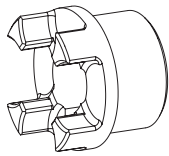


Types of hubs

Since ROTEX® is used on many different applications and mounting conditions, this coupling system is available with various hub types. These types mainly differ in that they provide either positive or frictionally engaged (backlash-free) connections, but mounting situations like, for example, gear shafts with integrated transmission cams or similar applications are covered, too.



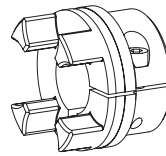
Type 1.0 hub with feather keyway and setscrew

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 crimping connections and adhesive bonds. (No ATEX approval)

Type 1.3 hub
with spline bore (see page 37)



Type 2.3 clamping hub with spline bore

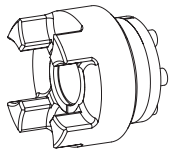
For splines see page 37. Positive-locking power transmission. The friction fit avoids resp. reduces reverse backlash.

Type 2.0 clamping hub
single slot without feather keyway

Frictionally engaged, backlash-free shaft-hub-connection. Transmittable torques depending on bore diameter (see page 44). (For ATEX category 3 only)

Type 2.1 clamping hub
single slot with feather keyway

Positive-locking power transmission with additional friction fit. The friction fit avoids resp. reduces reverse backlash. Surface pressure of the keyway connection is reduced.

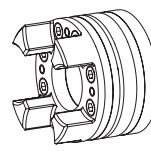


Type 4.2 hub for CLAMPEX® clamping set KTR 250

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

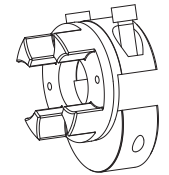


Type 6.0 clamping ring hub (see ROTEX® GS series)

Integrated frictionally engaged shaft-hub-connection for the transmission of higher torques. Screwing on elastomer side. For details about torque and dimensions see page 43. Suitable for high speeds.

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

Design like 6.0, except for clamping screws externally. For instance for radial disassembly of intermediate pipe (special design).

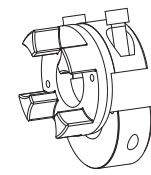


Type 7.6 clamping hub type DH with feather keyway for double-cardanic connection

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

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)

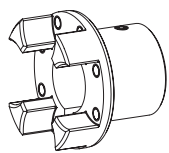


Type 7.9 clamping hub type H with feather keyway

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

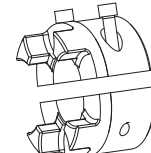
Type 7.8 clamping hub type H
without feather keyway

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



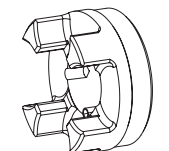
FNN hub

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



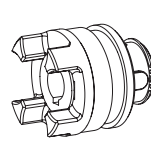
Type 7.1 SPLIT hub with feather keyway

Split hub made of cast iron. Positive-locking power transmission with additional friction fit. The friction fit avoids resp. reduces reverse backlash. Surface pressure of the keyway connection is reduced.



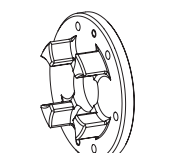
TB1 hub/TB2 hub

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



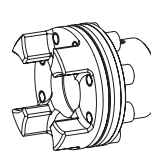
SD hub shifting hub

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



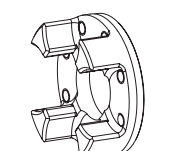
Driving flange type 3b

Driving flange to connect to customer's component. For dimensions see page 48.



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

For type AFN and BFN. With type AFN the spider can be replaced when installed without having to disassemble the driving and driven side.



Driving flange type 3Na

Driving flange to connect to customer's component. For dimensions see page 48.

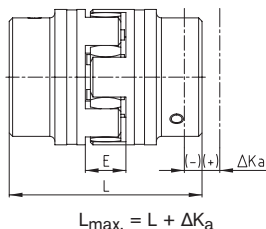
Speeds

Maximum speeds of hub versions/types																		
ROTEX® size	Maximum speed [rpm]													Maximum speed [rpm] depending on outside Ø of brake drum/disk				
	1.0 / 1.1 / 1.3			2.0 / 2.1 / 2.3 / 7.5 / 7.6 / 7.8 / 7.9	6.0	7.1	TB1 / TB2	FNN	FNN with fan	SD (with shiftable linkage)	3b / 3Na / 4N	DKM / ZS-DKM	ZR	ZRS	Brake drum (steel)		Brake disk (steel)	
	Steel, GJS, Al-H	GJL, sinter metal	Al-D	Outside Ø [mm]											[rpm]	Outside Ø [mm]	[rpm]	
14	10000	10000	3600	-		-	-	-		-	-	-			160	6000	200	8600
19	10000	10000	3600	10000		-	-	-		-	-	3600			200	4800	250	6850
24	10000	10000	3600	8600		10000	10000	-		-	10000	3600			250	3800	315	5500
28	10000	10000	3600	7300		8800	10000	10000	The permissible speed depends on the fan. Please consult with KTR for any other applications.	-	10000	3600	Depending on the application (observe critical bending speed on page 51).	Depending on the application (observe critical bending speed on page 50).	315	3000	355	4850
38	9500	8300	3600	6000		7200	8300	8800		3280	9500	3600			400	2400	400	4300
42	8000	7000	3600	5000		6000	7000	7200		3280	8000	3600			500	1900	450	3800
48	7200	6300	3600	4500		5500	6300	6000		2550	7200	3600			630	1500	500	3500
55	6300	5500	-	4000	see ROTEX® GS	4800	5500	5500		2120	6300	3600			630	1500	560	3050
65	5600	4900	-	3600		4200	4900	4800		2120	5600	3600			710	1350	630	2700
75	4700	4200	-	3000		3600	4200	4200		1710	4700	3600			710	1350	710	2400
90	3800	3600	-	2400		3000	3600	3600		1360	3800	3000			800	1200	800	2150
100	3600	-	-	2100		-	2900	2900		1360	3600	-					900	1900
110	3000	-	-	1900		-	2600	-		1360	3000	-					1000	1700
125	2600	-	-	1800		-	2300	-	855	2600	-							
140	2400	-	-	1500		-	2000	-	-	2400	-							
160	2000	-	-	1300	-	-	-	-	2000	-								
180	1800	-	-	1150	-	-	-	-	1800	-								
We recommend balancing from a circumferential speed of	v = 30 m/s	v = 30 m/s	On request	v = 20 m/s		v = 30 m/s	v = 30 m/s	v = 30 m/s	v = 30 m/s	v = 30 m/s	v = 30 m/s	On request	On request	On request	v = 30 m/s		v = 30 m/s	

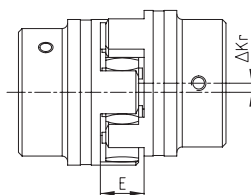
Depending on the application, balancing may also be required with lower circumferential speeds.
Higher speeds possible on request.

Displacements

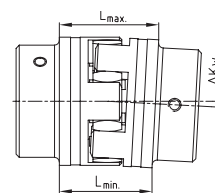
Axial displacement ΔK_A



Radial displacement ΔK_r



Angular displacement ΔK_W [degree]



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

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 [degree]	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 [degree]	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 [degree]	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 specified permissible displacement figures of the flexible ROTEX® couplings are standard values taking into account the load of the coupling up to the rated torque T_{KN} 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.

ROTEX®

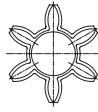
Flexible jaw couplings

Properties of standard spiders

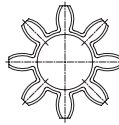
ROTEX® 14



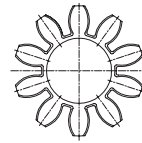
ROTEX® 19



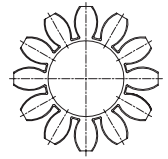
ROTEX® 24 - 65



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	– significantly higher service life expectancy – very good temperature resistance – improved damping of vibrations – good damping, medium flexibility – suitable for all hub materials	– good damping, medium flexibility – suitable for all hub materials
Spider type (Shore hardness)	98 Shore A (T-PUR®)	98 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	-30 °C to +90 °C
Short-term temperature	-40 °C to +150 °C	-40 °C to +120 °C
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®)	
	 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	– 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	

Technical data of standard spiders

92 Shore A spider made of T-PUR® and PUR													
ROTEX® size	Torsion angle ϕ with		Torque [Nm]				Damping power P _{KW} [W] ³⁾	Relative damping ψ	Resonance factor V _R	Torsion spring stiffness C dyn. [Nm/rad]			
			DIN 740 ¹⁾			T _K max ²⁾				1.0 T _{KN}	0.75 T _{KN}	0.5 T _{KN}	0.25 T _{KN}
	T _{KN}	T _K max	Rated T _{KN}	Max. T _K max	Vibratory T _{KW}								
14	6.4°	10°	7.5	15	2.0	22.5	–			0.38x10³	0.31x10³	0.24x10³	0.14x10³
19			10	20	2.6	30	4.8			1.28x10³	1.05x10³	0.8x10³	0.47x10³
24			35	70	9.1	105	6.6			4.86x10³	3.98x10³	3.01x10³	1.79x10³
28			95	190	25	285	8.4			10.9x10³	8.94x10³	6.76x10³	4.01x10³
38			190	380	49	570	10.2			21.05x10³	17.26x10³	13.05x10³	7.74x10³
42			265	530	69	795	12.0			23.74x10³	19.47x10³	14.72x10³	8.73x10³
48			310	620	81	930	13.8			36.7x10³	30.09x10³	22.75x10³	13.49x10³
55			410	820	107	1230	15.6			50.7x10³	41.59x10³	31.45x10³	18.64x10³
65	3.2°	5°	625	1250	163	1875	18.0	0.80	7.90	97.1x10³	79.65x10³	60.2x10³	35.7x10³
75			1280	2560	333	3840	21.6			113.3x10³	92.9x10³	70.3x10³	41.65x10³
90			2400	4800	624	7200	30.0			190.1x10³	155.9x10³	117.9x10³	69.9x10³
100			3300	6600	858	9900	36.0			253.1x10³	207.5x10³	156.9x10³	93x10³
110			4800	9600	1248	14400	42.0			415.5x10³	336.9x10³	257.6x10³	177.4x10³
125			6650	13300	1729	19950	48.0			647.7x10³	537.3x10³	412.2x10³	277.5x10³
140			8550	17100	2223	25650	54.6			813.4x10³	670.2x10³	519.7x10³	351.7x10³
160			12800	25600	3328	38400	75.0			1298x10³	1104x10³	901.9x10³	655.7x10³
180			18650	37300	4849	55950	78.0			2327x10³	1981x10³	1618x10³	1176x10³

98 Shore A spider made of T-PUR® and PUR													
ROTEX® size	Torsion angle ϕ with		Torque [Nm]				Damping power P_{KW} [W] ³⁾	Relative damping ψ	Resonance factor V_R	Torsion spring stiffness C dyn. [Nm/rad]			
			DIN 740 ¹⁾			T_K max ²⁾				1.0 T_{KN}	0.75 T_{KN}	0.5 T_{KN}	0.25 T_{KN}
	Rated T_{KN}	Max. T_K max	Vibratory T_{KW}										
14	6.4°	10°	12.5	25	3.3	37.5	—			0.56x10³	0.46x10³	0.35x10³	0.21x10³
19			17	34	4.4	51	4.8			2.92x10³	2.39x10³	1.81x10³	1.07x10³
24			60	120	16	180	6.6			9.93x10³	8.14x10³	6.16x10³	3.65x10³
28			160	320	42	480	8.4			26.77x10³	21.95x10³	16.6x10³	9.84x10³
38			325	650	85	975	10.2			48.57x10³	39.83x10³	30.11x10³	17.85x10³
42			450	900	117	1350	12.0			54.5x10³	44.69x10³	33.79x10³	20.03x10³
48			525	1050	137	1575	13.8			65.3x10³	53.54x10³	40.48x10³	24x10³
55			685	1370	178	2055	15.6			95x10³	77.9x10³	58.88x10³	34.9x10³
65	3.2°	5°	940	1880	244	2820	18.0	0.80	7.90	129.5x10³	106.2x10³	80.3x10³	47.6x10³
75			1920	3840	499	5760	21.6			197.5x10³	162x10³	122.5x10³	72.6x10³
90			3600	7200	936	10800	30.0			312.2x10³	256x10³	193.6x10³	114.7x10³
100			4950	9900	1287	14850	36.0			383.3x10³	314.3x10³	237.6x10³	140.9x10³
110			7200	14400	1872	21600	42.0			805.9x10³	663.1x10³	515.3x10³	360.5x10³
125			10000	20000	2600	30000	48.0			1207x10³	1003x10³	787.6x10³	552.5x10³
140			12800	25600	3328	38400	54.6			1549x10³	1283x10³	979.8x10³	674.1x10³
160			19200	38400	4992	57600	75.0			2481x10³	2137x10³	1781x10³	1275x10³
180			28000	56000	7280	84000	78.0			4220x10³	3635x10³	3031x10³	2170x10³

64 Shore D spider made of T-PUR®													
ROTEX® size	Torsion angle ϕ with		Torque [Nm]				Damping power P _{KW} [W] ³⁾	Relative damping ψ	Resonance factor V _R	Torsion spring stiffness C dyn. [Nm/rad]			
			DIN 740 ¹⁾			T _K max ²⁾				1.0 T _{KN}	0.75 T _{KN}	0.5 T _{KN}	0.25 T _{KN}
	T _{KN}	T _K max	Rated T _{KN}	Max. T _K max	Vibratory T _{KW}								
14	4.5°	7.0°	16	32	4.2	48	9.0			0.76x10³	0.62x10³	0.47x10³	0.28x10³
19			21	42	5.5	63	7.2			5.35x10³	4.39x10³	3.32x10³	1.97x10³
24			75	150	19.5	225	9.9			15.11x10³	12.39x10³	9.37x10³	5.55x10³
28			200	400	52	600	12.6			27.52x10³	22.57x10³	17.06x10³	10.12x10³
38			405	810	105	1215	15.3			70.15x10³	57.52x10³	43.49x10³	25.78x10³
42			560	1120	146	1680	18.0			79.9x10³	65.5x10³	49.52x10³	29.35x10³
48			655	1310	170	1965	20.7			95.5x10³	78.3x10³	59.22x10³	35.1x10³
55			825	1650	215	2475	23.4			107.9x10³	88.5x10³	66.9x10³	39.66x10³
65	2.5°	3.6°	1175	2350	306	3525	27.0	0.75	8.50	151.1x10³	123.9x10³	93.7x10³	55.53x10³
75			2400	4800	624	7200	32.4			248.2x10³	203.5x10³	153.9x10³	91.2x10³
90			4500	9000	1170	13500	45.0			674.5x10³	553.1x10³	418.2x10³	247.9x10³
100			6185	12370	1608	18555	54.0			861.2x10³	706.2x10³	533.9x10³	316.5x10³
110			9000	18000	2340	27000	63.0			1230x10³	1001x10³	773.1x10³	531.4x10³
125			12500	25000	3250	37500	72.0			1749x10³	1436x10³	1149x10³	832.1x10³
140			16000	32000	4160	48000	81.9			2312x10³	1929x10³	1521x10³	1082x10³
160			24000	48000	6240	72000	112.5			3415x10³	2961x10³	2471x10³	1830x10³
180			35000	70000	9100	105000	117.0			5670x10³	4917x10³	4103x10³	3038x10³

¹⁾ see catalogue page 15

²⁾ ≤ 1000 load cycles

³⁾ with +30 °C

Temperature factor S_t										
	-40 °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	1.2	1.3	1.45	1.6	1.8	2.1	2.5	3.0
PUR	1.0	1.0	1.3	1.4	1.55	1.8	2.2	—	—	—

With temperatures below -40 °C please consult with KTR.

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

For circumferential speeds exceeding $v = 30$ m/s dynamic balancing is required. For circumferential speeds exceeding $v = 35$ m/s only steel or nodular iron.

Technical data and properties of special spiders

		
Description	PA	PEEK
Material	Polyamide	Polyetheretherketone
Permissible temperature range		
Permanent temperature	-40 °C to +100 °C ¹⁾	up to +180 °C
Short-term temperature	-40 °C to +120 °C ¹⁾	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

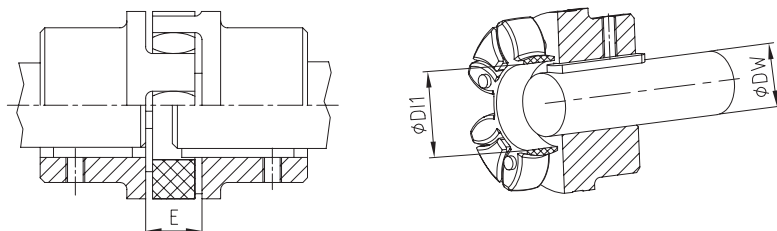
¹⁾ different properties depending on compound

Torques			
ROTEX® size	PA, PEEK		
	T _{KN} [Nm]	T _{K max} [Nm]	T _{KW} [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 S _t										
	-40 °C +30 °C	+40 °C	+50 °C	+60 °C	+70 °C	+80 °C	+90 °C	+100 °C	+110 °C	+120 °C
PA	1.0	1.0	1.0	1.0	1.2	1.4	1.6	–	–	–
PEEK	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0

With temperatures below -40 °C please consult with KTR.

Installation of spider

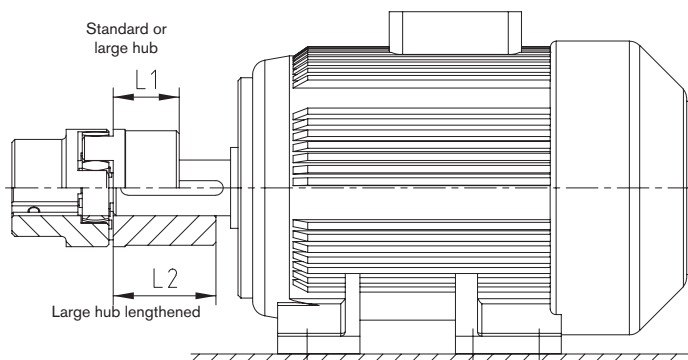


Shaft ØDW with feather key (acc. to DIN 6885 sheet 1) protruding into the spider ØD1

Mounting dimensions																	
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 DI1	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⁾ If the shaft diameter is smaller than or equal to dimension DI1, one shaft end or both shaft ends may protrude with the feather keyway into 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 power n= 3000 rpm 2 poles		ROTEX® coupling size	Motor power n= 1500 rpm 4 poles		ROTEX® coupling size	Motor power n= 1000 rpm 6 poles		ROTEX® coupling size	Motor power n= 750 rpm 8 poles		ROTEX® coupling size
Size	Shaft end DWxLW [mm]	Power P [kW]	Torque T [Nm]		Power P [kW]	Torque T [Nm]		Power P [kW]	Torque T [Nm]		Power P [kW]	Torque T [Nm]	
	2 poles	4, 6, 8 poles											
56	9 x 20	0.09	0.32	g 1)	0.06	0.43	g 1)	0.037	0.43	g 1)			
		0.12	0.41		0.09	0.64		0.045	0.52				
63	11 x 23	0.18	0.62		0.12	0.88		0.06	0.7				
		0.25	0.86	14	0.18	1.3	14	0.09	1.1	14			
71	14 x 30	0.37	1.3		0.25	1.8		0.18	2		0.09	1.4	14
		0.55	1.9		0.37	2.5		0.25	2.8		0.12	1.8	
80	19 x 40	0.75	2.5	19	0.55	3.7	19	0.37	3.9	19	0.18	2.5	19
90S	24 x 50	1.5	5		1.1	7.5		0.75	8		0.25	3.5	
90L		2.2	7.4		1.5	10		1.1	12		0.37	5.3	
100L	28 x 60	3	9.8	24	2.2	15	24	1.5	15	24	0.55	7.9	
		4	13		3	20		2.2	22		0.75	11	24
112M		5.5	18		4	27		3	30		1.1	16	
132S	38 x 80	7.5	25	28	5.5	36	28	4	40	28	1.5	21	28
132M					7.5	49		5.5	55		2.2	30	
160M	42 x 110	11	36	38	11	72	38	7.5	75	38	3	40	38
		15	49		15	98		11	109		5.5	74	
160L		18.5	60		18.5	121		15	148		7.5	100	
180M	48 x 110	22	71	42	22	144	42	18.5	181	42	11	145	42
180L		30	97		30	196		22	215		15	198	
200L	55 x 110	37	120										
225S	55 x 110	45	145	48	37	240	48	30	293	55	18.5	244	48
225M		55	177		45	292		37	361		22	290	55
250M	60 x 140	75	241	55	55	356	55	45	438	65 2)	30	392	65
280S		90	289		75	484	65 2)	55	535		37	483	65 2)
280M	75 x 140	110	353	65	90	581	75	75	727	75	45	587	75
315S		132	423		110	707		90	873		55	712	
315M	80 x 170	160	513	75	132	849	90	110	1070	90	75	971	90
315L		200	641		160	1030		132	1280		90	1170	
315	85 x 170	250	802		200	1290		160	1550		110	1420	
		315	1010		250	1600		200	1930		132	1710	
		355	1140		315	2020		250	2410		160	2070	
355	75 x 140	400	1280	90	355	2280	100	315	3040	110	200	2580	100
		500	1600		400	2570		400	3850		250	3220	110
		560	1790		500	3210		450	4330	125	315	4060	125
400	80 x 170	630	2020	100	560	3580	125	500	4810	140	355	4570	140
		710	2270		630	4030		560	5390		400	5150	
		800	2560		710	4540		630	6060		450	5790	
450	90 x 170	900	2880	110	800	5120	140	710	6830	160	500	6420	160
		1000	3200		900	5760		800	7690		560	7190	
					1000	6400					630	8090	

The coupling selection is based on an ambient temperature of up to +30 °C. The selection is based on a minimum safety factor of 2 to the max. coupling torque (TK max). A detailed selection is possible according to catalogue page 14 et seqq. Drives with periodical torque curves must be selected according to DIN 740 part 2. If requested, KTR will perform the selection.

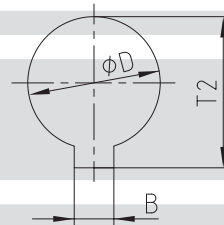
Torque T = rated torque according to Siemens catalogue M 11 · 1994/95.

¹⁾ For dimensions see ROTEX® GS series

²⁾ For motor hub made of steel see page 40

Cylindrical bores and inch bores

Bore ØD		Width of keyway B		Keyway depth T2	KTR code Inch bore	ROTEX® basic bores, available from stock Hub material aluminium: ●; hub material steel: ●; hub material EN-GJL: ●											
						ROTEX® sizes											
ØD [mm]	ØD [inch]	B [mm]	B [inch]	T2 [mm]		14	19	24	28	38	42	48	55	65	75	90	
Ø6 H7 +0.012		2 JS9 ±0.0125		7 +0.1		●											
Ø8 H7 +0.015		2 JS9 ±0.0125		9 +0.1		●	●										
Ø9 H7 +0.015		3 JS9 ±0.0125		10.4 +0.1		●	●										
Ø9.525 +0.0254	3/8	3.175 +0.051	1/8	10.972 +0.381	Tb												
Ø10 H7 +0.015		3 JS9 ±0.0125		11.4 +0.1		●	●	●									
Ø11 H7 +0.018		4 JS9 ±0.015		12.8 +0.1		●	●	●									
Ø11.112 +0.0254	7/16	2.382 +0.051	3/32	12.293 +0.381	DNB												
Ø12 H7 +0.018		4 JS9 ±0.015		13.8 +0.1		●	●	●									
Ø12.7 +0.0254	1/2	3.175 +0.051	1/8	14.224 +0.381	Ta		●	●									
Ø12.7 +0.0254	1/2	4.762 +0.051	3/16	14.757 +0.381	T												
Ø13.495 +0.0254	17/32	3.175 +0.051	1/8	15.011 +0.381	DNC												
Ø14 H7 +0.018		5 JS9 ±0.015		16.3 +0.1		●	●	●	●								
Ø14.287 +0.0254	9/16	3.175 +0.051	1/8	15.824 +0.381	Do												
Ø15 H7 +0.018		5 JS9 ±0.015		17.3 +0.1		●	●	●	●								
Ø15.875 +0.0254	5/8	3.175 +0.051	1/8	17.424 +0.381	E												
Ø15.875 +0.0254	5/8	3.968 +0.051	5/32	17.729 +0.381	Es		●	●	●								
Ø15.875 +0.0254	5/8	4.762 +0.051	3/16	18.008 +0.381	Ed		●	●									
Ø16 H7 +0.018		5 JS9 ±0.015		18.3 +0.1		●	●	●	●								
Ø17 H7 +0.018		5 JS9 ±0.015		19.3 +0.1			●	●	●	●							
Ø17.462 +0.0254	11/16	4.762 +0.051	3/16	19.634 +0.381	DNH												
Ø18 H7 +0.018		6 JS9 ±0.015		20.8 +0.1			●	●	●	●							
Ø19 H7 +0.021		6 JS9 ±0.015		21.8 +0.1			●	●	●	●							
Ø19.05 +0.0254	3/4	3.175 +0.051	1/8	20.624 +0.381	Ad												
Ø19.05 +0.0254	3/4	4.762 +0.051	3/16	21.259 +0.381	A		●	●	●	●							
Ø20 H7 +0.021		6 JS9 ±0.015		22.8 +0.1			●	●	●	●	●						
Ø22 H7 +0.021		6 JS9 ±0.015		24.8 +0.1			●	●	●	●	●						
Ø22.225 +0.0254	7/8	4.762 +0.051	3/16	24.485 +0.381	G												
Ø22.225 +0.0254	7/8	6.35 +0.051	1/4	25.069 +0.381	F			●	●	●	●						
Ø23.812 +0.0254	15/16	6.35 +0.051	1/4	26.695 +0.381	Gf												
Ø24 H7 +0.021		8 JS9 ±0.018		27.3 +0.2		●	●	●	●	●	●						
Ø25 H7 +0.021		8 JS9 ±0.018		28.3 +0.2		●	●	●	●	●	●	●					
Ø25.4 +0.0254	1	4.762 +0.051	3/16	27.686 +0.381	H												
Ø25.4 +0.0254	1	6.35 +0.051	1/4	28.295 +0.381	Hs			●	●	●	●						
Ø26.987 +0.0254	1 1/16	4.762 +0.051	3/16	29.286 +0.381	R												
Ø28 H7 +0.021		8 JS9 ±0.018		31.3 +0.2			●	●	●	●	●	●					
Ø28.575 +0.0254	1 1/8	6.35 +0.051	1/4	31.521 +0.381	Sb			●	●	●	●	●					
Ø28.575 +0.0254	1 1/8	7.937 +0.051	5/16	32.105 +0.381	Sd												
Ø30 H7 +0.021		8 JS9 ±0.018		33.3 +0.2			●	●	●	●	●	●	●				
Ø31.75 +0.0254	1 1/4	6.35 +0.051	1/4	34.721 +0.381	Js												
Ø31.75 +0.0254	1 1/4	7.937 +0.051	5/16	35.331 +0.381	K			●	●	●	●	●	●	●			
Ø32 H7 +0.025		10 JS9 ±0.018		35.3 +0.2			●	●	●	●	●	●	●	●	●		
Ø34.925 +0.0254	1 3/8	7.937 +0.051	5/16	38.557 +0.381	Ma			●	●								
Ø34.925 +0.0254	1 3/8	9.525 +0.0635	3/8	39.141 +0.381	RH1												
Ø35 H7 +0.025		10 JS9 ±0.018		38.3 +0.2				●	●	●	●	●	●	●	●		
Ø36.512 +0.0254	1 7/16	9.525 +0.0635	3/8	40.767 +0.381	Cb												
Ø38 H7 +0.025		10 JS9 ±0.018		41.3 +0.2				●	●	●	●	●	●	●	●	●	
Ø38.1 +0.0254	1 1/2	7.937 +0.051	5/16	41.783 +0.381	Ca												
Ø38.1 +0.0254	1 1/2	9.525 +0.0635	3/8	42.392 +0.381	C					●	●	●	●	●	●	●	
Ø40 H7 +0.025		12 JS9 ±0.0215		43.3 +0.2				●	●	●	●	●	●	●	●	●	
Ø41.275 +0.0254	1 5/8	9.525 +0.0635	3/8	45.618 +0.381	Nb					●	●						
Ø42 H7 +0.025		12 JS9 ±0.0215		45.3 +0.2						●	●	●	●	●	●	●	
Ø44.45 +0.0254	1 3/4	9.525 +0.0635	3/8	48.818 +0.381	Ls												
Ø44.45 +0.0254	1 3/4	11.112 +0.0635	7/16	49.428 +0.381	L												
Ø45 H7 +0.025		14 JS9 ±0.0215		48.8 +0.2						●	●	●	●	●	●	●	
Ø47.625 +0.0254	1 7/8	12.7 +0.0635	1/2	53.238 +0.381	Lu						●						
Ø48 H7 +0.025		14 JS9 ±0.0215		51.8 +0.2						●	●	●	●	●	●	●	
Ø49.212 +0.0254	1 15/16	12.7 +0.0635	1/2	54.864 +0.381	Da												
Ø50 H7 +0.025		14 JS9 ±0.0215		53.8 +0.2							●	●	●	●	●	●	●
Ø50.8 +0.0254	2	12.7 +0.0635	1/2	56.464 +0.381	Ds												
Ø53.975 +0.0381	2 1/8	12.7 +0.0635	1/2	59.69 +0.381	Pa						●						
Ø55 H7 +0.03		16 JS9 ±0.0215		59.3 +0.2							●	●	●	●	●	●	●
Ø57.15 +0.0381	2 1/4	12.7 +0.0635	1/2	62.915 +0.381	U												
Ø60 H7 +0.03		18 JS9 ±0.0215		64.4 +0.2													
Ø60.325 +0.0381	2 3/8	15.875 +0.076	5/8	67.335 +0.381	Ub												
Ø65 H7 +0.03		18 JS9 ±0.0215		69.4 +0.2													
Ø70 H7 +0.03		20 JS9 ±0.026		74.9 +0.2													
Ø75 H7 +0.03		20 JS9 ±0.026		79.9 +0.2													
Ø80 H7 +0.03		22 JS9 ±0.026		85.4 +0.2													
Ø85 H7 +0.035		22 JS9 ±0.026		90.4 +0.2													
Ø85.725 +0.0381	3 3/8	22.225 +0.076	7/8	95.504 +0.381	Wd												
Ø90 H7 +0.035		25 JS9 ±0.026		95.4 +0.2													
Ø92.075 +0.0381	3 5/8	22.225 +0.076	7/8	101.955 +0.381	Wf												
Ø100 H7 +0.035		28 JS9 ±0.026		106.4 +0.2													



Spline bores

Basic programme of SAE involute splines

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-S	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 of spline bores acc. to DIN 5482

Size	Pitch circle	Module	No. of teeth	Profile correction	Size	Pitch circle	Module	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	-0.200	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					

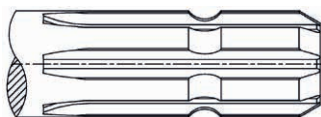
Basic programme of spline bores acc. to DIN 5480

Spline code	Pitch circle	Module	No. of teeth	Spline code	Pitch circle	Module	No. of teeth
20 x 1 x 18 x 8H	18.0	1	18	40 x 2 x 18 x 8H	36.0	2	18
20 x 1.25 x 14 x 8H	17.5	1.25	14	45 x 2 x 21 x 8H	41.0	2	21
25 x 1.25 x 18 x 8H	22.5	1.25	18	48 x 2 x 22 x 9H	44.0	2	22
28 x 1.25 x 21 x 8H	26.25	1.25	21	50 x 2 x 24 x 8H	48.0	2	24
30 x 2 x 14 x 8H	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 8H	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

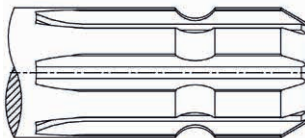
Basic programme of spline bores acc. to DIN 9611 - ISO 500 (p.t.o. shaft connection)

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

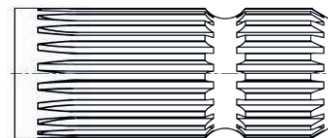
1 $\frac{3}{8}$ ", 6 teeth



1 $\frac{3}{4}$ ", 6 teeth



1 $\frac{3}{4}$ ", 20 teeth



Spline clamping hubs are often adapted to the shafts of hydraulic pump/hydraulic motor shafts. Please contact us for the respective hub length of the spline code!

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

²⁾ Profile correction different from DIN

³⁾ Similar to code PA-S

Taper bores

Basic programme taper 1:8

Code	D ^{+0.05}	(D2)	B ^{JS9}	T2 ^{+0.1}	LK
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}	15.65	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

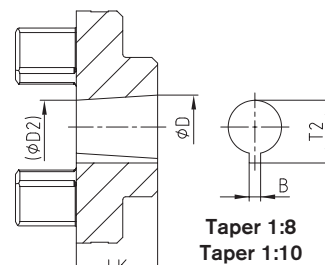
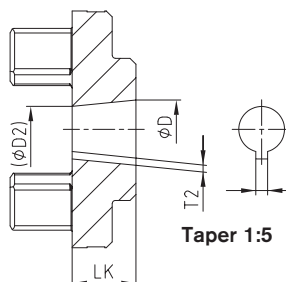
With code N/6 and N/6a keyway in parallel with taper.

Basic programme of taper 1:10

Code	D ^{+0.05}	(D2)	B ^{JS9}	T2 ^{+0.1}	LK
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

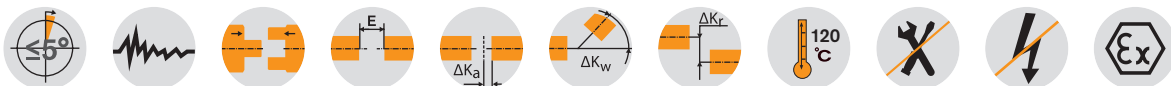
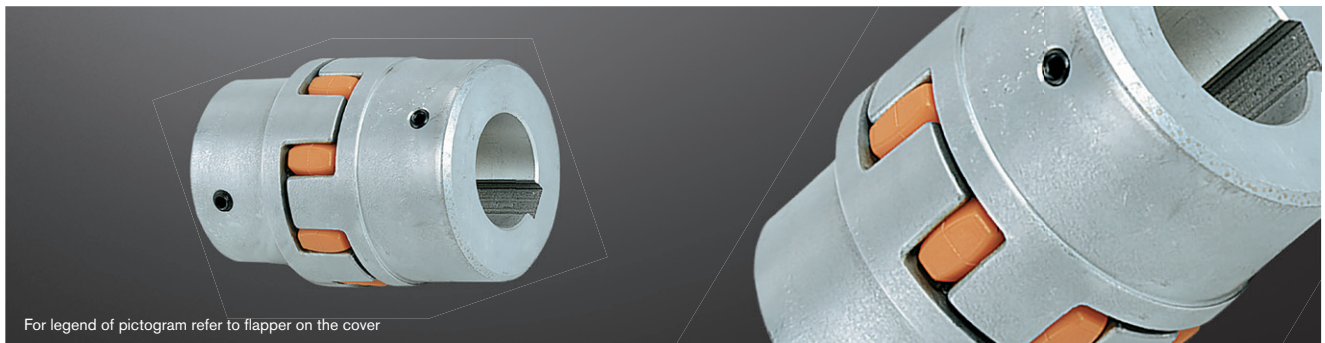
Basic programme taper 1:5

Code	D ^{+0.05}	(D2)	B ^{JS9}	T2 ^{+0.1}	LK
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

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]										Setscrew	
		92 ShA	98 ShA	64 ShD		General										G	T
14	1a	7.5	12.5	—	0-16	L	L1, L2	E	B1	S	DH	DI1	DN	N		M4	5
19	1a	10	17	—	0-25	35	11	13	10	1.5	30	10	30	—		M5	10
24	1a	35	60	—	0-35	66	25	16	12	2.0	40	18	40	—		M5	10
						78	30	18	14	2.0	56	27	56	—			2

ROTEX® Aluminium diecast (Al-D)																	
19	1	10	17	—	0-19	66	25	16	12	2	41	18	32	20	M5	10	2
	1a				19-24								41				
24	1	35	60	—	0-24	78	30	18	14	2	56	27	40	24	M5	10	2
	1a				22-28								56				
28	1	95	160	—	0-28	90	35	20	15	2.5	66	30	48	28	M8	15	10
	1a				28-38								66				

ROTEX® Aluminium (Al-H)																	
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	3.5	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	62			
	1b				12-48	164	70										
42	1	265	450	560	14-45	126	50	26	20	3	95	46	75	40	M8	20	10
	1a				42-55								94	65			
	1b				14-55	176	75										
48	1	310	525	655	15-52	140	56	28	21	3.5	105	51	85	45	M8	20	10
	1a				48-62								104	69			
	1b				15-62	188	80										
55	1	410	685	825	20-60	160	65	30	22	4	120	60	98	52	M10	20	17
	1a				55-74								118				
65	1	625	940	1175	22-70	185	75	35	26	4.5	135	68	115	61	M10	20	17
75	1	1280	1920	2400	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

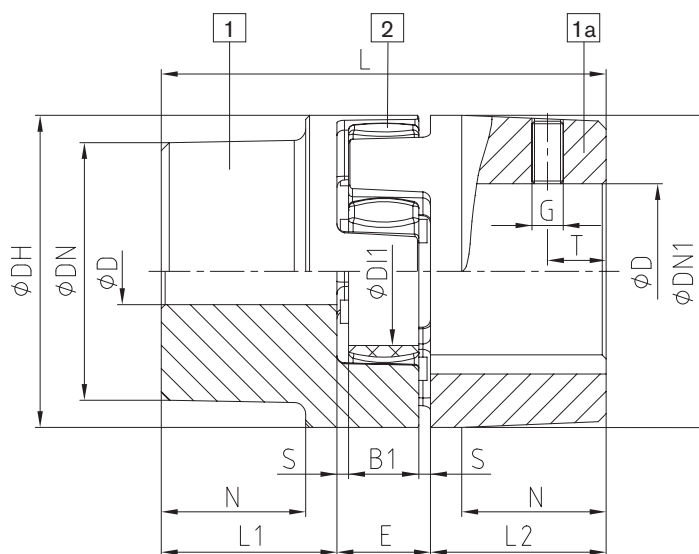
■ = Unless any material is specified in the order, it is defined with the calculation/order.

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

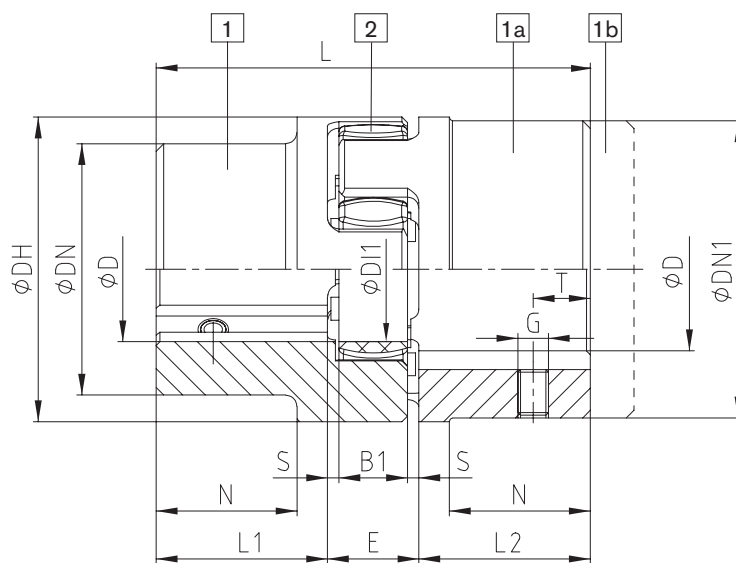
Ordering
example:

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

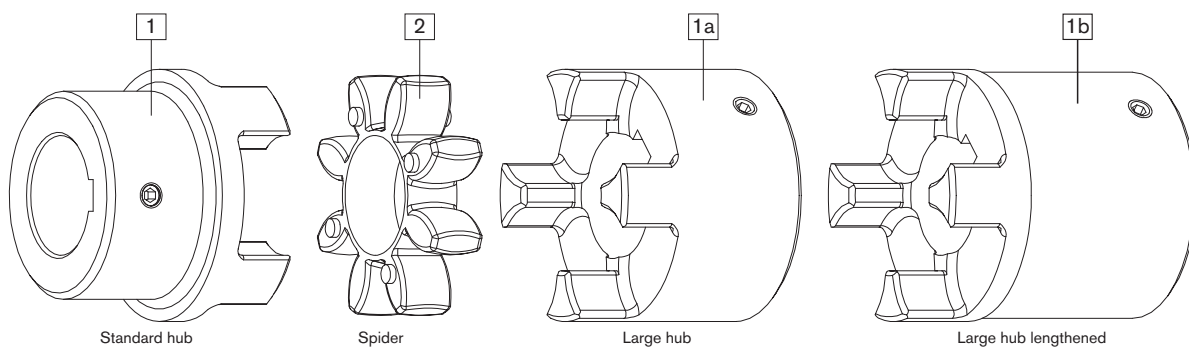
Components



AI-D (thread opposite the keyway)

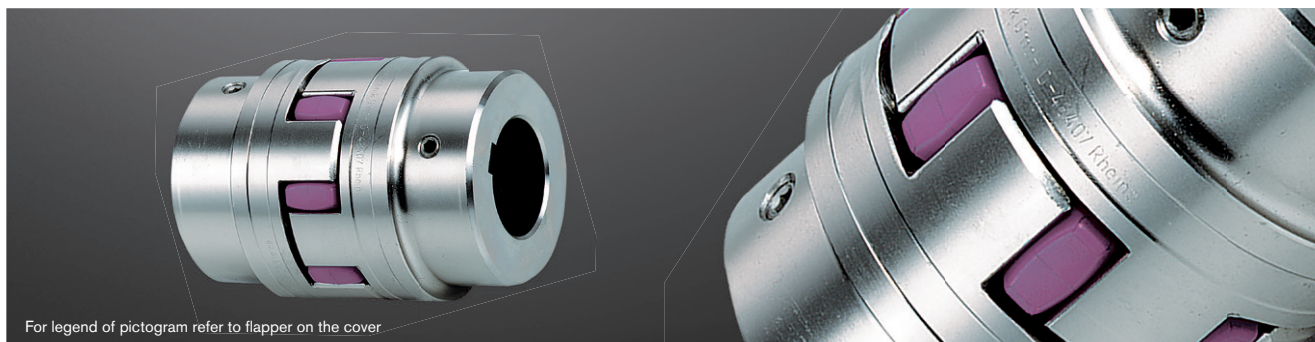


GJL / GJS (thread on the keyway)

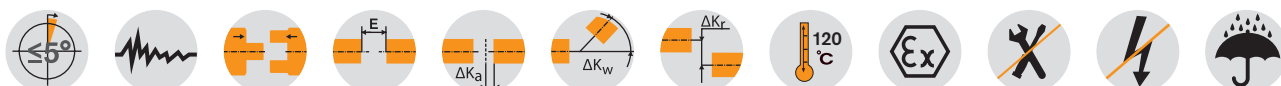


ROTEX® Standard Flexible jaw couplings

Material steel/stainless steel



For legend of pictogram 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		
	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	0-75	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	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 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:

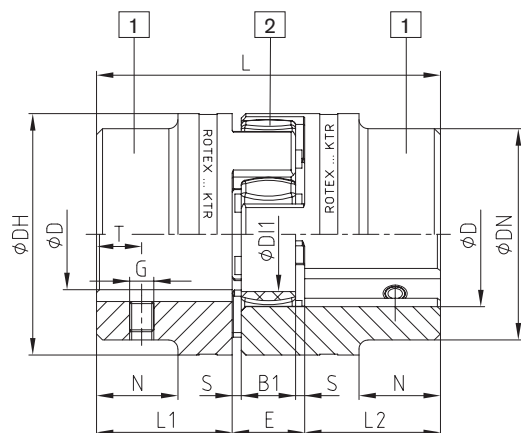
ROTEX® 38	1.4305	92 ShA	1 - Ø45	1 - Ø25
Coupling size	Material	Spider hardness	Component Finish bore	Component Finish bore

ROTEX®

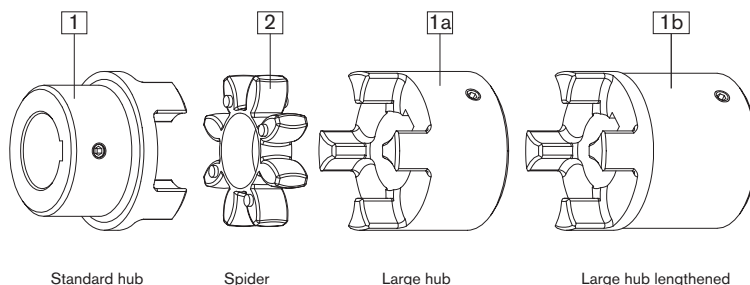
Flexible jaw couplings

DIN EN 10204 - 3.1 and 3.2 material test certificate

Components



Steel (thread on the keyway)



ROTEX® Coupling hubs with test certificate ¹⁾				
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.



ClassNK

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]	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

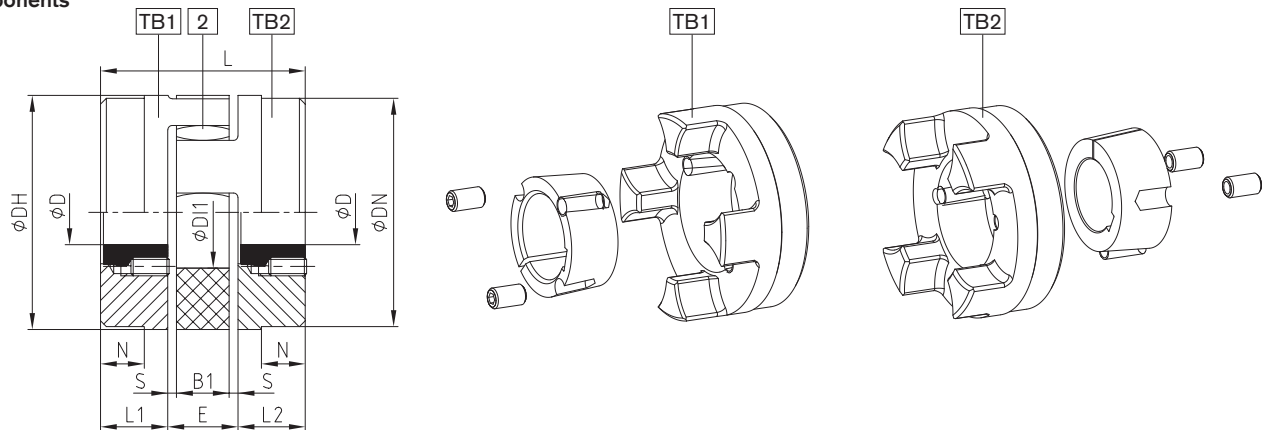
ROTEX®

Flexible jaw couplings

Taper clamping sleeve



Components



ROTEX® Shaft coupling for taper clamping sleeve

Size	Taper clamping sleeve	Dimensions [mm]									Fastening screws for taper clamping sleeves			
		L1, L2	E	B1	S	L	N	DH	DN	DI1	Size [Inch] ¹⁾	Length [mm]	Number	T _A [Nm]
24	1008	22	18	14	2.0	62	–	55	55	27	1/4"	13	2	5.7
28	1108	23	20	15	2.5	66	–	65	65	30	1/4"	13	2	5.7
38	1108	23	24	18	3.0	70	15	80	78	38	1/4"	13	2	5.7
42	1610	26	26	20	3.0	78	16	95	94	46	3/8"	16	2	20
48	1615	39	28	21	3.5	106	28	105	104	51	3/8"	16	2	20
55	2012	33	30	22	4.0	96	20	120	118	60	7/16"	22	2	31
65	2012	33	35	26	4.5	101	19	135	115	68	7/16"	22	2	31
75	2517	52	40	30	5.0	144	36	160	158	80	1/2"	25	2	49
	• 3020										5/8"	32		92
90	3020	52	45	34	5.5	149	33	200	160	100	5/8"	32	2	92
100	3535	90	50	38	6.0	230	69	225	180	113	1/2"	49	3	113
125	4545	114	60	46	7.0	288	86	290	230	147	3/4"	49	3	192

Taper clamping sleeve

Size	Summary of bore dimensions D [mm], 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 ²⁾				
1615	Ø14	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42 ²⁾				
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							

• Available for type TB2 only

¹⁾ 1. BSW thread

Coupling type TB1/TB2, TB1/TB1 and TB2/TB2 possible.

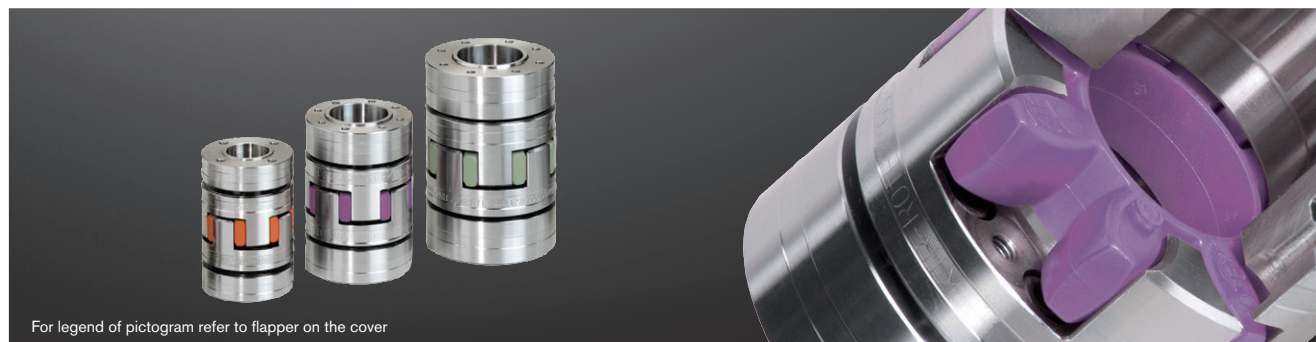
Please order our separate dimension sheet (M373054).

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

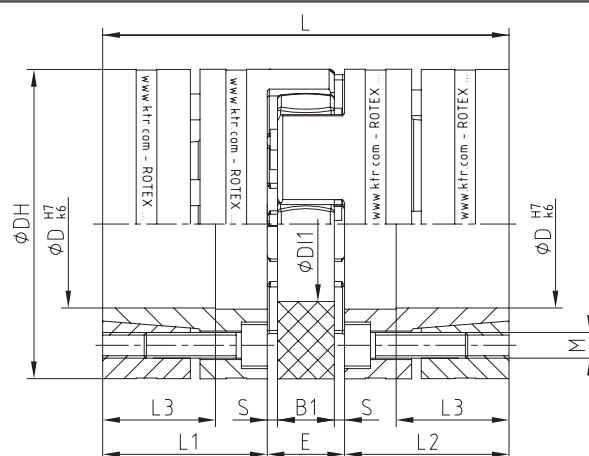
Ordering example:

ROTEX® 38	92 ShA	1108	TB1 - Ø24		TB2 - Ø22	
Coupling size	Spider hardness	Taper clamping sleeve	Hub type	Finish bore	Hub type	Finish bore

Clamping ring hubs



For legend of pictogram refer to flapper on the cover



Extraction 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 ShA		98 ShA															
	TKN	TK max	TKN	TK max	DH ²⁾	DI1	L	L1, L2	L3	E	B1	S	M	Z = number	T _A [Nm]	M1		
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 D and the respective transmittable friction torques T_R 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											445	495	595	526	678	671	775	718	872	1043	1061							
48													899	896	1030	962	1160	1379	1222	1543								
55														863	856	991	918	1119	1110	1247	1277	1665	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⁾ For selection see page 14 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 clearance k6/bore H7, from Ø55 G7/m6. The torque is reduced with bigger clearance. For the strength calculation of shaft/hollow shaft see KTR standard 45510 on our homepage www.ktr.com.

Ordering example:

ROTEX® GS 24	98 ShA	6.0 steel	Ø24	6.0 steel	Ø20
Coupling size	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

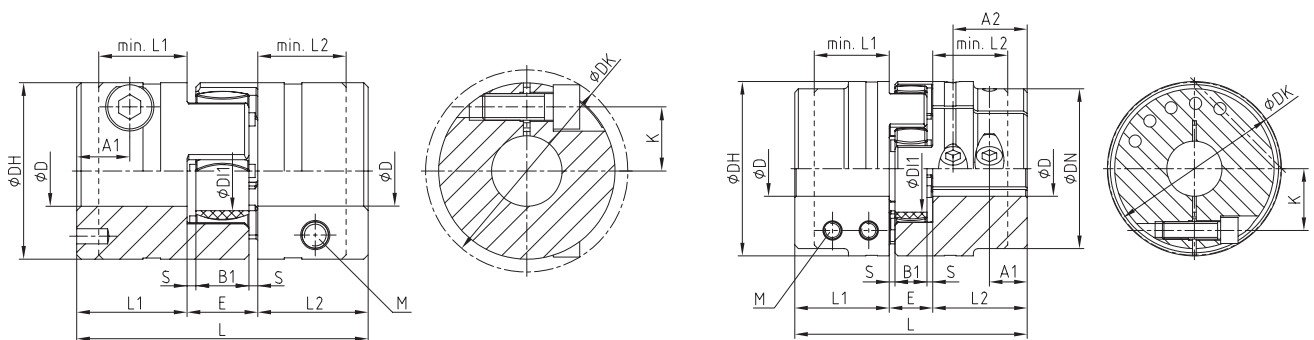
ROTEX®

Flexible jaw couplings

Clamping hubs



For legend of pictogram refer to flapper on the cover



ROTEX® 19 - 28

ROTEX® 38 - 90

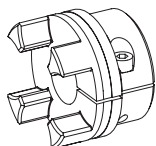
ROTEX® as clamping hubs																
Size	Dimensions [mm]														Screw DIN EN ISO 4762	
	Max. finish bore D	L	L1, L2	min. L1, min. L2	E	B1	S	DH	DN	DI1	DK	A1	A2	K	M	T _A [Nm]
19	20 ¹⁾	66	25	20	16	12	2.0	40	-	18	46.0	12	—	14.5	M6	14
24	28	78	30	25	18	14	2.0	55	-	27	57.5	12	—	20.0	M6	14
28	38	90	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 D and the respective transmittable friction torques T _R [Nm] of ROTEX® clamping hubs type 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

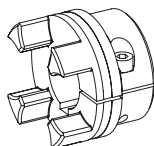
¹⁾ With type 2.1 D_{max.} Ø17 mm

²⁾ With reduced hubs dimension A1 varies resp. the number of screws changes from 2-off to 1-off

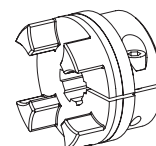
³⁾ A1 and A2 have a different dimension K



Type 2.0
Clamping hub single slot
without feather keyway



Type 2.1
Clamping hub single slot with
feather keyway



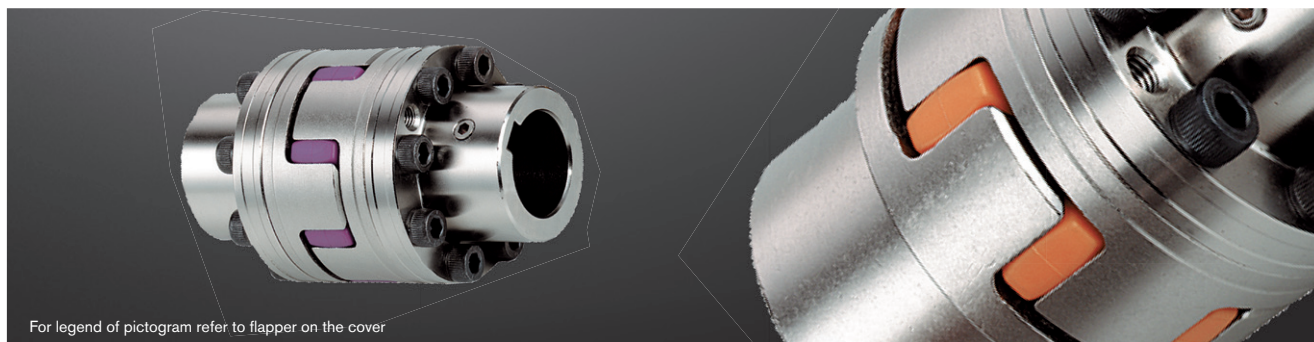
Type 2.3
Clamping hub with spline
bore (For a selection of our
programme of spline bores see
page 37)

**Ordering
example:**

ROTEX® 24	98 ShA	2.1	Ø24	2.0	Ø20
Coupling size	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

ROTEX® AFN and BFN Flexible jaw couplings

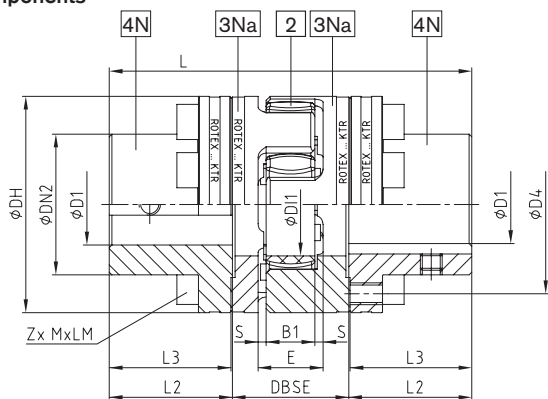
Flange programme



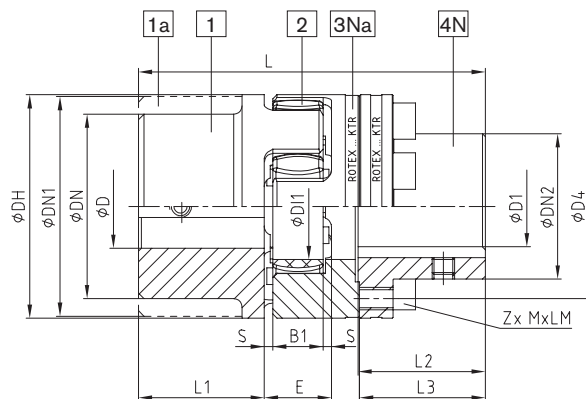
For legend of pictogram refer to flapper on the cover



Components



Type AFN



Type BFN

ROTEX® Type AFN and BFN																				
Size	Pilot bore D	Component 4N max. finish bore D1	Dimensions [mm]											Cap screws ³⁾ DIN EN ISO 4762 - 12.9						
			DH	DN2	D4	DI1	DBSE	L1, L2	E	B1	S	L3	L	MxLM	Z	pitch ²⁾	T _A ¹⁾ [Nm]			
24	Jaw coupling: page 38 to 40 Stock programme: page 36 and 37	27	55	36	45	27	33	30	18	15	2.0	30.5	94	86	M5x16	8		10		
28		30	65	42	54	30	39	35	20	15	2.5	35.5	110	100	M6x20	8	8x45°	17		
38		38	80	52	66	38	43	45	24	18	3.0	45.5	134	124	M8x22	8		41		
42		45	95	62	80	46	48	50	26	20	3.0	51.0	150	138	M8x25	12	16x22.5°	41		
48		52	105	70	90	51	50	56	28	21	3.5	57.0	164	152	M8x25	12		41		
55		60	120	80	102	60	60	65	30	22	4.0	66.0	192	176	M10x30	8	8x45°	83		
65		70	135	94	116	68	65	75	35	26	4.5	76.0	217	201	M10x30	12	16x22.5°	83		
75		80	160	108	136	80	75	85	40	30	5.0	86.5	248	229	M12x40	15		120		
90		105	200	142	172	100	82	100	45	34	5.5	101.5	285	265	M16x40	15		295		
100		115	225	158	195	113	97	110	50	38	6.0	111.5	320	295	M16x50	15		295		
110		130	255	178	218	127	103	120	55	42	6.5	122.0	347	321	M20x50	15	20x18°	580		
125		150	290	206	252	147	116	140	60	46	7.0	142.0	400	370	M20x60	15		580		
140		170	320	235	282	165	128	155	65	50	7.5	157.5	443	409	M20x60	15		580		
160		200	370	270	325	190	146	175	75	57	9.0	177.5	501	463	M24x70	15		1000		
180		230	420	315	375	220	159	195	85	64	10.5	198.0	555	515	M24x80	18	24x15°	1000		

¹⁾ Screw tightening torque T_A [Nm].

²⁾ Thread in the driving flange between the cams.

³⁾ Coupling is delivered not assembled.

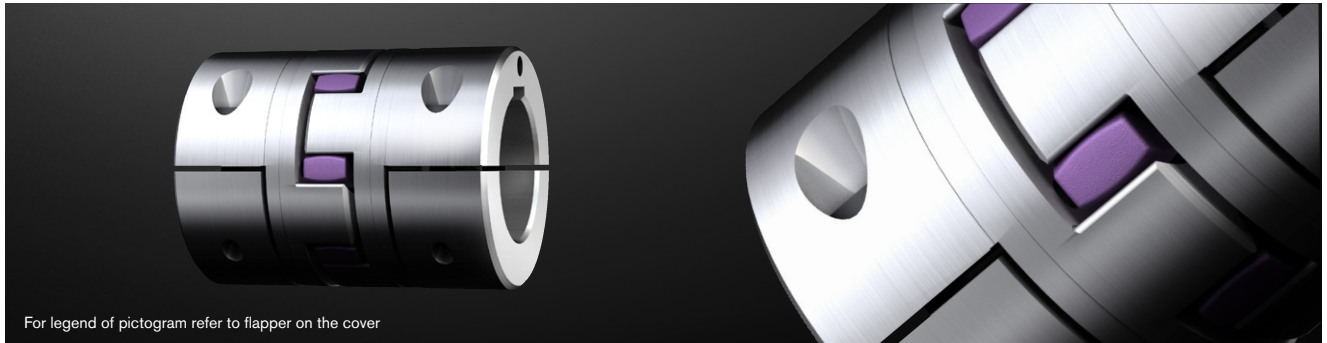
Ordering example:

ROTEX® 24	AFN	92 ShA	4N	Ø38	4N	Ø35
Coupling size	Type	Spider hardness	Component	Finish bore	Component	Finish bore

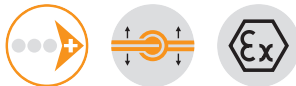
ROTEX® AH

Flexible jaw couplings

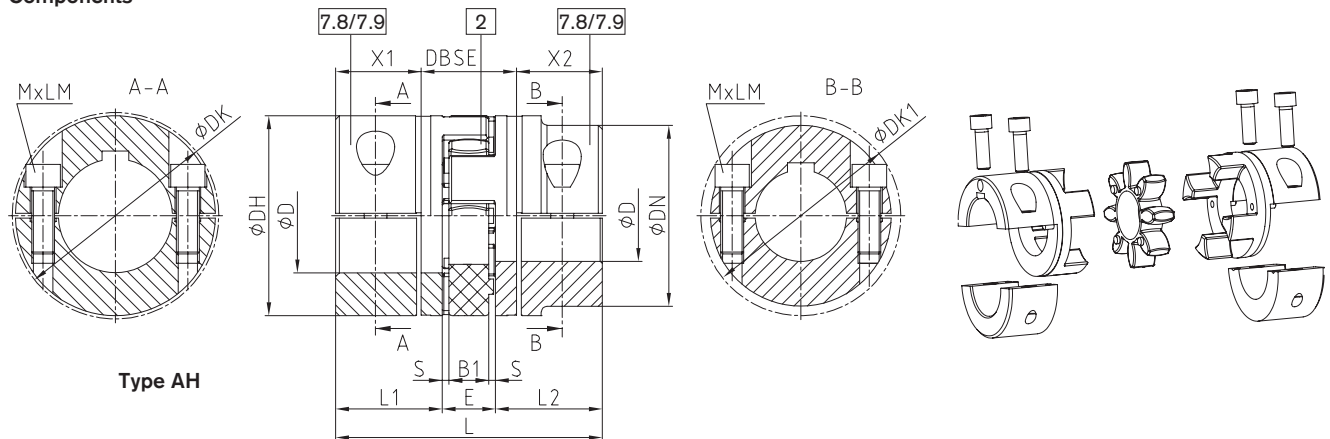
Drop-out center design coupling



For legend of pictogram refer to flapper on the cover



Components



ROTEX® Type AH														
Size	Dimensions [mm]												Cap screws DIN EN ISO 4762	
	Max. finish bore D	L	L1, L2	E	B1	S	DH	DN	DK	DK1	X1, X2	DBSE	MxLM	Tightening torque T _A [Nm]
19	20	66	25	16	12	2.0	40	—	46.0	—	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	—	73.0	—	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	39.0	48	M10x30	69
	55							—	97.0	—			M10x35	
48	55	140	56	28	21	3.5	105	95	—	105.0	45.0	50	M12x35	120
	60							—	108.5	—			M12x40	
55	65	160	65	30	22	4.0	120	110	—	119.5	50.0	60	M12x40	120
	70							—	122.0	—			M12x45	
65	70	185	75	35	26	4.5	135	115	—	123.5	60.0	65	M12x40	120
	80							—	132.5	—			M12x45	
75	80	210	85	40	30	5.0	160	135	—	147.5	67.5	75	M16x50	295
	90							—	158.0	—			M16x50	
90	90	245	100	45	34	5.5	200	160	—	176.0	81.5	82	M20x60	580
	110							—	197.0	—			M20x60	
100 ¹⁾	110	270	110	50	38	6.0	225	180	—	185.5	84.0	102	M16x50	295
110 ¹⁾	120	295	120	55	42	6.5	255	200	—	208.0	90.0	115	M20x60	580
125 ¹⁾	140	340	140	60	46	7.0	290	230	—	242.5	105.0	130	M24x70	1000

CAUTION:

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 = Half shell clamping hub without feather keyway max. circumferential speed of $v = 35$ m/s.

From a circumferential speed of $v = 25$ m/s the frictional torque of shaft/hub has to be reviewed. Please consult with KTR.

7.9 = Half shell clamping hub with feather keyway max. circumferential speed of $v = 35$ m/s. From a circumferential speed of $v = 25$ m/s dynamic balancing is required.

Speed: max. circumferential speed of 25 m/s on the outside diameter DH of the coupling

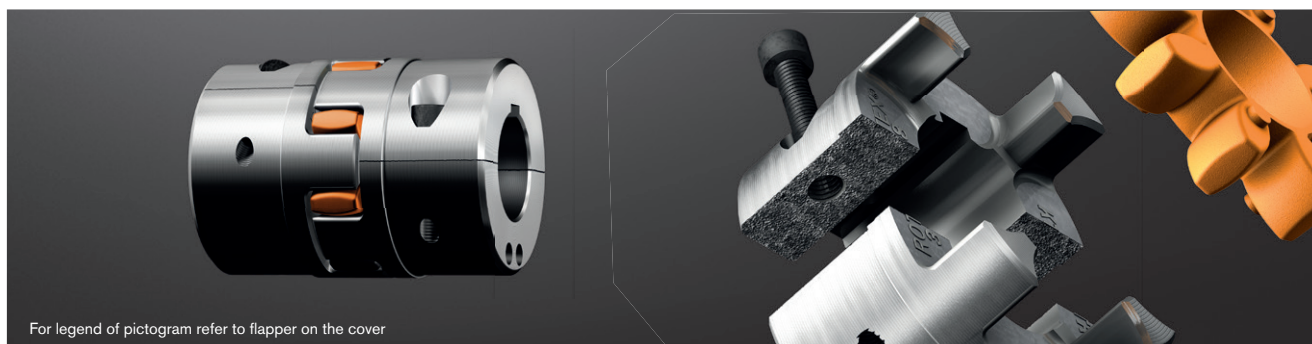
¹⁾ From size 100: 4 clamping screws for each clamping hub

Ordering example:

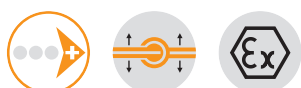
ROTEX® 38	AH	98 ShA	7.8	Ø38	7.8	Ø30
Coupling size	Type	Spider hardness	Hub type	Finish bore	Hub type	Finish bore



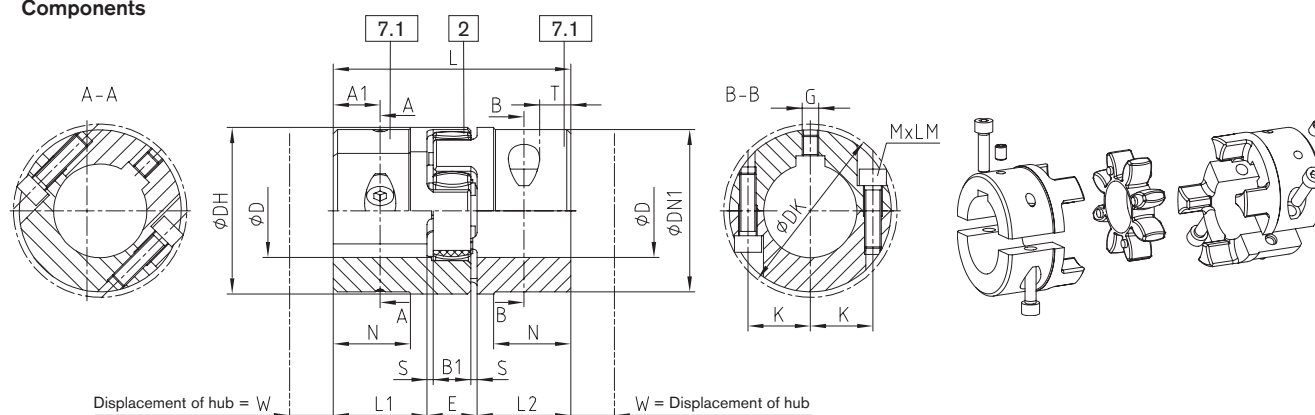
Drop-out center design coupling with SPLIT hubs



For legend of pictogram 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	48	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	50	37.5		M10	15	M12x40	115
	70	80							135	132.5							M12x45	
75	40	80	210	85	40	30	5.0	160	135	147	69	57	42.5	25		20	M16x50	290
	80	90							160	158								
90	40	90	245	100	45	34	5.5	200	160	176	81	72	50	30	M12	30	M20x60	560
	90	110							200	197								

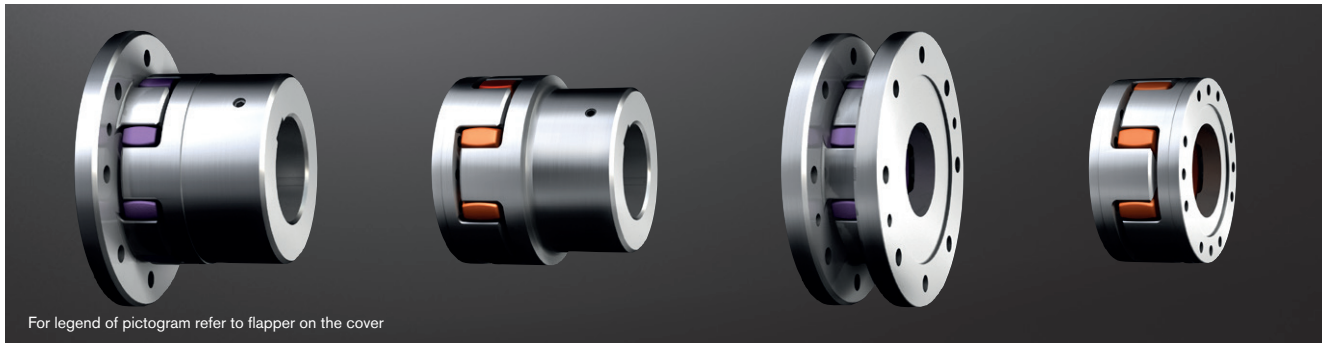
7.1 = SPLIT hub with feather keyway

Ordering example:

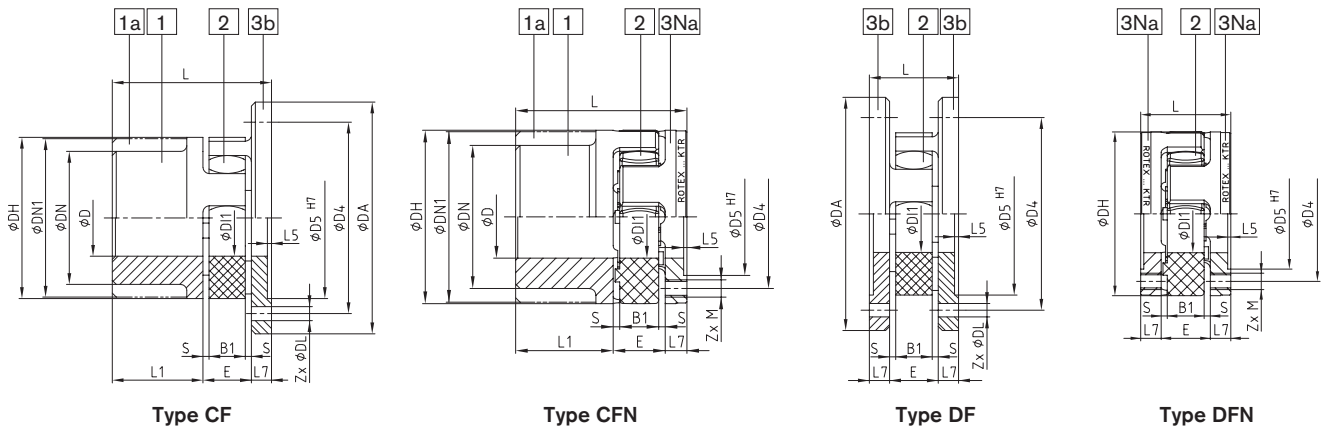
ROTEX® 38	SH	98 ShA	7.1	Ø38	7.1	Ø30
Coupling size	Type	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

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

Flange programme



Components



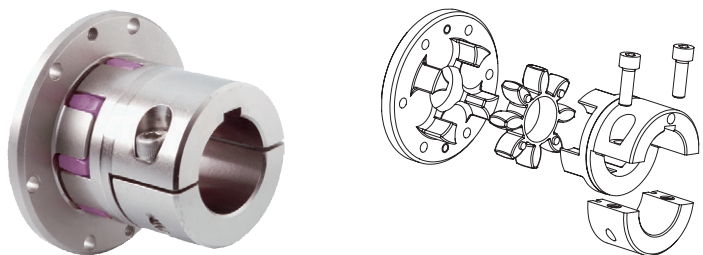
ROTEX® Type CF, CFN and DF, DFN																							
Size	D, DN, DN1	Dimensions general [mm]								Dimensions CF and DF [mm]						Dimensions CFN and DFN [mm]							
		DH	DI1	L1	E	B1	S	L5	L7	DA	D4	D5	Z	DL	L		D4	D5	M	Z	pitch	L	
															CF	DF						CFN	DFN
24	Jaw coupling: page 38 to 40 Stock programme: page 36 and 37	55	27	30	18	14	2.0	1.5	8	80	65	55	5	4.5	56	34	45	36	M5	8		56	34
28		65	30	35	20	15	2.5	1.5	10	100	80	65	6	6.6	65	40	54	44	M6	8	8x45°	65	40
38		80	38	45	24	18	3.0	1.5	10	115	95	80	6	6.6	79	44	66	54	M8	8		79	44
42		95	46	50	26	20	3.0	2.0	12	140	115	95	6	9.0	88	50	80	65	M8	12	16x22.5°	88	50
48		105	51	56	28	21	3.5	2.0	12	150	125	105	8	9.0	96	52	90	75	M8	12		96	52
55		120	60	65	30	22	4.0	2.0	16	175	145	120	8	11.0	111	62	102	84	M10	8	8x45°	111	62
65		135	68	75	35	26	4.5	2.0	16	190	160	135	10	11.0	126	67	116	96	M10	12	16x22.5°	126	67
75		160	80	85	40	30	5.0	2.5	19	215	185	160	10	13.5	144	78	136	112	M12	15		144	78
90		200	100	100	45	34	5.5	3.0	20	260	225	200	12	13.5	165	85	172	145	M16	15		165	85
100		225	113	110	50	38	6.0	4.0	25	285	250	225	12	13.5	185	100	195	165	M16	15		185	100
110		255	127	120	55	42	6.5	4.0	26	330	290	255	12	17.5	201	107	218	180	M20	15	20x18°	201	107
125		290	147	140	60	46	7.0	5.0	30	370	325	290	16	17.5	230	120	252	215	M20	15		230	120
140	320	165	155	65	50	7.5	5.0	34	410	360	320	16	22.0	254	133	282	245	M20	15		254	133	
160	370	190	175	75	57	9.0	5.0	38	460	410	370	16	22.0	288	151	325	280	M24	15		288	151	
180	420	220	195	85	64	10.5	5.5	40	520	465	420	16	26.0	320	165	375	330	M24	18	24x15°	320	165	

For other flange programmes see page 45.

Other types: ROTEX® CF-H

Flange drop-out center design coupling

Please order our separate dimension sheet (M412069).



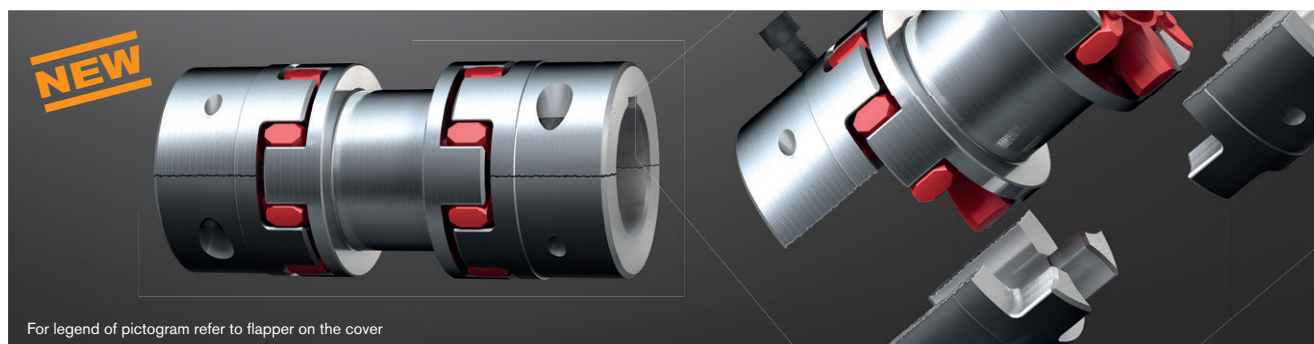
Ordering
example:

ROTEX® 38	CF	92 ShA	1	GJL	Ø20
Coupling size	Type	Spider hardness	Hub side, component	Material	Finish bore

ROTEX® ZS-DKM-SH

Flexible jaw couplings

Double-cardanic shaft coupling with SPLIT hubs



For legend of pictogram refer to flapper on the cover



ROTEX®

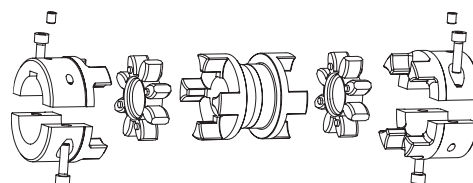
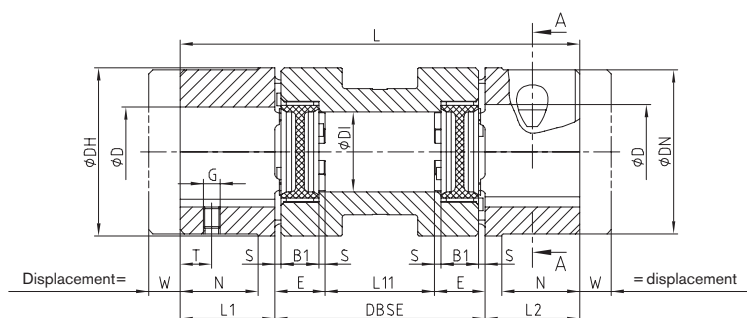
ROFLEX®

POLY-NORM®

POLY

REVOLUX®

Flexible jaw and
pin & bush couplings



ROTEX® type ZS-DKM-SH																								
Size ³⁾	Spider 98 ShA-GS T _{KN} [Nm] ^{1) 2)}	Drop-out center length DBSE	Dimensions [mm]													Screws DIN EN ISO 4762		Max. displacements						
			Finish bore D		DH	DN	DK	DI	L1, L2	L11	E	B1	S	L	G	W	MxLM	T _A [Nm]	Axial [mm]	with n = 1500 rpm		with n = 3000 rpm		
			min.	Max.																Radial [mm]	Angular [°]	Radial [mm]	Angular [°]	
19	10	42 ⁵⁾ 52 ⁵⁾	0	24	40	-	-	18	25	10	16	12	2.0	92	-	-	-	-	1.2	0.45	-	-	-	-
24	35	100	0	28	55	-	57.5	27	30	64	18	14	2.0	160	M5	12	M6x20	14	1.4	1.43	-	1.07	-	-
		140								104				200						2.13	1.60			
		58 ⁵⁾								18				128						0.66	-			
28	95	100	0	38	65	-	73	30	35	60	20	15	2.5	170	M8	12	M8x25	34	1.5	1.40	-	1.05	-	-
		140								100				210						2.10	1.57			
		68 ⁵⁾								20				158						0.77	-			
38	190	100	24	45	80	78	83.5	38	45	52	24	18	3.0	190	M8	15	M8x30	34	1.8	1.33	-	0.99	-	-
		140								92				230						2.02	1.52			
		74 ⁵⁾								22				174						0.84	-			
42	265	100	24	55	95	94	97	46	50	48	26	20	3.0	200	M8	15	M10x35	67	2.0	1.29	-	0.97	-	-
		140								88				240						2.00	1.49			
		80 ⁵⁾								24				192						0.91	-			
48	310	100	24	60	105	104	108.5	51	56	44	28	21	3.5	212	M8	15	M12x40	115	2.1	1.26	-	0.94	-	-
		140								84				252						1.95	1.47			
		88 ⁵⁾								28				218						1.01	-			
55	410	100	24	70	120	118	122	60	65	40	30	22	4.0	270	M10	15	M12x45	115	2.2	1.22	-	0.92	-	-
		140								40				230						1.22	0.92			
		180								80				310						1.92	1.44			
		200								120				310						2.62	1.96			
		102 ⁵⁾								140				330						2.97	2.22			
65	625	140	24	80	135	135 ⁶⁾	132.5 ⁶⁾	68	75	32	35	26	4.5	290	M10	15	M12x40	115	2.6	1.17	-	1.37	-	-
		70								35				26						4.5	290	1.83	1.37	
		110								330				2.53						1.90				
		116 ⁵⁾								36				286						1.33	-			
75	1280	140	40	90	160	160 ⁶⁾	158 ⁶⁾	80	85	60	40	30	5.0	310	M10	20	M16x50	290	3.0	1.75	-	1.31	-	-
		180								100				350						2.44	1.83			
		200								120				370						2.79	2.09			
		250								170				420						3.67	2.75			
90	2400	130 ⁵⁾	40	110	200	200 ⁶⁾	197 ⁶⁾	100	100	40	45	34	5.5	330	M12	30	M20x60	560	3.4	1.48	-	1.76	-	-
		180								90				380						2.36	1.76			
		250								160				450						3.58	2.68			

¹⁾ Maximum torque of coupling T_{K max} = rated torque of coupling T_{KN} x 2

²⁾ Mathematically transmittable torque with double-cardanic types acc. to 92 ShA-GS using the higher quality spiders 98 ShA-GS

³⁾ ROTEX®-SPLIT hub material sizes 24 and 28 = sintered steel; hub material sizes 38 to 90 = EN-GJL

⁴⁾ Hub type 7.1 = SPLIT hub with feather keyway and thread for setscrews

⁵⁾ Material spacer Al-H

⁶⁾ ØDN and ØDK depending on finish bore ØD, see page 47

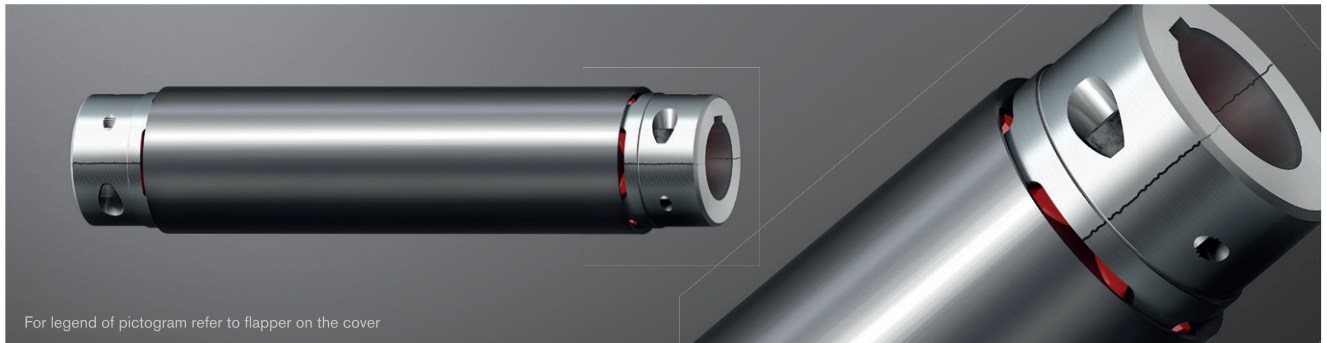
The max. permissible circumferential speed for double-cardanic ROTEX® DKM and ZS-DKM-SH coupling is 20m/s, with higher speeds please consult with KTR.
Spiders ROTEX® 98 ShA-GS and 64 ShD-GS applicable, while the transmittable torque [T_{KN}; T_{Kmax}] of the 92 ShA-GS spider must not be exceeded.

Ordering example:	ROTEX® 38	ZS-DKM-SH	140	98 ShA-GS	7.1 ⁴⁾	Ø 38	7.1 ⁴⁾	Ø30
	Coupling size	Type	Shaft distance di- mension DBSE	Spider hard- ness	Hub type	Finish bore	Hub type	Finish bore

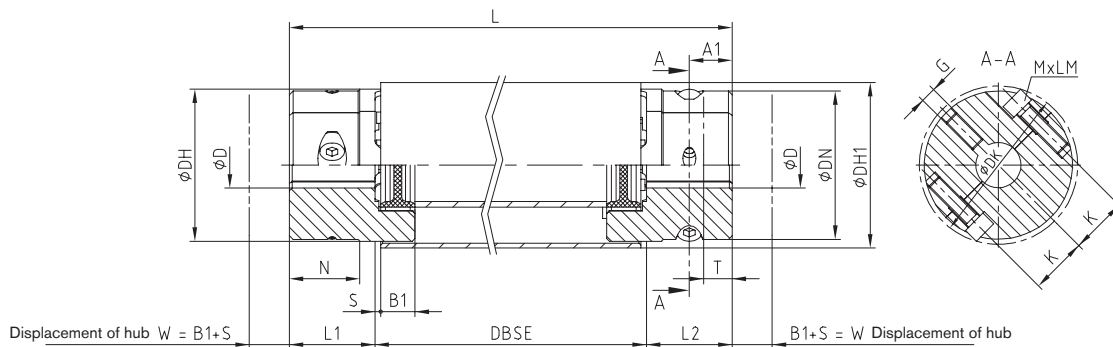
ROTEX® ZRS

Flexible / backlash-free intermediate shaft coupling

Intermediate shaft programme



For legend of pictogram refer to flapper on the cover



ROTEX® type ZRS																			
Size	Dimensions ¹⁾ [mm]															Clamping screw DIN EN ISO 4762		Intermediate pipe Torsion spring stiffness C ²⁾ [Nm/rad]	
	min.	Max.	DH	DN	L1, L2	N	B1	S	G	T	A1	K	DK	DH1	Min. DBSE	L ¹⁾	MxLM	Tightening torque T _A [Nm]	
19 ³⁾	0	20	40	-	25	-	12	2.0	-	-	8.0	14.5	46.0	45	33	⁴⁾	M6x16	14	3800
24	0	24	55	-	30	-	14	2.0	M5	10	15.0	20.0	57.5	60	37	L = DBSE + L1 + L2	M6x20	14	11100
28	0	38	65	-	35	-	15	2.5	M8	15	17.5	25.0	73.0	72	40		M8x25	34	23600
38	24	45	80	78	45	37.0	18	3.0	M8	15	22.5	30.0	83.5	87	49		M8x30	34	43800
42	24	55	95	94	50	40.0	20	3.0	M8	20	25.0	30.0	97.0	103	53		M10x35	67	82600

¹⁾ With inquiries and orders please specify the shaft distance dimension DBSE along with the maximum speed to review the critical bending speed.
Maximum DBSE = 4000 mm (different lengths on request).

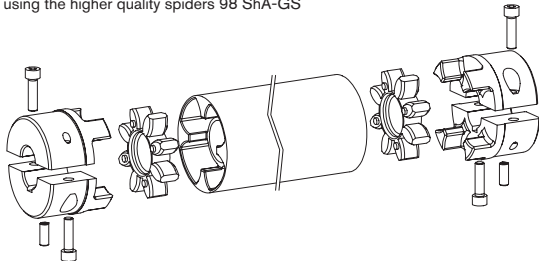
²⁾ Torsion spring stiffness with an intermediate pipe length of 1 m

³⁾ Available as a clamping hub type DH (7.5/7.6)

⁴⁾ L = DBSE + L1 + L2 - 15

⁵⁾ Finish bore according to ISO fit H7, feather keyway according to DIN 6885, sheet 1 [JS9]

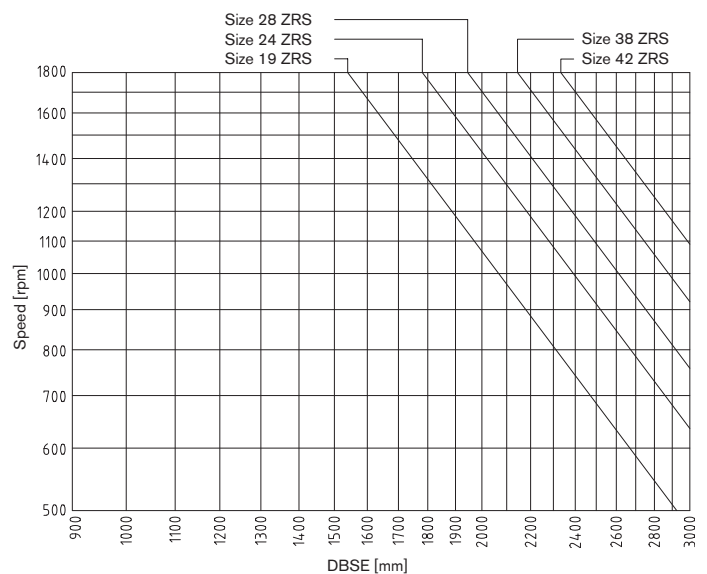
Mathematically transmittable torque with double-cardanic types acc. to 92 ShA-GS using the higher quality spiders 98 ShA-GS



7.1 = SPLIT hub with feather keyway

Displacements			
Size	Axial displacement [mm]	Radial displacement [mm] per 1m of pipe length	Angular displacement [degree]
19	1.2	15.7	0.9
24	1.4	15.7	0.9
28	1.5	15.7	0.9
38	1.8	17.5	1.0
42	2.0	17.5	1.0

Diagramme for coupling selection:



Ordering example:

ROTEX® 38	ZRS	1200	98 ShA-GS	7.1	Ø30	7.1	Ø30
Coupling size	Type	Shaft distance dimension DBSE	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

ROTEX® ZR

Flexible jaw couplings

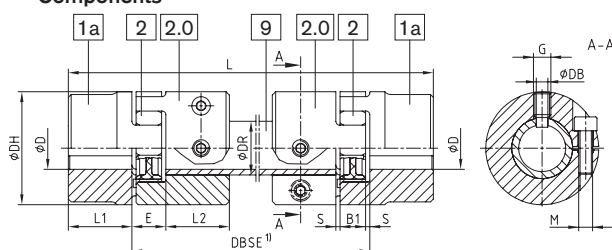
Intermediate shaft programme



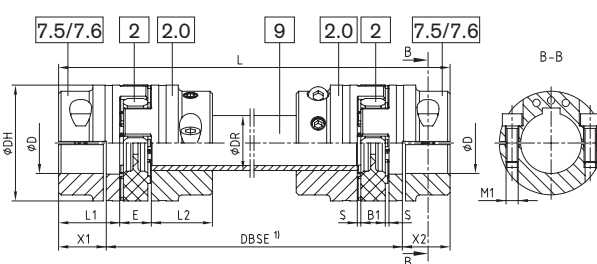
For legend of pictogram refer to flapper on the cover



Components



Type ZR
(with GS spider)³⁾



Type ZR
(with GS spider and clamping hubs type DH for a double-cardanic connection 7.5 or 7.6)³⁾

ROTEX® Type ZR

Size	Dimensions [mm]														Intermediate pipe				Locking screw G	Pin hole DB [mm]	Axial displacement [mm]	Angular displacement [degree]
	Max. finish bore D		DH	L1, L2	X1, X2	E	B1	S	L		min. DBSE		Clamping screw component 2.0		Clamping screw component 7.5/7.6		Torsional stiffness/m					
	Component 1a	Component 7.5/7.6							Component 1a	Component 7.5/7.6	M	T _A [Nm]	M1	T _A [Nm]	DR	C ²⁾ [Nm ² /rad]						
19	25	20	40	25	17.5	16	12	2.0	L = DBSE + 2 • L1	L = DBSE + 2 • X1/X2	110	97	M6	14	M6	10	Ø20x3	954.9	M6	4.0	1.2	0.9
24	35	28	55	30	22.5	18	14	2.0			128	111	M6	14	M6	14	Ø30x4	4522	M8	5.5	1.4	0.9
28	40	38	65	35	25.5	20	15	2.5			145	129	M8	35	M8	35	Ø35x4	7611	M10	7.0	1.5	0.9
38	48	45	80	45	35.5	24	18	3.0			180	157	M8	25	M8	35	Ø40x4	11870	M12	8.5	1.8	1.0
42	55	55	95	50	39.0	26	20	3.0			198	174	M10	49	M10	69	Ø45x4	17487	M12	8.5	2.0	1.0
48	62	60	105	56	45.0	28	21	3.5			217	190	M12	86	M12	120	Ø50x4	24648	M16	12	2.1	1.1
55	74	70	120	65	50.0	30	22	4.0			242	220	M12	120	M12	120	Ø55x4	33544	M16	12	2.2	1.1
65	80	80	135	75	60.0	35	26	4.5			281	250	M12	120	M12	120	Ø65x5	68329	M16	12	2.6	1.2
75	95	90	160	85	67.5	40	30	4.0			318	285	M16	295	M16	295	Ø75x5	108000	M16	12	3.0	1.2

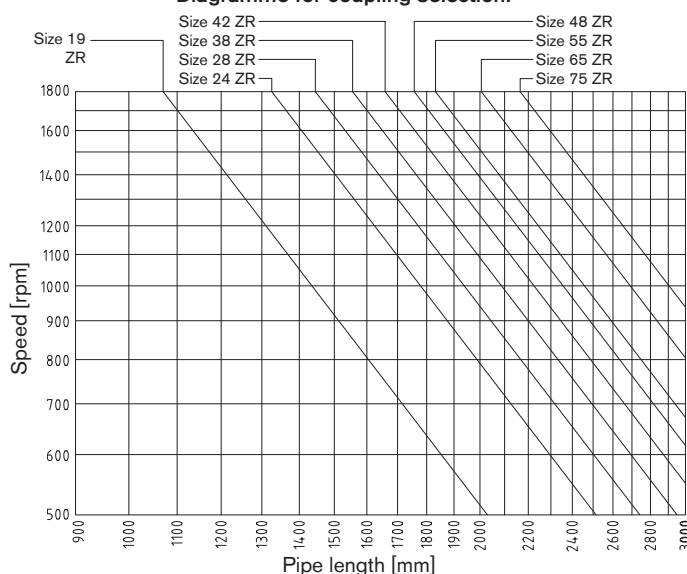
¹⁾ With inquiries and orders please specify the shaft distance dimension DBSE along with the maximum speed to review the critical bending speed.

²⁾ Torsion spring stiffness with 1 m length 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 considered. Please order dimension sheet M583613.

³⁾ Mathematically transmittable torque with double-cardanic types acc. to 92 ShA-GS using the higher quality spiders 98 ShA-GS

Not permissible for crane and hoist drives

Diagramme for coupling selection:



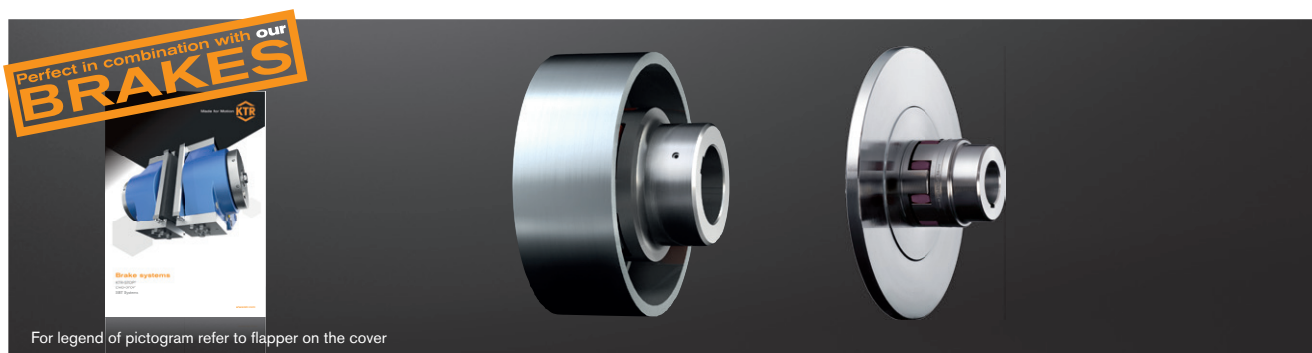
Ordering example:

ROTEX® 38	ZR	1200	98 ShA-GS	7.5	Ø38	7.5	Ø30
Coupling size	Type	Shaft distance dimension DBSE	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

ROTEX® BTAN and SBAN

Flexible jaw couplings

With brake drum/with brake disk



ROTEX® Type BTAN and SBAN

Size	Pilot bore, D, DN, DN1	Max. finish bore D1		Dimensions [mm]										
		GJS	steel	L	DH	DI1	D4	D5	Z	pitch ¹⁾	M	T _A [Nm]	L1, L2	E
38	Jaw coupling: page 38 to 40 Stock programme: page 36 and 37	—	37	114	80	38	66	50	8	8 x 45°	M8	35	45	24
42		—	44	126	95	46	80	60	12	16 x 22.5°	M8	41	50	26
48		—	50	140	105	51	90	68	12	16 x 22.5°	M8	41	56	28
55		—	57	160	120	60	102	78	8	8 x 45°	M10	83	65	30
65		—	68	185	135	68	116	92	12	16 x 22.5°	M10	83	75	35
75		—	78	210	160	80	136	106	15		M12	120	85	40
90		—	104	245	200	100	172	140	15		M16	295	100	45
100		100	—	270	225	113	195	156	15	20 x 18°	M16	295	110	50
110		110	—	295	255	127	218	176	15		M20	580	120	55
125		130	—	340	290	147	252	204	15		M20	580	140	60

Type BTAN												Type SBAN												
Brake drum	ROTEX® BTAN dimension "AB"										Speed rpm [V] (30 m/s)	Brake disk	ROTEX® SBAN dimension "AS"											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	104.5	1120	
500x190					-12	-4	8	16	23	39	1120	630x20					51.5	59.5	71.5	79.5	86.5	102.5	900	
630x236						-22	-10	-2	5	21	900	710x20					51.5	59.5	71.5	79.5	86.5	102.5	800	
710x265								-13	-6	10	800	800x25							69	77	84	100	710	
800x300										-4	710	900x25									84	100	630	

¹⁾ Thread in the hub between the cams.

Other sizes on request according to dimension sheet:

BTAN: M380821

SBAN straight: M380822; cranked: M 370065

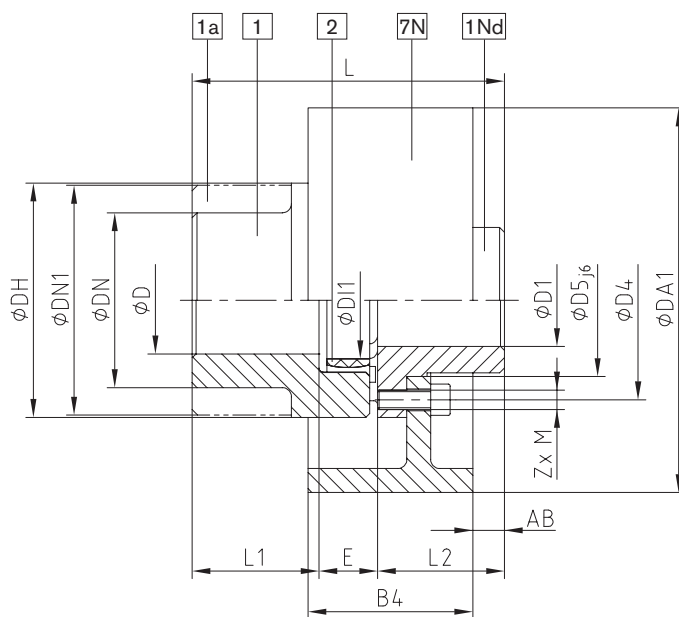
FNN hub: M 380823

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

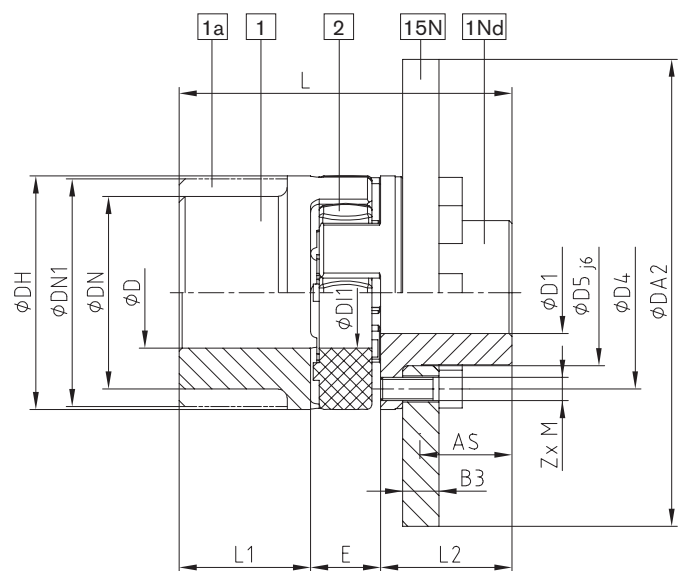
Ordering
example:

ROTEX® 38	BTAN	Ø200x75	98 ShA	1Nd	Ø34	1	Ø30
Coupling size	Type	Brake drum Ø x width	Spider hard- ness	Component	Finish bore	Component	Finish bore

Components



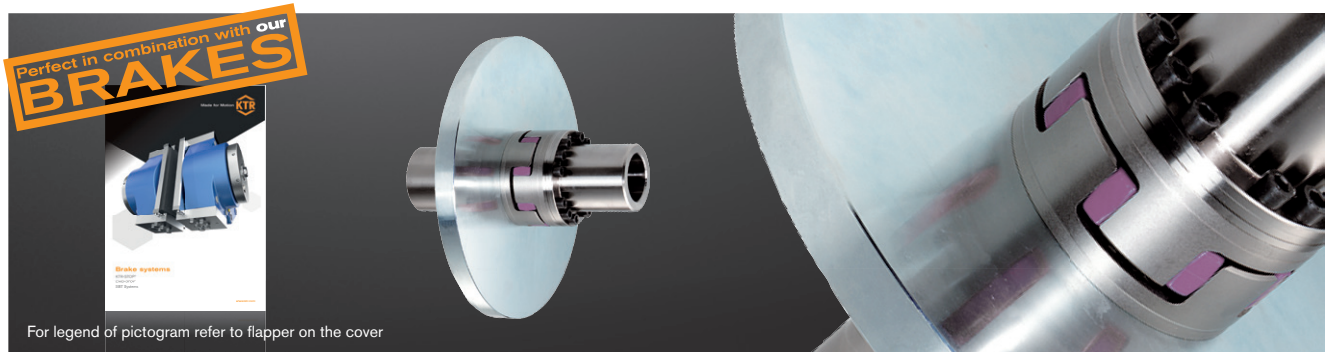
**Brake drum
Type BTAN**



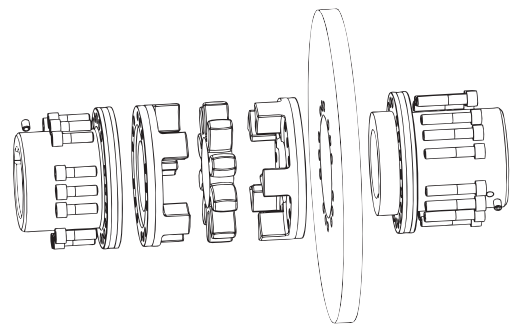
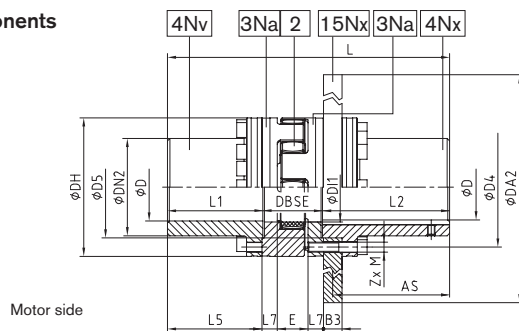
**Brake disk
Type SBAN**

ROTEX® AFN-SB special Flexible jaw couplings

Drop-out center design coupling with brake disk



Components



ROTEX® Type AFN-SB special

Size	Finish bore D		Dimensions [mm]										
	min.	Max.	DH	DN2	D4	D5 H7/h7	DI1	DBSE	E	M	Z	pitch	T _A [Nm]
65	22	70	135	94	116	96	68	65	35	M10	12	16x22.5°	83
75	30	80	160	108	136	112	80	75	40	M12	15		120
90	40	105	200	142	172	145	100	82	45	M16	15		295
100	46	115	225	158	195	165	113	97	50	M16	15		295
110	60	130	255	178	218	180	127	103	55	M20	15	20x18°	580
125	60	150	290	206	252	215	147	116	60	M20	15		580
140	60	170	320	235	282	245	165	128	65	M20	15		580
160	80	200	370	270	325	280	190	146	75	M24	15		1000
180	85	230	420	315	375	330	220	159	85	M24	18	24x15°	1000

ROTEX® Type AFN-SB special

Size	Torque with 98 ShA ¹⁾		Max. speed [rpm]	Max. braking torque ²⁾ [Nm]	Dimensions [mm]					
	T _{KN}	T _{K max}			L1	L2	L5	L7	AS	L
65	940	1880	3450	1880	113.5	166.0	112.5	16	150	344.5
75	1920	3840	3250	3840	133.0	166.5	131.5	19	150	374.5
90	3600	7200	3000	7200	165.5	206.5	164.0	20	190	454.0
100	4950	9900	2800	9900	155.0	206.5	153.5	25	190	458.5
110	7200	14400	2600	14400	203.5	212.0	201.5	26	195	518.5
125	10000	20000	2250	20000	200.5	212.0	198.5	30	195	528.5
140	12800	25600	1800	25600	247.0	252.5	244.5	34	235	627.5
									230 ³⁾	
160	19200	38400	1500	38400	229.0	252.5	226.5	38	235	627.5
									230 ³⁾	
180	28000	56000	1350	56000	198.0	252.5	195.0	40	235	609.5

ROTEX® Selection of coupling/brake disk

Size	Brake disk ØDA2 x B3									
	355x30	400x30	450x30	500x30	560x30	630x30	710x30	800x30	900x30	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
160							x	x	x	x
180							x	x	x	x

¹⁾ For selection see page 14 et seqq. ²⁾ The maximum braking torque must not exceed the maximum torque of the coupling. ³⁾ Dimensions with a width of brake disk B3 of 40 mm.

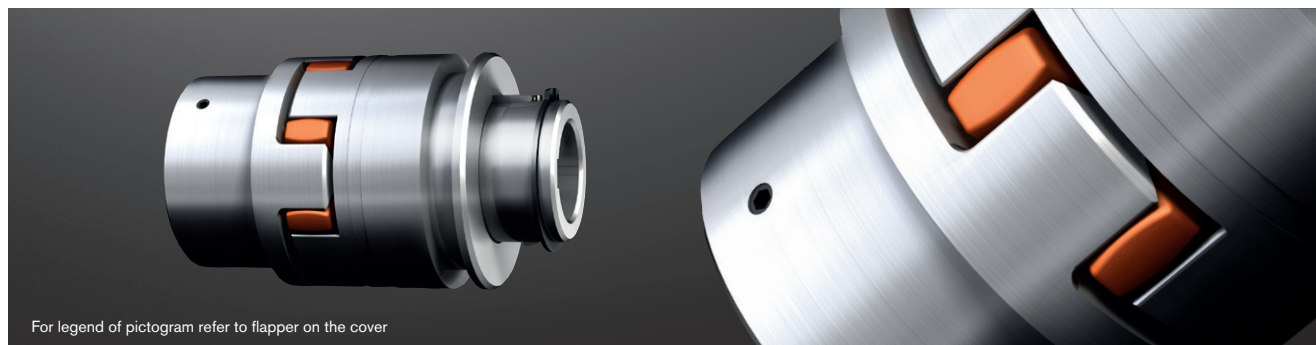
Ordering example:

ROTEX® 90	AFN-SB special	Ø450x30	98 ShA	4Nv	Ø90	4Nx	Ø90
Coupling size	Type	Brake disk Ø x width	Spider hardness	Component	Finish bore	Component	Finish bore

ROTEX® SD

Flexible jaw couplings

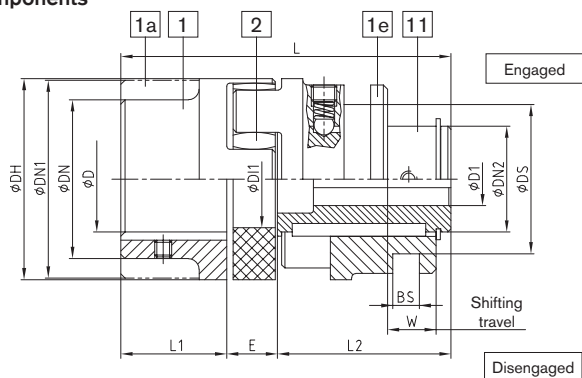
Shiftable coupling shiftable at standstill



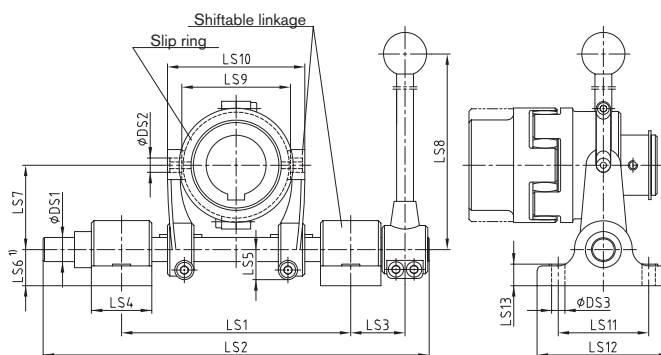
For legend of pictogram refer to flapper on the cover



Components



Type SD



Type SD with slip ring and shiftable linkage

Upon request: Shiftable linkage available with locking pin, locking device and retrieval of shift position.

ROTEX® Type SD																
Size	D, DN, DN1	Dimensions [mm]												Shifting force set in [N]	Slip ring size	Shiftable linkage size
		Finish bore D1		DH	DI1	DN2	DS±0.1	L	L1	L2	L6±0.1	E	W			
		min.	Max.													
24	Jaw couplings: page 38 to 40 Stock programme: page 36 and 37	8	20	55	27	30	41	98	30	51.5	6.0	16.5	16.0	110	-	-
28		10	24	65	30	36	58	113	35	60.0	8.0	18.0	17.5	130	-	-
38		12	30	80	38	45	70.5	140	45	73.0	12.5	22.0	21.0	150	1.1	1
42		14	35	95	46	50	70.5	156	50	82.0	12.5	24.0	23.0	180	1.1	1
48		15	42	105	51	60	89.5	172	56	90.5	17.5	25.5	24.5	200	2.2	2
55		18	50	120	60	70	112.5	195	65	103.0	18.0	27.0	26.0	250	3.3	3
65		20	55	135	68	80	112.5	227	75	120.0	18.0	32.0	30.5	280	3.3	3
75		25	65	160	80	95	130.5	257	85	135.0	20.5	37.0	35.0	350	4.4	3
90		28	75	200	100	110	164.5	293	100	152.0	25.5	41.0	39.5	350	5.5	4
100		30	80	225	113	115	164.5	325	110	169.0	25.5	46.0	44.0	380	5.5	4
110		35	85	255	127	125	164.5	355	120	184.0	25.5	51.5	48.5	450	5.5	4
125		40	100	290	147	145	210.5	404	140	208.5	30.5	55.5	53.0	500	6.6	5

Slip ring and shiftable linkage																			
Size	Size of shiftable linkage	Dimensions [mm]																	Max. speed [rpm] of slip ring
		DS1	DS2	DS3	LS1		LS2	LS3	LS4	LS5	LS6	LS7	LS8	LS9	LS10	LS11	LS12	LS13	
38	1	20	12	11	180	190	320	55	50	25	30	70	400	90	114	75	110	18	3280
42	1				240	270	430	60		27		97.5	450	111	151				2550
48	2	25																	
55	3		17		280	310	490			32.5	40	120	600	140	180	100	140		2120
65	3	30																	
75	3			13.5				70	60					170	210			25	1710
90	4																		
100	4	35	21		321	365	565			37.5	50	147.5	750	200	244	120	160		1360
110	4																		
125	5	40	25		365	410	630	80		46		190	1085	250	300				855

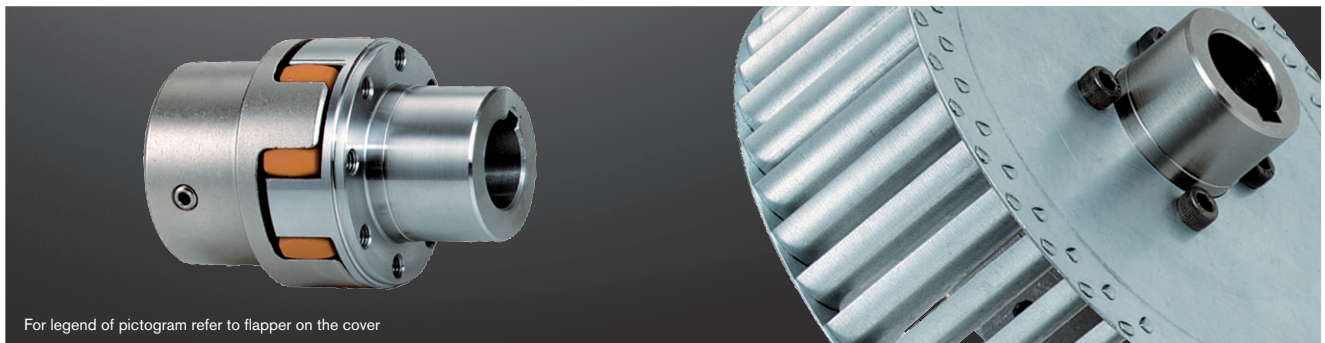
¹⁾ With a through base plate dimension „LS6“ of the shiftable linkage size 5 to be increased by at least 10 mm.
Finish bore according to ISO fit H7, feather keyway according to DIN 6885, sheet 1 [J9].

Ordering example:	ROTEX® 38	SD	With 1.1 and 1	98 ShA	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

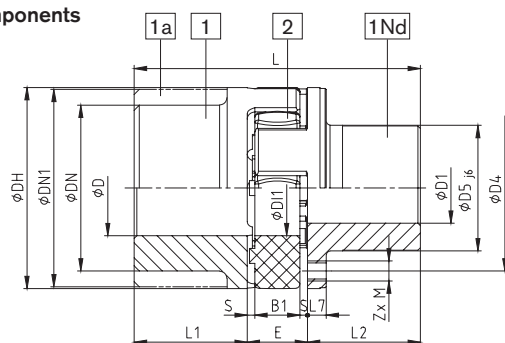
For mounting of fan



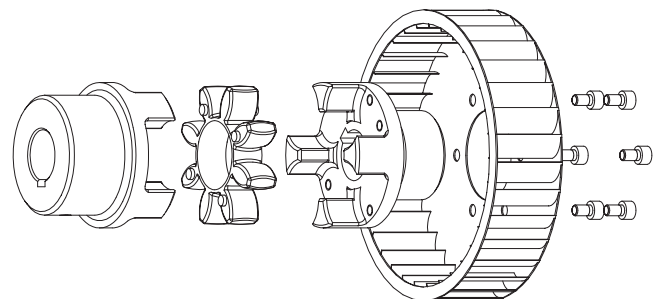
For legend of pictogram refer to flapper on the cover



Components



Type FNN



Type FNN with fan (type 1)

ROTEX® Type FNN																
Size	D, DN, DN1	Max. finish bore D1	Dimensions [mm]													
			L	DH	DI1	D4	D5	E	B1	S	L1, L2	L7	M	Z	pitch	
28	Jaw coupling: page 38 to 40 Stock programme: page 36 and 37	29	90	65	30	54	40	20	15	2.5	35	6.5	M6	8	8x45°	
38		37	114	80	38	66	50	24	18	3.0	45	7.5	M8	8		
42		44	126	95	46	80	60	26	20	3.0	50	9.5	M8	12	16x22.5°	
48		50	140	105	51	90	68	28	21	3.5	56	10.5	M8	12		
55		57	160	120	60	102	78	30	22	4.0	65	12.5	M10	8	8x45°	
65		68	185	135	68	116	92	35	26	4.5	75	13.5	M10	12	16x22.5°	
75		78	210	160	80	136	106	40	30	5.0	85	15.5	M12	15	20x18°	
90		104	245	200	100	172	140	45	34	5.5	100	18.5	M16	15		

Other sizes on request.

Dimensioning of fans is customer-specific and depends on the coupling selection. Please advise all necessary details for dimensioning of your fan. For that purpose you may use the KTR questionnaire acc. to KTR-N 20008 sheet 1.

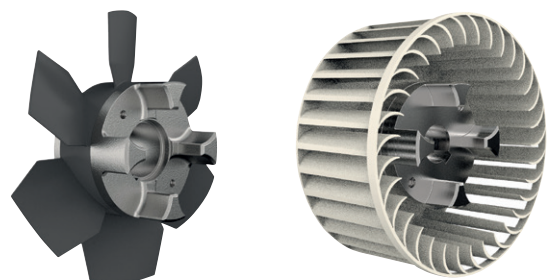
Type 1: Fan screwed on

The ROTEX® hub can be supplied with the fan screwed on. Customised connection dimensions such as pitch circle of threads, size of threads and number or centering of fans must be specified in your inquiry.



Type 2: Fan injection-moulded

Low prices due to optimisation of production with bigger volumes.

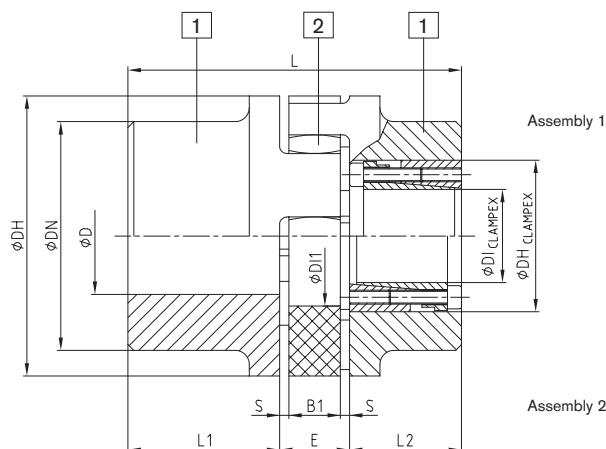


Ordering example:

ROTEX® 38	FNN	92 ShA	1	Ø38	1Nd	Ø30
Coupling size	Type	Spider hardness	Component	Finish bore	Component	Finish bore

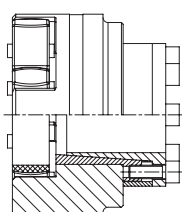
Other types with clamping sets

Components



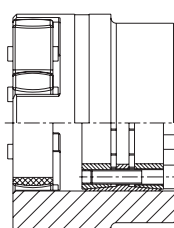
ROTEX® with clamping set CLAMPEX® KTR 200														
Size	D, DN	Hub material	CLAMPEX® KTR 200		Dimensions [mm]									
			Max. size of KTR clamping set DxDH	Transmittable torque and axial force										
				T [Nm]	FAX [kN]	L1	L2	E	B1	S	DH	DN	DI1	L
42	Jaw coupling: page 38 to 40 Stock programme: page 36	steel	30x55	790	53	50	48	26	20	3.0	95	—	46	Length = L1 + E + L2 (clamping set)
48			35x60	1300	74	56	48	28	21	3.5	105	—	51	
55			45x75	2200	98	65	59	30	22	4.0	120	—	60	
65			45x75	2200	98	75	59	35	26	4.5	135	115	68	
75			50x80	3330	132	85	59	40	30	5.0	160	135	80	
90		GJS	65x95	4300	132	100	59	45	34	5.5	200	160	100	Length = L1 + E + L2 (clamping set)
100			65x95	4300	132	110	59	50	38	6.0	225	180	113	
110			70x110	7500	214	120	70	55	42	6.5	255	200	127	
125			80x120	8500	213	140	70	60	46	7.0	290	230	147	
140			95x135	12600	265	155	70	65	50	7.5	320	255	165	
160		GJS	110x155	16500	300	175	80	75	57	9.0	370	290	190	Length = L1 + E + L2 (clamping set)
180			120x165	22500	375	195	80	85	64	10.5	420	325	220	

ROTEX® hub combined with CLAMPEX® KTR 250



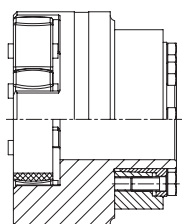
Frictionally engaged and backlash-free transmission of medium torques. CLAMPEX® KTR 250 is particularly suitable for thin-walled hubs and/or those made of aluminium or cast material. Please contact the KTR engineering department for further details.

ROTEX® hub combined with CLAMPEX® KTR 400



Frictionally engaged and backlash-free transmission of high torques. Compared to all other CLAMPEX® internal clamping sets, CLAMPEX® KTR 400 transmits the highest torques. Please contact the KTR engineering department for further details.

ROTEX® hub combined with CLAMPEX® KTR 620



Frictionally engaged and backlash-free transmission of torques immediately between shaft and hub. Since CLAMPEX® KTR 620 is positioned outside on the hub, the hub is in direct contact with the shaft. This results in significantly higher concentricity compared to the combinations with CLAMPEX® KTR 250 or CLAMPEX® KTR 400. Please contact the KTR engineering department for further details.

Other types with torque limiter



ROTEX® BKN - Overload coupling, type BKN

- Torsionally flexible coupling ROTEX® with shear pins
- Load-separating with blockage/overload
- Easy replacement of shear pin
- Fracture torque to be defined individually depending on the application

Customer variant from the stock programme.
Please specify the fracture torques with your order!
For further details see dimension sheet No. 5020/000/009-760313



ROTEX® - RUFLEX® - Overload coupling

- High power density
- Large wear volume with long service life
- Easy assembly and torque setting

For further details see catalogue page 288



ROTEX® - KTR-SI - Overload coupling

- Available in a ratchet, synchronous, idle rotation and fail-safe design
- High response accuracy, even after a long operating period
- Maintenance-free

For further details see catalogue page 295

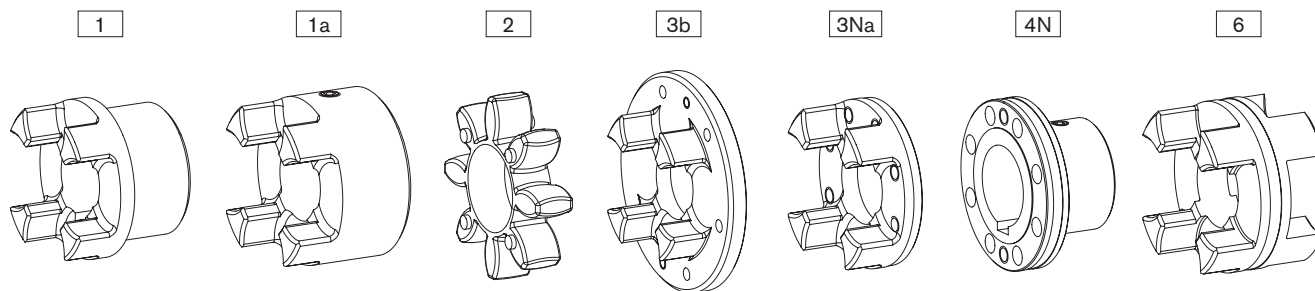


ROTEX® - KTR-SI FRE - idle rotation overload coupling

- Idle rotation overload system for high torques
- High repeatability
- Intelligent further development towards the shear pin coupling and hydraulic clamping sets

For further details see catalogue page 297

Weights and mass moments of inertia



ROTEX® individual components													
Size	Standard hub				Large hub			Spider	Driving flange			Coupling flange	DKM spacer
	Component 1				Component 1a			Component 2	Component 3b	Component 3Na		Component 4N	Component 6
	Aluminium [kg] [kgm²]	GJL [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	Aluminium [kg] [kgm²]	GJL [kg] [kgm²]	St [kg] [kgm²]	Polyurethane (Vulkollan) [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	Aluminium [kg] [kgm²]
14	—	—	—	—	0.020	—	—	0.0044	—	—	—	—	—
	—	—	—	—	0.000003	—	—	0.0000005	—	—	—	—	—
19	0.064	—	—	—	0.074	—	0.25	0.0057	—	—	—	—	—
	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	0.00001	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	0.00004	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	0.00008	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	0.00043	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	0.001166	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	0.00326	0.0651	—	0.02723	0.0448	0.0224
100	—	—	19.7	—	—	—	—	0.82	10.2	—	6.350	16.16	—
	—	—	0.11694	—	—	—	—	0.00592	0.1165	—	0.05273	0.0798	—
110	—	—	27.4	—	—	—	—	1.14	—	—	8.578	21.35	—
	—	—	0.20465	—	—	—	—	0.01048	—	—	0.09121	0.2824	—
125	—	—	42.3	—	—	—	—	1.56	—	—	12.598	34.33	—
	—	—	0.40727	—	—	—	—	0.01878	—	—	0.17469	0.3229	—
140	—	—	58.1	—	—	—	—	2.02	—	—	17.271	48.69	—
	—	—	0.67739	—	—	—	—	0.02989	—	—	0.29247	0.4917	—
160	—	—	84.2	—	—	—	—	3.08	—	—	26.305	71.08	—
	—	—	1.31729	—	—	—	—	0.06049	—	—	0.59436	0.9693	—
180	—	—	118.5	—	—	—	—	5.04	—	—	33.076	109.43	—
	—	—	2.30835	—	—	—	—	0.13295	—	—	0.97394	1.9650	—