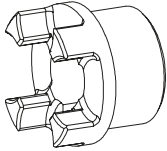


# ROTEX®

## Flexible jaw couplings

### Types of hubs

Since ROTEX® is used on many different applications and mounting situations, 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.



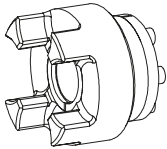
#### Type 1.0 hub with feather keyway and setscrew

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 32)

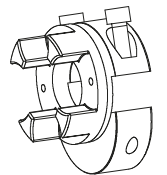


#### Type 4.2 hub for CLAMPEX® clamping set KTR 250

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.

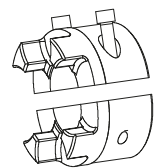


#### Type 7.5 clamping hub type DH without feather keyway for double-cardanic connection

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

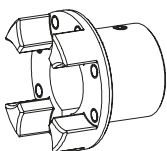
Type 7.6 clamping hub type DH with feather keyway for double-cardanic connection

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



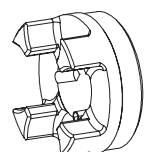
#### Type 7.0 SPLIT hub without feather keyway

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



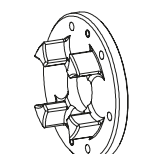
#### FNN hub

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



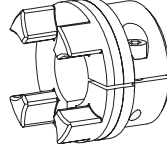
#### TB1 hub/TB2 hub

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



#### Driving flange type 3b

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



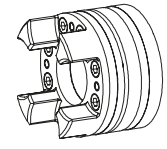
#### Type 2.0 clamping hub single slot without feather keyway

Frictionally engaged, backlash-free shaft-hub-connection. Transmittable torques depending on bore diameter (see page 40). (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 or reduces reverse backlash. Surface pressure of the keyway connection is reduced.

Type 2.3 clamping hub with spline bore (see page 32)

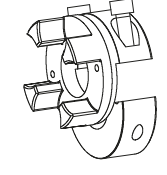


#### Type 6.0 clamping ring hub (see ROTEX® GS series)

Integrated frictionally engaged shaft-hub-connection for transmitting higher torques. Screwing on elastomer side. For details about torque and dimensions see page 41. 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).

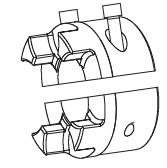


#### Type 7.8 clamping hub type H without feather keyway

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

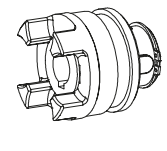
Type 7.9 clamping hub type H with feather keyway

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



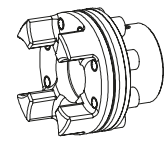
#### Type 7.1 SPLIT hub with feather keyway

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



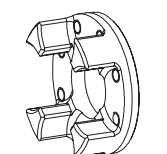
#### SD hub shifting hub

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 and 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.

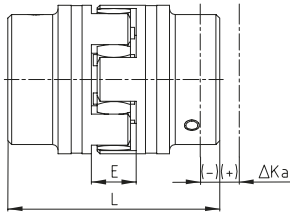


#### Driving flange type 3Na

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

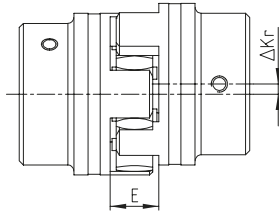
Displacements

Axial displacement  $\Delta K_a$

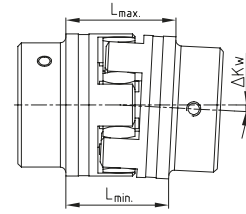


$L_{max} = L + \Delta K_a$

Radial displacement  $\Delta K_r$



Angular displacement  $\Delta K_w$  [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 $\Delta K_a$ [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 $\Delta K_r$ [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 $\Delta K_w$ [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
$\Delta K_w$ [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 of 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 $\Delta K_a$ [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 $\Delta K_r$ [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 $\Delta K_w$ [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
$\Delta K_w$ [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 $\Delta K_a$ [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 $\Delta K_r$ [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 $\Delta K_w$ [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
$\Delta K_w$ [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 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  $+30^\circ\text{C}$ . The displacement figures may only be used one by one - if they appear simultaneously, they must be limited in proportion. Care should be taken with the assembly of the coupling to accurately adhere to the distance dimension  $E$  in order to allow for axial clearance of the coupling while in operation. For detailed mounting instructions please refer to our homepage ([www.ktr.com](http://www.ktr.com)).

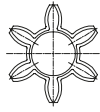
# ROTEX® Flexible jaw couplings

## Properties of standard spiders

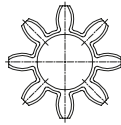
ROTEX® 14



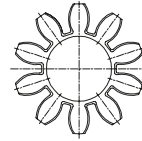
ROTEX® 19



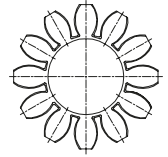
ROTEX® 24 - 65



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	-50 °C to +120 °C	-40 °C to +90 °C
Short-term temperature	-50 °C to +150 °C	-50 °C to +120 °C
Properties	<ul style="list-style-type: none"> <li>- significantly higher service life expectancy</li> <li>- very good temperature resistance</li> <li>- improved damping of vibrations</li> <li>- good damping, average flexibility</li> <li>- suitable for all hub materials</li> </ul>	<ul style="list-style-type: none"> <li>- good damping, average flexibility</li> <li>- suitable for all hub materials</li> </ul>
Spider type (Shore hardness)	98 Shore A (T-PUR®) <sup>1)</sup>	98 Shore A <sup>1)</sup>
	 T-PUR®	
Size	14 to 180	14 to 90
Material	T-PUR®	Polyurethane (PUR)
Permissible temperature range		
Permanent temperature	-50 °C to +120 °C	-30 °C to +90 °C
Short-term temperature	-50 °C to +150 °C	-40 °C to +120 °C
Properties	<ul style="list-style-type: none"> <li>- significantly higher service life expectancy</li> <li>- very good temperature resistance</li> <li>- improved damping of vibrations</li> <li>- transmission of high torques with average damping</li> <li>- recommended hub material: steel, GJL and GJS</li> </ul>	<ul style="list-style-type: none"> <li>- transmission of high torques with average damping</li> <li>- recommended hub material: steel, GJL and GJS</li> </ul>
Spider type (Shore hardness)	64 Shore D (T-PUR®)	64 Shore D
	 T-PUR®	
Size	14 to 180	14 to 90
Material	T-PUR®	Polyurethane (PUR)
Permissible temperature range		
Permanent temperature	-50 °C to +120 °C	-30 °C to +110 °C
Short-term temperature	-50 °C to +150 °C	-30 °C to +130 °C
Properties	<ul style="list-style-type: none"> <li>- significantly higher service life expectancy</li> <li>- very good temperature resistance</li> <li>- improved damping of vibrations</li> <li>- transmission of very high torques with low damping</li> <li>- recommended hub material: steel and GJS</li> </ul>	<ul style="list-style-type: none"> <li>- transmission of very high torques with low damping</li> <li>- suitable for displacing critical speeds</li> <li>- suitable with high humidity, resistant to hydrolysis</li> <li>- recommended hub material: steel and GJS</li> </ul>

Technical data of standard spiders

92 Shore A spider made of T-PUR® and PUR															
ROTEX® size	Max. speed		Torsion angle $\phi$ with		Torque [Nm]				Damping power P <sub>KW</sub> [W] <sup>3)</sup>	Relative damping $\psi$	Resonance factor V <sub>R</sub>	Torsion spring stiffness C dyn. [Nm/rad]			
	v=35 m/s cast iron	v=40 m/s steel	TKN	TK max	DIN 740 <sup>1)</sup>			TK max <sup>2)</sup>				1.0 TKN	0.75 TKN	0.5 TKN	0.25 TKN
					Rated TKN	Max. TK max	Vibratory TKW								
14	22200	25400	6.4°	10°	7.5	15	2.0	22.5	–			0.38x10 <sup>3</sup>	0.31x10 <sup>3</sup>	0.24x10 <sup>3</sup>	0.14x10 <sup>3</sup>
19	16700	19000			10	20	2.6	30	4.8			1.28x10 <sup>3</sup>	1.05x10 <sup>3</sup>	0.8x10 <sup>3</sup>	0.47x10 <sup>3</sup>
24	12100	13800			35	70	9.1	105	6.6			4.86x10 <sup>3</sup>	3.98x10 <sup>3</sup>	3.01x10 <sup>3</sup>	1.79x10 <sup>3</sup>
28	10100	11500			95	190	25	285	8.4			10.9x10 <sup>3</sup>	8.94x10 <sup>3</sup>	6.76x10 <sup>3</sup>	4.01x10 <sup>3</sup>
38	8300	9500			190	380	49	570	10.2			21.05x10 <sup>3</sup>	17.26x10 <sup>3</sup>	13.05x10 <sup>3</sup>	7.74x10 <sup>3</sup>
42	7000	8000			265	530	69	795	12.0			23.74x10 <sup>3</sup>	19.47x10 <sup>3</sup>	14.72x10 <sup>3</sup>	8.73x10 <sup>3</sup>
48	6350	7250			310	620	81	930	13.8			36.7x10 <sup>3</sup>	30.09x10 <sup>3</sup>	22.75x10 <sup>3</sup>	13.49x10 <sup>3</sup>
55	5550	6350			410	820	107	1230	15.6			50.7x10 <sup>3</sup>	41.59x10 <sup>3</sup>	31.45x10 <sup>3</sup>	18.64x10 <sup>3</sup>
65	4950	5650	3.2°	5°	625	1250	163	1875	18.0	0.80	7.90	97.1x10 <sup>3</sup>	79.65x10 <sup>3</sup>	60.2x10 <sup>3</sup>	35.7x10 <sup>3</sup>
75	4150	4750			1280	2560	333	3840	21.6			113.3x10 <sup>3</sup>	92.9x10 <sup>3</sup>	70.3x10 <sup>3</sup>	41.65x10 <sup>3</sup>
90	3300	3800			2400	4800	624	7200	30.0			190.1x10 <sup>3</sup>	155.9x10 <sup>3</sup>	117.9x10 <sup>3</sup>	69.9x10 <sup>3</sup>
100	2950	3350			3300	6600	858	9900	36.0			253.1x10 <sup>3</sup>	207.5x10 <sup>3</sup>	156.9x10 <sup>3</sup>	93x10 <sup>3</sup>
110	2600	2950			4800	9600	1248	14400	42.0			415.5x10 <sup>3</sup>	336.9x10 <sup>3</sup>	257.6x10 <sup>3</sup>	177.4x10 <sup>3</sup>
125	2300	2600			6650	13300	1729	19950	48.0			647.7x10 <sup>3</sup>	537.3x10 <sup>3</sup>	412.2x10 <sup>3</sup>	277.5x10 <sup>3</sup>
140	2050	2350			8550	17100	2223	25650	54.6			813.4x10 <sup>3</sup>	670.2x10 <sup>3</sup>	519.7x10 <sup>3</sup>	351.7x10 <sup>3</sup>
160	1800	2050			12800	25600	3328	38400	75.0			1298x10 <sup>3</sup>	1104x10 <sup>3</sup>	901.9x10 <sup>3</sup>	655.7x10 <sup>3</sup>
180	1550	1800			18650	37300	4849	55950	78.0			2327x10 <sup>3</sup>	1981x10 <sup>3</sup>	1618x10 <sup>3</sup>	1176x10 <sup>3</sup>

98 Shore A spider made of T-PUR® and PUR															
ROTEX® size	Max. speed		Torsion angle $\phi$ with		Torque [Nm]				Damping power P <sub>KW</sub> [W] <sup>3)</sup>	Relative damping $\psi$	Resonance factor V <sub>R</sub>	Torsion spring stiffness C dyn. [Nm/rad]			
	v=35 m/s cast iron	v=40 m/s steel	TKN	TK max	DIN 740 <sup>1)</sup>			TK max <sup>2)</sup>				1.0 TKN	0.75 TKN	0.5 TKN	0.25 TKN
					Rated TKN	Max. TK max	Vibratory TKW								
14	22200	25400	6.4°	10°	12.5	25	3.3	37.5	–			0.56x10 <sup>3</sup>	0.46x10 <sup>3</sup>	0.35x10 <sup>3</sup>	0.21x10 <sup>3</sup>
19	16700	19000			17	34	4.4	51	4.8			2.92x10 <sup>3</sup>	2.39x10 <sup>3</sup>	1.81x10 <sup>3</sup>	1.07x10 <sup>3</sup>
24	12100	13800			60	120	16	180	6.6			9.93x10 <sup>3</sup>	8.14x10 <sup>3</sup>	6.16x10 <sup>3</sup>	3.65x10 <sup>3</sup>
28	10100	11500			160	320	42	480	8.4			26.77x10 <sup>3</sup>	21.95x10 <sup>3</sup>	16.16x10 <sup>3</sup>	9.84x10 <sup>3</sup>
38	8300	9500			325	650	85	975	10.2			48.57x10 <sup>3</sup>	39.83x10 <sup>3</sup>	30.11x10 <sup>3</sup>	17.85x10 <sup>3</sup>
42	7000	8000			450	900	117	1350	12.0			54.5x10 <sup>3</sup>	44.69x10 <sup>3</sup>	33.79x10 <sup>3</sup>	20.03x10 <sup>3</sup>
48	6350	7250			525	1050	137	1575	13.8			65.3x10 <sup>3</sup>	53.54x10 <sup>3</sup>	40.48x10 <sup>3</sup>	24x10 <sup>3</sup>
55	5550	6350			685	1370	178	2055	15.6			95x10 <sup>3</sup>	77.9x10 <sup>3</sup>	58.88x10 <sup>3</sup>	34.9x10 <sup>3</sup>
65	4950	5650	3.2°	5°	940	1880	244	2820	18.0	0.80	7.90	129.5x10 <sup>3</sup>	106.2x10 <sup>3</sup>	80.3x10 <sup>3</sup>	47.6x10 <sup>3</sup>
75	4150	4750			1920	3840	499	5760	21.6			197.5x10 <sup>3</sup>	162x10 <sup>3</sup>	122.5x10 <sup>3</sup>	72.6x10 <sup>3</sup>
90	3300	3800			3600	7200	936	10800	30.0			312.2x10 <sup>3</sup>	256x10 <sup>3</sup>	193.6x10 <sup>3</sup>	114.7x10 <sup>3</sup>
100	2950	3350			4950	9900	1287	14850	36.0			383.3x10 <sup>3</sup>	314.3x10 <sup>3</sup>	237.6x10 <sup>3</sup>	140.9x10 <sup>3</sup>
110	2600	2950			7200	14400	1872	21600	42.0			805.9x10 <sup>3</sup>	663.1x10 <sup>3</sup>	515.3x10 <sup>3</sup>	360.5x10 <sup>3</sup>
125	2300	2600			10000	20000	2600	30000	48.0			1207x10 <sup>3</sup>	1003x10 <sup>3</sup>	773.1x10 <sup>3</sup>	552.5x10 <sup>3</sup>
140	2050	2350			12800	25600	3328	38400	54.6			1549x10 <sup>3</sup>	1283x10 <sup>3</sup>	979.8x10 <sup>3</sup>	674.1x10 <sup>3</sup>
160	1800	2050			19200	38400	4992	57600	75.0			2481x10 <sup>3</sup>	2137x10 <sup>3</sup>	1781x10 <sup>3</sup>	1275x10 <sup>3</sup>
180	1550	1800			28000	56000	7280	84000	78.0			4220x10 <sup>3</sup>	3635x10 <sup>3</sup>	3031x10 <sup>3</sup>	2170x10 <sup>3</sup>

64 Shore D spider made of T-PUR® and PUR															
ROTEX® size	Max. speed		Torsion angle $\phi$ with		Torque [Nm]				Damping power P <sub>KW</sub> [W] <sup>3)</sup>	Relative damping $\psi$	Resonance factor V <sub>R</sub>	Torsion spring stiffness C dyn. [Nm/rad]			
	v=35 m/s cast iron	v=40 m/s steel	TKN	TK max	DIN 740 <sup>1)</sup>			TK max <sup>2)</sup>				1.0 TKN	0.75 TKN	0.5 TKN	0.25 TKN
					Rated TKN	Max. TK max	Vibratory TKW								
14	22200	25400	4.5°	7.0°	16	32	4.2	48	9.0			0.76x10 <sup>3</sup>	0.62x10 <sup>3</sup>	0.47x10 <sup>3</sup>	0.28x10 <sup>3</sup>
19	16700	19000			21	42	5.5	63	7.2			5.35x10 <sup>3</sup>	4.39x10 <sup>3</sup>	3.32x10 <sup>3</sup>	1.97x10 <sup>3</sup>
24	12100	13800			75	150	19.5	225	9.9			15.11x10 <sup>3</sup>	12.39x10 <sup>3</sup>	9.37x10 <sup>3</sup>	5.55x10 <sup>3</sup>
28	10100	11500			200	400	52	600	12.6			27.52x10 <sup>3</sup>	22.57x10 <sup>3</sup>	17.06x10 <sup>3</sup>	10.12x10 <sup>3</sup>
38	8300	9500			405	810	105	1215	15.3			70.15x10 <sup>3</sup>	57.52x10 <sup>3</sup>	43.49x10 <sup>3</sup>	25.78x10 <sup>3</sup>
42	7000	8000			560	1120	146	1680	18.0			79.9x10 <sup>3</sup>	65.5x10 <sup>3</sup>	49.52x10 <sup>3</sup>	29.35x10 <sup>3</sup>
48	6350	7250			655	1310	170	1965	20.7			95.5x10 <sup>3</sup>	78.3x10 <sup>3</sup>	59.22x10 <sup>3</sup>	35.1x10 <sup>3</sup>
55	5550	6350			825	1650	215	2475	23.4			107.9x10 <sup>3</sup>	88.5x10 <sup>3</sup>	66.9x10 <sup>3</sup>	39.66x10 <sup>3</sup>
65	4950	5650	2.5°	3.6°	1175	2350	306	3525	27.0	0.75	8.50	151.1x10 <sup>3</sup>	123.9x10 <sup>3</sup>	93.7x10 <sup>3</sup>	55.53x10 <sup>3</sup>
75	4150	4750			2400	4800	624	7200	32.4			248.2x10 <sup>3</sup>	203.5x10 <sup>3</sup>	153.9x10 <sup>3</sup>	91.2x10 <sup>3</sup>
90	3300	3800			4500	9000	1170	13500	45.0			674.5x10 <sup>3</sup>	553.1x10 <sup>3</sup>	418.2x10 <sup>3</sup>	247.9x10 <sup>3</sup>
100	2950	3350			6185	12370	1608	18555	54.0			861.2x10 <sup>3</sup>	706.2x10 <sup>3</sup>	533.9x10 <sup>3</sup>	316.5x10 <sup>3</sup>
110	2600	2950			9000	18000	2340	27000	63.0			1230x10 <sup>3</sup>	1001x10 <sup>3</sup>	773.1x10 <sup>3</sup>	531.4x10 <sup>3</sup>
125	2300	2600			12500	25000	3250	37500	72.0			1749x10 <sup>3</sup>	1436x10 <sup>3</sup>	1149x10 <sup>3</sup>	832.1x10 <sup>3</sup>
140	2050	2350			16000	32000	4160	48000	81.9			2312x10 <sup>3</sup>	1929x10 <sup>3</sup>	1521x10 <sup>3</sup>	1082x10 <sup>3</sup>
160	1800	2050			24000	48000	6240	72000	112.5			3415x10 <sup>3</sup>	2961x10 <sup>3</sup>	2471x10 <sup>3</sup>	1830x10 <sup>3</sup>
180	1550	1800			35000	70000	9100	105000	117.0			5670x10 <sup>3</sup>	4917x10 <sup>3</sup>	4103x10 <sup>3</sup>	3038x10 <sup>3</sup>

<sup>1)</sup> see catalogue page 11  
<sup>2)</sup> ≤ 1000 load cycles  
<sup>3)</sup> with +30°C



Temperature factor S <sub>t</sub>											
	-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 Shore A T-PUR®.  
 For peripheral speeds exceeding v = 30 m/s dynamic balancing is required. For circumferential speeds exceeding v = 35 m/s only steel or nodular iron.

# ROTEX®

## Flexible jaw couplings

### Technical data and properties of special spiders

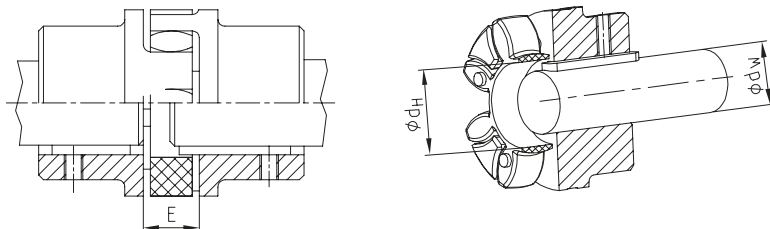
		
Designation	PA	PEEK
Material	Polyamide	Polyetheretherketone
Permissible temperature range Permanent temperature Short-term temperature	-20 °C to +130 °C <sup>1)</sup> -30 °C to +150 °C <sup>1)</sup>	up to +180 °C (ATEX to +160 °C) up to +250 °C
Properties	<ul style="list-style-type: none"> <li>- small twisting angle and high torsion spring stiffness</li> <li>- transmission of very high torques with very low damping</li> <li>- good resistance to chemicals <sup>1)</sup></li> <li>- recommended hub material: steel</li> <li>- high restoring forces with displacements</li> </ul>	<ul style="list-style-type: none"> <li>- small twisting angle and high torsion spring stiffness</li> <li>- transmission of very high torques with very low damping</li> <li>- highly temperature-resistant, resistant to hydrolysis</li> <li>- good resistance to chemicals</li> <li>- recommended hub material: steel</li> <li>- high restoring forces with displacements</li> </ul>

<sup>1)</sup> different properties depending on compound

Torques			
ROTEX® size	PA, PEEK		
	T <sub>KN</sub> [Nm]	T <sub>K max</sub> [Nm]	T <sub>KW</sub> [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 <sub>t</sub>												
	-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

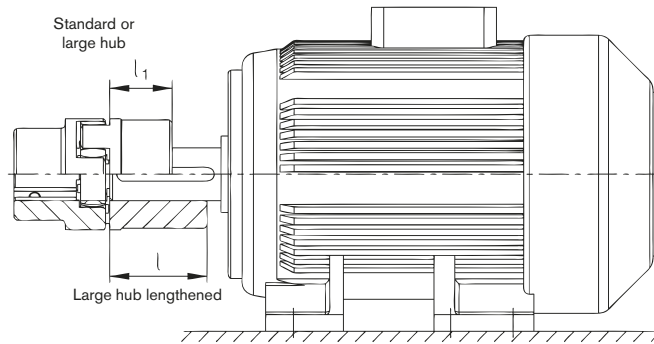


Shaft  $\phi d_W$  with feather key (acc. to DIN 6885 sheet 1) protruding into the spider  $\phi d_H$

Assembly 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 d <sub>H</sub>	10	18	27	30	38	46	51	60	68	80	100	113	127	147	165	190	220
Dimension d <sub>W</sub> <sup>2)</sup>	7	12	20	22	28	36	40	48	55	65	80	95	100	120	135	160	185

<sup>2)</sup> If the shaft diameter is smaller than or equal to dimension d<sub>H</sub>, 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 dxl [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	9 <sup>1)</sup>	0.06	0.43	9 <sup>1)</sup>	0.037	0.43	9 <sup>1)</sup>					
			0.12	0.41			0.09		0.64			0.045	0.52			
63	11 x 23		0.18	0.62	14	0.12	0.88	14	0.06	0.7	14					
			0.25	0.86			0.09		1.1							
71	14 x 30		0.37	1.3			0.25		1.8			0.18	2		0.09	1.4
			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			
			1.1	3.7			0.75		5.1			0.55	5.8		0.25	3.5
90S	24 x 50		1.5	5			1.1		7.5			0.75	8		0.37	5.3
90L	24 x 50		2.2	7.4			1.5		10			1.1	12		0.55	7.9
100L	28 x 60		3	9.8	24	2.2	15	24	1.5	15	24	0.75	11			
112M			4	13		4	27		2.2	22		1.5	21			
132S			5.5	18		5.5	36		3	30		2.2	30			
132M	38 x 80		7.5	25	28	7.5	49	28	4	40	28	3	40			
							5.5		55							
160M	42 x 110		11	36		38	11		72	38		7.5	75	38	4	54
			15	49					15			98			11	109
160L			18.5	60			18.5	121			15	148			11	145
180M	48 x 110		22	71			22	144			18.5	181			15	198
180L					42			42			42					
200L	55 x 110		30	97			30		196			22	215		18.5	244
			37	120											22	290
225S	55 x 110						37		240	48					30	293
225M	55 x 110	60 x 140	45	145		45	292	55	30	293	55	22	290			
250M	60 x 140	65 x 140	55	177	48	55	356	55	37	361	65 <sup>2)</sup>	30	392			
280S			75	241	55	75	484	65 <sup>2)</sup>	45	438	65 <sup>2)</sup>	37	483			
280M	75 x 140		90	289			90	581		55	535		45	587		
315S			110	353			110	707	75	75	727	75	55	712		
315M			132	423		65	132	849		90	873		75	971		
315L	65 x 140		160	513	75	160	1030	90	110	1070	90	90	1170			
			200	641			200		1290			132	1280		110	1420
												160	1550		132	1710
315	85 x 170		250	802			250		1600			200	1930		160	2070
			315	1010		315	2020		250	2410	100	200	2580			
355	75 x 140		355	1140	90	355	2280	100			110					
			400	1280			400		2570			315	3040		250	3220
			500	1600			500		3210	110		400	3850	125	315	4060
560	1790		560	3580			450		4330			355	4570			
400	80 x 170		630	2020	100	630	4030	125	500	4810	140	400	5150			
			710	2270			710		4540			560	5390		450	5790
			800	2560			800		5120	140		630	6060		500	6420
450	90 x 170		900	2880			900		5760			710	6830		560	7190
	120 x 210		1000	3200	110	1000	6400	160	800	7690	160	630	8090			

The coupling selection is based on an ambient temperature up to 30 °C. The selection is based on a minimum safety factor of 2 versus the max. coupling torque ( $T_{Kmax}$ ). 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.

<sup>1)</sup> For dimensions see ROTEX® GS series

<sup>2)</sup> For motor hub made of steel see page 36

### Cylindrical bores and spline bores

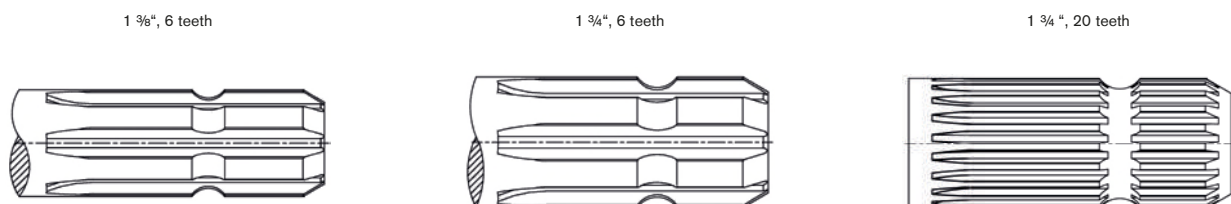
ROTEX® size		Stock programme of cylindrical finish bores [mm] H7 feather keyway acc. to DIN 6885 sheet 1 [JS9] and thread for setscrews																																					
Material	Un-bored	Ø6	Ø8	Ø9	Ø10	Ø11	Ø12	Ø14	Ø15	Ø16	Ø17	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø26	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42	Ø45	Ø48	Ø50	Ø55	Ø60	Ø65	Ø70	Ø75	Ø80	Ø85	Ø90	Ø100			
14	Sint	•	•	•	•	•	•	•	•	•																													
	Al-H	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
19	Sint	•																																					
	Al-D	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
24	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Al-D	•																																					
28	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
	Al-D	•																																					
38	GJL	•																																					
	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	
42	GJL	•																																					
	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
48	GJL	•																																					
	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
55	GJL	•																																					
	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
65	GJL	•																																					
	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
75	GJL	•																																					
	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•
90	GJL	•																																					
	St	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•	•

Basic programme of 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	5/8"	14.28	16/32	9	30°	PS-S	1 1/2"	35.98	12/24	17	30°
PI-S	3/4"	17.46	16/32	11	30°	PD-S	1 1/2"	36.51	16/32	23	30°
PB-S	7/8"	20.63	16/32	13	30°	PE-S	1 3/4"	42.86	16/32	27	30°
PB-BS	1"	23.81	16/32	15	30°	PK-S	1 3/4"	41.275	8/16	13	30°
PJ	1 1/8"	26.98	16/32	17	30°	PT-C <sup>1)</sup>	2"	47.625	8/16	15	30°
PC-S	1 1/4"	29.63	12/24	14	30°	PQ-C <sup>1)</sup>	2 1/4"	53.975	8/16	17	30°
PA-S	1 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 <sup>2)</sup>	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 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 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 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 3/8"	8.69	6	34.93	29.65
1 3/8"	-	21	34.95	34.80 <sup>3)</sup>
1 3/4"	11.07	6	44.45	37.74
1 3/4"	-	20	45.20	40.20



Spline clamping hubs are often adapted to the shafts of hydraulic pumps/hydraulic motors. Please contact us for the respective hub length of the spline codeff

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

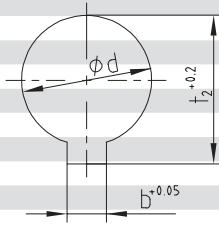
<sup>2)</sup> Profile correction different from DIN

<sup>3)</sup> Similar to code PA-S



## Inch bores and taper bores

Stock programme of inch bores						Size									
Bore and keyway acc. to ANSI/AGMA 9002-C14 Bore (clearance fit) Keyway (commercial class fit)						19	24	28	38	42	48	55	65	75	90
KTR code	Ø bore ["]	Width of keyway ["]	Ø bore [mm]	Width of keyway [mm]	Keyway depth/ Tolerance +0.381 [mm]	Steel				Cast iron (GJL)					
Tb	3/8	1/8	9.525 +0.0254	3.175 +0.051	10.972										
DNB	7/16	3/32	11.112 +0.0254	2.382 + 0.051	12.293										
T	1/2	3/16	12.7 +0.0254	4.762 +0.051	14.757										
Ta	1/2	1/8	12.7 +0.0254	3.175 +0.051	14.224	●	●								
DNC	17/32	1/8	13.495 +0.0254	3.175 +0.051	15.011										
Do	9/16	1/8	14.287 +0.0254	3.175 +0.051	15.824										
E	5/8	1/8	15.875 +0.0254	3.175 +0.051	17.424										
Es	5/8	5/32	15.875 +0.0254	3.968 +0.051	17.729	●	●	●							
Ed	5/8	3/16	15.875 +0.0254	4.762 +0.051	18.008	●	●								
DNH	11/16	3/16	17.462 +0.0254	4.762 +0.051	19.634										
Ad	3/4	1/8	19.05 +0.0254	3.175 +0.051	20.624										
A	3/4	3/16	19.05 +0.0254	4.762 +0.051	21.259	●	●	●	●						
G	7/8	3/16	22.225 +0.0254	4.762 +0.051	24.485	●	●	●	●	●					
F	7/8	1/4	22.225 +0.0254	6.35 +0.051	25.069		●	●	●	●	●				
Gf	15/16	1/4	23.812 +0.0254	6.35 +0.051	26.695										
H	1	3/16	25.4 +0.0254	4.762 +0.051	27.686										
Hs	1	1/4	25.4 +0.0254	6.35 +0.051	28.295			●	●						
R	1 1/16	3/16	26.987 +0.0254	4.762 +0.051	29.286										
Sb	1 1/8	1/4	28.575 +0.0254	6.35 +0.051	31.521			●	●						
Sd	1 1/8	5/16	28.575 +0.0254	7.937 +0.051	32.105										
Js	1 1/4	1/4	31.75 +0.0254	6.35 +0.051	34.721				●						
K	1 1/4	5/16	31.75 +0.0254	7.937 +0.051	35.331			●	●	●	●	●	●		
Ma	1 3/8	5/16	34.925 +0.0254	7.937 +0.051	38.557			●	●						
RH1	1 3/8	3/8	34.925 +0.0254	9.525 +0.063	39.141										
Cb	1 7/16	3/8	36.512 +0.0254	9.525 +0.063	40.767										
Ca	1 1/2	5/16	38.1 +0.0254	7.937 +0.051	41.783										
C	1 1/2	3/8	38.1 +0.0254	9.525 +0.0635	42.392			●	●	●	●	●	●	●	
Nb	1 5/8	3/8	41.275 +0.0254	9.525 +0.0635	45.618				●	●					
Ls	1 3/4	3/8	44.45 +0.0254	9.525 +0.0635	48.818										
L	1 3/4	7/16	44.45 +0.0254	11.112 +0.0635	49.428										
Lu	1 7/8	1/2	47.625 +0.0254	12.7 +0.0635	53.238				●	●					
Da	1 15/16	1/2	49.212 +0.0254	12.7 +0.0635	54.864										
Ds	2	1/2	50.8 +0.0254	12.7 +0.0635	56.464										
Pa	2 1/8	1/2	53.975 +0.0381	12.7 +0.063	59.69										
U	2 1/4	1/2	57.15 +0.0381	12.7 +0.063	62.915										
Ub	2 3/8	5/8	60.325 +0.0381	15.875 +0.076	67.335										
Wd	3 3/8	7/8	85.725 +0.0381	22.225 +0.076	95.504										
Wf	3 5/8	7/8	92.075 +0.0381	22.225 +0.076	101.955										

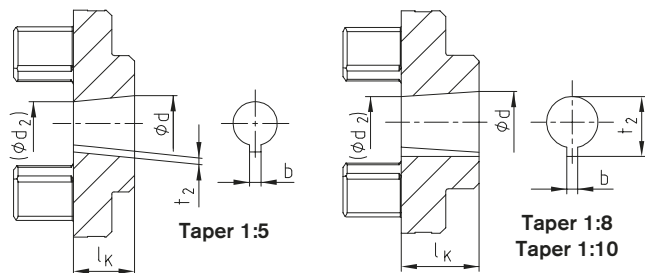


Basic programme taper 1:3					
Code	$d^{+0.05}$	$(d_2)$	$b^{JS9}$	$t_2^{+0.1}$	$l_K$
N/1	9.7	7.575	2.4 <sup>+0.05</sup>	10.85	17.0
N/1c	11.6	9.5375	3 <sup>JS9</sup>	12.90	16.5
N/1e	13.0	10.375	2.4 <sup>+0.05</sup>	13.80	21.0
N/1d	14.0	11.813	3 <sup>JS9</sup>	15.50	17.5
N/1b	14.3	11.8625	3.2 <sup>+0.05</sup>	15.65	19.5
N/2	17.287	14.287	3.2 <sup>+0.05</sup>	18.24	24.0
N/2a	17.287	14.287	4 <sup>JS9</sup>	18.94	24.0
N/2b	17.287	14.287	3 <sup>JS9</sup>	18.34	24.0
N/3	22.002	18.502	4 <sup>JS9</sup>	23.40	28.0
N/4	25.463	20.963	4.78 <sup>+0.05</sup>	27.83	36.0
N/4b	25.463	20.963	5 <sup>JS9</sup>	28.23	36.0
N/4a	27.0	22.9375	4.78 <sup>+0.05</sup>	28.80	32.5
N/4g	28.45	23.6375	6 <sup>JS9</sup>	29.32	38.5
N/5	33.176	27.676	6.38 <sup>+0.05</sup>	35.39	44.0
N/5a	33.176	27.676	7 <sup>JS9</sup>	35.39	44.0

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

Basic programme of taper 1:10					
Code	$d^{+0.05}$	$(d_2)$	$b^{JS9}$	$t_2^{+0.1}$	$l_K$
CX	19.95	16.75	5 <sup>JS9</sup>	22.08	32
DX	24.95	20.45	6 <sup>JS9</sup>	26.68	45
EX	29.75	24.75	8 <sup>JS9</sup>	31.88	50

Basic programme taper 1:5					
Code	$d^{+0.05}$	$(d_2)$	$b^{JS9}$	$t_2^{+0.1}$	$l_K$
A-10	9.85	7.55	2 <sup>JS9</sup>	1.0	11.5
B-17	16.85	13.15	3 <sup>JS9</sup>	1.8	18.5
C-20	19.85	15.55	4 <sup>JS9</sup>	2.2	21.5
Cs-22	21.95	17.65	3 <sup>JS9</sup>	1.8	21.5
D-25	24.85	19.55	5 <sup>JS9</sup>	2.9	26.5
E-30	29.85	23.55	6 <sup>JS9</sup>	2.6	31.5
F-35	34.85	27.55	6 <sup>JS9</sup>	2.6	36.5
G-40	39.85	32.85	6 <sup>JS9</sup>	2.6	35.0



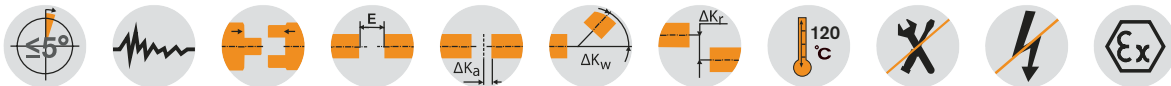


# ROTEX® Standard Flexible jaw couplings

Material aluminium + cast + powder metal



For legend of pictogram please refer to flapper on the cover



## ROTEX® Powder metal steel (Sint)

Size	Component	Spider <sup>1)</sup> (component 2) Rated torque [Nm]			Finish bore d	Dimensions [mm]												
		92 ShA	98 ShA	64 ShD		General												
						L	l <sub>1,2</sub>	E	b	s	D <sub>H</sub>	d <sub>H</sub>	D	N	G	t	T <sub>A</sub> [Nm]	
14	1a	7.5	12.5	16	unbored: 8, 10, 11, 12, 14, 15, 16	35	11	13	10	1.5	30	10	30	-	M4	5	1.5	
19	1a	10	17	21	unbored: 14, 16, 19, 20, 22, 24	66	25	16	12	2.0	40	18	40	-	M5	10	2	
24	1a	35	60	75	unbored: 24	78	30	18	14	2.0	56	27	40	-	M5	10	2	

## ROTEX® Aluminium diecast (Al-D)

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

## ROTEX® Aluminium (Al-H)

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

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

## ROTEX® Cast iron (GJL)

38	1	190	325	405	12-40	114	45	24	18	3	80	38	66	37	M8	15	10
	38-48				78												
42	1b	265	450	560	12-48	126	50	26	20	3	95	46	75	40	M8	20	10
	1				14-45								176				
48	1	310	525	655	15-52	140	56	28	21	3.5	105	51	85	45	M8	20	10
	1a				48-62								188				
55	1	410	685	825	20-60	160	65	30	22	4	120	60	98	52	M10	20	17
	1a				15-62								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)

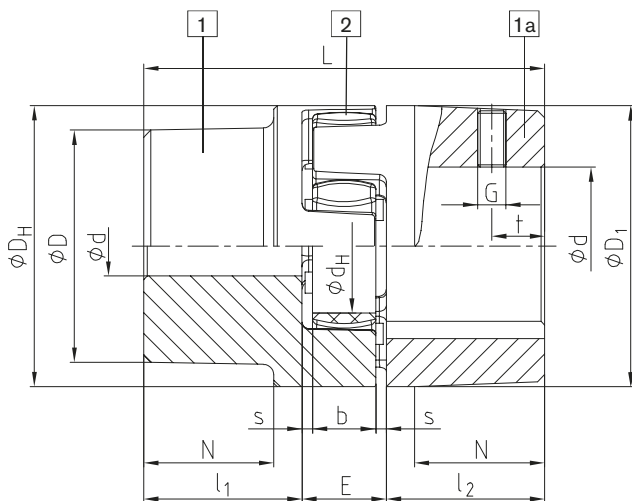
100	1	3300	4950	6185	50-115	270	110	50	38	6	225	113	180	89	M12	30	40
110	1	4800	7200	9000	60-125	295	120	55	42	6.5	255	127	200	96	M16	35	80
125	1	6650	10000	12500	60-145	340	140	60	46	7	290	147	230	112	M16	40	80
140	1	8550	12800	16000	60-160	375	155	65	50	7.5	320	165	255	124	M20	45	140
160	1	12800	19200	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.

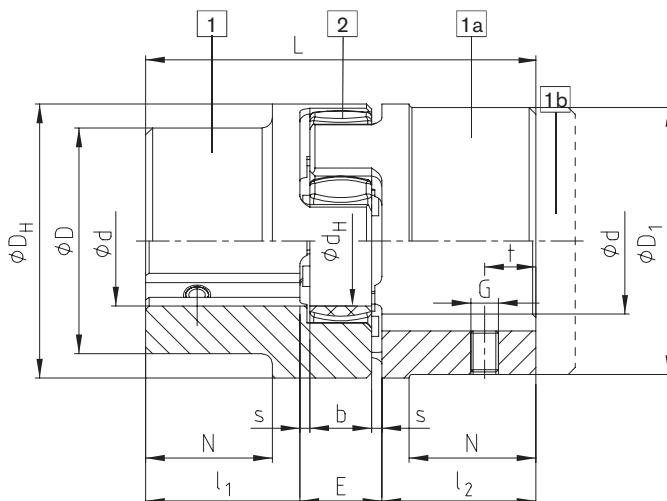
<sup>1)</sup> Maximum torque of the coupling  $T_{K \max}$  = rated torque of the coupling  $T_K$  rated x 2. For selection please see page 10 et seqq.

Ordering example:	ROTEX® 38	GJL	92 ShA	1a	Ø 45	1	Ø 25
	Coupling size	Material	Spider hardness	Component	Finish bore	Component	Finish bore

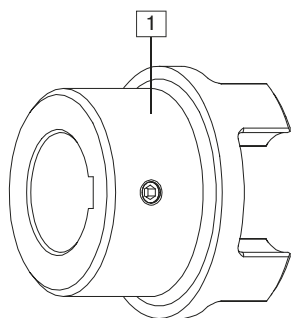
Components



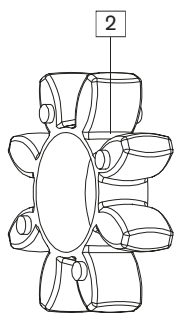
AI-D (thread opposite the keyway)



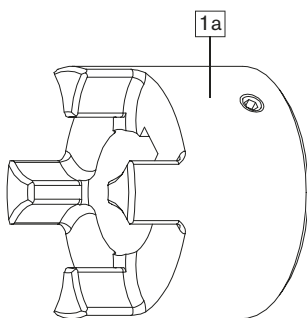
GJL / GJS (thread on the keyway)



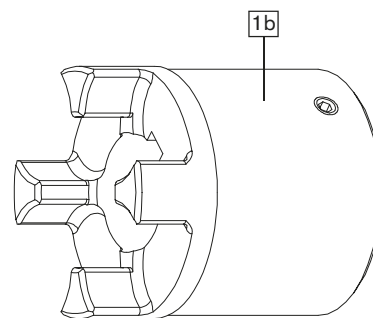
Standard hub



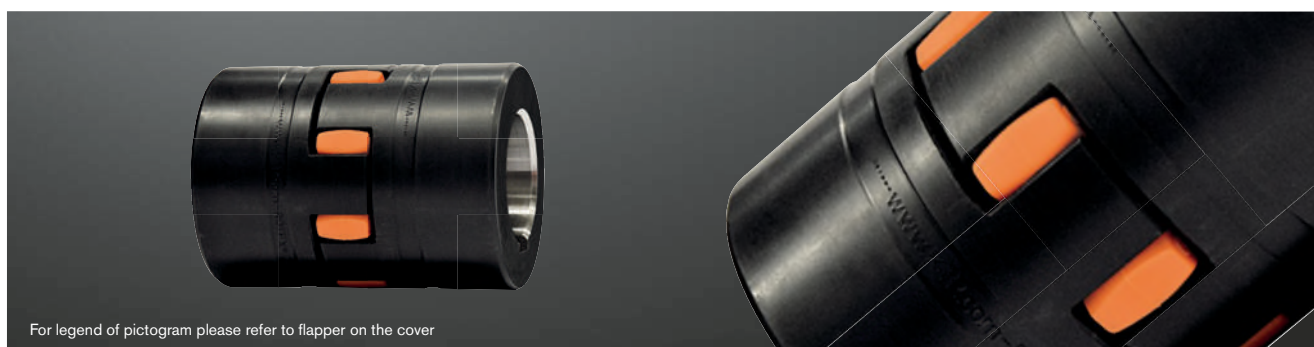
Spider



Large hub



Large hub lengthened



For legend of pictogram please refer to flapper on the cover

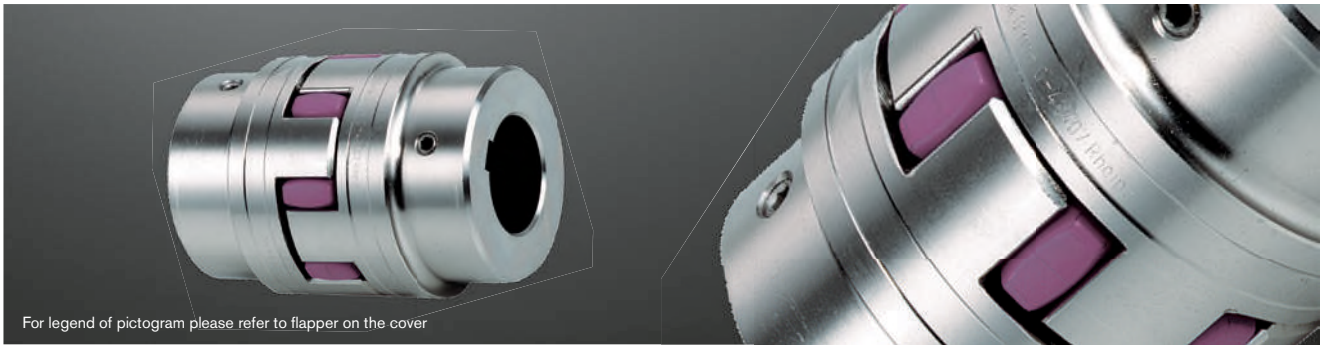
ROTEX® with CDP coating <sup>1)</sup>

Size	Component	Spider (component 2) Rated torque [Nm]			Finish bore d (min. - max.)	Dimensions [mm]											
		92 ShA	98 ShA	64 ShD		General										Thread for setscrews	
						L	l <sub>1</sub> , l <sub>2</sub>	E	b	s	D <sub>H</sub>	d <sub>H</sub>	D	N	G	t	T <sub>A</sub> [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	1	190	325	405	0-48	114	45	24	18	3	80	38	70	27	M8	15	10
42	1	265	450	560	0-55	126	50	26	20	3	95	46	85	28	M8	20	10
48	1	310	525	655	0-62	140	56	28	21	3.5	105	51	95	32	M8	20	10
55	1	410	685	825	0-74	160	65	30	22	4	120	60	110	37	M10	20	17
65	1	625	940	1175	0-80	185	75	35	26	4.5	135	68	115	47	M10	20	17
75	1	1280	1920	2400	0-95	210	85	40	30	5	160	80	135	53	M10	25	17
90	1	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	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

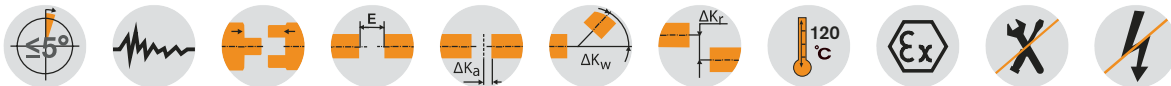
<sup>1)</sup> Corrosion protection class to DIN EN ISO 12944: Min. C4, heavy - long

# ROTEX® Standard Flexible jaw couplings

## Material steel/stainless steel



For legend of pictogram please refer to flapper on the cover



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

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

<sup>1)</sup> Maximum torque of the coupling T<sub>K max</sub> = rated torque of the coupling T<sub>K rated</sub> x 2. For selection please see page 10 et seqq.

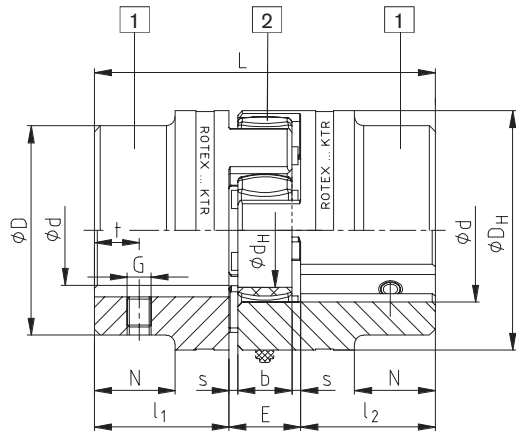
ROTEX® Stainless steel																			
Size	Material	Spider (component 2) Rated torque [Nm]			Finish bore d (min. - max.)	Dimensions [mm]											Thread for setscrews		
		92 ShA	98 ShA	64 ShD		General											G	t	T <sub>A</sub> [Nm]
						L	l <sub>1</sub> , l <sub>2</sub>	E	b	s	D <sub>H</sub>	d <sub>H</sub>	D	N					
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	80	27	M8	15	10		
42	1.4305	265	450	560	0-55	126	50	26	20	3	95	46	95	28	M8	20	10		
48	1.4571	310	525	655	0-62	140	56	28	21	3.5	105	51	105	32	M8	20	10		

Ordering example:

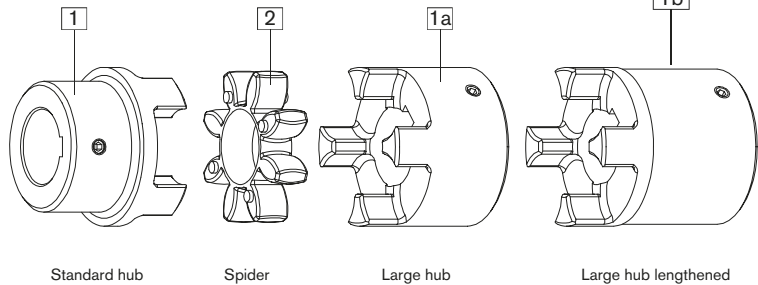
ROTEX® 38	St	92 ShA	1 - Ø45	1 - Ø25
Coupling size	Material	Spider hardness	Component Finish bore	Component Finish bore

## DIN EN 10204 - 3.1 and 3.2 material test certificate

### Components



Steel (thread on the keyway)



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

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

<sup>2)</sup> Notch impact strength with -40 °C

<sup>3)</sup> Notch impact strength with -20 °C

### Marine programme:

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



## UL



### Use in fire pumps

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

Sizes available:



ROTEX® UL Listed								
Size	Component	Material	Spider (component 2) Rated torque [Nm] 92 ShA	Dimensions [mm]				
				Finish bore d (min. - max.)	L	l <sub>1,2</sub>	E	D <sub>H</sub>
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

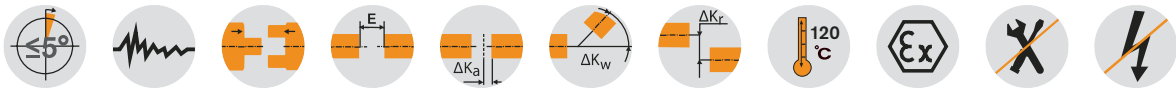
\* for complete dimensions see table on page 36

# ROTEX® Flexible jaw couplings

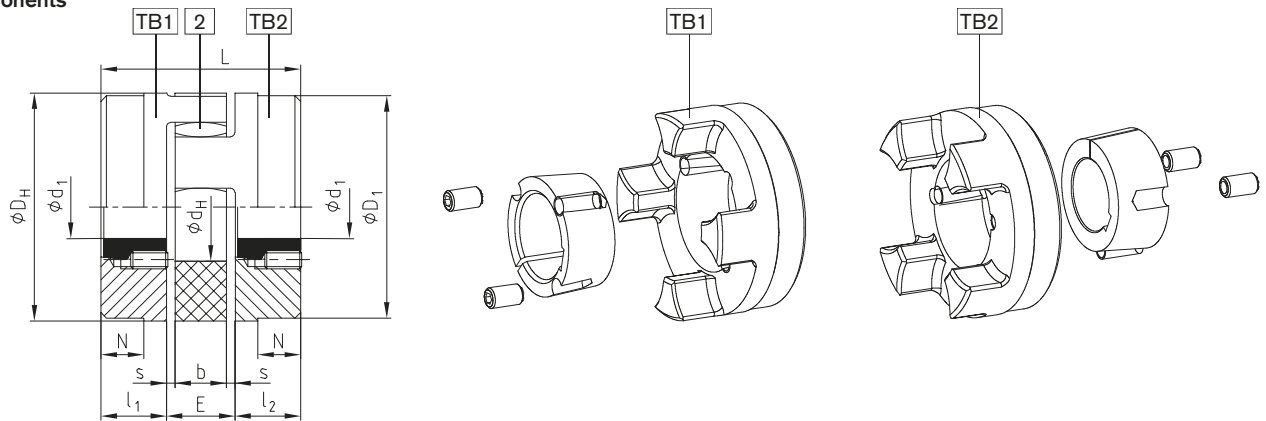
## Taper clamping sleeve



For legend of pictogram please refer to flapper on the cover



### Components



ROTEX® Shaft coupling for taper clamping sleeve															
Size	Taper clamping sleeve	Dimensions [mm]									Fastening screws for taper clamping sleeves				
		l <sub>1</sub> , l <sub>2</sub>	E	s	b	L	N	D <sub>H</sub>	D <sub>1</sub>	d <sub>H</sub>	Size [Inch] <sup>1)</sup>	Length [mm]	Number	T <sub>A</sub> [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	
	5/8"										32	92			
90	3020	52	45	5.5	34	149	33	200	160	100	3/8"	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 sleeve																			
Size	Summary of bore dimensions d <sub>1</sub> [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 <sup>2)</sup>							
1610	Ø14	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42 <sup>2)</sup>				
1615	Ø14	Ø16	Ø18	Ø19	Ø20	Ø22	Ø24	Ø25	Ø28	Ø30	Ø32	Ø35	Ø38	Ø40	Ø42 <sup>2)</sup>				
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

<sup>1)</sup> 1. BSW thread

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

Please order our separate dimension sheet (M373054).

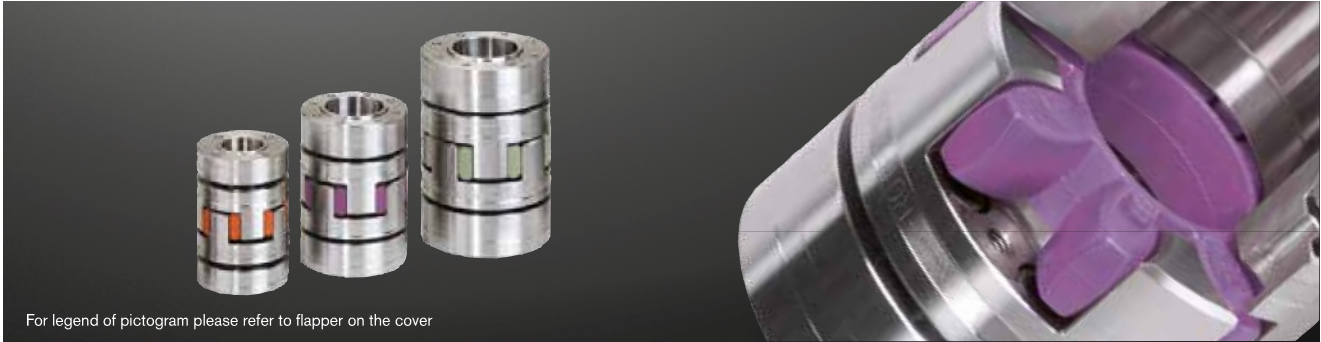
<sup>2)</sup> Bores with feather keyway (fl at design) acc. to DIN 6885 sheet 3

Ordering example:	ROTEX® 38	92 ShA	1108	TB1 - Ø 24		TB2 - Ø 22	
	Coupling size	Spider hardness	Taper clamping sleeve	Hub design	Finish bore	Hub design	Finish bore

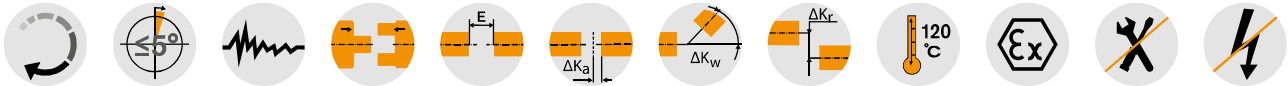


# ROTEX® Flexible jaw couplings

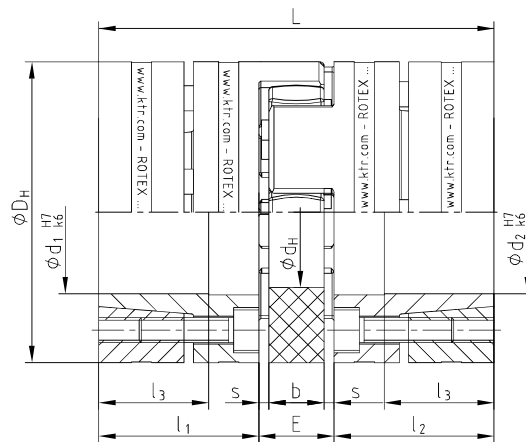
## Clamping ring hubs



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] <sup>1)</sup>				Dimensions [mm]								Clamping screws			Weight per hub with max. bore [kg]	Mass moment of inertia per hub with max. bore [kgm <sup>2</sup> ]	
	92 ShA		98 ShA		DH <sup>2)</sup>	dH	L	l <sub>1, 2</sub>	l <sub>3</sub>	E	b	s	M	z = number	T <sub>A</sub> [Nm]			M <sub>1</sub>
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 <sup>-4</sup>
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 <sup>-4</sup>
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 <sup>-4</sup>
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 <sup>-4</sup>
42	265	530	450	900	95	46	126	50	35	26	20	3.0	M8	4	35	M8	2.30	31.7 x 10 <sup>-4</sup>
48	310	620	525	1050	105	51	140	56	41	28	21	3.5	M10	4	69	M10	3.08	52.0 x 10 <sup>-4</sup>
55	375	750	685	1370	120	60	160	65	45	30	22	4.0	M10	4	69	M10	4.67	103.0 x 10 <sup>-4</sup>
65	—	—	940	1880	135	68	185	75	55	35	26	4.5	M12	4	120	M12	6.70	191.0 x 10 <sup>-4</sup>
75	—	—	1920	3840	160	80	210	85	63	40	30	5.0	M12	5	120	M12	9.90	396.8 x 10 <sup>-4</sup>
90	—	—	3600	4500	200	104	245	100	75	45	34	5.5	M16	5	295	M16	17.70	1136 x 10 <sup>-4</sup>

Bore d <sub>1</sub> /d <sub>2</sub> and the respective transmittable friction torques T <sub>R</sub> of clamping ring hub in [Nm] <sup>1)</sup>																												
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											616	704	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

<sup>1)</sup> For selection please see page 10 et seq.

<sup>2)</sup> ØDH + 2 mm with high speeds for expansion of spider

The transmittable torques of the clamping connection include the max. fitting tolerance with shaft clearance k6/bore H7, from Ø55 G7/m6. The torque is reduced with bigger fitting tolerances. For the strength calculation of shaft/hollow shaft see KTR standard 45510 at our homepage www.ktr.com.

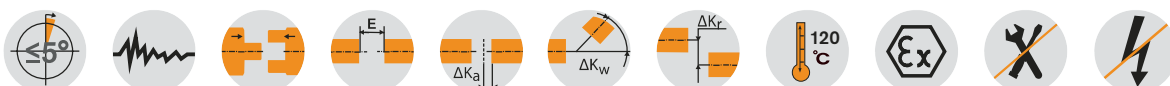
Ordering example:	ROTEX® GS 24	98 ShA	6.0 steel	Ø24	6.0 steel	Ø20
	Coupling size	Spider hardness	Hub design	Finish bore	Hub design	Finish bore

# ROTEX® Flexible jaw couplings

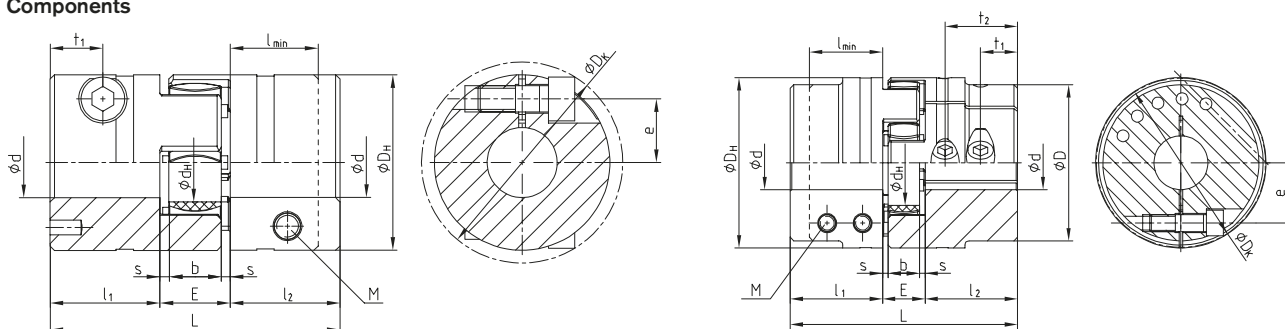
## Clamping hubs



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	t <sub>1,2</sub>	l <sub>min.</sub>	E	b	s	D <sub>H</sub>	D	d <sub>H</sub>	D <sub>K</sub>	t <sub>1</sub>	t <sub>2</sub>	e	M	T <sub>A</sub> [Nm]
19	20 <sup>1)</sup>	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 <sup>2)</sup>	—	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 <sup>2)</sup>	—	32.0	M10	69
48	55	140	56	46	28	21	3.5	105	95	51	105.0	21 <sup>2)</sup>	—	36.0	M12	120
55	68	160	65	50	30	22	4.0	120	110	60	119.5	26	51 <sup>2)</sup>	42.5 <sup>3)</sup>	M12	120
65	70	185	75	55	35	26	4.5	135	115	68	132.5	33	61 <sup>2)</sup>	50.0 <sup>3)</sup>	M12	120
75	80	210	85	65	40	30	5.0	160	135	80	158.0	36	68 <sup>2)</sup>	57.0 <sup>3)</sup>	M16	295
90	90	245	100	80	45	34	5.5	200	160	100	197.0	40	80 <sup>2)</sup>	72.0 <sup>3)</sup>	M20	580

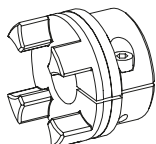
### Bore d<sub>1</sub>/d<sub>2</sub> and the respective transmittable friction torques T<sub>R</sub> [Nm] of ROTEX® clamping hubs design 2.0

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		

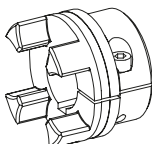
<sup>1)</sup> With type 2.1 d<sub>max.</sub> Ø17 mm

<sup>2)</sup> With reduced hubs dimension t<sub>1</sub> varies or the number of screws changes from 2-off to 1-off

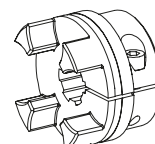
<sup>3)</sup> t<sub>1</sub> and t<sub>2</sub> have a different dimension e



**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 programme of spline bores see page 32)

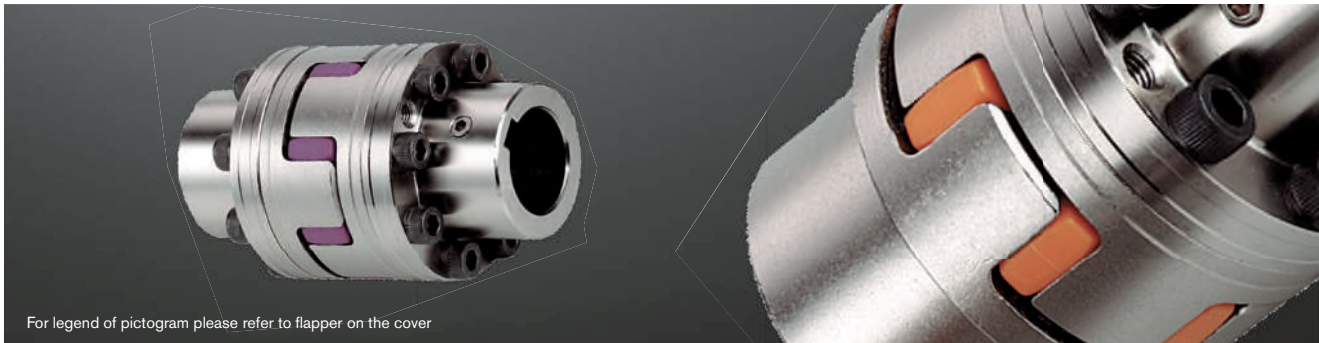
### Ordering example:

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

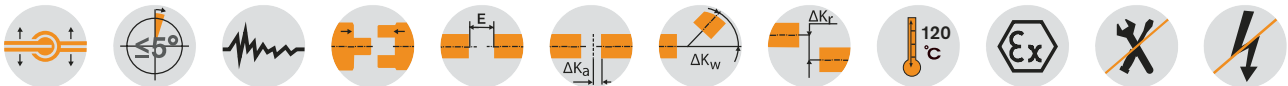


# ROTEX® AFN and BFN Flexible jaw couplings

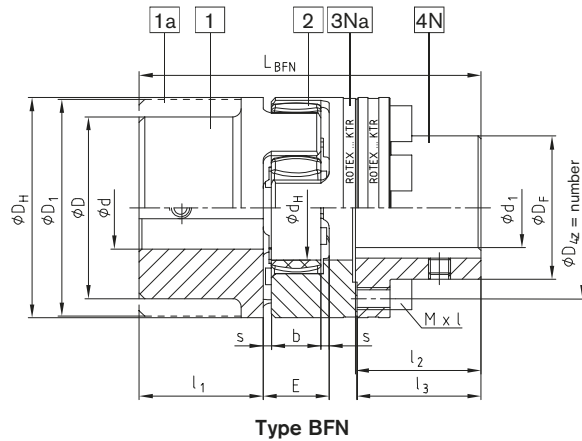
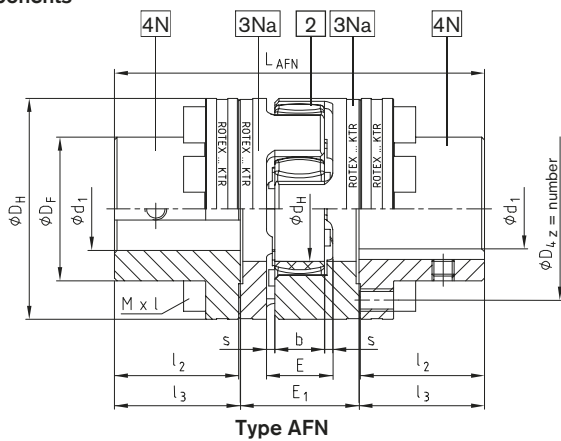
## Flange programme



For legend of pictogram please refer to flapper on the cover



### Components



ROTEX® Type AFN and BFN																			
Size	Pilot bore d, D, D <sub>1</sub>	Component 4N max. finish bore d <sub>1</sub>	Dimensions [mm]													Cap screws <sup>3)</sup> DIN EN ISO 4762 - 12.9			
			D <sub>H</sub>	D <sub>F</sub>	D <sub>4</sub>	d <sub>H</sub>	l <sub>1</sub> , l <sub>2</sub>	E	E <sub>1</sub>	s	b	l <sub>3</sub> ; l <sub>4</sub>	L <sub>AFN</sub>	L <sub>BFN</sub>	Mxl	z	pitch <sup>2)</sup>	T <sub>A</sub> <sup>1)</sup> [Nm]	
24	See jaw couplings on page 34 to 36 For stock programme / basic programme see page 32 and 33	27	55	36	45	27	30	18	33	2.0	14	30.5	94	86	M5x16	8		10	
28		30	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		45	95	62	80	46	50	26	48	3.0	20	51.0	150	138	M8x25	12		41	
48		50	105	70	90	51	56	28	50	3.5	21	57.0	164	152	M8x25	12	16x22.5°	41	
55		60	120	80	102	60	65	30	60	4.0	22	66.0	192	176	M10x30	8	8x45°	83	
65		70	135	94	116	68	75	35	65	4.5	26	76.0	217	201	M10x30	12	16x22.5°	83	
75		80	160	108	136	80	85	40	75	5.0	30	86.5	248	229	M12x40	15		120	
90		105	200	142	172	100	100	45	82	5.5	34	101.5	285	265	M16x40	15		295	
100		115	225	158	195	113	110	50	97	6.0	38	111.5	320	295	M16x50	15		295	
110		130	255	178	218	127	120	55	103	6.5	42	122.0	347	321	M20x50	15	20x18°	580	
125		150	290	206	252	147	140	60	116	7.0	46	142.0	400	370	M20x60	15		580	
140		170	320	235	282	165	155	65	128	7.5	50	157.5	443	409	M20x60	15		580	
160		200	370	270	325	190	175	75	146	9.0	57	177.5	501	463	M24x70	15		1000	
180		230	420	315	375	220	195	85	159	10.5	64	198.0	555	515	M24x80	18	24x15°	1000	

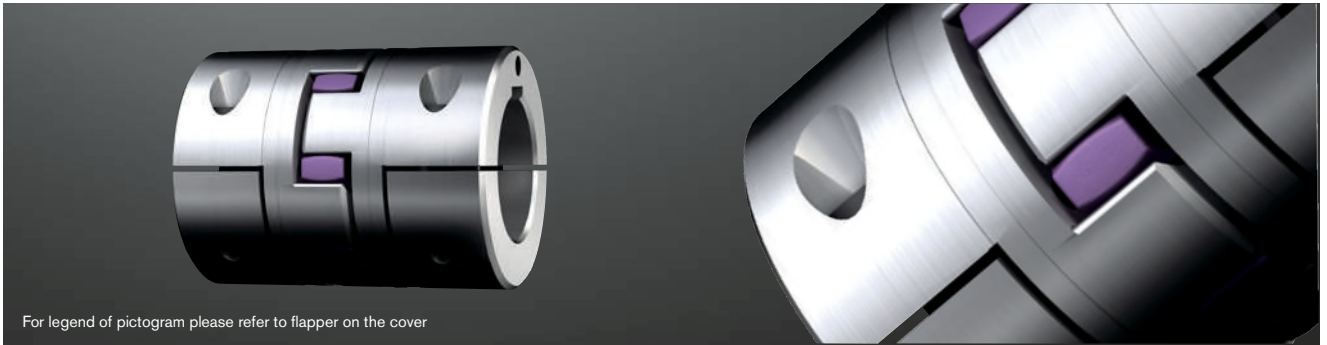
<sup>1)</sup> Screw tightening torque T<sub>A</sub> [Nm].  
<sup>2)</sup> Thread in the driving flange between the cams.  
<sup>3)</sup> Coupling is delivered not assembled.

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

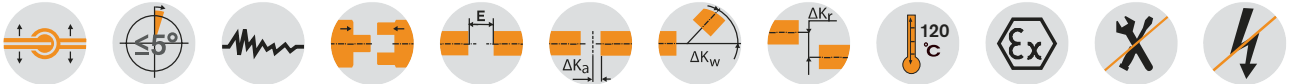
# ROTEX® A-H

## Flexible jaw couplings

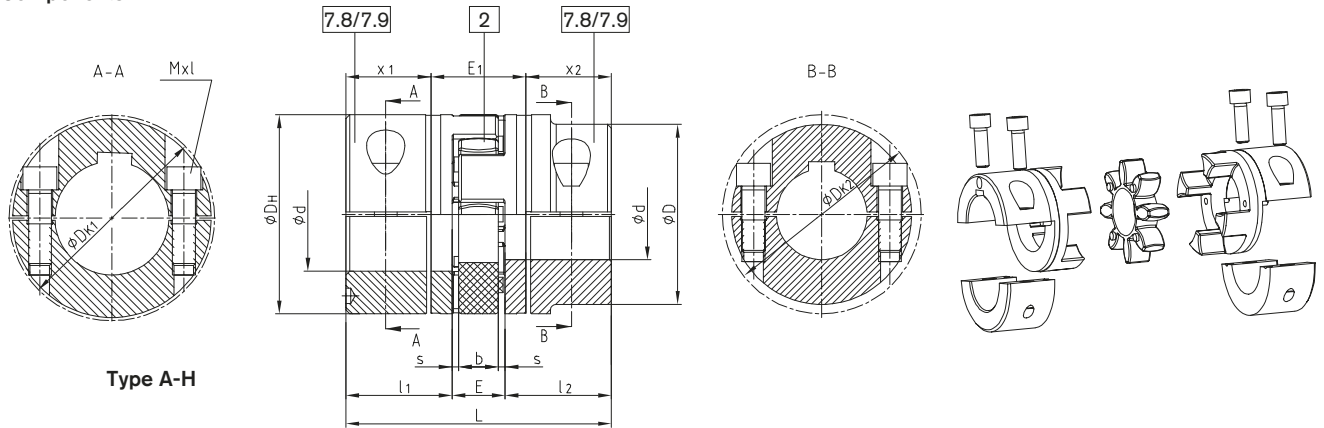
### Drop-out center design coupling



For legend of pictogram please refer to flapper on the cover



#### Components



ROTEX® Type A-H														
Size	Max. finish bore d	Dimensions [mm]											Cap screws DIN EN ISO 4762	
		L	l <sub>1</sub> , l <sub>2</sub>	E	b	s	D <sub>H</sub>	D	D <sub>K1</sub>	D <sub>K2</sub>	x <sub>1</sub> , x <sub>2</sub>	E <sub>1</sub>	Mxl	Tightening torque T <sub>A</sub> [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	48	M10x30	69
55	—							—	—					
48	55	140	56	28	21	3.5	105	95	—	105	45	50	M12x35	120
60	—							108.5	—					
55	65	160	65	30	22	4.0	120	110	—	119.5	50	60	M12x40	120
70	—							—	—	122			—	
65	70	185	75	35	26	4.5	135	115	—	123.5	60	65	M12x40	120
80	—							—	—	132.5			—	
75	80	210	85	40	30	5.0	160	135	—	147.5	67.5	75	M16x50	295
90	—							—	—	158			—	
90	90	245	100	45	34	5.5	200	160	—	176	81.5	82	M20x60	580
110	—							—	—	197			—	
100 <sup>1)</sup>	110	270	110	50	38	6.0	225	180	—	185.5	84	102	M16x50	295
110 <sup>1)</sup>	120	295	120	55	42	6.5	255	200	—	208	90	115	M20x60	580
125 <sup>1)</sup>	140	340	140	60	46	7.0	290	230	—	242.5	105	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 = Shell clamping hub without feather key max. circumferential speed of v = 35 m/s.

Applying for 7.8 only: from a circumferential speed of v = 25 m/s the frictional torque of shaft/hub has to be reviewed. Please consult with KTR engineering department.

7.9 = Shell clamping hub with feather key 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 D<sub>H</sub> of the coupling

<sup>1)</sup> From size 100: 4 clamping screws for each clamping hub

Ordering example:	ROTEX® 38	A-H	98 ShA	7.8	Ø38	7.8	Ø30
	Coupling size	Type	Spider hardness	Hub design	Finish bore	Hub design	Finish bore

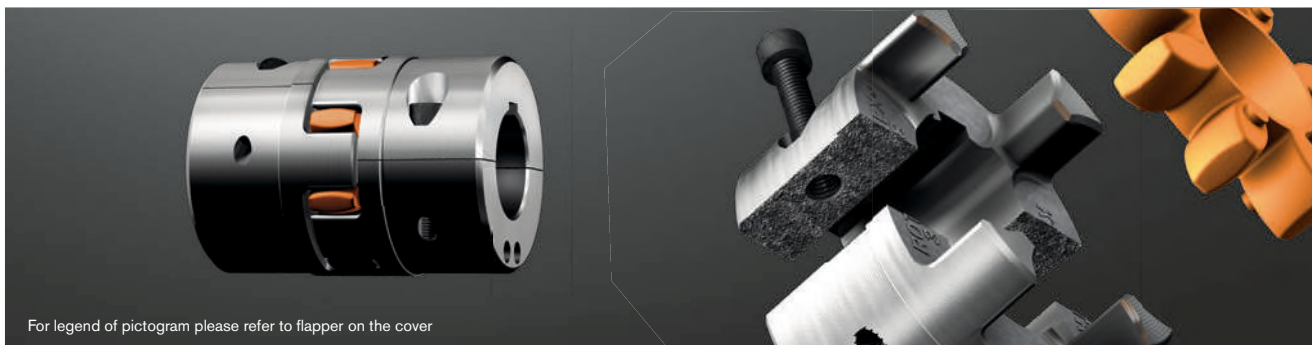
# ROTEX® S-H

## Flexible jaw couplings

Flexible jaw and pin & bush couplings

ROTEX®

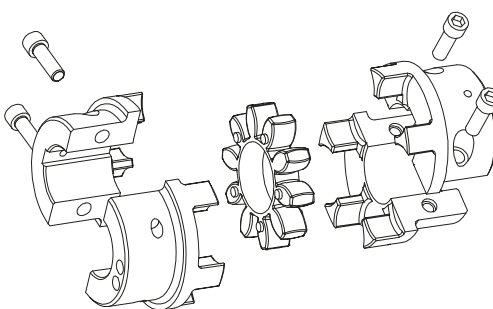
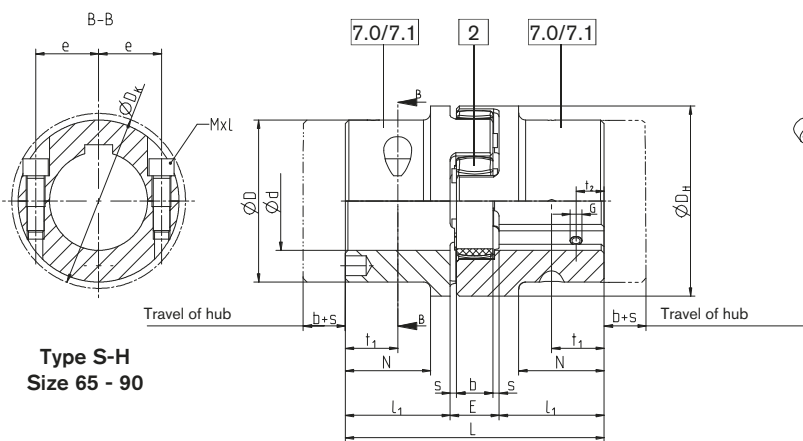
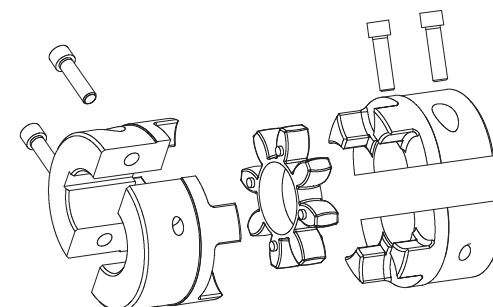
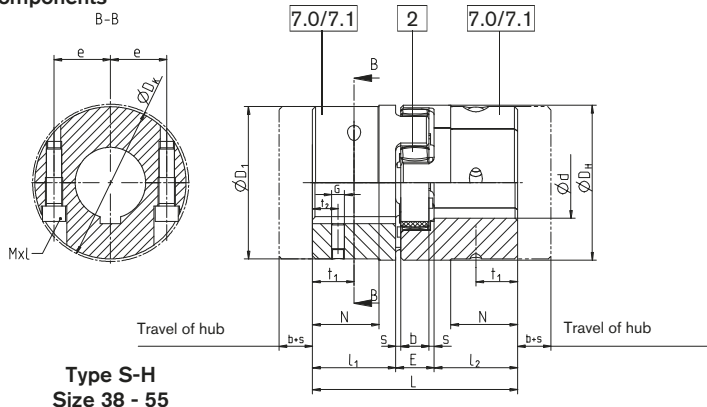
### Drop-out center design coupling with SPLIT hubs



For legend of pictogram please refer to flapper on the cover



#### Components



POLY-NORM®

POLY

ROTEX® Type S-H																	
Size	Finish bore d		Dimensions [mm]													Cap screws DIN EN ISO 4762	
	Min.	Max.	L	l <sub>1</sub> , l <sub>2</sub>	E	b	s	D <sub>H</sub>	D <sub>1</sub>	D <sub>K</sub>	N	e	t <sub>1</sub>	t <sub>2</sub>	G	Mxl	Tightening torque T <sub>A</sub> [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	M10x35		67	
48	24	60	140	56	28	21	3.5	105	104	108.5	45	35	28	M12x40		115	
55	24	70	160	65	30	22	4	120	118	122	52	40	32.5	20	M10	M12x45	115
65	24	70	185	75	35	26	4.5	135	115	123.5	61	45	37.5	M12x40		M12x40	115
	70	80							135	132.5		50				M12x45	
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					

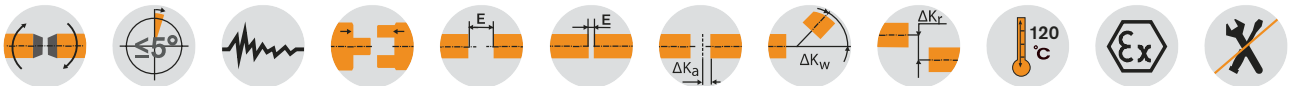
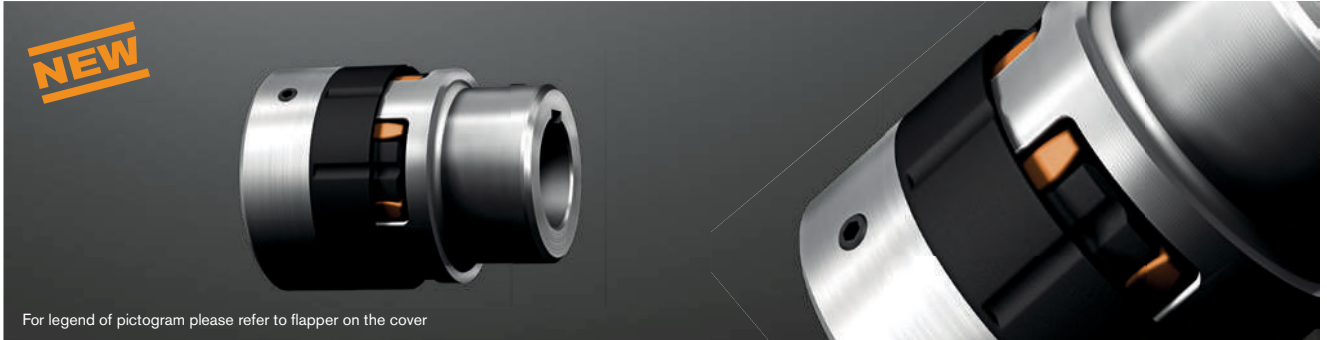
7.0 = SPLIT hub without feather keyway  
7.1 = SPLIT hub with feather keyway

Ordering example:	ROTEX® 38	S-H	98 ShA	7.1	Ø38	7.1	Ø30
	Coupling size	Type	Spider hardness	Hub design	Finish bore	Hub design	Finish bore

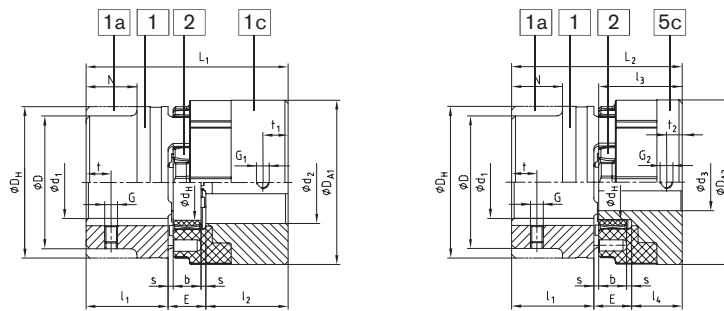
REVOLEX®

# ROTEX® SP GN and EN Flexible jaw couplings

## Single-cardanic shaft coupling (Non Sparking)



### Components



ROTEX® Standard (St) <sup>3)</sup>			ROTEX® SP Type GN							ROTEX® SP Type EN							
Size	Spider <sup>1)</sup> (component 2) Rated torque [Nm]	Component steel (St)	Component SP	Dimensions [mm] ROTEX® SP component 1c						Component SP	Dimensions [mm] ROTEX® SP component 5c						
				max. d <sub>2</sub> <sup>2)</sup>	l <sub>2</sub>	DA <sub>1</sub>	G <sub>1</sub>	t <sub>1</sub>	L <sub>1</sub>		max. d <sub>2</sub> <sup>2)</sup>	l <sub>3</sub>	l <sub>4</sub>	DA <sub>2</sub>	G <sub>2</sub>	t <sub>2</sub>	L <sub>2</sub>
24	35	1a	1c	28	30	61	M5	10	78	5c	19	36	22	61	M5	6	70
		98							90								81
28	95	1a	1c	32	35	72	M8	15	115	5c	22	42	26	72	M8	7	106
		114							99								
38	190	1	1c	42	45	87	M8	15	139	5c	28	50	30	87	M8	7	124
		126							110								
42	265	1b	1c	48	50	103	M8	20	151	5c	35	56	34	103	M8	10	135
		140							120								
48	310	1	1c	55	56	114	M8	20	164	5c	40	60	36	114	M8	10	124
		160							135								
55	410	1b	1c	65	65	130	M10	20	185	5c	45	66	40	130	M10	17	160
		185							154								
65	625	1	1c	75	75	146	M10	20	210	5c	55	75	44	146	M10	17	179

ROTEX® Standard (GJL) <sup>4)</sup>			ROTEX® SP Type GN							ROTEX® SP Type EN							
Size	Spider <sup>1)</sup> (component 2) Rated torque [Nm]	Component cast iron (GJL)	Component SP	Dimensions [mm] ROTEX® SP component 1c						Component SP	Dimensions [mm] ROTEX® SP component 5c						
				max. d <sub>2</sub> <sup>2)</sup>	l <sub>2</sub>	DA	G	t	L		max. d <sub>2</sub> <sup>2)</sup>	l <sub>2</sub>	l <sub>3</sub>	DA	G	t <sub>1</sub>	L <sub>1</sub>
38	190	1	1c	42	45	87	M8	15	114	5c	28	50	30	87	M8	7	99
		1a							139								124
		1b															
42	265	1	1c	48	50	103	M8	20	126	5c	35	56	34	103	M8	10	110
		1a							151								135
		1b															
48	310	1	1c	55	56	114	M8	20	140	5c	40	60	36	114	M8	10	120
		1a							164								144
		1b															
55	410	1	1c	65	65	130	M10	20	160	5c	45	66	40	130	M10	17	135
		1a															
65	625	1	1c	75	75	146	M10	20	185	5c	55	75	44	146	M10	17	154

<sup>1)</sup> Maximum torque of the coupling  $T_{K \max}$  = rated torque of the coupling  $T_{K \text{ rated}} \times 2$ . Transmittable torque according to 92 ShA.

<sup>2)</sup> Bores H7 with keyway to DIN 6885 sheet 1 [JS9] and thread for setscrew

<sup>3)</sup> For dimensions of standard ROTEX® hubs (St) 1, 1a, 1b see catalogue on page 36.

<sup>4)</sup> For dimensions of standard ROTEX® hubs (GJL) 1, 1a, 1b see catalogue on page 34.

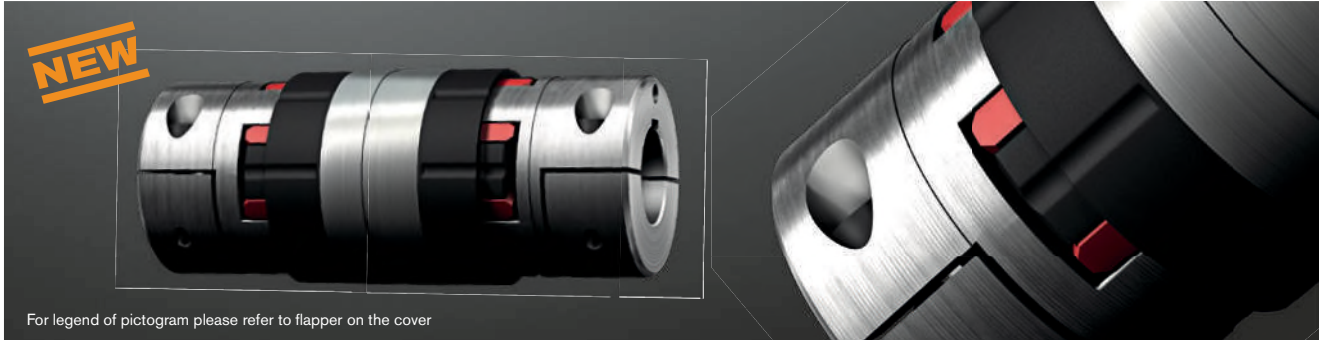
■ = Available from stock

Ordering example:	ROTEX® SP 38	GJL	92 ShA	1a	Ø45	1c	Ø42
		Coupling size	Material Components 1, 1a, 1b	Spider hardness	Component	Finish bore	Component

# ROTEX® SP ZS-DKM-C

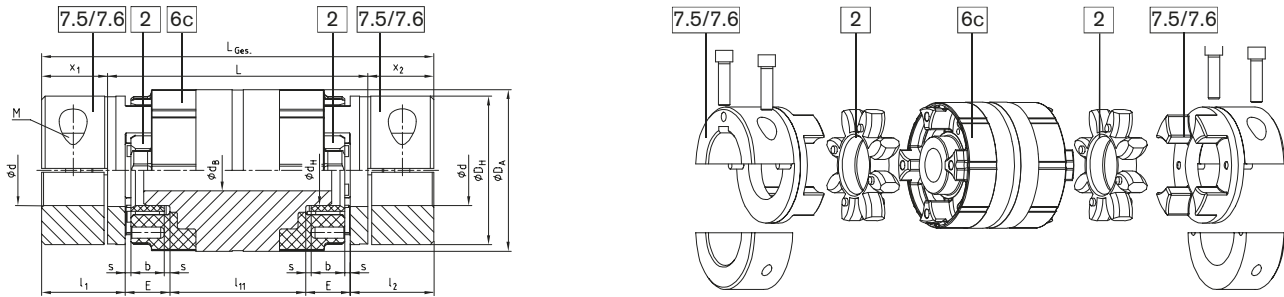
## Flexible jaw couplings

### Double-cardanic shaft coupling (Non Sparking)

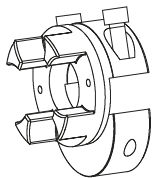


For legend of pictogram please refer to flapper on the cover

#### Components



ROTEX® SP Type ZS-DKM-C																
Size	Drop-out center length L	Spider <sup>1)</sup> (component 2) Rated torque [Nm]	Dimensions [mm]												Dimensions [mm]	
			Max. finish bore d <sup>2)</sup>	L <sub>total</sub>	General component 7.5/7.6 steel									ROTEX® SP Type 6c Al-H <sup>3)</sup>		
					l <sub>1</sub> , l <sub>2</sub>	x <sub>1</sub> , x <sub>2</sub>	E	b	s	D <sub>H</sub>	D <sub>A</sub>	d <sub>H</sub>	M	T <sub>A</sub> [Nm]	d <sub>B</sub>	l <sub>11</sub>
24	100	35	28	145	30	22.5	18	14	2.0	55	61	27	M6	14	14	49
	185			89												
28	100	95	38	151	35	25.5	20	15	2.5	65	72	30	M8	35	16	41
	191			81												
38	100	190	45	171	45	35.5	24	18	3.0	80	87	38	M8	35	22	33
	211			73												
42	100	265	55	178	50	39	26	20	3.0	95	103	46	M10	69	30	26
	218			66												
48	140	310	60	230	56	45	28	21	3.5	105	114	51	M12	120	35	62
	240			50												
55	180	410	70	280	65	50	30	22	4.0	120	130	60	M12	120	35	90
	200			110												
	300			110												
65	140	625	80	260	75	60	35	26	4.5	135	146	68	M12	120	48	40
	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

<sup>1)</sup> Maximum torque of the coupling  $T_{K \max}$  = rated torque of the coupling  $T_{K \text{ rated}}$  x 2. Transmittable torque according to 92 ShA-GS.

<sup>2)</sup> Hub type 7.5 = without keyway; hub type 7.6 = with keyway acc. to DIN 6685 sheet 1 [JS9]

<sup>3)</sup> Size 42 with drop-out center length L=100 mm made of steel

■ = Available from stock

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



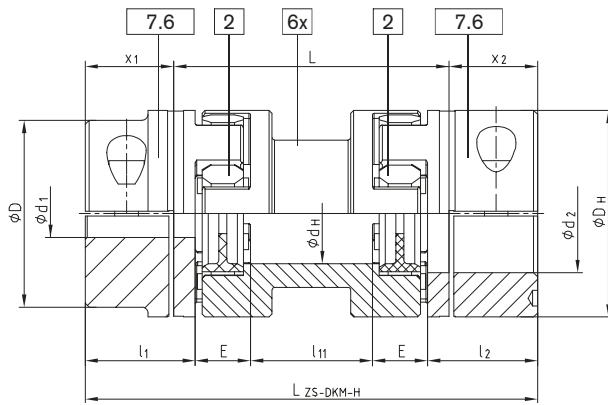
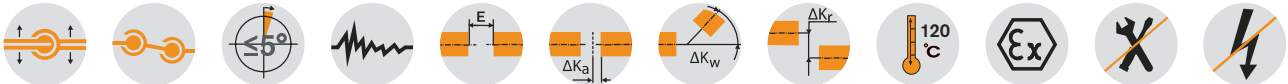
# ROTEX® ZS-DKM-H

## Flexible jaw couplings

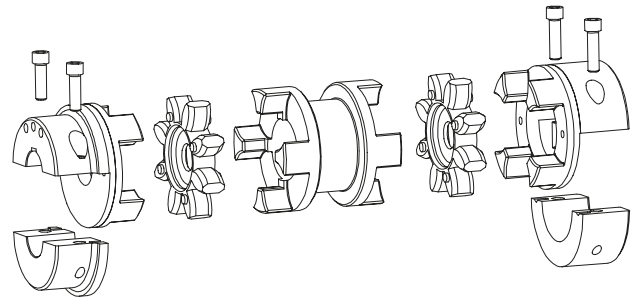
### Double-cardanic shaft coupling



For legend of pictogram please refer to flapper on the cover



Type ZS-DKM-H



ROTEX® Type ZS-DKM-H																		
Size	Drop-out center length L [mm]	Max. finish bore $d_1, d_2$	Spider <sup>1)</sup> (component 2) $T_{KN}$ [Nm]	Dimensions [mm]							Screws DIN EN ISO 4762 - 12.9			Max. displacements				Weight <sup>2)</sup> [kg]
				$D_H$	$d_H$	$l_1, l_2$	$x_1, x_2$	$l_{11}$	E	LZS-DKM-H	M	$T_A$ [Nm]	Axial [mm]	with n = 1500 rpm		with n = 3000 rpm		
														Radial [mm]	Angular [°]	Radial [mm]	Angular [°]	
24	100	28	35	55	27	30	22.5	49	18	145	M6	14	1.4	1.17	0.87	1.40	1.90	1.60
	89							185		1.87				1.40				
28	100	38	95	65	30	35	25.5	41	20	151	M8	35	1.5	1.06	0.80	1.32	2.20	1.90
	81							191		1.76				1.32				
38	100	45	190	80	38	45	35.5	33	24	171	M8	35	1.8	0.99	0.74	1.27	4.10	3.90
	73							211		1.69				1.27				
42	100	55	265	95	46	50	39.0	26	26	178	M10	69	2.0	0.91	0.68	1.20	5.10	5.70
	66							218		1.60				1.20				
48	100	60	310	105	51	56	45.0	22	28	190	M12	120	2.1	0.87	0.65	1.18	7.10	7.90
	62							230		1.57				1.18				
55	100	70	410	120	60	65	50.0	10	30	200	M12	120	2.2	0.70	0.52	0.75	9.50	11.20
	140							240		1.40				1.05				
	180							280		2.09				1.57				
	200							300		2.44				1.83				
65	140	80	625	135	68	75	60.0	40	35	260	M12	120	2.6	1.31	0.98	1.50	16.10	16.80
	80							300		2.00				1.50				
75	140	90	1280	160	80	85	67.5	25	40	275	M16	295	3.0	1.13	0.85	23.60	26.00	
	180							315		1.83				1.37				
	200							335		2.19				1.64				
	250							385		3.05				2.29				
90	180	110	2400	200	100	100	81.5	53	45	343	M20	580	3.4	1.71	1.28	48.90	52.60	
	123							413		2.93				2.19				
100	250	110	3300	225	105	110	84	98	50	418	M20	580	3.4	2.6	-	-	60	
110	250	120	4800	255	115	120	88	76	55	426	M20	580	3.4	2.3	-	-	90	
125	250	140	6650	290	133	140	105	60	60	460	M24	1000	3.4	1.6	-	-	120	

<sup>1)</sup> Maximum torque of the coupling  $T_{K \max}$  = rated torque of the coupling  $T_{K \text{ rated}}$  x 2.  
Size 24 to 90 spider type 98 ShA-GS / transmittable torque acc. to 92 ShA-GS.

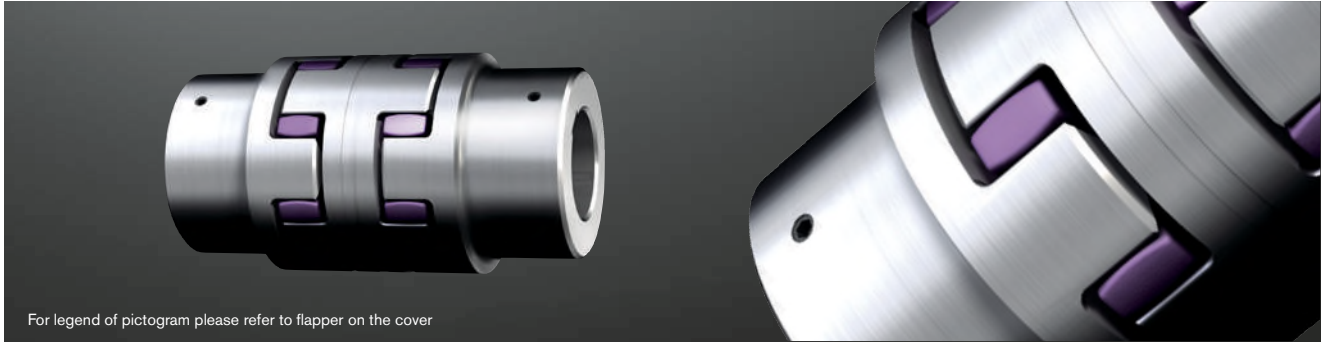
7.6 = Shell clamping hub with feather key for a double-cardanic connection  
ATTENTION: The standard series can be used with horizontal mounting only. Vertical assembly on request.

Ordering example:	ROTEX® 38	ZS-DKM-H	140	98 ShA-GS	7.6	Ø 38	7.6	Ø30
	Coupling size	Type	Shaft distance dimension L	Spider hardness	Hub design	Finish bore	Hub design	Finish bore

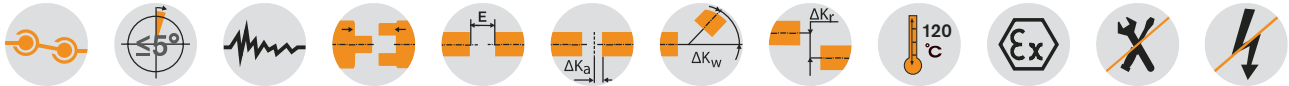
# ROTEX® DKM

## Flexible jaw couplings

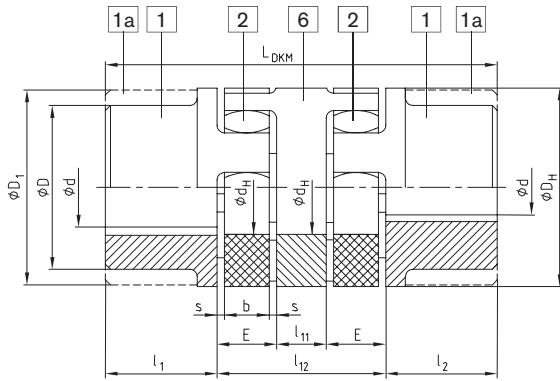
### Double-cardanic shaft coupling



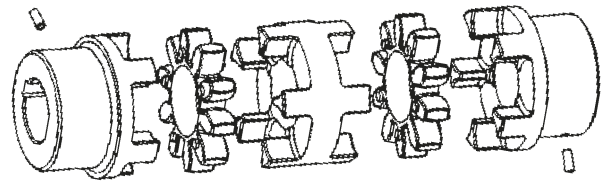
For legend of pictogram please refer to flapper on the cover



#### Components



Type DKM



ROTEX® Type DKM																
Size	d, D, D <sub>1</sub>	Spider <sup>1)</sup> (component 2)		Dimensions [mm]									Max. displacements with n = 1500 rpm			
		Rated torque [Nm]		D <sub>H</sub>	d <sub>H</sub>	l <sub>1,2</sub>	l <sub>11</sub>	l <sub>12</sub>	E	s	b	L <sub>DKM</sub>	Radial [mm]	Angular [°]	Axial [mm]	
19	See jaw couplings on page 34 to 36 For stock programme / basic programme see page 32 and 33	92 ShA	98 ShA	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	

<sup>1)</sup> For selection please see page 10 et seqq.  
Finish bore according to ISO fit H7, feather keyway according to DIN 6885, sheet 1 [US9].

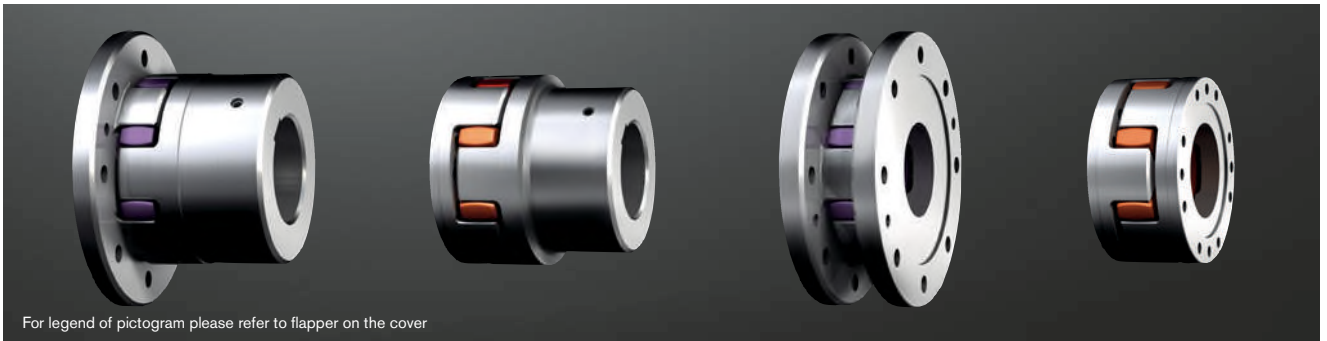
Ordering example:	ROTEX® 38	DKM	GJL	98 ShA	1	Ø38	1	Ø30
	Coupling size	Type	Material	Spider hardness	Component	Finish bore	Component	Finish bore

ROTEX® Flexible jaw and pin & bush couplings  
 POLY-NORM®  
 POLY  
 REVOLLEX®

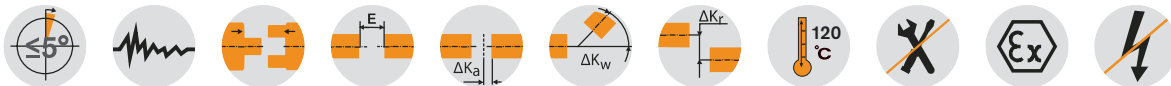


# ROTEX® CF, CFN, DF and DFN Flexible jaw couplings

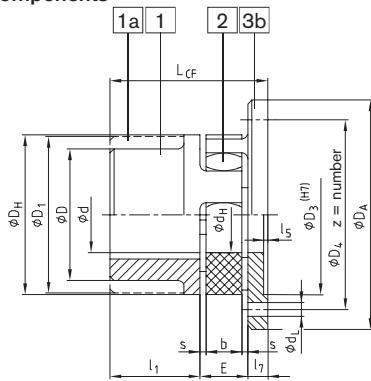
## Flange programme



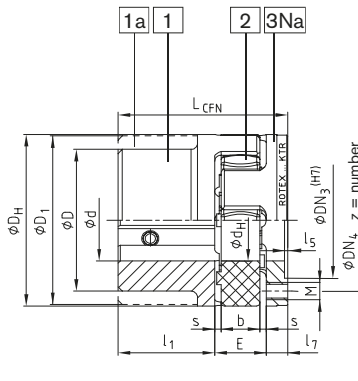
For legend of pictogram please refer to flapper on the cover



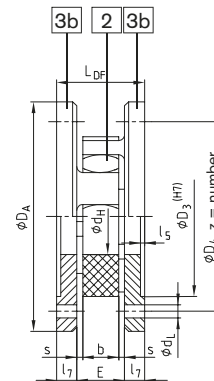
### Components



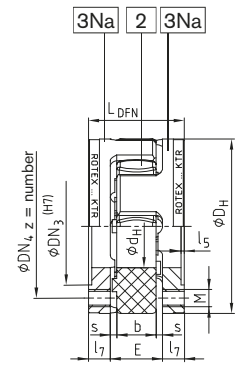
Type CF



Type CFN



Type DF



Type DFN

ROTEX® Type CF, CFN and DF, DFN																							
Size	d, D, D1	Dimensions general [mm]							Dimensions CF and DF [mm]							Dimensions CFN and DFN [mm]							
		DH	dH	l1	E	s	b	l5	l7	DA	D3	D4	z	dI	LCF	LDF	DN3	DN4	M	z	Pitch	LCFN	LDFN
24		55	27	30	18	2.0	14	1.5	8	80	55	65	5	4.5	56	34	36	45	M5	8		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	8x45°	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

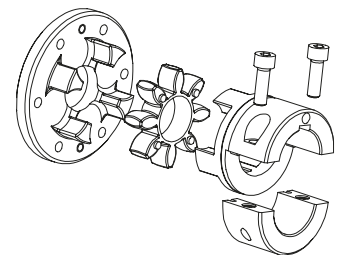
For other flange programmes see page 41.

Other types: ROTEX® CF-H

Flange drop-out center design coupling

Please order our separate dimension sheet

(M412069).

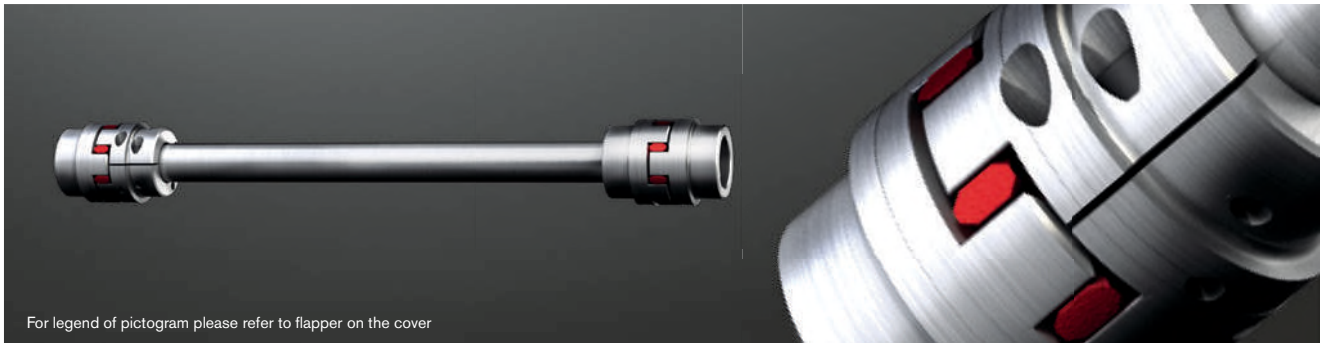


Ordering example:	ROTEX® 38	CF	92 ShA	1	GJL	Ø20
	Coupling size	Type	Spider hardness	Hub side, component	Material	Finish bore

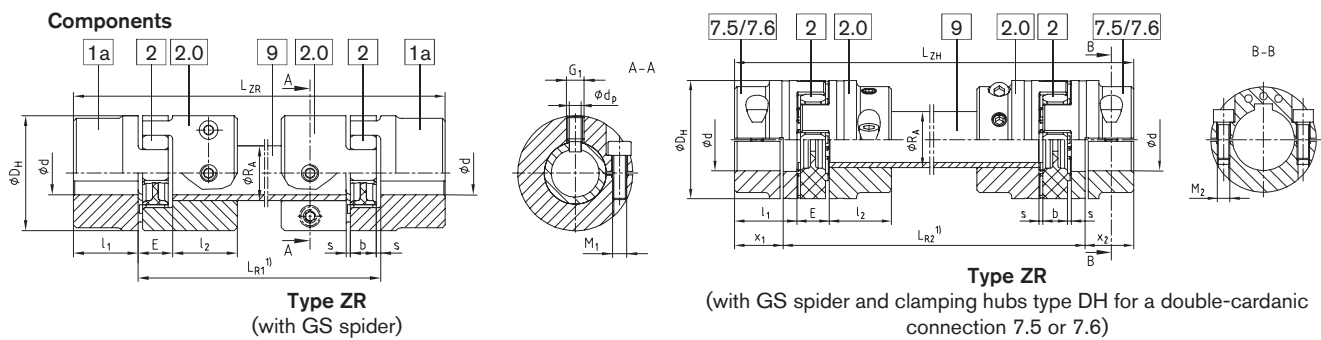
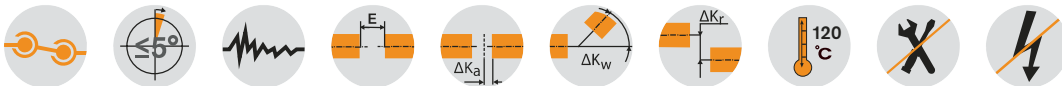
# ROTEX® ZR

## Flexible jaw couplings

### Intermediate shaft programme



For legend of pictogram please refer to flapper on the cover

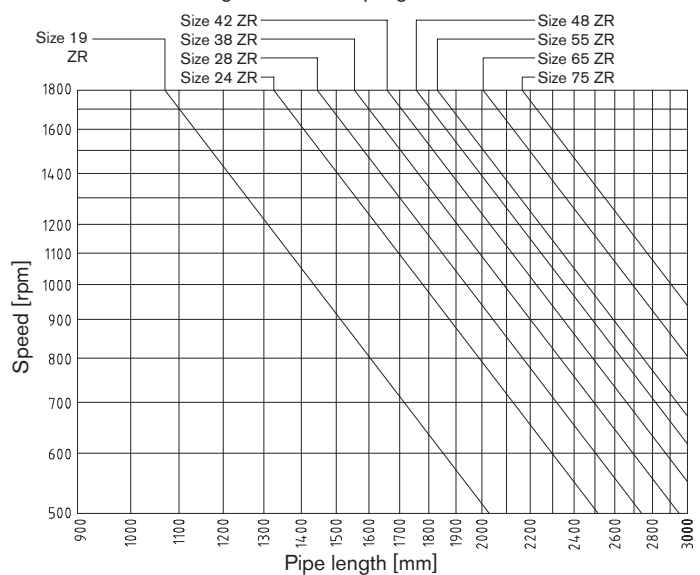


ROTEX® Type ZR																					
Size	Max. finish bore d		Dimensions [mm]						Intermediate pipe Torsional stiffness/m		Clamping screw component 2.0		Clamping screw component 7.5/7.6		LZR, LZH	min. LR1	min. LR2	Locking screw G1	Cone bore dp [mm]	Axial displacement [mm]	Angular displacement [degree]
	Component 1a	Component 7.5/7.6	DH	l1, l2	x1, x2	E	s	b	RA	C 2) [Nm <sup>2</sup> /rad]	M1	TA [Nm]	M2	TA [Nm]							
19	25	20	40	25	17.5	16	2.0	12	Ø20x3	954.9	M6	14	M6	10	LR1 + 2 • l1 LR2 + 2 • x1 / 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 specify the shaft distance dimension LR1/LR2 along with the maximum speed to review the critical bending speed.  
 2) Torsion spring stiffness with an intermediate pipe having a length of 1 m  
 Finish bore according to ISO fit H7, feather keyway according to DIN 6885, sheet 1 [JS9].  
 Friction torques of clamping hubs have to be considered.  
 Please order dimension sheet M 583613.

Not permissible for crane and hoist drives

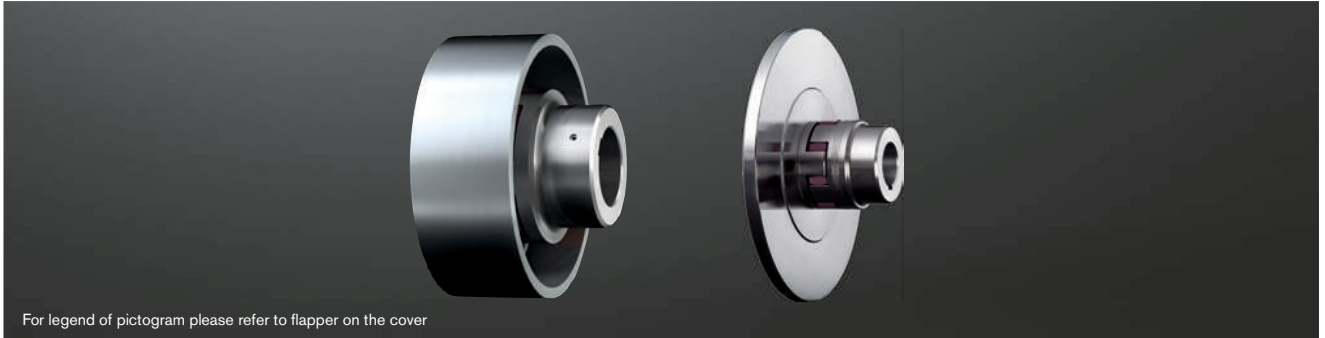
Diagramme for coupling selection:



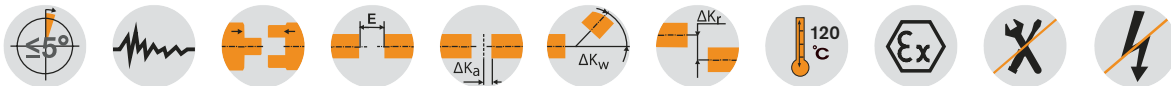
Ordering example:	ROTEX® 38	ZR	1200	98 ShA-GS	7.5	Ø38	7.5	Ø30
	Coupling size	Type	Shaft distance dimension LR1/LR2	Spider hardness	Hub design	Finish bore	Hub design	Finish bore

# 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 and SBAN															
Size	Pilot bore, d, D, D1	Max. finish bore d1		Dimensions [mm]											
		GJS	Steel	DH	D2	D4	dH	z	pitch <sup>1)</sup>	M	TA [Nm]	l1, l2	E	L	
38	See jaw couplings on page 34 to 36 For stock programme / basic programme see page 32 and 33	—	35	80	50	66	38	8	8 x 45°	M8	35	45	24	114	
42		—	45	95	60	80	46	12	16 x 22.5°	M8	41	50	26	126	
48		—	50	105	68	90	51	12	8 x 45°	M8	41	56	28	140	
55		—	58	120	78	102	60	8	16 x 22.5°	M10	83	65	30	160	
65		—	68	135	92	116	68	12	8 x 45°	M10	83	75	35	185	
75		—	78	160	106	136	80	15	16 x 22.5°	M12	120	85	40	210	
90		—	100	200	140	172	100	15	20 x 18°	M16	295	100	45	245	
100		100	—	225	156	195	113	15	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		

Brake drum	Type BTAN										Speed rpm [V] (30 m/s)	Brake disk	Type SBAN										Speed rpm [V] (30 m/s)
	ROTEX® BTAN dimension „C“												ROTEX® dimension „N“										
	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

<sup>1)</sup> Thread in the hub between the cams.

Other sizes on request according to dimension sheet:

BTAN: M380821

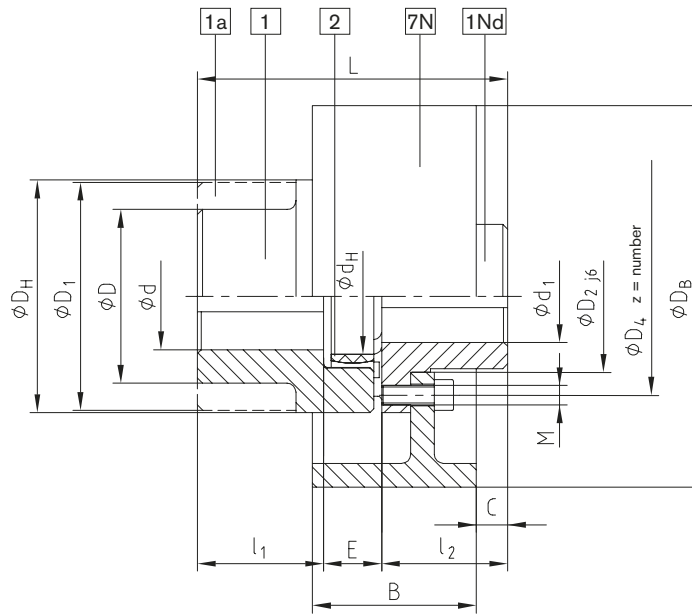
SBAN straight: M380822; cranked: M 370065

FNN hub: M 380823

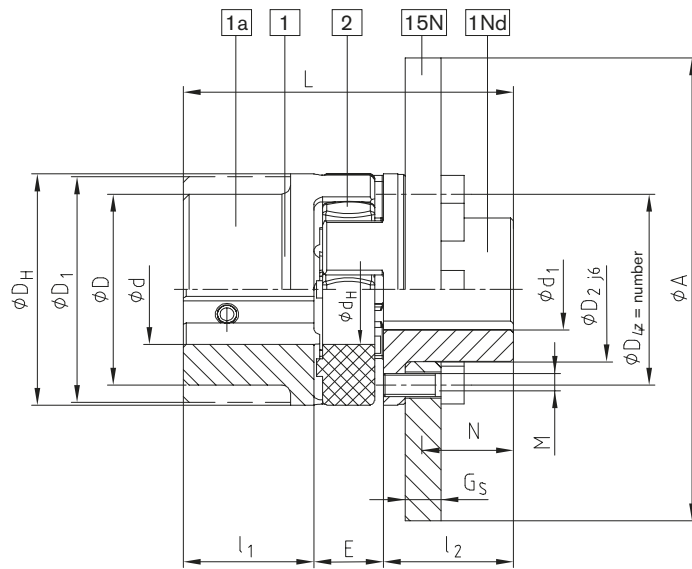
Finish bore according to ISO fit H7, feather keyway according to DIN 6885, sheet 1 [JS9].

Ordering example:	ROTEX® 38	BTAN	Ø200x75	98 ShA	1Nd	Ø34	1	Ø30
	Coupling size	Type	Brake drum Ø x width	Spider hardness	Component	Finish bore	Component	Finish bore

Components



Brake drum  
Type BTAN



Brake disk  
Type SBAN

ROTEX®

POLY-NORM®

POLY

REVOLEX®

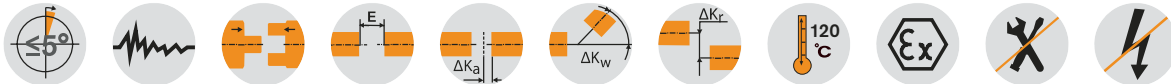
Flexible jaw and  
pin & bush couplings

# ROTEX® AFN-SB special Flexible jaw couplings

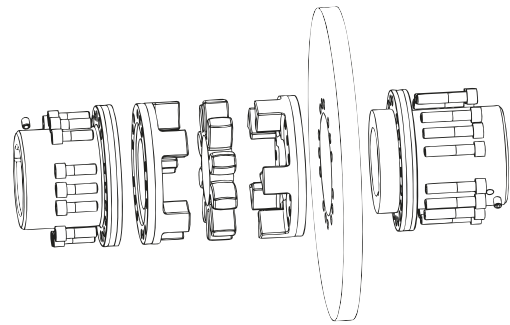
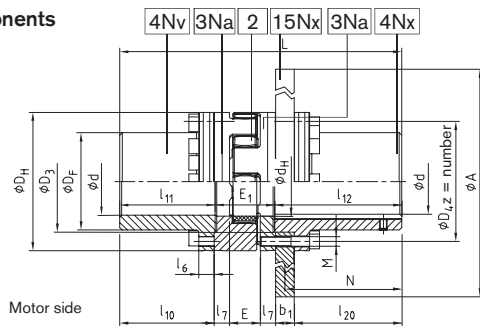
## Drop-out center design coupling with brake disk



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 <sub>H</sub>	D <sub>F</sub>	D <sub>3</sub> H7/h7	D <sub>4</sub>	d <sub>H</sub>	E	E <sub>1</sub>	M	z	Pitch	T <sub>A</sub> [Nm]
65	22	70	135	94	96	116	68	35	65	M10	12	16x22.5°	83
75	30	80	160	108	112	136	80	40	75	M12	15		120
90	40	105	200	142	145	172	100	45	82	M16	15	20x18°	295
100	46	115	225	158	165	195	113	50	97	M16	15		295
110	60	130	255	178	180	218	127	55	103	M20	15	580	580
125	60	150	290	206	215	252	147	60	116	M20	15		580
140	60	170	320	235	245	282	165	65	128	M20	15	580	580
160	80	200	370	270	280	325	190	75	146	M24	15		1000
180	85	230	420	315	330	375	220	85	159	M24	18	24x15°	1000

ROTEX® Type AFN-SB special												
Size	Torque with 98 ShA <sup>1)</sup>		Max. speed [rpm]	Max. braking torque <sup>2)</sup> [Nm]	Dimensions [mm]							
	T <sub>KN</sub>	T <sub>K max</sub>			l <sub>7</sub>	l <sub>10</sub>	l <sub>11</sub>	l <sub>12</sub>	l <sub>20</sub>	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 <sup>3)</sup>	230 <sup>3)</sup>		
160	19200	38400	1500	38400	38	226.5	229.0	252.5	220	235	627.5	
									210 <sup>3)</sup>	230 <sup>3)</sup>		
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 b <sub>1</sub>										
	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

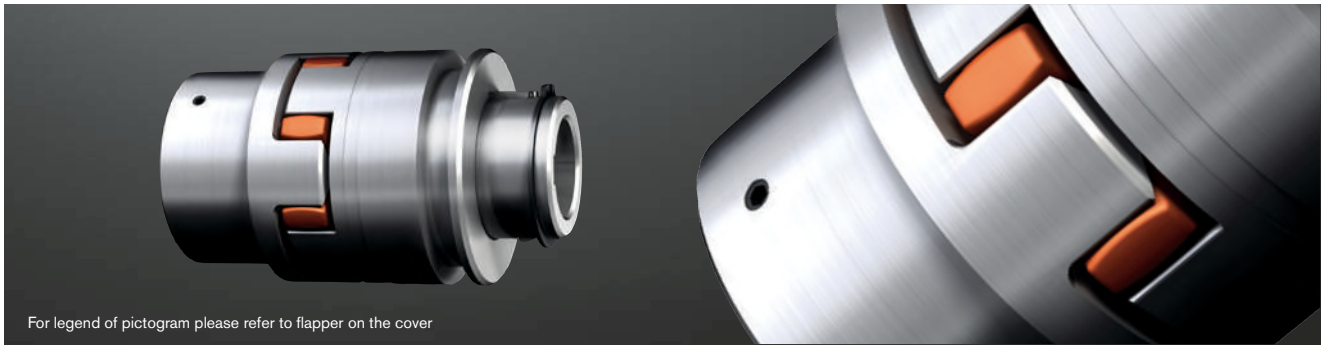
<sup>1)</sup> For selection please see page 10 et seqq. <sup>2)</sup> The maximum braking torque must not exceed the maximum torque of the coupling. <sup>3)</sup> Dimensions with a width of brake disk b<sub>1</sub> of 40 mm.

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

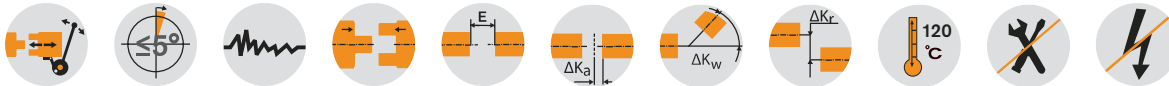
# ROTEX® SD

## Flexible jaw-type couplings

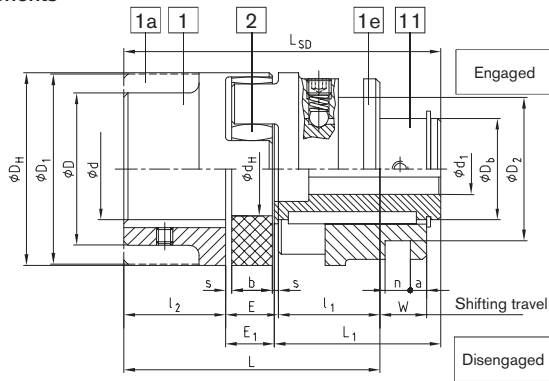
### Shiftable coupling shiftable at standstill



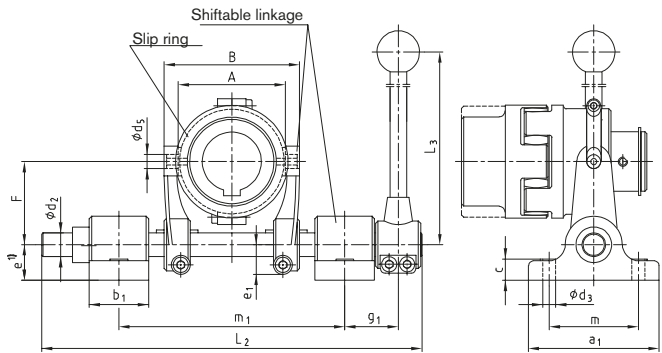
For legend of pictogram please refer to flapper on the cover



#### Components



Type SD



Bauart SD with slip ring and shiftable linkage

ROTEX® Type SD																					
Size	d, D, D <sub>1</sub>	Finish bore d <sub>1</sub>		Dimensions [mm]															Shifting force set in [N]	Slip ring size	Shiftable linkage size
		Min.	Max.	D <sub>H</sub>	D <sub>2</sub> ±0,1	D <sub>b</sub>	d <sub>H</sub>	l <sub>1</sub> , l <sub>2</sub>	E	s	b	E <sub>1</sub>	L	L <sub>1</sub>	W	a	n ±0,1	LSD			
24	See jaw couplings on page 34 to 36 For stock programme / basic programme see page 32 and 33	8	20	55	41	30	27	30	18	2.0	14	16.5	78	51.5	16.0	6	6.0	98	110	—	—
28		10	24	65	58	36	30	35	20	2.5	15	18.0	90	60.0	17.5	8	8.0	113	130	—	—
38		12	30	80	70.5	45	38	45	24	3.0	18	22.0	114	73.0	21.0	8	12.5	140	150	1.1	1
42		14	35	95	70.5	50	46	50	26	3.0	20	24.0	126	82.0	23.0	8	12.5	156	180	1.1	1
48		15	42	105	89.5	60	51	56	28	3.5	21	25.5	140	90.5	24.5	6	17.5	172	200	2.2	2
55		18	50	120	112.5	70	60	65	30	4.0	22	27.0	160	103.0	26.0	6	18.0	195	250	3.3	3
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	3.3	3
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	4.4	3
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	5.5	4
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	5.5	4
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	5.5	4
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	6.6	5

Slip ring and shiftable linkage																				
Size	Size of shiftable linkage	Dimensions [mm]															Max. speed [rpm] for slip ring			
		a <sub>1</sub>	b <sub>1</sub>	c	d <sub>2</sub>	d <sub>3</sub>	d <sub>5</sub>	e <sup>1)</sup>	e <sub>1</sub>	F	g <sub>1</sub>	L <sub>2</sub>	L <sub>3</sub>	m	m <sub>1</sub> min.	m <sub>1</sub> max.		A	B	
38	1																			
42	1	110	50	18	20	11	12	30	25	70	55	320	400	75	180	190	90	114	3280	
48	2				25				27	97.5	60	430	450		240	270	111	151	2550	
55	3																			
65	3	140			30		17	40	32.5	120	70	490	600	100	280	310	140	180	2120	
75	3																			
90	4		60	25		13.5											170	210	1710	
100	4				35		21	50	37.5	147.5	70	565	750	120	321	365	200	244	1360	
110	4	160																		
125	5				40		25		46	190	80	630	1085		365	410	250	300	855	

<sup>1)</sup> 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 according to DIN 6885, sheet 1 [JS9].

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



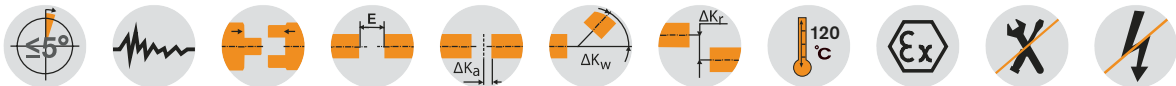
# ROTEX® FNN

## Flexible jaw couplings

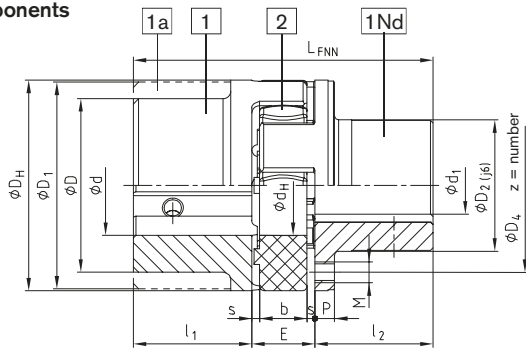
### For mounting of fan



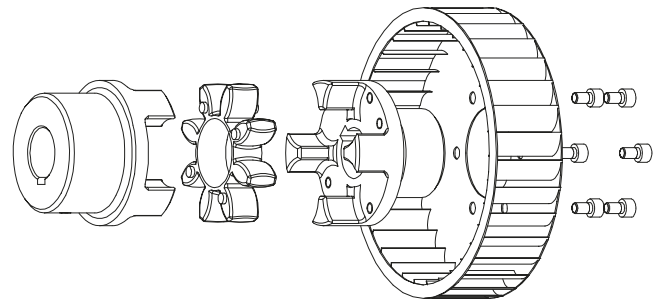
For legend of pictogram please refer to flapper on the cover



#### Components



Type FNN



Type FNN with fan (type 1)

ROTEX® Type FNN															
Size	d, D, D1	Max. finish bore d1	Dimensions [mm]												
			DH	D2	D4	dH	E	s	b	l1, l2	P	M	z	Pitch	LFNN
28	See jaw couplings on page 34 to 36 For stock programme / basic programme see page 32 and 33	28	65	40	54	30	20	2.5	15	35	6.5	M6	8	8x45°	90
38		35	80	50	66	38	24	3.0	18	45	7.5	M8	8		114
42		42	95	60	80	46	26	3.0	20	50	9.5	M8	12		126
48		50	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		245

Other sizes on request.

#### Type 1: Fan screwed on

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



#### Type 2: Fan injection-moulded

Low prices due to production volumes with bigger quantities.



#### Type 3: Fan pressed or glued on

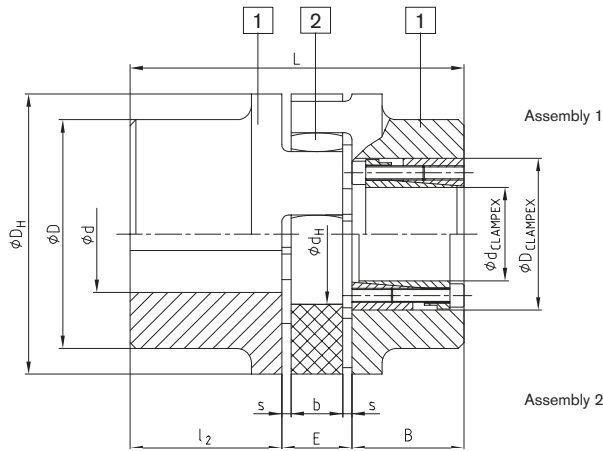
Special surface forming (knurling according to DIN 82) allows the fan to be pressed or bonded onto the hub collar.



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

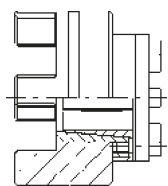


Components

ROTEX® with clamping set CLAMPEX® KTR 200															
Size	d, D, D1	Hub material	CLAMPEX® KTR 200			Dimensions [mm]									
			Max. size of KTR clamping set dxD	Transmittable torque and axial force		B	l <sub>2</sub>	E	s	b	D <sub>H</sub>	D	d <sub>H</sub>	L	
T [Nm]	F <sub>AX</sub> [kN]														
42	See jaw couplings on page 34 to 36 For stock programme / basic programme see page 32 and 33	Steel Component 1	30x55	769	51	48	50	26	3.0	20	95	—	46	Length = l <sub>2</sub> + 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			65x95	4107	126	59	100	45	5.5	34	200	160	100		
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			
			Component 1												
			GJS												

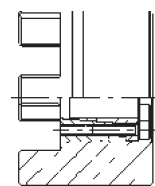
Technical data of CLAMPEX® KTR 200																	
KTR 200 size	Length	Transmittable torque and axial force		Clamping screws DIN EN ISO 4762 - 12.9		KTR 200 size	Length	Transmittable torque and axial force		Clamping screws DIN EN ISO 4762 - 12.9		KTR 200 size	Length	Transmittable torque and axial force		Clamping screws DIN EN ISO 4762 - 12.9	
dxD	B	T [Nm]	F <sub>ax</sub> [kN]	zxM	T <sub>A</sub> [Nm]	dxD	B	T [Nm]	F <sub>ax</sub> [kN]	zxM	T <sub>A</sub> [Nm]	dxD	B	T [Nm]	F <sub>ax</sub> [kN]	zxM	T <sub>A</sub> [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



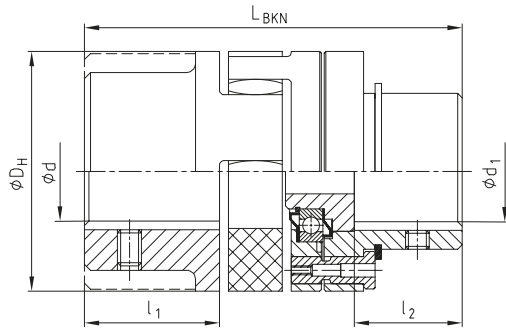
Frictionally engaged, backlash-free shaft-hub-connection for transmitting average torques.

#### Type 4.3 with CLAMPEX® clamping set KTR 400



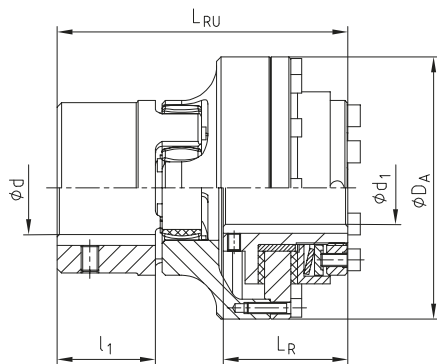
Frictionally engaged, backlash-free shaft-hub-connection for transmitting bigger torques. Maximum size of clamping set depends on the hub collar diameter. Clamping set screw fitting possible both internally and externally. For details of calculation see CLAMPEX® catalogue.

## Other types with torque limiters



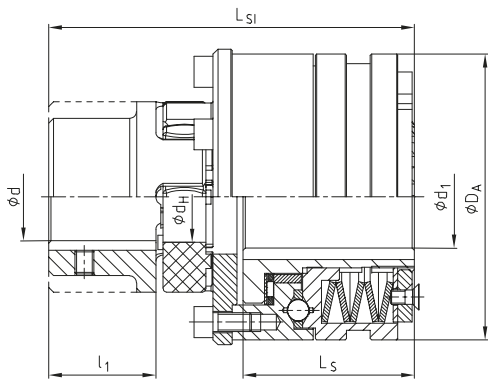
ROTEX® BKN - Shear pin coupling, type BKN							
Size	Max. finish bore d	Max. finish bore d <sub>1</sub>	l <sub>1</sub>	l <sub>2</sub>	L <sub>BKN</sub>	D <sub>H</sub>	Min. fracture torque [Nm]
28	See jaw couplings on page 34 to 36 Stock programme/basic programme on page 32 and 33	28	35	25	101	65	100
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

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

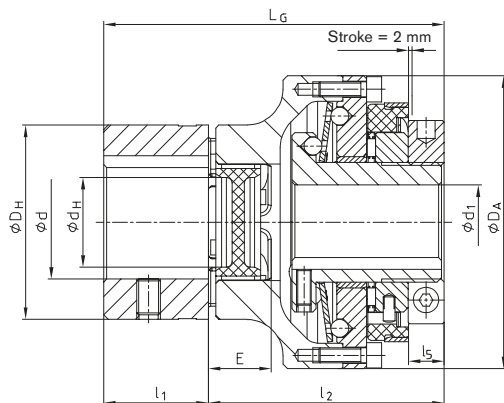


ROTEX® - RUFLEX® - Overload coupling									
ROTEX® size	RUFLEX® size	Ratchet torques [Nm]	d	d <sub>1</sub> max.	D <sub>A</sub>	l <sub>1</sub>	L <sub>R</sub>	L <sub>RU</sub>	
14	00	0.5 - 5	See jaw couplings on page 34 to 36; stock programme/basic programme on page 32 and 33	10	44	11	31	59	
19	0	2 - 20		20 <sup>1)</sup>	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	

<sup>1)</sup> Finish bore exceeding Ø19, feather keyway according to DIN 6885 sheet 3

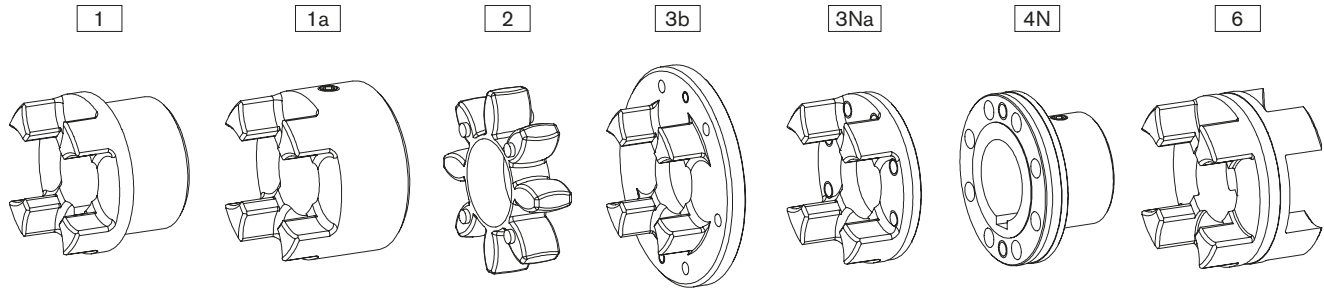


ROTEX® - KTR-SI - Overload coupling									
ROTEX® size	KTR-SI type	KTR-SI size	Ratchet torques [Nm]	d	Max. d <sub>1</sub>	D <sub>A</sub>	l <sub>1</sub>	L <sub>S</sub>	L <sub>SI</sub>
28	DK	2	12-200	See jaw couplings on page 34 to 36 Stock programme/basic programme on page 32 and 33	35	100	35	56	124
	SR/SGR	0	5-40		20	55		34.5	102
38	DK	3	25-450		45	120	45	73	155
	SR/SGR	1	12-100		25	82		48	129.5
48	DK	4	50-1000		55	146	56	93.5	194
	SR/SGR	2	25-200		35	100		56	155
55	DK	5	85-2000		65	176	65	107	222.5
	SR/SGR	3	50-450		45	120		73	186
75	DK	—	—		—	—	85	—	—
	SR/SGR	4	100-2000	55	146	93.5		241.5	
90	DK	—	—	—	—	100	—	—	
	SR/SGR	5	170-3400	65	176		107	275.5	



SYNTAX® - Backlash-free, torsionally rigid overload coupling with ROTEX® GS																
ROTEX® size	SYNTAX® size	SYNTAX® torque range disk spring [Nm]				Max. bore		D <sub>A</sub>	D <sub>H</sub>	d <sub>H</sub>	E	L	L <sub>G</sub>	l <sub>1</sub>	l <sub>2</sub>	l <sub>5</sub>
		DK <sub>1</sub>	DK <sub>2</sub>	SK <sub>1</sub>	SK <sub>2</sub>	d	d <sub>1</sub>									
24	20	6-20	15-30	10-20	20-65	35	20	80	55	27	18	45	100	30	70	10
28	25	20-60	45-90	25-65	40-100	40	25	98	65	30	20	50	113	35	78	11
38	35	25-80	75-150	30-100	70-180	48	35	120	80	38	24	60	136	45	91	13
48	50	60-180	175-300	80-280	160-400	55	50	162	105	51	28	70	167	56	111	14

## Weights and mass moments of inertia



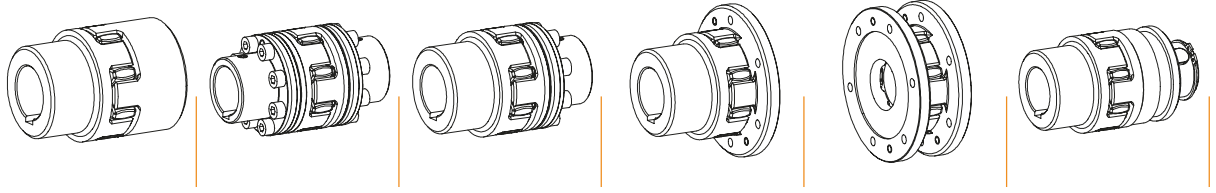
ROTEX® individual components														
Size	Standard hub				Large hub			Spider	Driving flange				Coupling flange	DKM spacer
	Component 1				Component 1a			Component 2	Component 3b	Component 3Na			Component 4N	Component 6
	Alu [kg] [kgm²]	GJL [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	Alu [kg] [kgm²]	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	—	

Weight and mass moment of inertia each refer to the average finish bore without feather keyway.

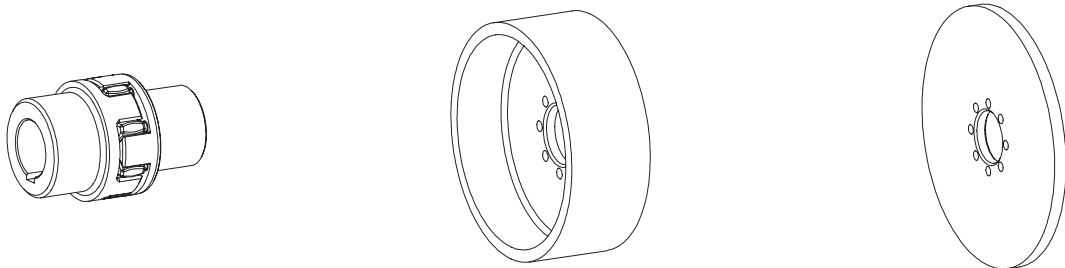
For continuously updated data please refer to our online catalogue at [www.ktr.com](http://www.ktr.com)

# ROTEX® Flexible jaw couplings

## 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	0.003037	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 <sup>1)</sup>		
Brake drum ØD <sub>B</sub> 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 <sup>1)</sup>		
Brake disk ØA x G <sub>S</sub>	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