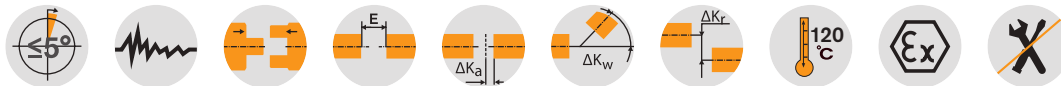
ROTEX®

Flexible jaw couplings

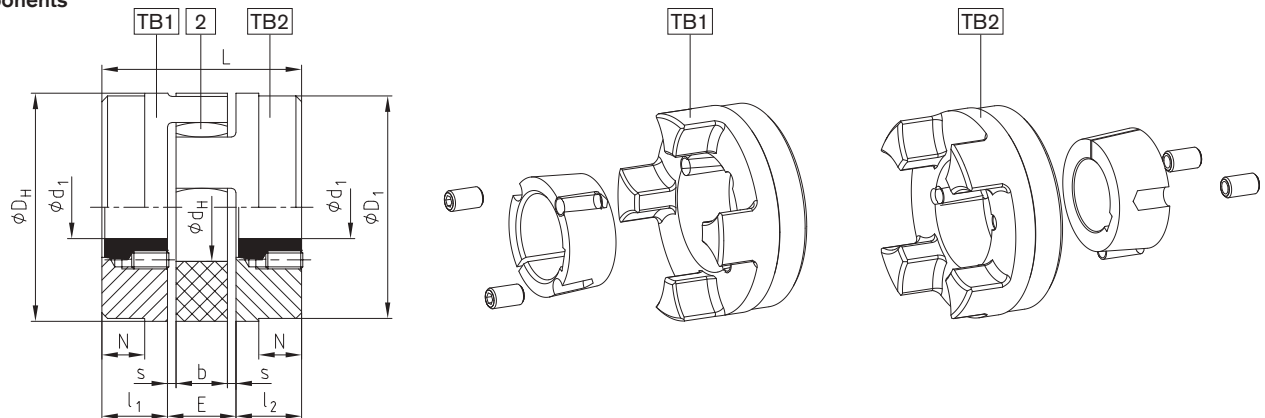
Taper clamping bush



For legend of pictogram please refer to flapper on the cover



Components



ROTEX® Shaft coupling for taper clamping bush

Size	Taper clamping bush	Dimensions [mm]									Fastening screw for taper bush			
		l ₁ :l ₂	E	s	b	L	N	D _H	D ₁	d _H	Size [Inch]1)	Length [mm]	No. z	T _A [Nm]
24	1008	22	18	2,0	14	62	–	55	55	27	1/4"	13	2	5,7
28	1108	23	20	2,5	15	66	–	65	65	30	1/4"	13	2	5,7
38	1108	23	24	3,0	18	70	15	80	78	38	1/4"	13	2	5,7
42	1610	26	26	3,0	20	78	16	95	94	46	3/8"	16	2	20
48	1615	39	28	3,5	21	106	28	105	104	51	3/8"	16	2	20
55	2012	33	30	4,0	22	96	20	120	118	60	7/16"	22	2	31
65	2012	33	35	4,5	26	101	19	135	115	68	7/16"	22	2	31
75	2517	52	40	5,0	30	144	36	160	158	80	1/2"	25	2	49
	• 3020										5/8"	32		92
90	3020	52	45	5,5	34	149	33	200	160	100	5/8"	32	2	92
100	3535	90	50	6	38	230	69	225	180	113	1/2"	49	3	113
125	4545	114	60	7,0	46	288	86	290	230	147	3/4"	49	3	192

Taper clamping bush

Size	Bore dimensions d1 [mm] available; H7 fit – feather keyway acc. to DIN 6885 sheet 1.																		
1008	Ø10	Ø11	Ø12	Ø14	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25								
1108	Ø10	Ø11	Ø12	Ø14	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28 ²⁾							
1610	Ø14	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42*				
1615	Ø14	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42*				
2012	Ø14	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	
2517	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60
3020	Ø25	Ø28	Ø30	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60	Ø65	Ø70	Ø75				
3535	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60	Ø65	Ø70	Ø75	Ø80	Ø85	Ø90				
4545	Ø55	Ø60	Ø65	Ø70	Ø75	Ø80	Ø85	Ø90	Ø95	Ø100	Ø105	Ø110							

• Only available for type TB 2

¹⁾ 1. BSW Thread

Coupling type TB 1/1; TB 2/2; TB 1/2 possible

Please order our separate dimension sheet (M 373054).

²⁾ Bores with feather keyway (flat design) acc. to DIN 6885 sheet 3

Ordering example:

ROTEX® 38	92 Sh-A	1108	TB1 – Ø 24	TB2 – Ø 22
Coupling size	Spider hardness	Taper clamping bush	Hub type	Finish bore
			Hub type	Finish bore

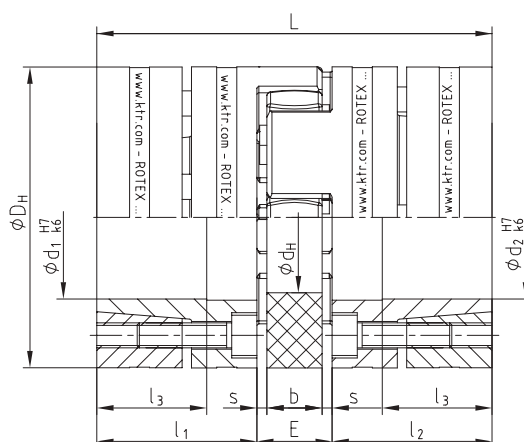
Clamping ring hubs



For legend of pictogram please refer to flapper on the cover



Components



Tack thread M1 between clamping screws

Clamping ring hubs steel

Size	Torques [Nm] 1)				Dimensions [mm]									Clamping screws				Weight per hub with max. bore [kg]	Mass moment of inertia per hub with max. bore [kgm2]
	92 Sh A		98 Sh A																
	T _{KN}	T _{Kmax}	T _{KN}	T _{Kmax}	DH ²⁾	dH	L	l ₁ ; l ₂	l ₃	E	b	s	M	Number z	T _A [Nm]	M ₁			
19	10,0	20	17	34	40	18	66	25	18	16	12	2,0	M4	6	4,1	M4	0,179	0,44 x 10 ⁻⁴	
24	35,0	70	60	120	55	27	78	30	22	18	14	2,0	M5	4	8,5	M5	0,399	1,91 x 10 ⁻⁴	
28	95,0	190	160	320	65	30	90	35	27	20	15	2,5	M5	8	8,5	M5	0,592	4,18 x 10 ⁻⁴	
38	190,0	380	325	650	80	38	114	45	35	24	18	3,0	M6	8	14	M6	1,225	12,9 x 10 ⁻⁴	
42	265	530	450	900	95	46	126	50	35	26	20	3,0	M8	4	35	M8	2,30	31,7 x 10 ⁻⁴	
48	310	620	525	1050	105	51	140	56	41	28	21	3,5	M10	4	69	M10	3,08	52,0 x 10 ⁻⁴	
55	375	750	685	1370	120	60	160	65	45	30	22	4,0	M10	4	69	M10	4,67	103,0 x 10 ⁻⁴	
65	—	—	940	1880	135	68	185	75	55	35	26	4,5	M12	4	120	M12	6,70	191,0 x 10 ⁻⁴	
75	—	—	1920	3840	160	80	210	85	63	40	30	5,0	M12	5	120	M12	9,90	396,8 x 10 ⁻⁴	
90	—	—	3600	4500	200	104	245	100	75	45	34	5,5	M16	5	295	M16	17,70	1136 x 10 ⁻⁴	

Bore d1/d2 and the corresponding transmittable friction torques TR of clamping ring hub in [Nm] 1)

Size	Ø10	Ø11	Ø14	Ø15	Ø16	Ø19	Ø20	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60	Ø65	Ø70	Ø80	Ø90	Ø95	Ø100	Ø105
19	27	32	69	84	57	94	110																					
24			70	87	56	97	114	116	133	192																		
28				108	131	207	148	253	285	315	382	330	433	503														
38							208	353	395	439	531	463	603	593	689	793	776											
42											483	416	547	536	625	571	704	851	865									
48											616	704	899	896	1030	962	1160	1379	1222	1543								
55														863	856	991	918	1119	1110	1247	1277	1672	1605	2008				
65															1446	1355	1637	1635	1827	1887	2429	2368	2930					
75																1710	2053	2059	2294	2384	3040	2983	3664	4293				
90																			3845	4249	4794	5858	5900	7036	8047	9247	9575	10845

¹⁾ Please see coupling selection on page 10 et seqq.

²⁾ ØDH + 2 mm with high speeds for expansion of spider

The transmittable torques of the clamping connection consider the max. clearance with shaft fit k6 / bore H7, from Ø55 G7/m6. The torque is reduced with bigger clearance. For the stiffness calculation of the shaft/hollow shaft see KTR standard 45510 on our homepage www.ktr.com

Ordering example:

ROTEX® GS 24	98 Sh-A	6.0 Steel	Ø24	6.0 Steel	Ø20
Coupling size	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

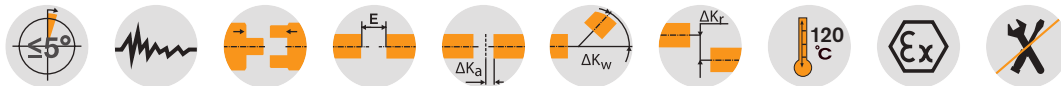
ROTEX®

Flexible jaw couplings

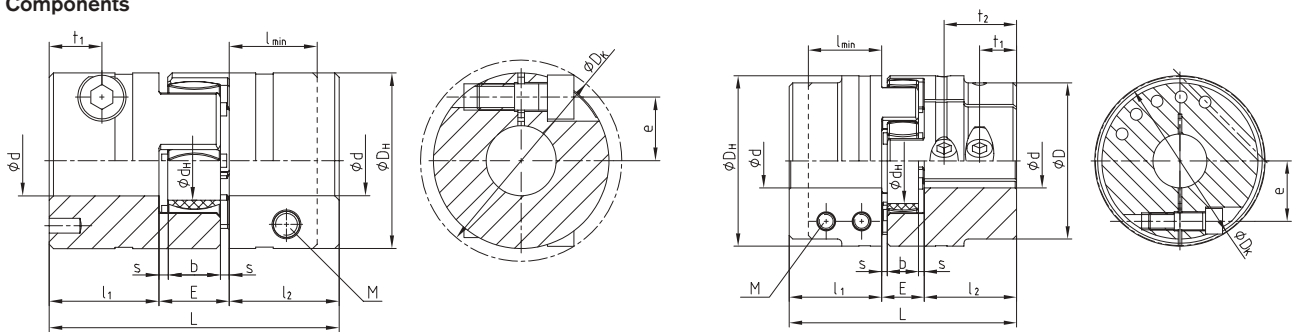
Clamping hubs



For legend of pictogram please refer to flapper on the cover



Components



ROTEX® 19 - 28

ROTEX® 38 - 90

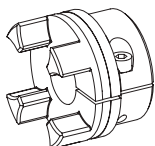
ROTEX® as clamping hubs																
Size	Dimensions [mm]														Screw DIN EN ISO 4762	
	max. d	L	l ₁ :l ₂	l Min.	E	b	s	D _H	D	d _H	D _K	t ₁	t ₂	e	M	T _A [Nm]
19	20 ¹⁾	66	25	20	16	12	2,0	40	-	18	46,0	12	—	14,5	M6	14
24	28	78	30	25	18	14	2,0	55	-	27	57,5	12	—	20,0	M6	14
28	38	90	35	30	20	15	2,5	65	-	30	73,0	14 ²⁾	—	25,0	M8	35
38	42	114	45	35	24	18	3,0	80	70	38	77,5	19	—	26,5	M8	35
42	50	126	50	42	26	20	3,0	95	85	46	93,5	18 ²⁾	—	32,0	M10	69
48	55	140	56	46	28	21	3,5	105	95	51	105,0	21 ²⁾	—	36,0	M12	120
55	68	160	65	50	30	22	4,0	120	110	60	119,5	26	51 ²⁾	42,5 ³⁾	M12	120
65	70	185	75	55	35	26	4,5	135	115	68	132,5	33	61 ²⁾	50,0 ³⁾	M12	120
75	80	210	85	65	40	30	5,0	160	135	80	158,0	36	68 ²⁾	57,0 ³⁾	M16	295
90	90	245	100	80	45	34	5,5	200	160	100	197,0	40	80 ²⁾	72,0 ³⁾	M20	580

Bore surface and the corresponding transmittable friction torques [Nm] of ROTEX® clamping hubs design 2.0																														
Size	Ø8	Ø10	Ø11	Ø14	Ø15	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60	Ø65	Ø70	Ø75	Ø80	Ø85	Ø90
19	44	46	47	51	52	53	55	57	58																					
24		59	60	64	65	66	68	70	71	73	76	77	80																	
28				139	141	144	148	150	152	157	161	163	170	174	178	185	191													
38					163	165	170	172	174	178	183	185	192	196	200	207	213	217	222											
42									291	297	304	308	318	325	332	342	353	360	367	377	387	394								
48									466	476	486	491	506	516	526	542	557	567	577	592	607	618	643							
55															1185	1215	1245	1266	1286	1316	1347	1367	1417	1468	1519					
65																1316	1347	1367	1387	1417	1448	1468	1519	1569	1620	1671				
75																		2869	2926	2983	3022	3117	3213	3309	3404	3500	3595			
90																			5220	5310	5400	5460	5610	5760	5910	6060	6210	6360	6510	6660

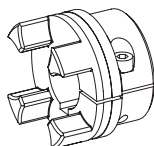
¹⁾ With type 2.1 dmax. Ø17 mm

²⁾ With reduced hubs dimension t1 varies or the number of screws changes from 2-off to 1-off

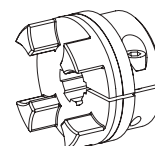
³⁾ t1 and t2 have a different dimension e



Type 2.0
Clamping hub, single slot,
without feather keyway



Type 2.1
Clamping hub, single slot, with
feather keyway



Type 2.3
Clamping hub with spline bore
(For a selection of our pro-
gramme of spline bores please
see page 32)

Ordering example:

ROTEX® 24	98 Sh-A	2.1	Ø 24	2.0	Ø20
Coupling size	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

ROTEX® AFN and BFN Flexible jaw couplings

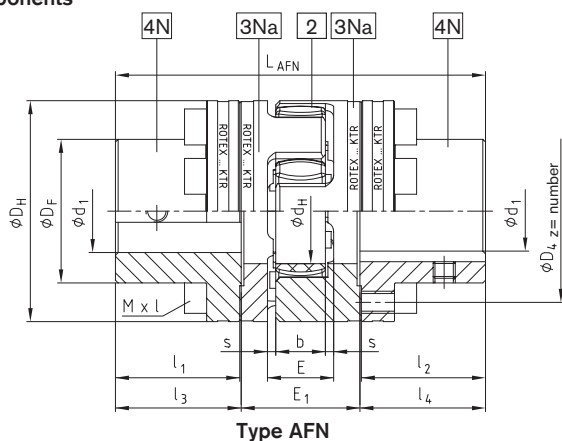
Flange programme



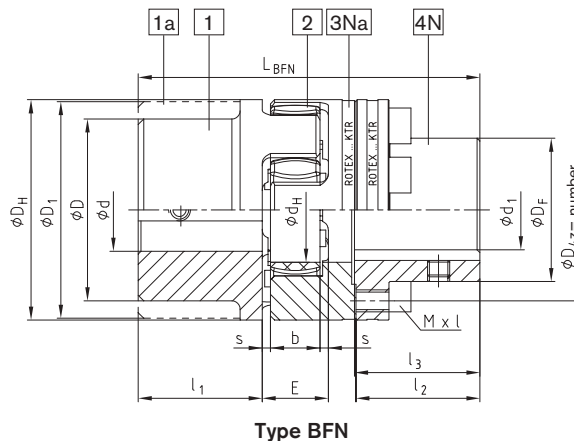
For legend of pictogram please refer to flapper on the cover



Components



Type AFN



Type BFN

ROTEX® Type AFN (No. 002) and BFN (No. 004)

Size	Pilot bored Ød; ØD; ØD1	Component 4N max. finish bore Ød1	Dimensions [mm]												Cyl. screws 3) DIN EN ISO 4762 - 12.9			
			DH	DF	D4	dH	l ₁ ; l ₂	E	E ₁	s	b	l ₃ ; l ₄	LAFN	LBFN	Mx _l	z	Pitch 2)	¹⁾ TA [Nm]
24	See jaw couplings on page 34 to 39 Stock programme/basic programme on page 32 and 33	24	55	36	45	27	30	18	33	2,0	14	30,5	94	86	M5x16	8		10
28		28	65	42	54	30	35	20	39	2,5	15	35,5	110	100	M6x20	8	8x45°	17
38		38	80	52	66	38	45	24	43	3,0	18	45,5	134	124	M8x22	8		41
42		42	95	62	80	46	50	26	48	3,0	20	51,0	150	138	M8x25	12	16x22,5°	41
48		48	105	70	90	51	56	28	50	3,5	21	57,0	164	152	M8x25	12		41
55		55	120	80	102	60	65	30	60	4,0	22	66,0	192	176	M10x30	8	8x45°	83
65		65	135	94	116	68	75	35	65	4,5	26	76,0	217	201	M10x30	12	16x22,5°	83
75		75	160	108	136	80	85	40	75	5,0	30	86,5	248	229	M12x40	15		120
90		100	200	142	172	100	100	45	82	5,5	34	101,5	285	265	M16x40	15		295
100		110	225	158	195	113	110	50	97	6,0	38	111,5	320	295	M16x50	15		295
110		125	255	178	218	127	120	55	103	6,5	42	122,0	347	321	M20x50	15	20x18°	580
125		145	290	206	252	147	140	60	116	7,0	46	142,0	400	370	M20x60	15		580
140		165	320	235	282	165	155	65	128	7,5	50	157,5	443	409	M20x60	15		580
160		190	370	270	325	190	175	75	146	9,0	57	177,5	501	463	M24x70	15		1000
180		220	420	315	375	220	195	85	159	10,5	64	198,0	555	515	M24x80	18	24x15°	1000

1) Screw tightening torque TA [Nm].

2) Thread in driving flange between cams.

3) Coupling is delivered not assembled.

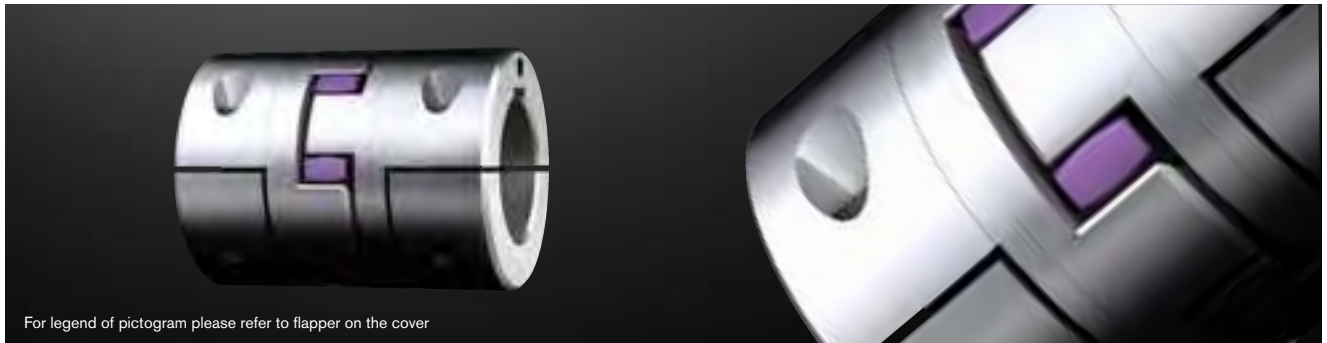
Ordering example:

ROTEX® 24	AFN	92 Sh-A	4N	Ø 38	4N	Ø35
Coupling size	Type	Spider hardness	Component	Finish bore	Component	Finish bore

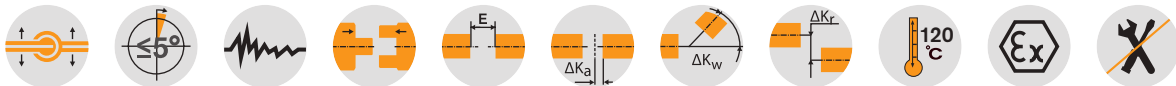
ROTEX® A-H

Flexible jaw couplings

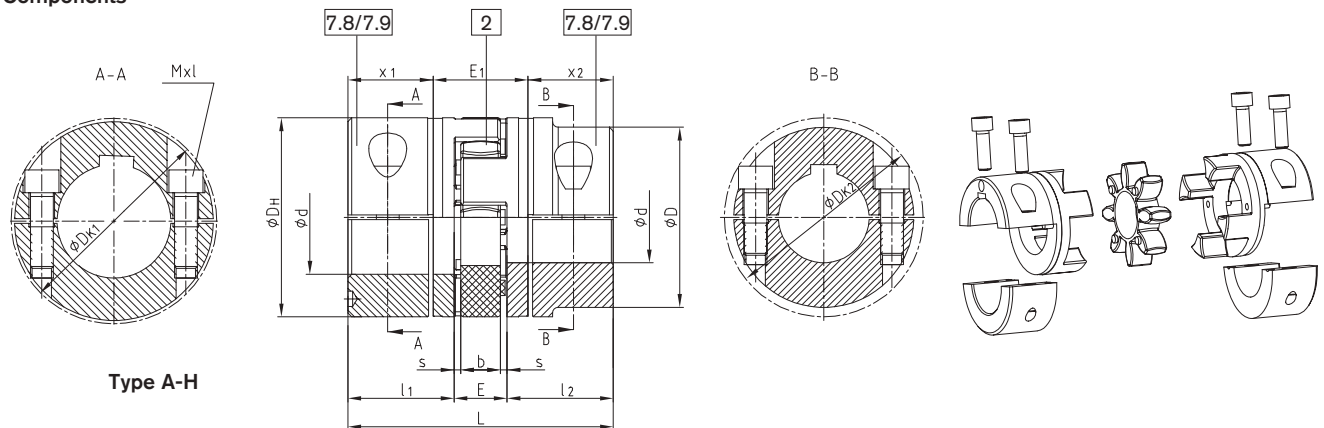
Drop-out center design coupling



For legend of pictogram please refer to flapper on the cover



Components



ROTEX® Type A-H														
Size	Max. finish bore Ød [mm]	Dimensions [mm]										Cyl. screws DIN EN ISO 4762		
		L	l ₁ ; l ₂	E	b	s	D _H	D	DK ₁	DK ₂	x ₁ /x ₂	E ₁	MxI	Tightening torque T _A [Nm]
19	20	66	25	16	12	2,0	40	—	46	—	17,5	31	M6x16	14
24	28	78	30	18	14	2,0	55	—	57,5	—	22,5	33	M6x20	14
28	38	90	35	20	15	2,5	65	—	73	—	25,5	39	M8x25	35
38	45	114	45	24	18	3,0	80	—	83,5	—	35,5	43	M8x30	35
42	50	126	50	26	20	3,0	95	85	—	93,5	—	39	M10x30	69
	55							—	97	—		48	M10x35	
48	55	140	56	28	21	3,5	105	95	—	105	—	50	M12x35	120
	60							—	108,5	—	45	50	M12x40	
55	65	160	65	30	22	4,0	120	110	—	119,5	—	60	M12x40	120
	70							—	122	—	50	60	M12x45	
65	70	185	75	35	26	4,5	135	115	—	123,5	—	65	M12x40	120
	80							—	132,5	—	60	65	M12x45	
75	80	210	85	40	30	5,0	160	135	—	147,5	—	75	M16x50	295
	90							—	158	—	67,5	75	M16x50	
90	90	245	100	45	34	5,5	200	160	—	176	—	82	M20x60	580
	110							—	197	—	81,5	82	M20x60	
100 ¹⁾	110	270	110	50	38	6,0	225	180	—	185,5	84	102	M16x50	295
110 ¹⁾	120	295	120	55	42	6,5	255	200	—	208	90	115	M20x60	580
125 ¹⁾	140	340	140	60	46	7,0	290	230	—	242,5	105	130	M24x70	1000

Please note:

With maximum bore the feather keyways are offset to each other by approx. 5°!
Hub material up to size 90: steel, from size 100: GJS

7.8= Shell clamping hub without feather key

7.9= Shell clamping hub with feather key

¹⁾ From size 100: 4 clamping screws for each clamping hub.

Ordering example:

ROTEX® 38	A-H	98 Sh-A	7.8	Ø 38	7.8	Ø30
Coupling size	Type	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

ROTEX® S-H

Flexible jaw couplings

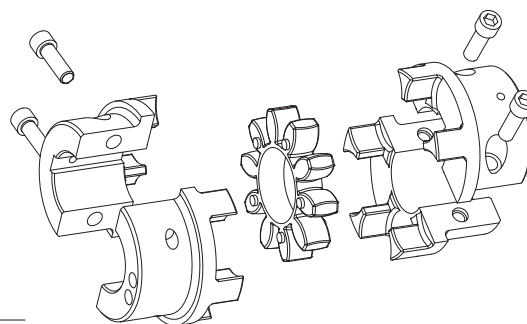
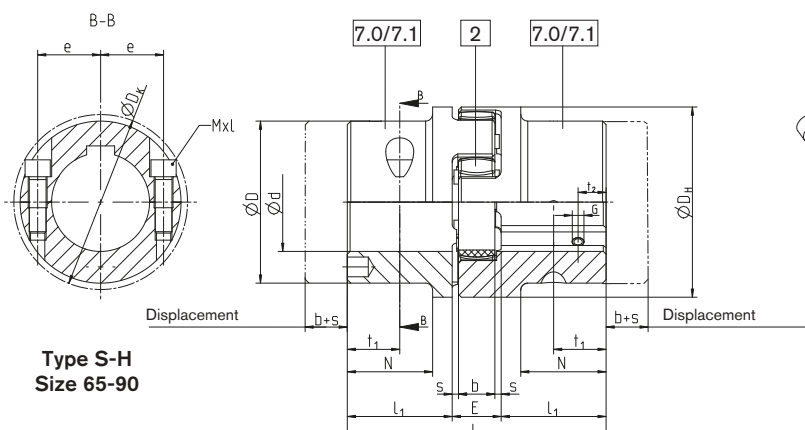
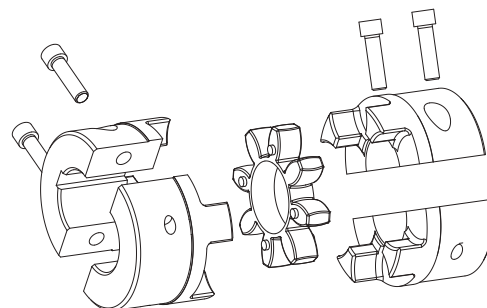
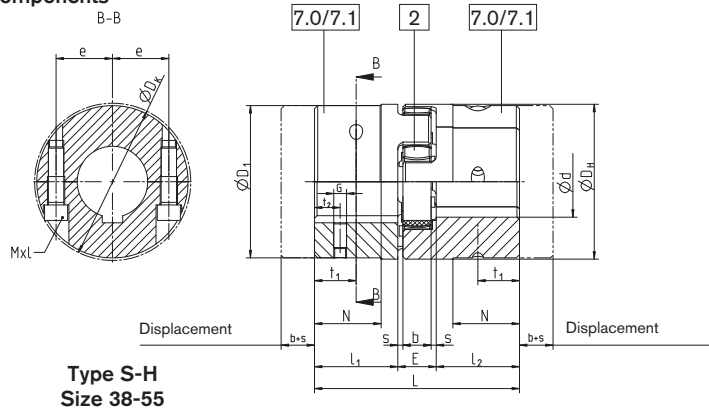
Drop-out center design coupling with SPLIT hubs



For legend of pictogram please refer to flapper on the cover



Components



ROTEX® Type S-H																	
Size	Finish bore Ød [mm]		Dimensions [mm]												Cyl. screws DIN EN ISO 4762		
	minimum	maximum	L	l1; l2	E	b	s	DH	D1	DK	N	e	t1	t2	G	Mxl	Tightening torque TA [Nm]
38	24	45	114	45	24	18	3	80	78	83,5	37	30	22,5	15	M8	M8x30	34
42	24	55	126	50	26	20	3	95	94	97	40	30	25		M8	M10x30	67
48	24	60	140	56	28	21	3,5	105	104	108,5	45	35	28			M12x35	115
55	24	70	160	65	30	22	4	120	118	122	52	40	32,5	20		M12x40	115
65	24	70	185	75	35	26	4,5	135	115	123,5	61	45	37,5		M10	M12x40	115
	70	80							135	132,5		50					
75	40	80	210	85	40	30	5	160	135	147	69	51	42,5	25		M16x50	290
	80	90							160	158		57					
90	40	90	245	100	45	34	5,5	200	160	176	81	60	50	30	M12	M20x60	560
	90	110							200	197		72					

7.0= SPLIT hub without feather keyway

7.1= SPLIT hub with feather keyway

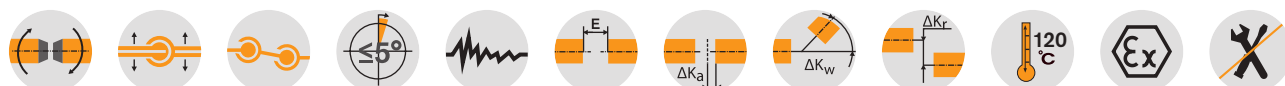
Ordering example:

ROTEX® 38	S-H	98 Sh-A	7.1	Ø 38	7.1	Ø30
Coupling size	Type	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

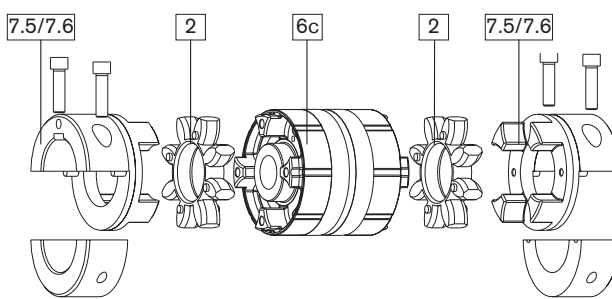
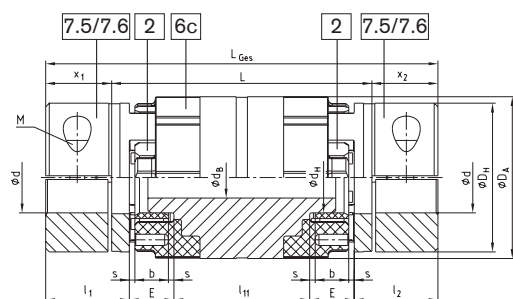
ROTEX® SP ZS-DKM-C

Flexible jaw couplings

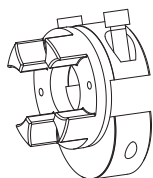
Double-cardanic shaft coupling (Non Sparking)



Components



ROTEX® SP Type ZS-DKM-C (No. 085)																
Size	Drop-out center length L	Spider (part 2) 1) Rated torque [Nm]	Dimensions [mm]												Dimensions [mm]	
			General component 7.5/7.6 steel												ROTEX® SP comp. 6c Al-H3)	
			Maximum finish bore ²⁾ d	Lges.	l ₁ , l ₂	x ₁ , x ₂	E	b	s	DH	DA	dH	M	TA [Nm]	dB	l ₁₁
24	100	35	28	145	30	22,5	18	14	2,0	55	61	27	M6	14	14	49
	140			185												89
28	100	95	38	151	35	25,5	20	15	2,5	65	72	30	M8	35	16	41
	140			191												81
38	100	190	45	171	45	35,5	24	18	3,0	80	87	38	M8	35	22	33
	140			211												73
42	100	265	55	178	50	39	26	20	3,0	95	103	46	M10	69	30	26
	140			218												66
48	140	310	60	230	56	45	28	21	3,5	105	114	51	M12	120	35	62
	140			240												50
55	180	410	70	280	65	50	30	22	4,0	120	130	60	M12	120	35	90
	200			300												110
	200			300												110
65	140	625	80	260	75	60	35	26	4,5	135	146	68	M12	120	48	40
	180			300												50



Type 7.5 clamping hub type DH
without feather keyway for
double-cardanic connection

Type 7.6 clamping hub type DH
with feather keyway for
double-cardanic connection

¹⁾ Maximum torque of coupling TKmax. = rated torque of coupling TK rated x 2. Transmittable torque acc. to 92 Sh-A-GS

²⁾ Hub type 7.5= without keyway; hub type 7.6=with keyway to DIN 6685 sheet 1 (J59)

³⁾ Size 42 with drop-out center length 100 made of steel

■ = Available from stock

Ordering example:	ROTEX® SP 38	ZS-DKM-C	140	98 Sh-A-GS	7.5	Ø38	7.5	Ø30
	Coupling size	Type	Drop-out center length L	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

ROTEX® DKM

Flexible jaw couplings

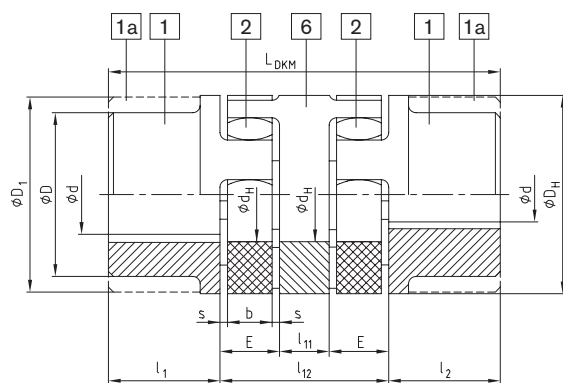
Double-cardanic shaft coupling



For legend of pictogram please refer to flapper on the cover



Components



Type DKM



ROTEX® Type DKM (No. 018)																
Größe	Ød, ØD, ØD1	Spider (part 2) Rated torque [Nm] 1		Dimensions [mm]									Max. displacement with n = 1500 rpm			
		92 Sh-A	98 Sh-A	D _H	d _H	l ₁ ; l ₂	l ₁₁	l ₁₂	E	s	b	L _{DKM}	Radial [mm]	Angular [°]	Axial [mm]	
19	See jaw couplings on page 34 to 39 Stock programme/basic programme on page 32 and 33	10	17	40	18	25	10	42	16	2,0	12	92	0,45	1,0	+1,2/-1,0	
24		35	60	55	27	30	16	52	18	2,0	14	112	0,59	1,0	+1,4/-1,0	
28		95	160	65	30	35	18	58	20	2,5	15	128	0,66	1,0	+1,5/-1,4	
38		190	325	80	38	45	20	68	24	3,0	18	158	0,77	1,0	+1,8/-1,4	
42		265	450	95	46	50	22	74	26	3,0	20	174	0,84	1,0	+2,0/-2,0	
48		310	525	105	51	56	24	80	28	3,5	21	192	0,91	1,0	+2,1/-2,0	
55		410	685	120	60	65	28	88	30	4,0	22	218	1,01	1,0	+2,2/-2,0	
65		625	940	135	68	75	32	102	35	4,5	26	252	1,17	1,0	+2,6/-2,0	
75		1280	1920	160	80	85	36	116	40	5,0	30	286	1,33	1,0	+3,0/-3,0	
90		2400	3600	200	100	100	40	130	45	5,5	34	330	1,48	1,0	+3,4/-3,0	

¹⁾ For selection please see page 10 et seqq.

Finish bore according to ISO fit H7, feather keyway according to DIN 6885 sheet 1 - JS9

Ordering example:

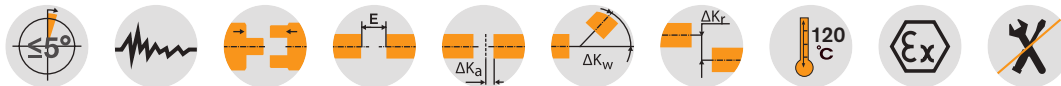
ROTEX® 38	DKM	GJL	98 Sh-A	1	Ø 38	1	Ø30
Coupling size	Type	Material	Spider hardness	Component	Finish bore	Component	Finish bore

ROTEX® CF, CFN, DF and DFN Flexible jaw couplings

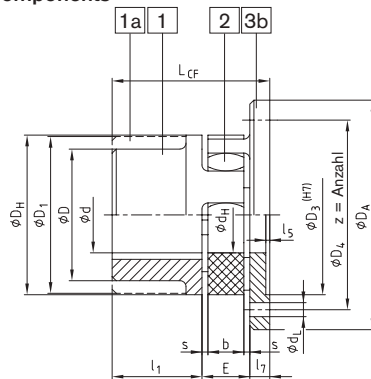
Flange programme



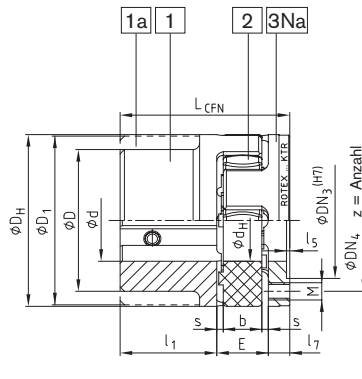
For legend of pictogram please refer to flapper on the cover



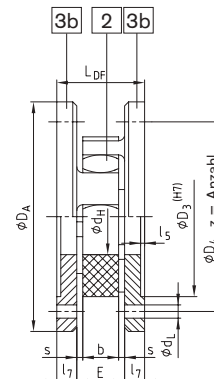
Components



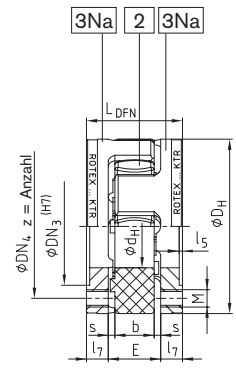
Type CF



Type CFN



Type DF



Type DFN

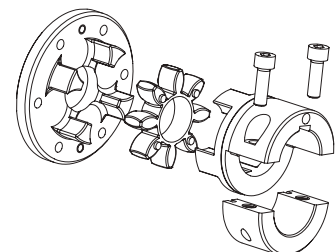
ROTEX® Type CF, CFN (No. 005) and DF, DFN (No. 006)																								
Size	d, ØD, ØD ₁	General dimension								Dimensions CF and DF								Dimensions CFN and DFN						
		D _H	d _H	l ₁	E	s	b	l ₅	l ₇	D _A	D ₃	D ₄	z	d _L	L _{CF}	L _{DF}	DN ₃	DN ₄	M	z	Pitch	L _{CFN}	L _{DFN}	
24	See shaft coupling on page 34 to 39 Stock programme/basic programme on page 32 and 33	55	27	30	18	2,0	14	1,5	8	80	55	65	5	4,5	56	34	36	45	M5	8	8x45°	56	34	
28		65	30	35	20	2,5	15	1,5	10	100	65	80	6	6,6	65	40	44	54	M6	8		65	40	
38		80	38	45	24	3,0	18	1,5	10	115	80	95	6	6,6	79	44	54	66	M8	8		79	44	
42		95	46	50	26	3,0	20	2,0	12	140	95	115	6	9,0	88	50	65	80	M8	12	16x22,5°	88	50	
48		105	51	56	28	3,5	21	2,0	12	150	105	125	8	9,0	96	52	75	90	M8	12		96	52	
55		120	60	65	30	4,0	22	2,0	16	175	120	145	8	11,0	111	62	84	102	M10	8	8x45°	111	62	
65		135	68	75	35	4,5	26	2,0	16	190	135	160	10	11,0	126	67	96	116	M10	12	16x22,5°	126	67	
75		160	80	85	40	5,0	30	2,5	19	215	160	185	10	13,5	144	78	112	136	M12	15		144	78	
90		200	100	100	45	5,5	34	3,0	20	260	200	225	12	13,5	165	85	145	172	M16	15		165	85	
100		225	113	110	50	6,0	38	4,0	25	285	225	250	12	13,5	185	100	165	195	M16	15		185	100	
110	255	127	120	55	6,5	42	4,0	26	330	255	290	12	18,0	201	107	180	218	M20	15	20x18°	201	107		
125	290	147	140	60	7,0	46	5,0	30	370	290	325	16	18,0	230	120	215	252	M20	15		230	120		
140	320	165	155	65	7,5	50	5,0	34	410	320	360	16	22,0	254	133	245	282	M20	15		254	133		
160	370	190	175	75	9,0	57	5,0	38	460	370	410	16	22,0	288	151	280	325	M24	15		288	151		
180	420	220	195	85	10,5	64	5,5	40	520	420	465	16	26,0	320	165	330	375	M24	18	24x15°	320	165		

For other flange programmes see page 43.

Other types: ROTEX® CF-H

Flange drop-out center design coupling

Please order our separate dimension sheet (M412069)



Ordering
example:

ROTEX® 38	CF	92 Sh-A	1	GJL	Ø20
Coupling size	Type	Spider hardness	Hub side Component	Material	Finish bore

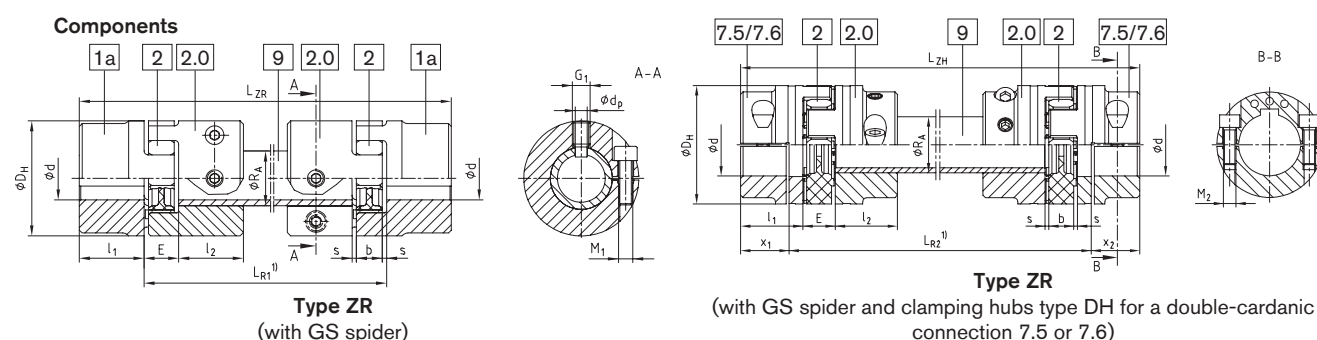
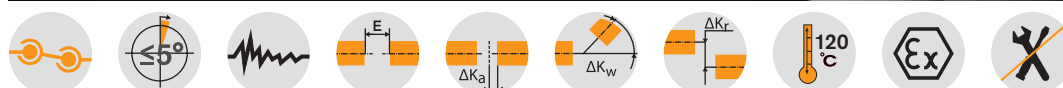
ROTEX® ZR

Flexible jaw couplings

Intermediate shaft programme



For legend of pictogram please refer to flapper on the cover

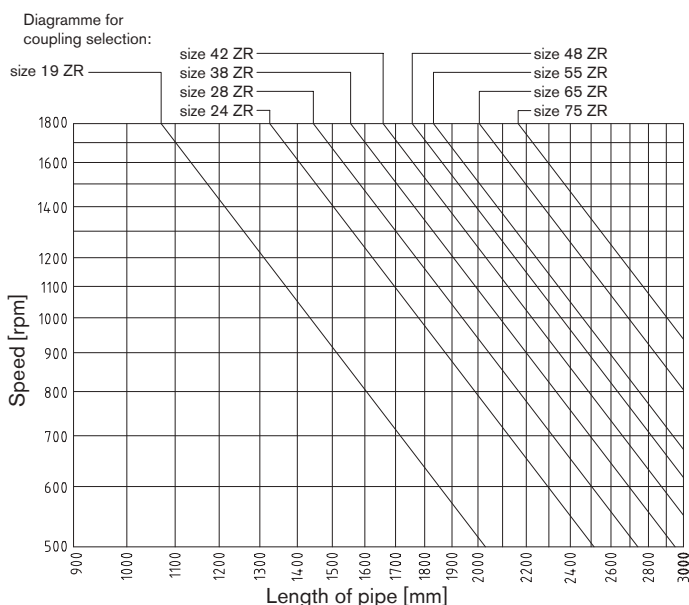


ROTEX® Type ZR (No. 037)																					
Size	Finish bore Ød		Dimensions [mm]						Intermediate pipe Torsional stiffness/m		Clamping screw Part 2.0		Clamping screw Component 7.5/7.6		LZR; LZH	min. LR1	min. LR2	Locking screw G1	Cone bore dp [mm]	Axial displacement [mm]	Angular displacement [degrees]
	Part 1a	Part 7.5/7.6	D _H	l ₁ ; l ₂	x ₁ ; x ₂	E	s	b	R _A	C ²⁾ [Nm ² /rad]	M ₁	T _A [Nm]	M ₂	T _A [Nm]							
19	25	20	40	25	17,5	16	2,0	12	Ø20x3	954,9	M6	14	M6	10	L _{R1} + 2 • l ₁ L _{R2} + 2 • x ₁ /x ₂	110	97	M6	4,0	1,2	0,9
24	35	28	55	30	22,5	18	2,0	14	Ø30x4	4522	M6	14	M6	14		128	111	M8	5,5	1,4	0,9
28	40	38	65	35	25,5	20	2,5	15	Ø35x4	7611	M8	35	M8	35		145	129	M10	7,0	1,5	0,9
38	48	45	80	45	35,5	24	3,0	18	Ø40x4	11870	M8	25	M8	35		180	157	M12	8,5	1,8	1,0
42	55	55	95	50	39,0	26	3,0	20	Ø45x4	17487	M10	49	M10	69		198	174	M12	8,5	2,0	1,0
48	62	60	105	56	45,0	28	3,5	21	Ø50x4	24648	M12	86	M12	120		217	190	M16	12	2,1	1,1
55	74	70	120	65	50,0	30	4,0	22	Ø55x4	33544	M12	120	M12	120		242	220	M16	12	2,2	1,1
65	80	80	135	75	60,0	35	4,5	26	Ø65x5	68329	M12	120	M12	120		281	250	M16	12	2,6	1,2
75	95	90	160	85	67,5	40	4,0	30	Ø75x5	108000	M16	295	M16	295		318	285	M16	12	3,0	1,2

¹⁾ For inquiries and orders please mention the shaft distance dimension LR1/LR2 along with the maximum speed to review the critical bending speed.

²⁾ Torsion spring stiffness with a length of 1 m of intermediate pipe
Finish bore acc. to ISO fit H7, feather keyway acc. to DIN 6885 sheet 1 - JS9
Friction torques of clamping hubs have to be taken into account. Please order dimension sheet No. 583613.

Not permissible for crane and hoisting gear drives



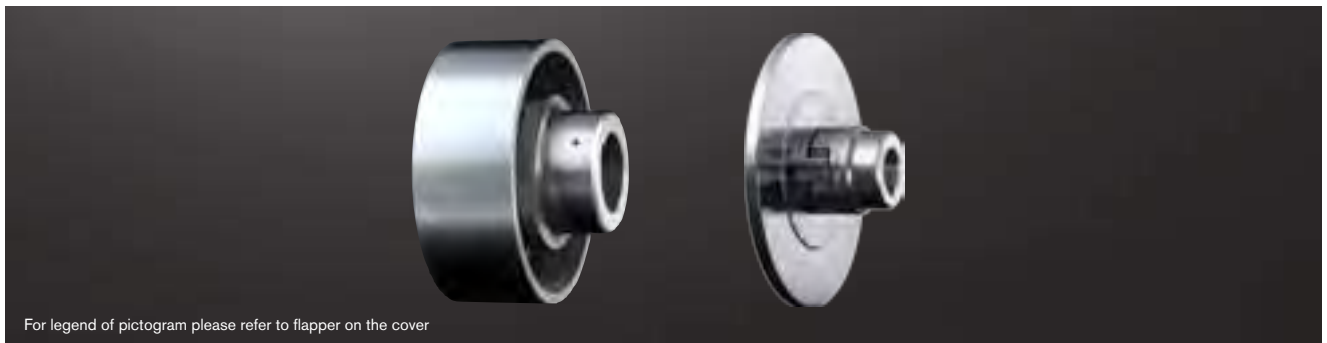
Ordering example:

ROTEX® 38	ZR	1200	98 Sh-A-GS	7.5	Ø 38	7.5	Ø30
Coupling size	Type	Shaft distance dimension LR1/LR2	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

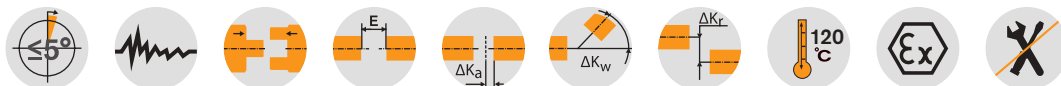
ROTEX® BTAN and SBAN

Flexible jaw couplings

With brake drum / with brake disk



For legend of pictogram please refer to flapper on the cover



ROTEX® Type BTAN (No. 011) and SBAN (No. 013)														
Size	Pilot bore Ød; ØD ØD1	Finish bore max.d1		Dimensions [mm]										
		GJS	Steel	D _H	D ₂	D ₄	d _H	z	Pitch 1)	M	TA [Nm]	l ₁ ; l ₂	E	L
38	See jaw couplings on page 34 to 39 Stock programme/basic pro- gramme on page 32 and 33	—	34	80	50	66	38	8	8 x 45°	M8	41	45	24	114
42		—	42	95	60	80	46	12	16 x 22,5°	M8	41	50	26	126
48		—	48	105	68	90	51	12		M8	41	56	28	140
55		—	55	120	78	102	60	8	8 x 45°	M10	83	65	30	160
65		—	65	135	92	116	68	12	16 x 22,5°	M10	83	75	35	185
75		—	75	160	106	136	80	15		M12	120	85	40	210
90		—	100	200	140	172	100	15		M16	295	100	45	245
100		100	—	225	156	195	113	15	20 x 18°	M16	295	110	50	270
110		110	—	255	176	218	127	15		M20	580	120	55	295
125		130	—	290	204	252	147	15		M20	580	140	60	340

Type BTAN												Type SBAN											
Brake drum	ROTEX® BTAN dimension „C“										Speed rpm [V] (30 m/s)	Brake disk	ROTEX® SBAN dimension „N“										Speed rpm [V] (30 m/s)
	38	42	48	55	65	75	90	100	110	125			38	42	48	55	65	75	90	100	110	125	
160x60	14										3550	200x12,5	31,25									2800	
200x75	9	12	17	24							2800	250x12,5	31,25	34,25	39,25							2240	
250x95	1	4	9	16	25	33					2240	315x16		32,5	37,5	44,5	53,5	61,5				1800	
315x118		-5	0	7	16	24	36				1800	400x16			37,5	44,5	53,5	61,5	73,5	81,5	88,5	1400	
400x150		-18	-13	-6	3	11	23	31	38		1400	500x16				44,5	53,5	61,5	73,5	81,5	88,5	1120	
500x190					-12	-4	8	16	23	39	1120	630x20					51,5	59,5	71,5	79,5	86,5	900	
630x236						-22	-10	-2	5	21	900	710x20					51,5	59,5	71,5	79,5	86,5	800	
710x265								-13	-6	10	800	800x25							69	77	84	710	
800x300										-4	710	900x25									84	630	

¹⁾ Thread in the hub between the cams

Other sizes on request according to dimension sheet No.:

BTAN:M 380821

SBAN straight: M380822; cranked: M 370065

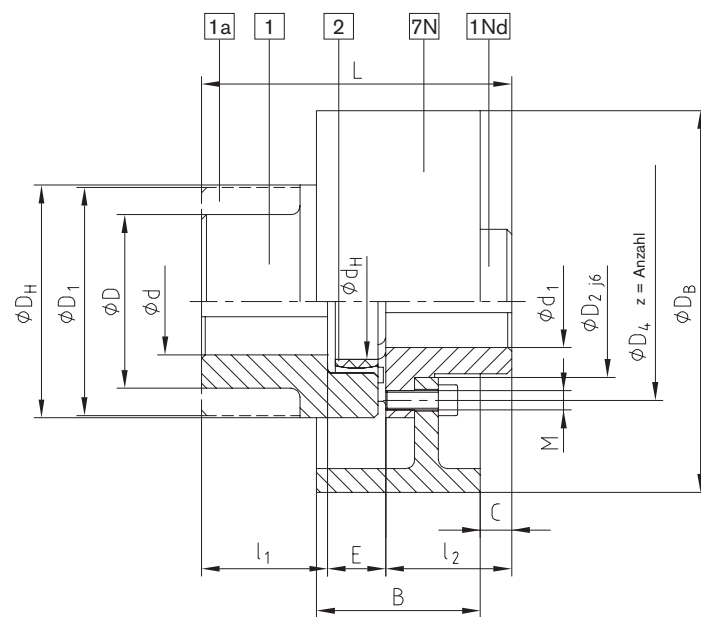
FNN hub: M 380823

Finish bore according to ISO fit H7, feather keyway acc. to DIN 6885 sheet 1 - JS9

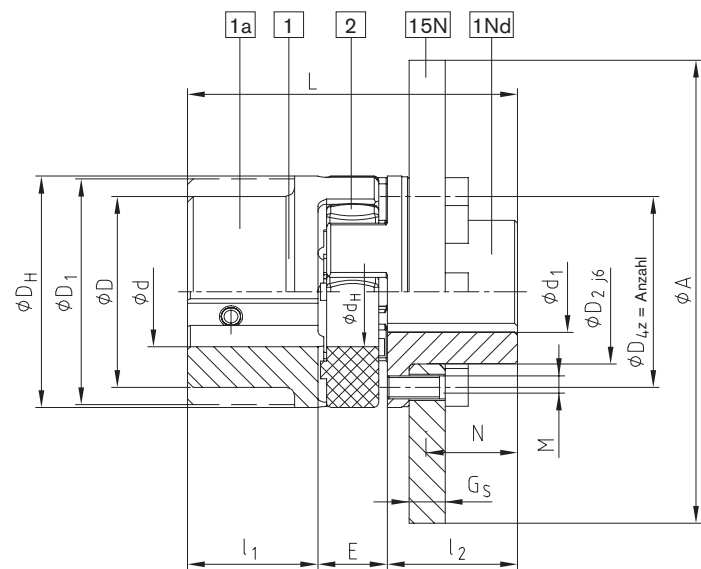
Ordering
example:

ROTEX® 38	BTAN	Ø200x75	98 Sh-A	1Nd	Ø 38	1	Ø30
Coupling size	Type	Ø brake drum x width	Spider hardness	Component	Finish bore	Component	Finish bore

Components



Brake drum
type BTAN

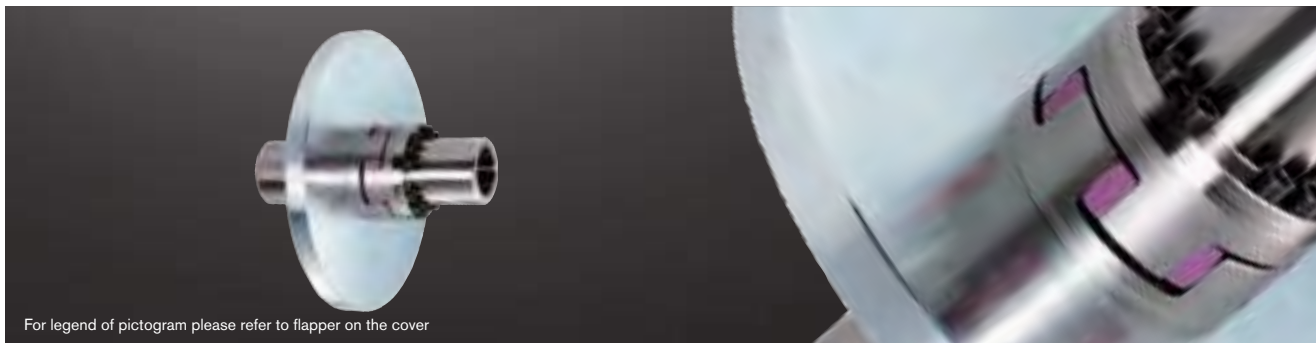


Brake disk
type SBAN

ROTEX® AFN-SB

Flexible jaw couplings

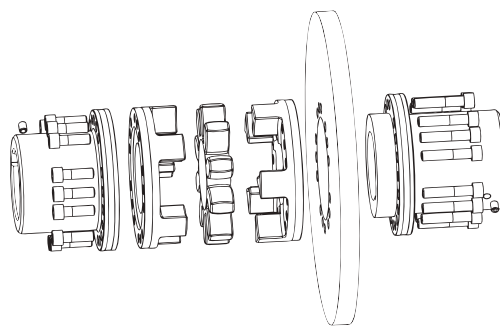
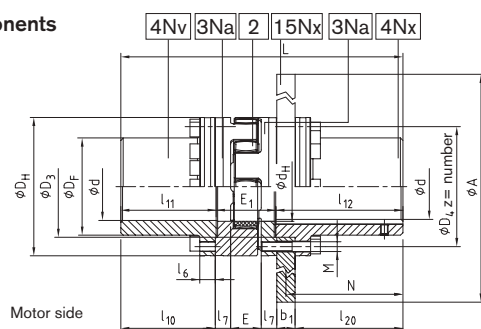
Drop-out center design coupling with brake disk



For legend of pictogram please refer to flapper on the cover



Components



ROTEX® Type AFN-SB special

Size	Finish bore d		Dimensions [mm]										
	Min.	max	D _H	D _F	D ₃ H7/h7	D ₄	d _H	E	E ₁	M	z	Pitch	TA [Nm]
65	22	65	135	94	96	116	68	35	65	M10	12	16x22,5°	83
75	30	75	160	108	112	136	80	40	75	M12	15		120
90	40	100	200	142	145	172	100	45	82	M16	15		295
100	46	110	225	158	165	195	113	50	97	M16	15		295
110	60	125	255	178	180	218	127	55	103	M20	15	20x18°	580
125	60	145	290	206	215	252	147	60	116	M20	15		580
140	60	165	320	235	245	282	165	65	128	M20	15		580
160	80	190	370	270	280	325	190	75	146	M24	15		1000
180	85	220	420	315	330	375	220	85	159	M24	18	24x15°	1000

ROTEX® Bauart AFN-SB special

Size	Torque with 98Sh-A ¹⁾		Max. speed [rpm]	Max. braking torque [Nm]2)	Dimensions [mm]						
	T _{KN}	T _{Kmax}			l ₇	l ₁₀	l ₁₁	l ₁₂	l ₂₀	N	L
65	940	1880	3450	1880	16	112,5	113,5	166,0	135	150	344,5
75	1920	3840	3250	3840	19	131,5	133,0	166,5	135	150	374,5
90	3600	7200	3000	7200	20	164,0	165,5	206,5	175	190	454,0
100	4950	9900	2800	9900	25	153,5	155,0	206,5	175	190	458,5
110	7200	14400	2600	14400	26	201,5	203,5	212,0	180	195	518,5
125	10000	20000	2250	20000	30	198,5	200,5	212,0	180	195	528,5
140	12800	25600	1800	25600	34	244,5	247,0	252,5	220	235	627,5
									210 ³⁾	230 ³⁾	
160	19200	38400	1500	38400	38	226,5	229,0	252,5	220	235	627,5
									210 ³⁾	230 ³⁾	
180	28000	56000	1350	56000	40	195,0	198,0	252,5	220	235	609,5

ROTEX® Selection of coupling/brake disk

Size	Brake disk ØA x b1										
	355x30	400x30	450x30	500x30	560x30	630x30	710x30	800x30	900x30	900x40	1000x40
65	x	x	x								
75		x	x	x							
90			x	x	x	x					
100				x	x	x					
110				x	x	x	x				
125						x	x	x			
140							x	x	x	x	x
160							x	x	x	x	x
180							x	x	x	x	x

¹⁾ For selection see page 10 et seqq. ²⁾ The maximum braking torque must not exceed the maximum torque of the coupling. ³⁾ Dimensions for a brake disk width b1 of 40 mm.

Ordering example:

ROTEX® 90	AFN-SB special	Ø450x30	98 Sh-A	4Nv	Ø90	4Nx	Ø90
Coupling size	Type	ØBrake disk, x width	Spider hardness	Component	Finish bore	Component	Finish bore

ROTEX® SD

Flexible jaw couplings

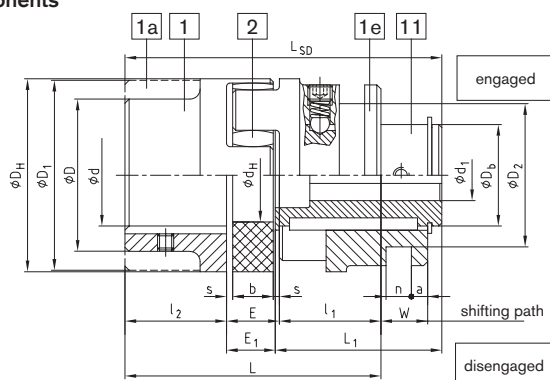
Shiftable coupling shiftable at standstill



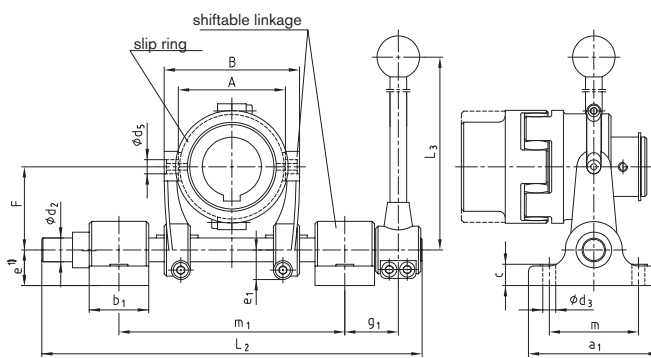
For legend of pictogram please refer to flapper on the cover



Components



Type SD



Type SD with slip ring and shiftable linkage

ROTEX® Type SD (No. 015)																			
Size	Ød, ØD, ØD1	Finish bore d1		Dimensions [mm]														Shifting force set in [N]	Slip ring size
		Min.	max.	DH	D2±0,1	Db	dH	l1;2	E	s	b	E1	L	L1	W	a	n±0,1	LSD	
24	See jaw couplings on page 34 to 39 Stock programme/basic progr. see page 32 and 33	8	18	55	41	30	27	30	18	2,0	14	16,5	78	51,5	16,0	6	6,0	98	110
28		10	22	65	58	36	30	35	20	2,5	15	18,0	90	60,0	17,5	8	8,0	113	130
38		12	28	80	70,5	45	38	45	24	3,0	18	22,0	114	73,0	21,0	8	12,5	140	150
42		14	32	95	70,5	50	46	50	26	3,0	20	24,0	126	82,0	23,0	8	12,5	156	180
48		15	40	105	89,5	60	51	56	28	3,5	21	25,5	140	90,5	24,5	6	17,5	172	200
55		18	48	120	112,5	70	60	65	30	4,0	22	27,0	160	103,0	26,0	6	18,0	195	250
65		20	55	135	112,5	80	68	75	35	4,5	26	32,0	185	120,0	30,5	7	18,0	227	280
75		25	65	160	130,5	95	80	85	40	5,0	30	37,0	210	135,0	35,0	6	20,5	257	350
90		28	75	200	164,5	110	100	100	45	5,5	34	41,0	245	152,0	39,5	8	25,5	293	350
100		30	80	225	164,5	115	113	110	50	6,0	38	46,0	270	169,0	44,0	14	25,5	325	380
110		35	85	255	164,5	125	127	120	55	6,5	42	51,5	295	184,0	48,5	18,5	25,5	355	450
125		40	100	290	210,5	145	147	140	60	7,0	46	55,5	340	208,5	53,0	18,5	30,5	404	500

Slip ring and shiftable linkage																						
Size	Size of shiftable linkage	Dimensions [mm]																	Max. speed [rpm] for slip ring			
		a ₁	b ₁	c	d ₂	d ₃	d ₅	e ¹⁾	e ₁	F	g ₁	L ₂	L ₃	m	m ₁ Min.	m ₁ max.	A	B				
38	1	110	50	18	20	11	12	30	25	70	55	320	400	75	180	190	90	114	3280			
42	1																					
48	2	140			25		17	40	27	97,5	60	430	450		240	270	111	151	2550			
55	3																					
65	3				60		25	30	13,5			32,5	120	70	490	600	100	280	310	140	180	2120
75	3																					
90	4	160					21	50	37,5	147,5	70	565	750	120	321	365	200	244	1360			
100	4																					
110	4																					
125	5				40		25		46	190	80	630	1085		365	410	250	300	855			

¹⁾ With a through base plate the dimension „e“ of the shiftable linkage size 5 has to be increased by at least 10 mm.
Finish bore according to ISO fit H7, feather keyway acc. to DIN 6885 sheet 1 - JS9

Ordering example:	ROTEX® 38	SD	With 1.1 and 1	98 Sh-A	1	Ø38	11	Ø28
	Coupling size	Type	with slip ring 1.1 and shiftable linkage 1	Spider hardness	Component	Finish bore	Component	Finish bore

ROTEX® FNN

Flexible jaw couplings

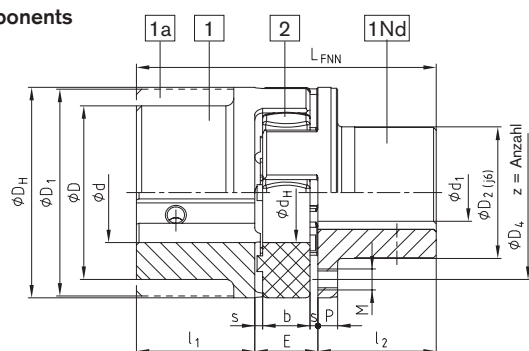
For mounting of fan



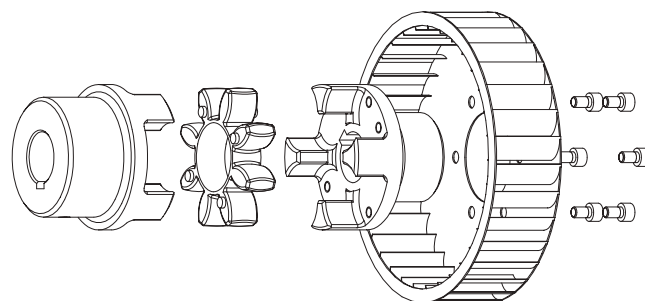
For legend of pictogram please refer to flapper on the cover



Components



Type FNN



Type FNN with fan (type 1)

ROTEX® Type FNN (No. 021)															
Size	Ød, ØD, ØD1	Max. finish bore Ød1	Dimensions [mm]												
			DH	D2	D4	dH	E	s	b	l _{1,2}	P	M	z	Pitch	LFNN
28	See jaw couplings on page 34 to 39 Stock programme/basic progr. see page 32 and 33	24	65	40	54	30	20	2,5	15	35	6,5	M6	8	8x45°	90
38		34	80	50	66	38	24	3,0	18	45	7,5	M8	8	8x45°	114
42		42	95	60	80	46	26	3,0	20	50	9,5	M8	12	16x22,5°	126
48		48	105	68	90	51	28	3,5	21	56	10,5	M8	12	16x22,5°	140
55		55	120	78	102	60	30	4,0	22	65	12,5	M10	8	8x45°	160
65		65	135	92	116	68	35	4,5	26	75	13,5	M10	12	16x22,5°	185
75		75	160	106	136	80	40	5,0	30	85	15,5	M12	15	20x18°	210
90		100	200	140	172	100	45	5,5	34	100	18,5	M16	15	20x18°	245

Other sizes on request

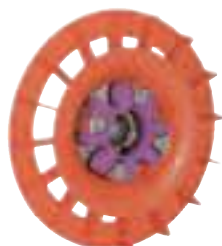
Type 1: Fan screwed on

The ROTEX® coupling can be supplied with the fan screwed on. Specific connection dimensions of customers such as pitch circle of threads, size of threads and number or centering of fans should be mentioned in your inquiry.



Type 2: Fan injection-moulded

Low prices due to production volumes with higher quantities.



Type 3: Fan pressed or glued on

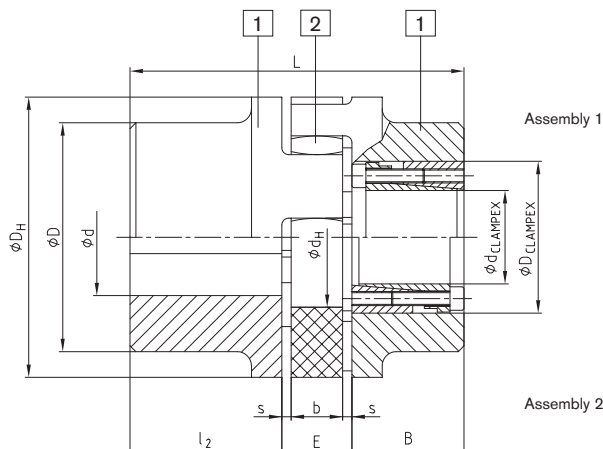
Special surface forming (knurling according to DIN 82) allows the fan to be pressed or glued onto the hub collar.



Ordering example:

ROTEX® 38	FNN	92 Sh-A	1	Ø 38	1Nd	Ø30
Coupling size	Type	Spider hardness	Component	Finish bore	Component	Finish bore

Other types with clamping sets



Components

ROTEX® Type No. 001 with clamping set CLAMPEX® KTR 200														
Size	Ød, ØD, ØD1	Hub material	CLAMPEX® KTR 200			B	Abmessungen [mm]							
			Max. size of KTR clamping set dxD	Transmittable torque and axial force			l ₂	E	s	b	D _H	D	d _H	L
				T [Nm]	FAX [kN]									
42	See jaw couplings on page 34 to 39 Stock programme/basic programme on page 32 and 33	Steel Part 1	30x55	769	51	48	50	26	3,0	20	95	—	46	length = 12+ E + B (clamping set)
48			35x60	1197	68	48	56	28	3,5	21	105	—	51	
55			45x75	2132	95	59	65	30	4,0	22	120	—	60	
65			45x75	2132	95	59	75	35	4,5	26	135	115	68	
75			50x80	3159	126	59	85	40	5,0	30	160	135	80	
90		GIS Part 1	65x95	4107	126	59	100	45	5,5	34	200	160	100	length = 12+ E + B (clamping set)
100			65x95	4107	126	59	110	50	6,0	38	225	180	113	
110			70x110	7023	201	70	120	55	6,5	42	255	200	127	
125			80x120	8026	201	70	140	60	7,0	46	290	230	147	
140			95x135	11373	239	70	155	65	7,5	50	320	255	165	
160			110x155	16068	292	80	175	75	9,0	57	370	290	190	
180			120x165	21910	365	80	195	85	10,5	64	420	325	220	

ROTEX® Type No. 001 with clamping set CLAMPEX® KTR 200																	
KTR 200 size	Length	Transmittable torque and axial force		Clamping screws DIN EN ISO 4762 – 12.9		KTR 200 size	Length	Transmittable torque and axial force		Clamping screws DIN EN ISO 4762 – 12.9		KTR 200 size	Length	Transmittable torque and axial force		Clamping screws DIN EN ISO 4762 – 12.9	
dxD	B	T [Nm]	F _{ax} [kN]	zxM	T _A [Nm]	dxD	B	T [Nm]	F _{ax} [kN]	zxM	T _A [Nm]	dxD	B	T [Nm]	F _{ax} [kN]	zxM	T _A [Nm]
20x47	48	513	51	6xM6	17	38x65	48	1299	68	8xM6	17	65x95	59	4107	126	8xM8	41
22x47	48	564	51	6xM6	17	40x65	48	1368	68	8xM6	17	70x110	70	7023	201	8xM10	83
24x50	48	616	51	6xM6	17	42x75	59	1990	95	6xM8	41	75x115	70	7524	201	8xM10	83
25x50	48	641	51	6xM6	17	45x75	59	2132	95	6xM8	41	80x120	70	8026	201	8xM10	83
28x50	48	718	51	6xM6	17	48x80	59	3033	126	8xM8	41	85x125	70	10659	251	10xM10	83
30x55	48	769	51	6xM6	17	50x80	59	3159	126	8xM8	41	90x130	70	11286	251	10xM10	83
32x60	48	1094	68	8xM6	17	55x85	59	3475	126	8xM8	41	95x135	66	11373	239	10xM10	83
35x60	48	1197	68	8xM6	17	60x90	59	3791	126	8xM8	41	for further details please see CLAMPEX® catalogue					

Type 4.2 with CLAMPEX® clamping set KTR 250



Frictionally engaged, backlash-free shaft-hub-connection for transmitting average torques.

Type 4.3 for CLAMPEX® clamping set KTR 400

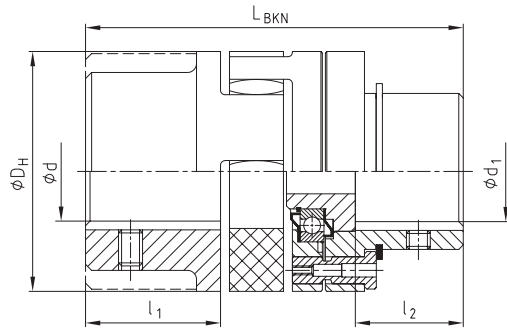
Frictionally engaged, backlash-free shaft-hub-connection for transmitting bigger torques. Maximum size of clamping set depends on the hub collar diameter. Clamping set screw fitting possible both internally and externally. For details of calculation please see CLAMPEX® catalogue.



ROTEX®

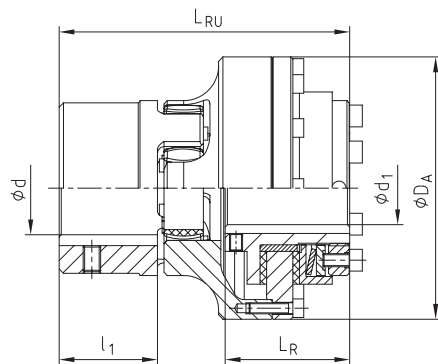
Flexible jaw couplings

Other types with torque limiters



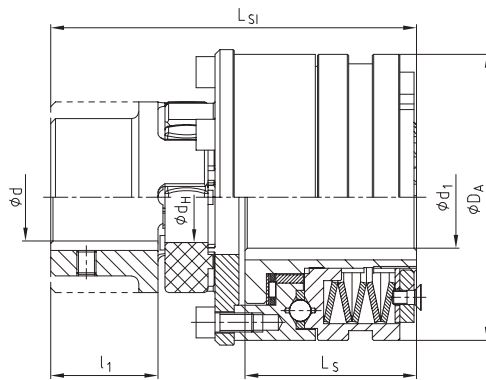
ROTEX® BKN - shear pin coupling, type BKN No. 009							
Size	Max. finish bore d	Max. finish bore d1	l ₁	l ₂	L _{BKN}	D _H	Min. fracture torque [Nm]
28	See shaft coupling on page 34 to 39 Stock progr./basic progr. on page 32/33	28	35	25	101	65	100
38		38	45	35	125	80	190
42		42	50	40	139	95	250
48		48	56	46	153	105	300
55		55	65	55	177	120	400
65		65	75	65	202	135	500
75		75	85	70	230	160	600
90		100	100	85	266	200	700

Modification for customer from the stock programme.
Please mention the fracture torques with your order!
For further details please see dimension sheet No. 5020/000/009-7603

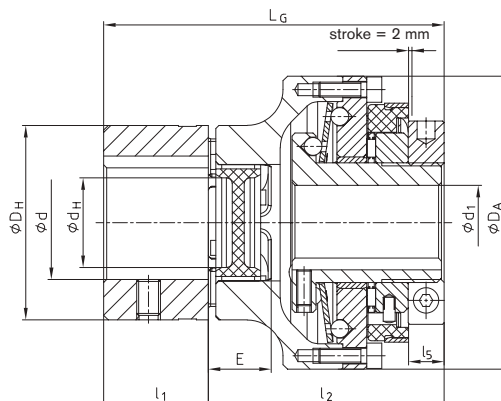


ROTEX® - RUFLEX® - Overload coupling, type No. 070								
ROTEX® size	RUFLEX® size	Ratchet torques [Nm]	d	d1 max.	D _A	l ₁	L _R	L _{RU}
14	00	0,5 — 5	See shaft coupling on page 34 to 39 Stock progr./basic progr. on page 32/33	10	44	11	31	59
19	0	2 — 20		20 ¹⁾	63	25	33	78
24	01	5 — 70		22	80	30	45	98
28	1	20 — 200		25	98	35	52	113
38	2	25 — 400		35	120	45	57	133
48	3	50 — 800		45	162	56	68	166
75	4	90 — 1600		55	185	85	78	205

¹⁾ Finish bore exceeding ø 19, keyway according to 6885/3

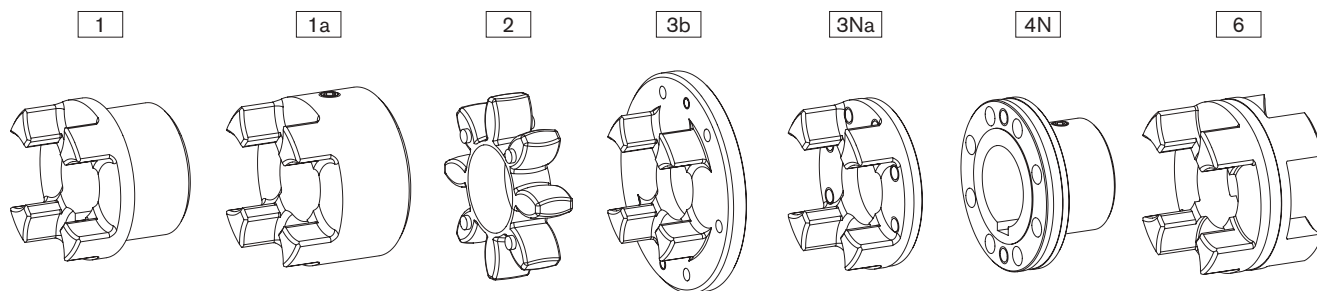


ROTEX® - KTR-SI - Overload coupling, type No. 070								
ROTEX® size	KTR-SI type	KTR-SI size	Ratchet torques [Nm]	d	max. d1	D _A	l ₁	L _S
28	DK	2	12-200	See shaft coupling on page 34 to 39 Stock progr./basic progr. on page 32/33	35	100	35	56
	SR/SGR	0	5-40		20	55		34,5
38	DK	3	25-450		45	120	45	73
	SR/SGR	1	12-100		25	82		48
48	DK	4	50-1000		55	146	56	93,5
	SR/SGR	2	25-200		35	100		56
55	DK	5	85-2000		65	176	65	107
	SR/SGR	3	50-450		45	120		73
75	DK	—	—		—	—	85	—
	SR/SGR	4	100-2000		55	146		93,5
90	DK	—	—		—	—	100	—
	SR/SGR	5	170-3400		65	176		107



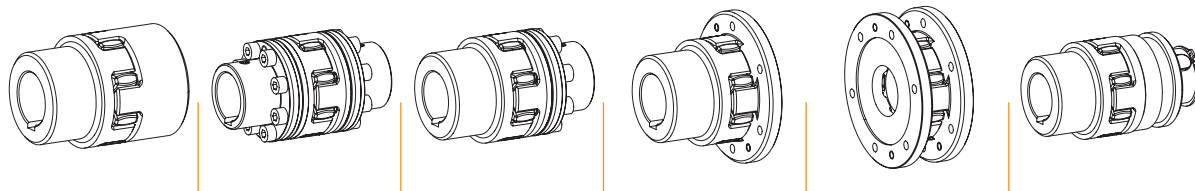
SYNTAX® - backlash-free, torsionally rigid overload coupling with ROTEX® GS														
ROTEX® size	SYNTAX® size	SYNTAX® torque range disk spring [Nm]				Max. Bore		D _A	D _H	d _H	E	L	L _G	l ₁
		DK ₁	DK ₂	SK ₁	SK ₂	d	d ₁							
24	20	6-20	15-30	10-20	20-65	35	20	80	55	27	18	45	100	30
28	25	20-60	45-90	25-65	40-100	40	25	98	65	30	20	50	113	35
38	35	25-80	75-150	30-100	70-180	48	35	120	80	38	24	60	136	45
48	50	60-180	175-300	80-280	160-400	55	50	162	105	51	28	70	167	56

Weights and mass moments of inertia

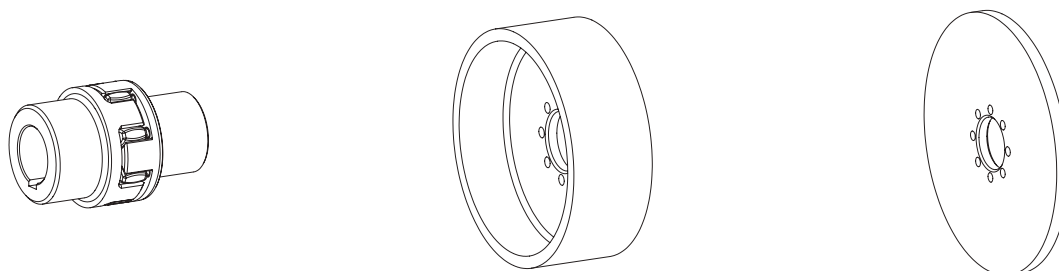


ROTEX® individual components													
Size	Standard hub				Large hub			Spider	Driving flange			C-flange	DKM spacer
	Part 1				Part 1a			Part 2	Part 3b	Part 3Na		Part 4N	Part 6
	Alu [kg] [kgm²]	GJL [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	Alu [kg] [kgm²]	GJL [kg] [kgm²]	St [kg] [kgm²]	Polyurethane (Vulkollan) [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	Alu [kg] [kgm²]
14	—	—	—	—	0,020	—	—	0,0044	—	—	—	—	—
	—	—	—	—	0,000003	—	—	0,0000005	—	—	—	—	—
19	0,064	—	—	—	0,074	—	0,25	0,0056	—	—	—	—	—
	0,00001	—	—	—	0,00002	—	0,00006	0,000001	—	—	—	—	—
24	0,123	—	—	—	0,174	—	0,55	0,014	0,028	0,145	—	0,30	0,14
	0,00004	—	—	—	0,00008	—	0,00023	0,000006	0,00023	0,00007	—	0,00009	0,00006
28	0,200	—	—	—	0,264	—	0,89	0,024	0,54	0,232	—	0,49	0,22
	0,00010	—	—	—	0,00019	—	0,00053	0,000010	0,0007	0,00017	—	0,0002	0,00013
38	0,44	1,16	—	1,6	0,470	1,32	1,74	0,042	0,73	—	0,313	0,87	0,35
	0,00033	0,00086	—	0,00151	0,00046	0,00135	0,00155	0,00003	0,001	—	0,00038	0,0005	0,00035
42	0,69	1,75	—	2,44	0,772	2,05	2,74	0,065	1,26	—	0,608	1,4	0,47
	0,00067	0,00178	—	0,00281	0,00111	0,00291	0,00343	0,00007	0,0032	—	0,00089	0,0011	0,00068
48	0,80	2,44	—	3,34	1,01	2,78	3,72	0,086	1,45	—	0,755	1,92	0,62
	0,0012	0,00308	—	0,00473	0,00174	0,00484	0,00570	0,00013	0,0043	—	0,001358	0,0018	0,0011
55	—	3,68	—	5,05	—	4,08	5,57	0,11	2,58	—	1,243	2,93	0,90
	—	0,00615	—	0,00948	—	0,00926	0,01193	0,00023	0,0105	—	0,002920	0,0037	0,0021
65	—	5,67	—	6,79	—	6,04	8,22	0,17	3,10	—	1,635	4,36	1,31
	—	0,01240	—	0,01516	—	0,01789	0,02079	0,00042	0,0149	—	0,004891	0,0069	0,0039
75	—	8,72	—	10,5	—	9,53	14,3	0,32	4,46	—	2,511	6,80	1,97
	—	0,02644	—	0,03269	—	0,03946	0,05069	0,00116	0,0281	—	0,01050	0,0151	0,0082
90	—	14,8	—	18,7	—	18,2	24,0	0,57	6,94	—	4,151	12,84	3,45
	—	0,06730	—	0,08742	—	0,15086	0,13151	0,00323	0,0651	—	0,02723	0,0448	0,0224
100	—	—	19,7	—	—	—	—	0,81	10,2	—	6,350	16,16	—
	—	—	0,11694	—	—	—	—	0,00588	0,1165	—	0,05273	0,0798	—
110	—	—	27,4	—	—	—	—	1,19	—	—	8,578	21,35	—
	—	—	0,20465	—	—	—	—	0,01097	—	—	0,09121	0,2824	—
125	—	—	42,3	—	—	—	—	1,63	—	—	12,598	34,33	—
	—	—	0,40727	—	—	—	—	0,01972	—	—	0,17469	0,3229	—
140	—	—	58,1	—	—	—	—	2,11	—	—	17,271	48,69	—
	—	—	0,67739	—	—	—	—	0,03129	—	—	0,29247	0,4917	—
160	—	—	84,2	—	—	—	—	3,21	—	—	26,305	71,08	—
	—	—	1,31729	—	—	—	—	0,06323	—	—	0,59436	0,9693	—
180	—	—	118,5	—	—	—	—	5,25	—	—	33,076	109,43	—
	—	—	2,30835	—	—	—	—	0,13789	—	—	0,97394	1,9650	—

Weights and mass moments of inertia



ROTEX® Complete coupling types												
Size	Standard		AFN		BFN		CF		DF		SD	
	Weight [kg]	Mass moment of inertia J [kgm²]	Weight [kg]	Mass moment of inertia J [kgm²]	Weight [kg]	Mass moment of inertia J [kgm²]	Weight [kg]	Mass moment of inertia J [kgm²]	Weight [kg]	Mass moment of inertia J [kgm²]	Weight [kg]	Mass moment of inertia J [kgm²]
19	0,51	0,000121	—	—	—	—	0,44	0,00016	0,38	0,00020	0,42	0,00008
24	1,1	0,000466	0,98	0,00036	1,1	0,00041	0,84	0,00047	0,57	0,00047	1,1	0,00046
28	1,8	0,00107	1,6	0,00083	1,7	0,00095	1,5	0,00124	1,1	0,00141	1,9	0,00106
38	2,5	0,00171	2,8	0,00209	2,6	0,00193	1,9	0,00217	1,5	0,00259	3,0	0,00435
42	3,9	0,00476	4,5	0,00472	4,1	0,00419	3,1	0,00513	2,6	0,00662	4,4	0,00804
48	5,3	0,00805	5,9	0,00736	5,5	0,00684	3,9	0,00755	3,0	0,00881	6,2	0,00223
55	7,9	0,01564	8,9	0,01480	8,3	0,01369	6,4	0,01692	5,3	0,02131	9,8	0,0166
65	11,9	0,03071	12,9	0,0266	12,3	0,0259	8,9	0,02780	6,4	0,03037	14,9	0,0326
75	18,6	0,06706	20,6	0,0601	19,3	0,0572	13,5	0,0557	9,2	0,05741	23,2	0,0706
90	33,6	0,22139	37,8	0,1718	34,2	0,1551	22,3	0,1356	14,5	0,1333	40,5	0,1891
100	40,2	0,23976	49,6	0,3068	45,2	0,2737	30,9	0,2401	21,2	0,2394	46,7	0,2467
110	56,0	0,42027	67,5	0,5385	61,7	0,4793	42,9	0,4324	29,8	0,4446	61,5	0,4186
125	86,2	0,83426	102,6	1,0485	94,4	0,9413	64,4	0,8187	42,2	0,8031	96,8	0,8497
140	118,3	1,38607	141,2	1,743	129,7	1,564	90,4	1,4221	62,5	1,4580	127,8	1,368
160	171,6	2,69781	210,3	3,517	190,9	3,107	127,6	2,589	83,6	2,4805	190,3	2,723
180	242,25	4,75449	306,6	6,582	274,4	5,668	175,1	4,448	107,9	4,141	262,2	4,810



BTAN/SBAN without drum/disk		
Size	Weight [kg]	Mass moment of inertia J [kgm²]
28	0,90	0,0004
38	2,10	0,0014
42	3,24	0,0031
48	4,41	0,0053
55	6,60	0,0105
65	10,1	0,0209
75	15,4	0,0442
90	27,6	0,1224
100	36,9	0,2074
110	50,9	0,3665
125	79,1	0,7349
140	109,0	1,2292
160	161,9	2,4569
180	232,9	4,4967

Brake drum for BTAN 1)		
Brake drum ØDB x B	Weight [kg]	Mass moment of inertia J [kgm²]
160 x 60	2,12	0,01
200 x 75	3,45	0,03
250 x 95	6,87	0,08
315 x 118	14,95	0,28
400 x 150	31,20	0,89
500 x 190	60,00	2,70
630 x 236	112,00	8,01
710 x 265	161,00	14,9
800 x 300	202,00	27,2

Brake disk for SBAN 1)		
Brake disk ØA x GS	Weight [kg]	Mass moment of inertia J [kgm²]
200 x 12,5	2,928	0,015367
250 x 12,5	4,662	0,037584
315 x 16	8,618	0,111829
400 x 16	15,230	0,315206
500 x 16	23,964	0,769963
630 x 20	47,716	2,426359
710 x 20	60,934	3,915100
800 x 25	94,913	7,878998
900 x 25	118,954	12,609089
1000 x 25	148,240	19,234941