

# FLEXIBLE JAW AND PIN & BUSH COUPLINGS

## TYPES AND OPERATING DESCRIPTION

### Properties of flexible jaw and pin & bush couplings

				
Product	ROTEX®	POLY-NORM®	POLY	REVOLEX®
Type	Torsionally flexible jaw-type coupling			Torsionally flexible pin & bush coupling
<b>Properties</b>				
Torsionally flexible	●	●	●	●
Damping vibrations	●	●	●	●
Maintenance-free	●	●	●	●
Axial plug-in	●	●	●	●
Shear type			●	
Fail-safe	●	●		●
Compensating for misalignment	●	●	●	●
<b>Types</b>				
Variant diversity	very high	average	average	high
Special features	Extensive basic programme available from stock while customized solutions can be realized	Basic programme available from stock	Basic programme available from stock	Extensive programme, ideal for customized solutions, for applications with high performances
Applications/core industries	Manifold applications, applicable in all industries	Pump industry, industrial gearboxes	Chemical pumps, high-pressure pumps,...	Industrial gearboxes, conveyor systems, industrial fans, rope-ways, agitators, generators, ...
Surface	All-over machining, very good dynamic properties	Shell surface machined	Shell surface machined	All-over machining, very good dynamic properties
<b>Torque range TKN [Nm]</b>				
Min.	1	40	42	3800
Max.	35.000	67.000	6.100	1.220.000
<b>Max. circumferential speed v [m/s]</b>				
Cast EN-GJL (dynamic balancing)	35	35	35	35
Steel + cast EN-GJS (dynamic balancing)	60			60
<b>Hub materials available</b>				
Steel (semi-finished product) » customized solutions available	●			●
Cast iron (GJL) » subject to mould	●	●	●	●
Nodular iron (GJS) » subject to mould	●	○		○
Aluminium semi-finished product (Al-H) » customized solution available	●			
Aluminium diecast (Al-D)	●			
Stainless steel	●			
Corrosion-protected types	●	○	○	○
<b>Spiders / elastomers</b>				
Material	T-PUR, PA, PEEK, Hytrel, ...	NBR (up to size 180) T-PUR (from size 200)	NBR	NR, NBR NBR electrically insulating
Degree of hardness	flexible to torsionally rigid	flexible	flexible	flexible
Temperature range in °C, min. / max. (standard)	- 50 / + 120	- 30 / + 80	- 30 / + 80	- 30 / + 80
Temperaturbereich in °C, min. / max. (Sonder)	- 50 / + 250	- 30 / + 80	- 30 / + 80	- 50 / + 80

● ≈ Standard  
○ ≈ On request

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Type	Torsionally flexible jaw-type coupling			Torsionally flexible pin & bush coupling
<b>Geometries</b>				
Design	compact	short	short	short
Mass moment of inertia	low	average	high	average
Shaft distance dimension	low / average	low	low	low
<b>Types (extract)</b>				
Elastomers can be disassembled radially » with no need of displacing driving/driven side	AFN, A-H, S-H, ZR, DF, DNF, CF-H	ADR, ADR-SB	PKD	standard
Intermediate shaft types » bridging larger shaft distances	ZR, ZWN	-	-	customized
Standard spacers 100 mm to 250 mm	ZS-DKM-H	AZR	PKA	customized
Shaft-to-shaft connection	standard	standard	standard	standard
Flange-to-shaft connection	CF, CFN	-	-	customized
Flange-to-flange connection » particularly short mounting lengths	DF, DNF	-	-	customized
Double-cardanic » compensating for big displacements » lower restoring forces	ZS-DKM-H, ZR, ZWN	-	-	-
<b>Certifications/type examinations</b>				
ATEX 	●	●	●	●
UL-listed 	●			
GOST R/ GOST TR 	●	●	●	●
DNV/GL 	●			●
ABS 	●			○
Bureau Veritas 	●			○
LR 	○			○
RS CLASS 	○			○
CCS 	○			○

● ≈ Standard  
○ ≈ On request

ROTEX®

POLY-NORM®

POLY

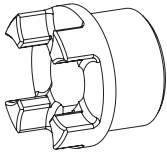
REVOLEX®

# ROTEX®

## Flexible jaw couplings

### Hub types

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



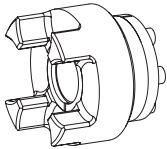
#### Type 1.0 hub with feather keyway and setscrew

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

Type 1.1 hub without feather keyway with setscrew

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

Type 1.3 hub with spline bore (see page 32)

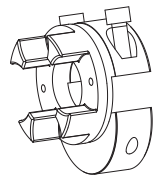


#### Type 4.2 hub with CLAMPEX® clamping set KTR 250

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

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

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

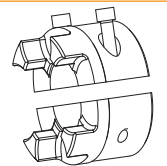


#### Type 7.5 clamping hub type DH without feather keyway for double-cardanic connection

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

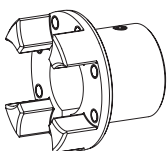
Type 7.6 clamping hub type DH with feather keyway for double-cardanic connection

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



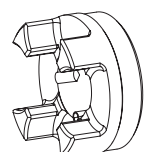
#### Type 7.0 SPLIT hub without feather keyway

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



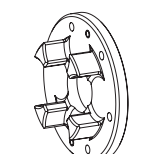
#### FNN hub

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



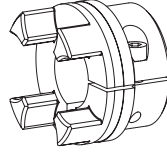
#### TB1 hub/TB2 hub

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



#### Mitnehmerflansch Ausf. 3b

Driving flange to connect to customer's component. Dimensions see page 50.



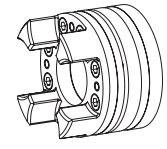
#### Type 2.0 clamping hub single slotted without feather keyway

Frictionally engaged, backlash-free shaft-hub-connection. Transmittable torques depending on bore diameter (see page 42). (For ATEX category 3 only)

Type 2.1 clamping hub single slotted with feather keyway

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

Type 2.3 clamping hub with spline bore (see page 42)

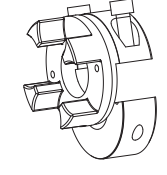


#### Type 6.0 clamping ring hub (see ROTEX® GS series)

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

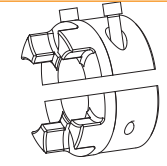


#### Type 7.8 clamping hub type H without feather keyway

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

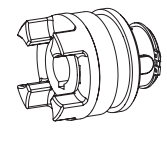
Type 7.9 clamping hub type H with feather keyway

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



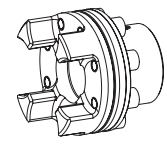
#### Type 7.1 SPLIT hub with feather keyway

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



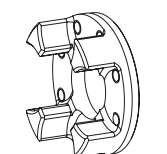
#### SD hub shifting hub

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



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

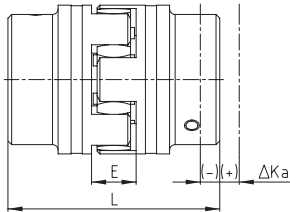
For type AFN and BFN:  
With type AFN the spider can be replaced while being assembled without having to disassemble the driving and driven side.



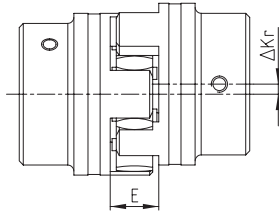
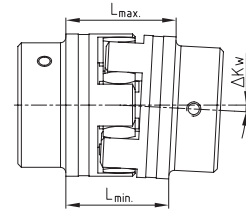
#### Mitnehmerflansch Ausf. 3Na

Driving flange to connect to customer's component. Dimensions see page 50.

## Displacements

**Axial displacement  $\Delta K_a$** 


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

**Radial displacement  $\Delta K_r$** 

**Angular displacement  $\Delta K_w$  [degrees]**


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

**Displacements for spider 92 and 98 Shore-A**

ROTEX® Size	14	19	24	28	38	42	48	55	65	75	90	100	110	125	140	160	180
Max. axial displacement $\Delta K_a$ [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 $\Delta K_w$ [degrees]	1,2	1,2	0,9	0,9	1,0	1,0	1,1	1,1	1,2	1,2	1,2	1,2	1,3	1,3	1,2	1,2	1,2
$\Delta K_w$ [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 for spider 64 Shore-D**

ROTEX® size	14	19	24	28	38	42	48	55	65	75	90	100	110	125	140	160	180
Max. axial displacement $\Delta K_a$ [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 $\Delta K_w$ [degrees]	1,1	1,1	0,8	0,8	0,9	0,9	1,0	1,0	1,1	1,1	1,1	1,1	1,2	1,2	1,1	1,1	1,1
$\Delta K_w$ [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 $\Delta K_w$ [degrees]	0,60	0,45	0,45	0,50	0,50	0,55	0,55	0,55	0,60	0,60	0,60	0,60	0,65	0,65	0,60
$\Delta K_w$ [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 figures of displacement of flexible ROTEX® couplings are standard values taking into account the load of the coupling up to the rated torque TKN and an operating speed  $n = 1500$  rpm along with an ambient temperature of  $+30^\circ\text{C}$ .



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



# ROTEX®

## Flexible jaw couplings

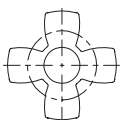
### Properties of standard spiders

Spider type (hardness Shore)	92 Shore-A (T-PUR®)	92 Shore-A
	 <b>T-PUR®</b>	
Size	14 to 180	14 to 90
Material	T-PUR®	Polyurethane (PUR)
Permissible temperature range Permanent temperature Short-term temperature	-50 °C to +120 °C -50 °C to +150 °C	-40 °C to +90 °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>

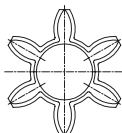
Spider type (Shore hardness)	98 Shore-A (T-PUR®) <sup>1)</sup>	98 Shore-A <sup>1)</sup>
	 <b>T-PUR®</b>	
Size	14 to 180	14 to 90
Material	T-PUR®	Polyurethane (PUR)
Permissible temperature range Permanent temperature Short-term temperature	-50 °C to +120 °C -50 °C to +150 °C	-30 °C to +90 °C -40 °C to +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
	 <b>T-PUR®</b>	
Size	14 to 180	14 to 90
Material	T-PUR®	Polyurethane (PUR)
Permissible temperature range Permanent temperature Short-term temperature	-50 °C to +120 °C -50 °C to +150 °C	-30 °C to +110 °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>

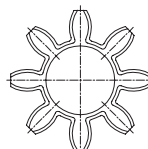
ROTEX® 14



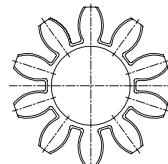
ROTEX® 19



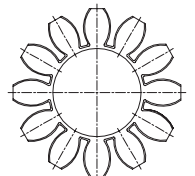
ROTEX® 24 - 65



ROTEX® 75 - 160



ROTEX® 180



### Technical data of standard spiders

92 Shore-A Zahnkranz aus T-PUR® und PUR															
ROTEX® Size	max. Speed		Twist angle $\phi$ bei		Torque [Nm]				Damping power P <sub>KW</sub> [W] <sup>1)</sup>	Relative damping $\psi$	Resonance factor V <sub>R</sub>	Torsion spring stiffness C dyn. [Nm/rad]			
	V=35 m/s GJL	V=40 m/s steel	T <sub>KN</sub>	T <sub>K max</sub>	DIN 740 <sup>1)</sup>			T <sub>Kmax. Rated</sub> <sup>2)</sup>				1,0 T <sub>KN</sub>	0,75 T <sub>KN</sub>	0,5 T <sub>KN</sub>	0,25 T <sub>KN</sub>
					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 Zahnkranz aus T-PUR® und PUR															
ROTEX® Size	max. Speed		Twist angle $\phi$ bei		Torque [Nm]				Damping power P <sub>KW</sub> [W] <sup>1)</sup>	Relative damping $\psi$	Resonance factor V <sub>R</sub>	Torsion spring stiffness C dyn. [Nm/rad]			
	V=35 m/s GJL	V=40 m/s steel	T <sub>KN</sub>	T <sub>K max</sub>	DIN 740 <sup>1)</sup>			T <sub>Kmax. Rated</sub> <sup>2)</sup>				1,0 T <sub>KN</sub>	0,75 T <sub>KN</sub>	0,5 T <sub>KN</sub>	0,25 T <sub>KN</sub>
					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>	16,6x10 <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>	787,6x10 <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 Zahnkranz aus T-PUR® und PUR															
ROTEX® Size	max. Speed		Twist angle $\phi$ bei		Torque [Nm]				Damping power P <sub>KW</sub> [W] <sup>1)</sup>	Relative damping $\psi$	Resonance factor V <sub>R</sub>	Torsion spring stiffness C dyn. [Nm/rad]			
	V=35 m/s GJL	V=40 m/s steel	T <sub>KN</sub>	T <sub>K max</sub>	DIN 740 <sup>1)</sup>			T <sub>Kmax. Rated</sub> <sup>2)</sup>				1,0 T <sub>KN</sub>	0,75 T <sub>KN</sub>	0,5 T <sub>KN</sub>	0,25 T <sub>KN</sub>
					Rated (TKN)	Max (TK max)	Vibratory (TKW)								
14	22200	25400	6,4°	10°	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 page 11  
<sup>2)</sup> ≤ 1000 load changes  
<sup>3)</sup> with +30°C



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

Unless explicitly specified in your order, we will supply spiders with Shore hardness 92 Sh-A T-PUR®.  
 For circumferential speeds exceeding V = 30 m/s, dyn. balancing is necessary For circumferential speeds exceeding V = 35 m/s only steel or nodular iron.  
<sup>1)</sup>With +30 °C

# ROTEX®

## Flexible jaw couplings

### Technical data and properties of special spiders

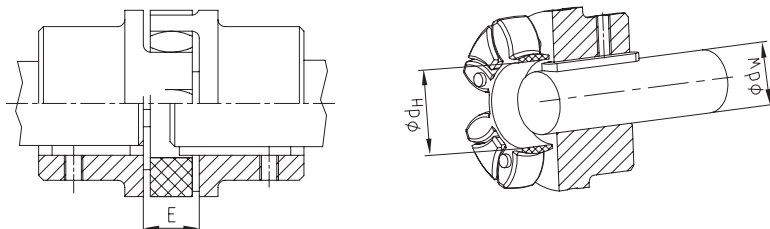
		
Spider type	PA	PEEK
Material	Polyamide	Polyetheretherketone
Permissible temperature range Permanent temperature Short-term temperature	-20 °C to +130 °C 1) -30 °C to +150 °C 1)	up to +180 °C (ATEX to +160 °C) up to +250 °C
Properties	<ul style="list-style-type: none"> <li>- small twisting angle and high torsion spring stiffness</li> <li>- transmission of very high torques with very low damping</li> <li>- good resistance to chemicals 1)</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			
	TKN [Nm]	PA, PEEK	
		TK max [Nm]	TKW [Nm]
14	22	44	5,5
19	30	60	8,0
24	105	210	27,5
28	280	560	73
38	565	1130	147
42	785	1570	204
48	915	1830	238
55	1200	2400	312
65	1645	3290	427
75	2560	5130	667
90	6300	12600	1640
100	8650	17300	2250
110	10500	21000	2730
125	13000	26000	3380

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

### Installation of spider



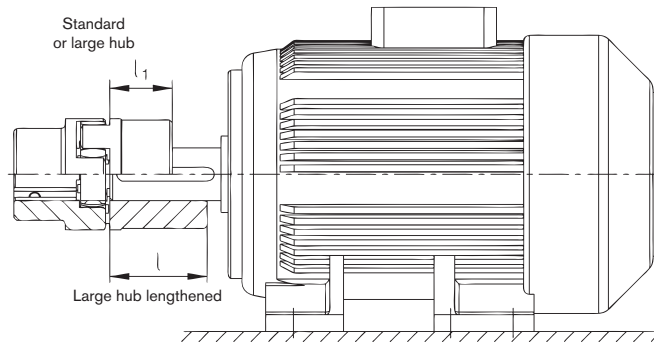
Shaft  $\varnothing d_W$  with feather key (acc. to DIN 6885 sheet) <sup>1)</sup> protruding into the spider  $\varnothing d_H$

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

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



### Selection of standard IEC motors



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

A. C. motor 50 Hz		Motor output n= 3000 RPM 2 poles		ROTEX® coupling size	Motor output n= 1500 RPM 4 poles		ROTEX® coupling size	Motor output n= 1000 RPM 6 poles		ROTEX® coupling size	Motor output n= 750 RPM 8 poles		ROTEX® coupling size
Size	Shaft end dxl [mm]		Output P [kW]		Torque T [Nm]	Output P [kW]		Torque T [Nm]	Output P [kW]		Torque T [Nm]	Output P [kW]	
	2-pole	4, 6, 8 pole		Output P [kW]			Torque T [Nm]			Output P [kW]			Torque T [Nm]
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		0,18	1,3		0,09	1,1			
71	14 x 30		0,37	1,3	14	0,25	1,8	14	0,18	2	14	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	19	1,1	7,5	19	0,75	8	19	0,37	5,3
90L			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
						3	20					1,1	16
112M			4	13	24	4	27	24	2,2	22	24	1,5	21
132S			5,5	18		5,5	36					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								5,5	74
160L			18,5	60	38	15	98	38	11	109	38	7,5	100
180M	48 x 110		22	71									
180L					42	22	144	42	15	148	42	11	145
						30	196					18,5	181
200L	55 x 110		30	97	42			42	22	215	42		
			37	120									
225S	55 x 110				48	37	240	48			48	18,5	244
225M	60 x 140	60 x 140	45	145									
250M	60 x 140	65 x 140	55	177	48	55	356	55	37	361	55	30	392
280S			75	241								45	438
280M	75 x 140		90	289	55	90	581	55	55	535	55	45	587
315S			110	353								75	727
315M	80 x 170		132	423	65	132	849	65	90	873	65	75	971
			160	513								110	1070
315L	65 x 140		200	641	75	200	1290	90	132	1280	90	110	1420
										160		1550	
315	85 x 170		250	802	75	250	1600	90	200	1930	90	160	2070
			315	1010								250	2410
			355	1140	90	355	2280	100			100		
355	75 x 140	95 x 170	400	1280								315	3040
			500	1600	90	500	3210	110	400	3850	125	315	4060
			560	1790								450	4330
400	80 x 170	110 x 210	630	2020	100	630	4030	125	500	4810	140	400	5150
			710	2270								560	5390
			800	2560	100	800	5120	140	630	6060	140	500	6420
450	90 x 170	120 x 210	900	2880								710	6830
			1000	3200	110	1000	6400	160	800	7690	160	630	8090

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

<sup>1)</sup> Dimensions see series ROTEX® GS

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

### Cylindrical bores and spline bores

ROTEX® Size/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 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	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 spline bores to DIN 5482										
Size	Pitch circle	Pitch	No. of teeth	Profile correction	Size	Pitch circle	Pitch	No. of teeth	Profile correction	
A 17 x 14	14,40	1,6	9	+0,600 <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 spline bores to DIN 5480							
Spline code	Pitch circle	Pitch	No. of teeth	Spline code	Pitch circle	Pitch	No. of teeth
20 x 1 x 18 x 7H	18,0	1	18	40 x 2 x 18 x 8H	36,0	2	18
20 x 1,25 x 14 x 7H	17,5	1,25	14	45 x 2 x 21 x 7H	41,0	2	21
25 x 1,25 x 18 x 7H	22,5	1,25	18	48 x 2 x 22 x 9H	44,0	2	22
28 x 1,25 x 21 x 7H	26,25	1,25	21	50 x 2 x 24 x 8H	48,0	2	24
30 x 2 x 14 x 7H	26,0	2	14	60 x 2 x 28 x 8H	56,0	2	28
32 x 2 x 14 x 8H	28,0	2	14	75 x 3 x 24 x 7H	72,0	3	24
35 x 2 x 16 x 8H	32,0	2	16	80 x 3 x 25 x 8H	75,0	3	25

Basic programme spline bores acc. to DIN 9611 (p.t.o. shaft spline)				
Size	Width of keyway	No. of teeth	Tip circle	Root circle
1 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 ask us about the corresponding hub length of the spline code!

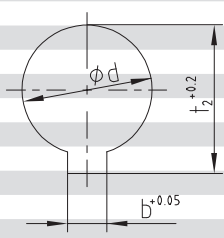
<sup>1)</sup> For clamping hubs only, for plug-in hubs use code PT or PQ.

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

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

### Inch bores and taper bores

Stock programme 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	4,76+0,051	18,008	●	●								
DNH	11/16	3/16	17,462 +0,0254	4,76+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	4,76+0,051	21,259	●	●	●	●						
G	7/8	3/16	22,225+0,0254	4,76+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	4,782 +0,051	27,8										
Hs	1	1/4	25,4+0,0254	6,35+0,051	28,295			●	●						
R	1 1/16	3/16	26,987+0,0254	4,782 +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	7,93 +0,051	32,105										
Js	1 1/4	1/4	31,75+0,0254	6,35+0,051	34,72				●						
K	1 1/4	5/16	31,75+0,0254	7,93+0,051	35,3				●	●	●	●	●		
Ma	1 3/8	5/16	34,925+0,0254	7,93+0,051	38,56			●	●						
RH1	1 3/8	3/8	34,93+0,0254	9,55+0,063	38,56										
Cb	1 7/16	3/8	36,5125+0,0254	9,55+0,063	39,325										
Ca	1 1/2	5/16	38,1+0,0254	7,93+0,051	41,783										
C	1 1/2	3/8	38,1+0,0254	9,55+0,063	42,39			●	●	●	●	●	●	●	
Nb	1 5/8	3/8	41,275+0,0254	9,55+0,063	45,6				●	●					
Ls	1 3/4	3/8	44,45+0,0254	9,55+0,063	48,8										
L	1 3/4	7/16	44,45+0,0254	11,11+0,063	49,43										
Lu	1 7/8	1/2	45,94+0,0254	12,7+0,063	53,24										
Da	1 15/16	1/2	47,47+0,0254	12,7+0,063	54,86										
Ds	2	1/2	50,8+0,0254	12,7+0,063	56,46										
D	2	1/2	50,8+0,0254	12,7+0,063	55,1										
Pa	2 1/8	1/2	53,975+0,0254	12,7+0,063	59,69										
U	2 1/4	1/2	57,15+0,0254	12,7+0,063	62,92										
Ub	2 3/8	5/8	60,325+0,0254	15,875+0,076	67,34										
Wd	3 3/8	7/8	87,725+0,0254	22,225+0,076	95,504										
Wf	3 5/8	7/8	92,075+0,0254	22,225+0,076	101,96										

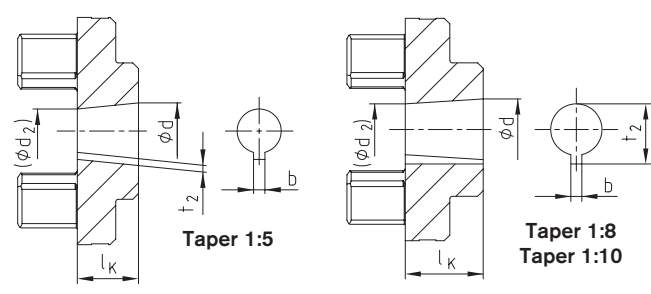


Basic programme taper 1:3					
Code	d <sup>+0,05</sup>	(d <sub>2</sub> )	b <sup>JS9</sup>	t <sub>2</sub> <sup>+0,1</sup>	l <sub>K</sub>
N/ 1	9,7	7,575	2,4 <sup>+0,05</sup>	10,85	17,0
N/ 1c	11,6	9,5375	3 <sup>JS9</sup>	12,90	16,5
N/ 1e	13,0	10,375	2,4 <sup>+0,05</sup>	13,80	21,0
N/ 1d	14,0	11,813	3 <sup>JS9</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

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

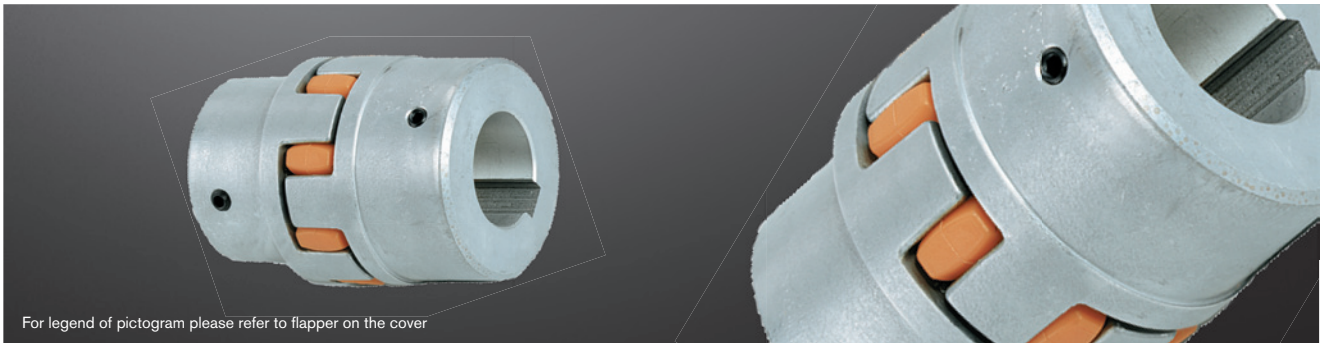
Basic programme taper 1:10					
Code	d <sup>+0,05</sup>	(d <sub>2</sub> )	b <sup>JS9</sup>	t <sub>2</sub> <sup>+0,1</sup>	l <sub>K</sub>
CX	19,95	16,75	5 <sup>JS9</sup>	22,08	32
DX	24,95	20,45	6 <sup>JS9</sup>	26,68	45
EX	29,75	24,75	8 <sup>JS9</sup>	31,88	50

Basic programme taper 1:5					
Code	d <sup>+0,05</sup>	(d <sub>2</sub> )	b <sup>JS9</sup>	t <sub>2</sub> <sup>+0,1</sup>	l <sub>K</sub>
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

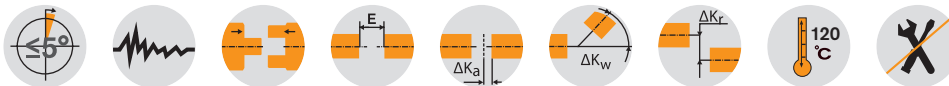


# ROTEX® Standard Flexible jaw couplings

## Material cast + powder metal



For legend of pictogram please refer to flapper on the cover



### ROTEX® Sintered steel (Sint)

Size	Component	Spider (part 2) <sup>1)</sup> Rated torque [Nm]			Finish bore d	Dimensions [mm]												
		92 Sh-A	98 Sh-A	64 Sh-D		General												
						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]	
14	1a	7,5	12,5	16	ungeb.: 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	ungeb., 14, 16, 19, 20, 22, 24	66	25	16	12	2,0	40	18	40	-	M5	10	2	
24	1a	35	60	75	ungeb., Ø 24	78	30	18	14	2,0	56	27	40	-	M5	10	2	

### ROTEX® Aluminium diecast (AI-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® 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
	14-45				94												
48	1b	310	525	655	14-55	176	75	28	21	3,5	105	51	65	45	M8	20	10
	15-52				85												
55	1a	410	685	825	48-62	188	80	30	22	4	120	60	45	52	M10	20	17
	15-62				69												
65	1	625	940	1175	20-60	160	65	30	22	4	120	60	98	61	M10	20	17
	55-74				118												
75	1	625	940	1175	22-70	185	75	35	26	4,5	135	68	115	61	M10	20	17
90	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

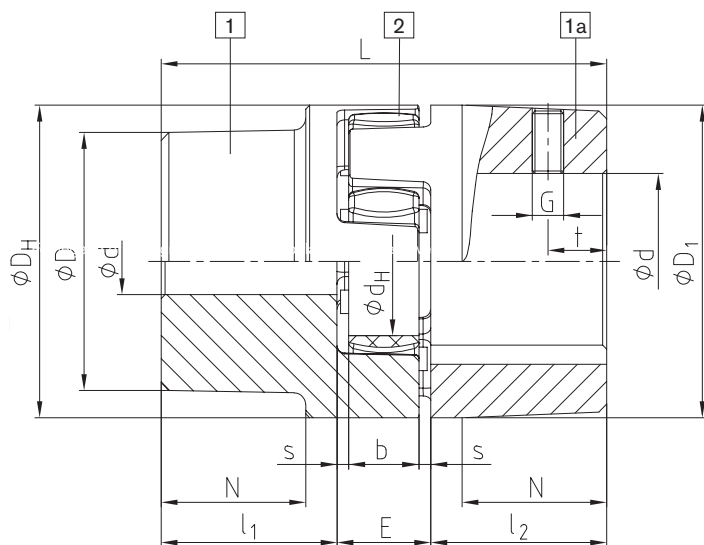
■ = If no material is specified in the order, it is stipulated in the calculation/order.

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

Ordering example:

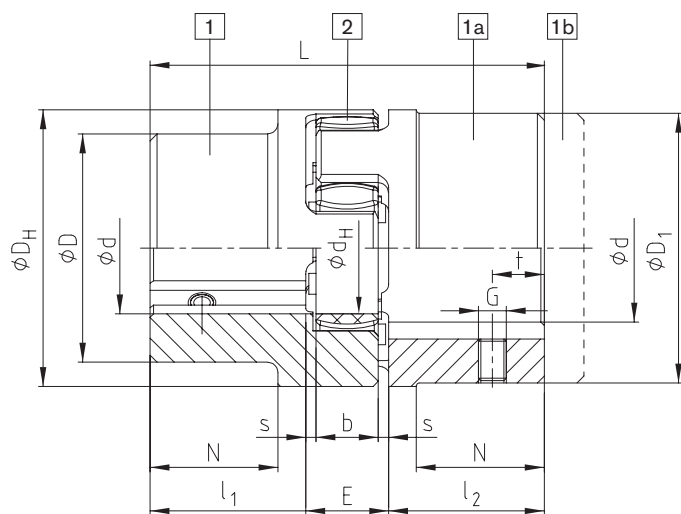
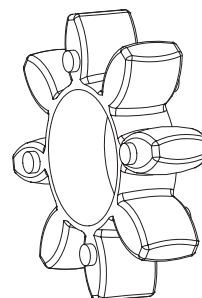
ROTEX® 38	GJL	92 Sh-A	1a	Ø 45	1	Ø 25
Coupling size	Material	Spider hardness	Component	Finish bore	Component	Finish bore

Components

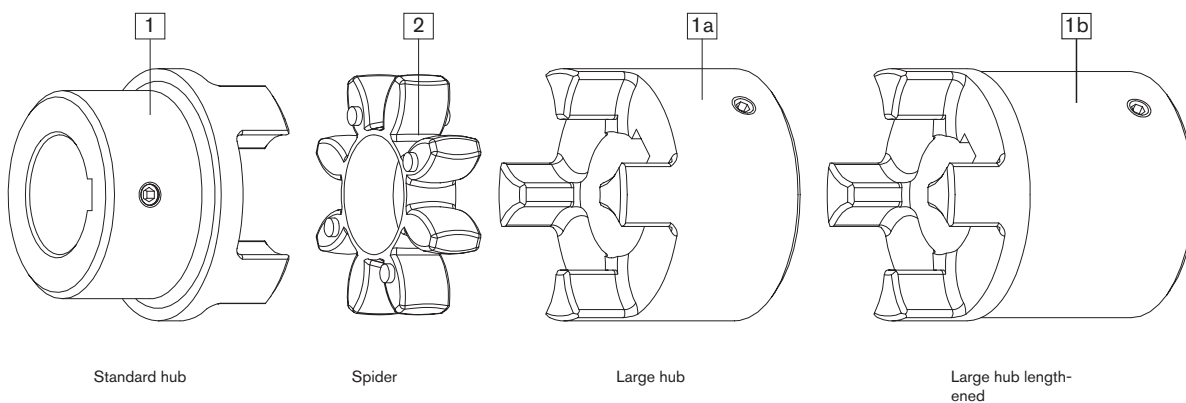


AL-D (thread opposite to the keyway)

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

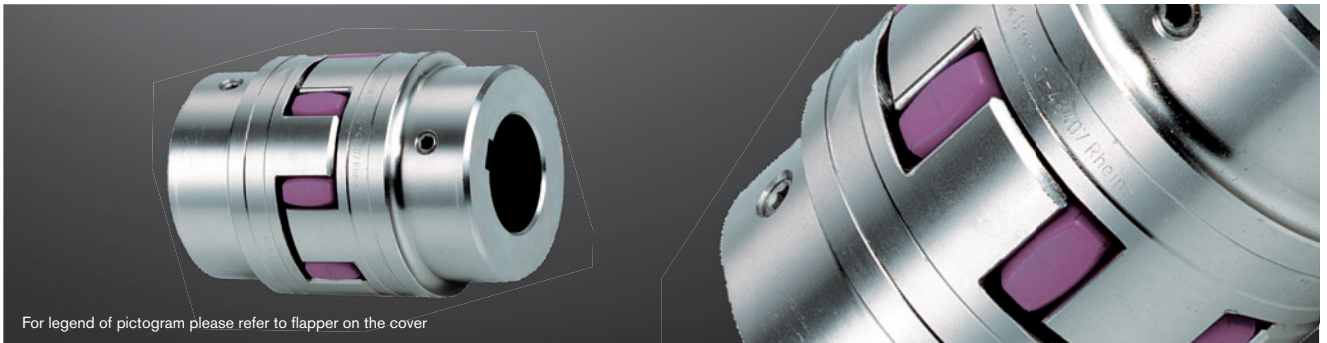


GJL / GJS (thread on the keyway)

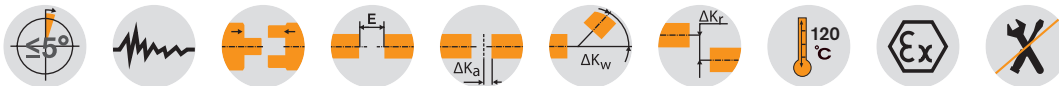


# ROTEX® Standard Flexible jaw couplings

## Material steel



For legend of pictogram please refer to flapper on the cover



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

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

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



### Use in fire extinguisher pumps

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

Sizes available:

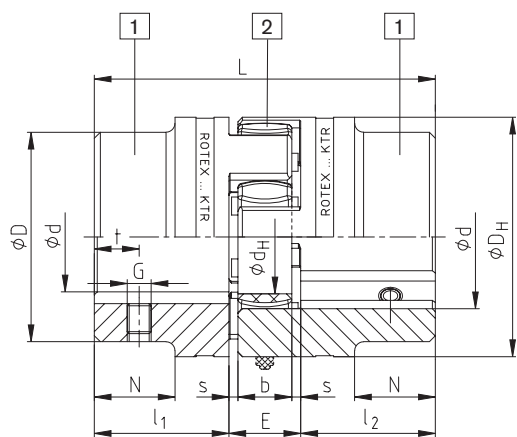


ROTEX® UL-Listed									
Size	Component	Material	Spider (part 2) Rated torque [Nm]	Dimensions [mm]					
				Finish bore d (min-max)	L	l <sub>1</sub> ; l <sub>2</sub>	E	D <sub>H</sub>	
									92 Sh-A
42	1	St	265	18-55	126	50	26	95	
55	1	St	410	24-74	160	65	30	120	
65	1	St	625	24-80	185	75	35	135	
75	1	St	1280	24-95	210	85	40	160	
90	1	St	2400	30-110	245	100	45	200	

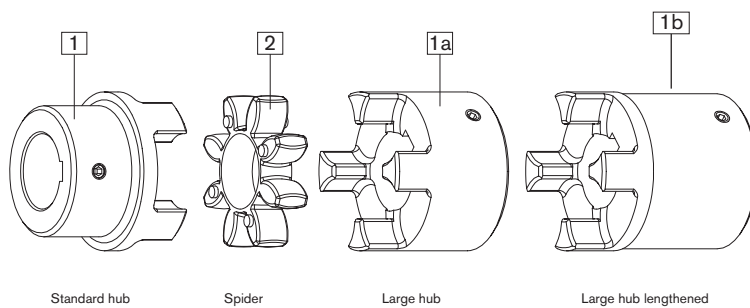
\* For complete dimensions see table on page 36

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

Components



Steel (thread on the keyway)



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

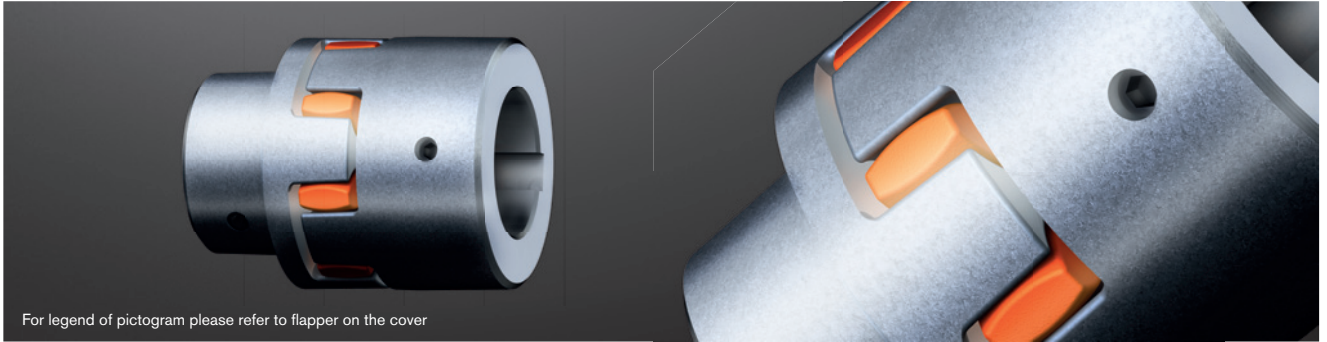
Marine programme:

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

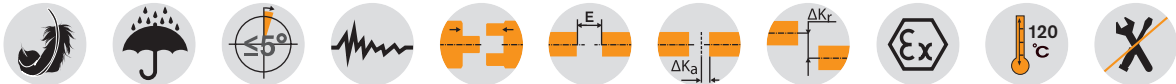


# ROTEX® Standard Flexible jaw couplings

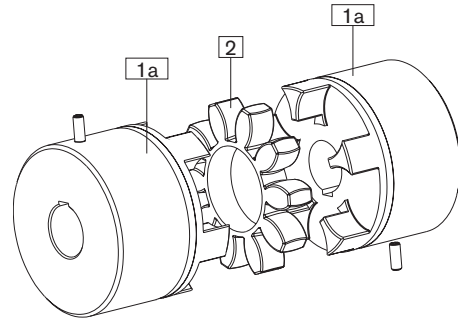
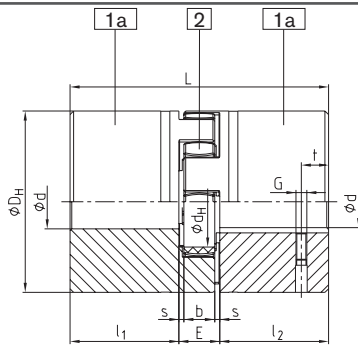
## Material aluminium



For legend of pictogram please refer to flapper on the cover



### Components



### ROTEX® Aluminium (AL-H)

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

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

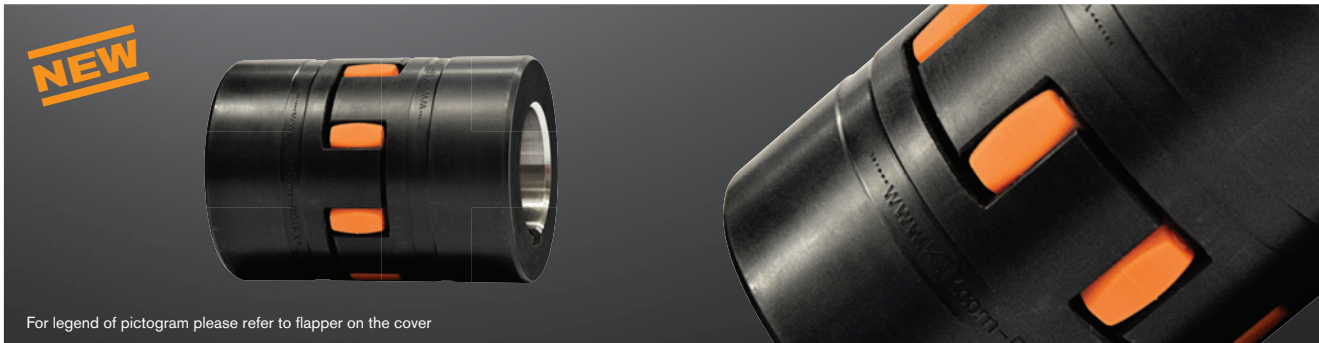
### Ordering example:

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

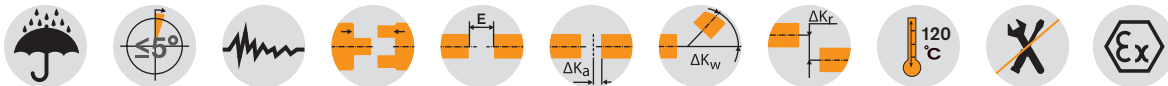


# ROTEX® Standard Flexible jaw couplings

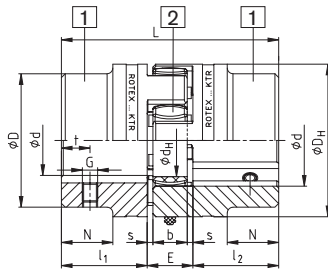
Material steel with CDP coating, stainless steel



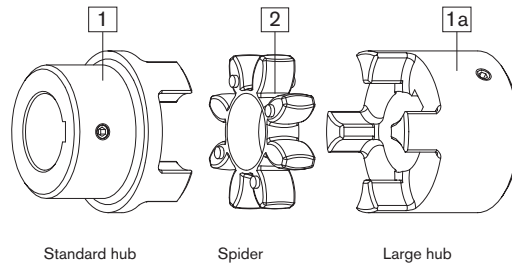
For legend of pictogram please refer to flapper on the cover



## Components



Steel (thread on the keyway)



ROTEX® with CDP coating <sup>1)</sup>																	
Size	Component	Spider (part 2) Rated torque [Nm]			Finish bore d (min-max)	Dimensions [mm]											
						General											Thread for setscrew
		92 Sh-A	98 Sh-A	64 Sh-D		L	l <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

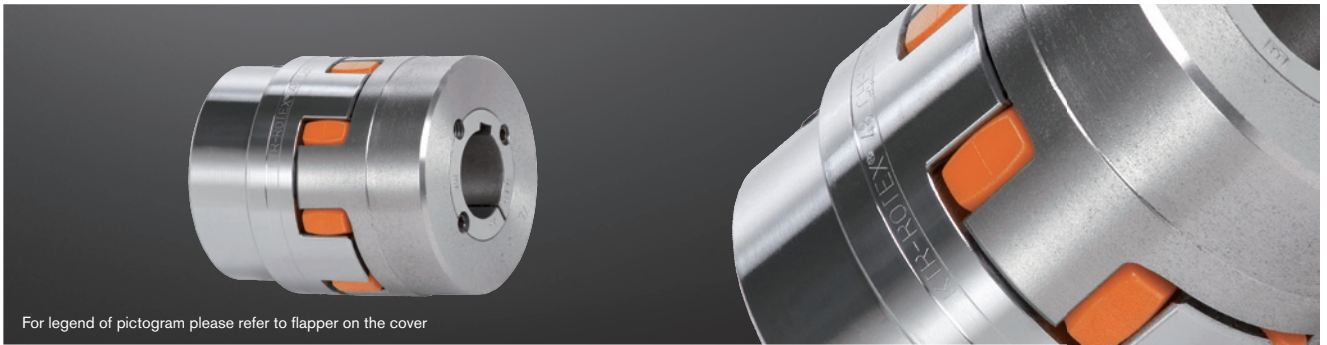
<sup>1)</sup> Corrosion protection class to DIN EN ISO 12944: Min. C4, heavy-long

ROTEX® Stainless steel																	
Size	Material	Spider (part 2) Rated torque [Nm]			Finish bore d (min - max)	Dimensions [mm]											
						General											Thread for setscrew
		92 Sh-A	98 Sh-A	64 Sh-D		L	l <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	1.4305	10	17	21	0-25	66	25	16	12	2	40	18	40	-	M5	10	2
24	1.4571	35	60	75	0-35	78	30	18	14	2	55	27	55	-	M5	10	2
28	1.4305	95	160	200	0-40	90	35	20	15	2,5	65	30	65	-	M8	15	10
38	1.4571	190	325	405	0-48	114	45	24	18	3	80	38	70	27	M8	15	10
42	1.4305	265	450	560	0-55	126	50	26	20	3	95	46	85	28	M8	20	10
48	1.4571	310	525	655	0-62	140	56	28	21	3,5	105	51	95	32	M8	20	10

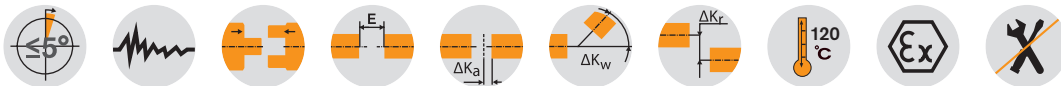
Ordering example:	ROTEX® 38	St+KTL	92 Sh-A	1 - Ø 45		1 - Ø 25	
	Coupling size	Material	Spider hardness	Component	Finish bore	Component	Finish bore

# ROTEX® Flexible jaw couplings

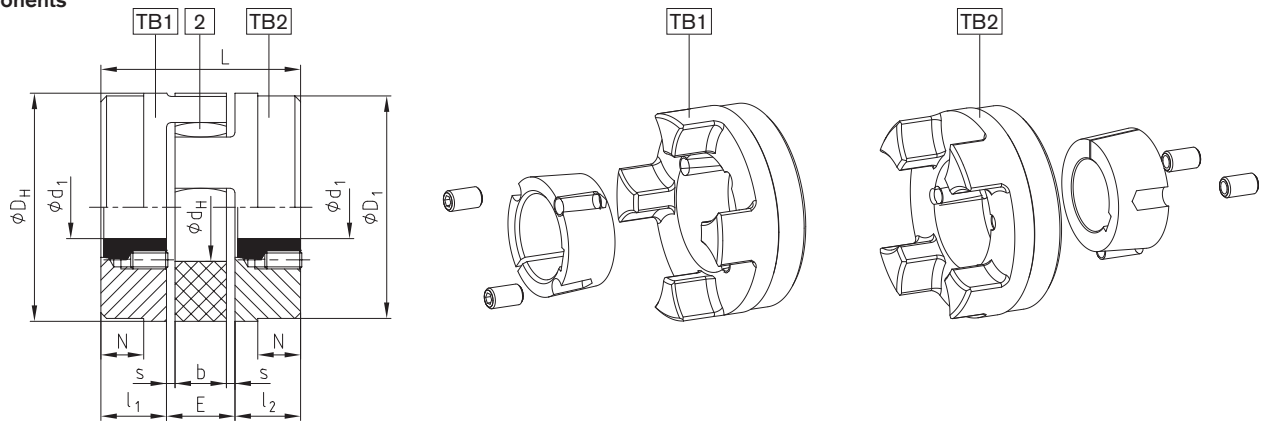
## Taper clamping bush



For legend of pictogram please refer to flapper on the cover



### Components



### ROTEX® Shaft coupling for taper clamping bush

Size	Taper clamping bush	Dimensions [mm]									Fastening screw for taper bush			
		l <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]	No. z	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
	• 3020										5/8"	32	2	92
90	3020	52	45	5,5	34	149	33	200	160	100	5/8"	32	2	92
100	3535	90	50	6	38	230	69	225	180	113	1/2"	49	3	113
125	4545	114	60	7,0	46	288	86	290	230	147	3/4"	49	3	192

### Taper clamping bush

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

• Only available for type TB 2

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

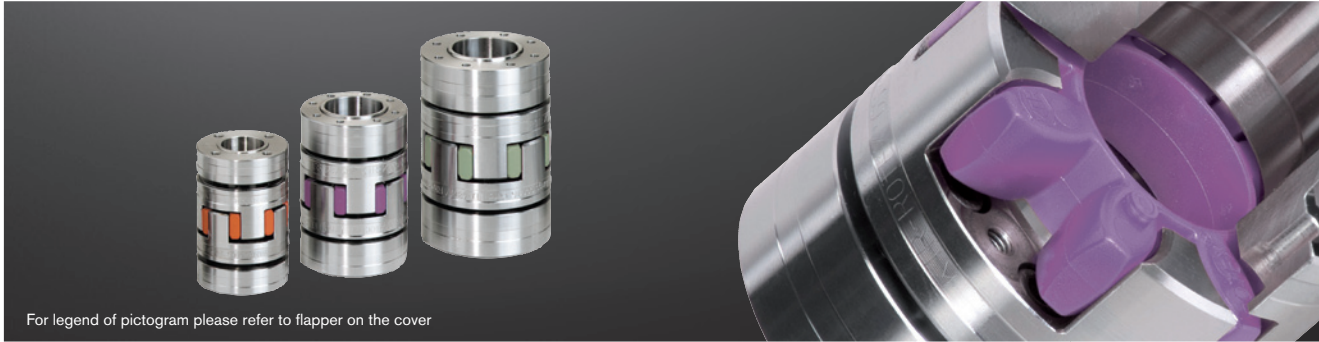
Coupling type TB 1/1; TB 2/2; TB 1/2 possible

Please order our separate dimension sheet (M 373054).

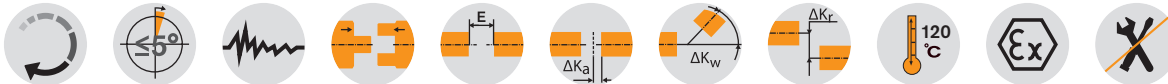
<sup>2)</sup> Bores with feather keyway (flat design) acc. to DIN 6885 sheet 3

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

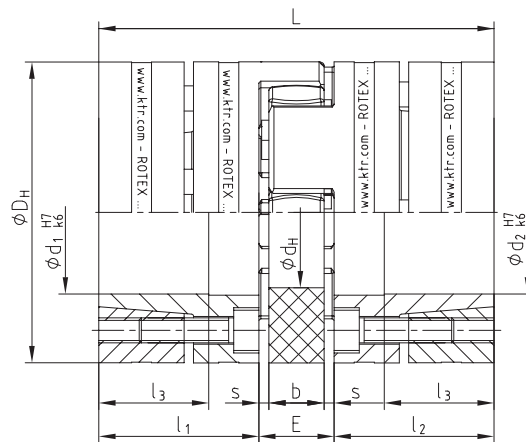
## Clamping ring hubs



For legend of pictogram please refer to flapper on the cover



### Components



Tack thread M1 between clamping screws

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 Sh A		98 Sh A		DH <sup>2)</sup>	dH	L	l <sub>1</sub> ; l <sub>2</sub>	l <sub>3</sub>	E	b	s	M	Number z	T <sub>A</sub> [Nm]	M <sub>1</sub>		
	T <sub>KN</sub>	T <sub>Kmax</sub>	T <sub>KN</sub>	T <sub>Kmax</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 d1/d2 and the corresponding transmittable friction torques TR 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									358	398	483	416	547	536	625	571	704	851	865									
48											616	704	899	896	1030	962	1160	1379	1222	1543								
55													863	856	991	918	1119	1110	1247	1277	1672	1605	2008					
65															1446	1355	1637	1635	1827	1887	2429	2368	2930					
75																1710	2053	2059	2294	2384	3040	2983	3664	4293				
90																			3845	4249	4794	5858	5900	7036	8047	9247	9575	10845

<sup>1)</sup> Please see coupling selection on page 10 et seqq.

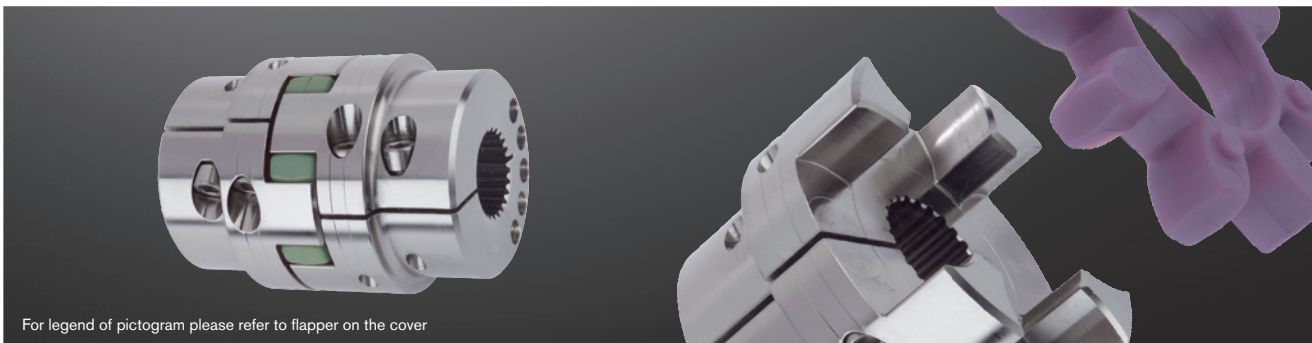
<sup>2)</sup> ØDH + 2 mm with high speeds for expansion of spider

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

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

# ROTEX® Flexible jaw couplings

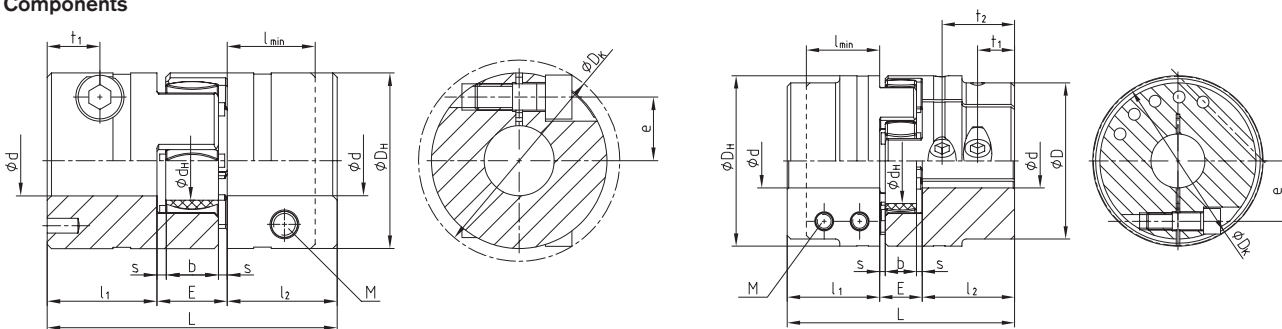
## Clamping hubs



For legend of pictogram please refer to flapper on the cover



### Components



ROTEX® 19 - 28

ROTEX® 38 - 90

### ROTEX® as clamping hubs

Size	Dimensions [mm]														Screw DIN EN ISO 4762	
	max. d	L	l <sub>1</sub> :l <sub>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

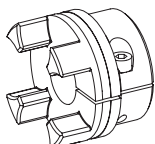
### Bore surface and the corresponding transmittable friction torques [Nm] of ROTEX® clamping hubs design 2.0

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

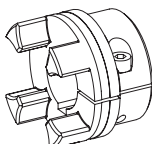
<sup>1)</sup> With type 2.1 dmax. Ø17 mm

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

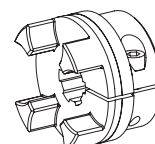
<sup>3)</sup> t1 and t2 have a different dimension e



**Type 2.0**  
Clamping hub, single slot,  
without feather keyway



**Type 2.1**  
Clamping hub, single slot,  
with feather keyway



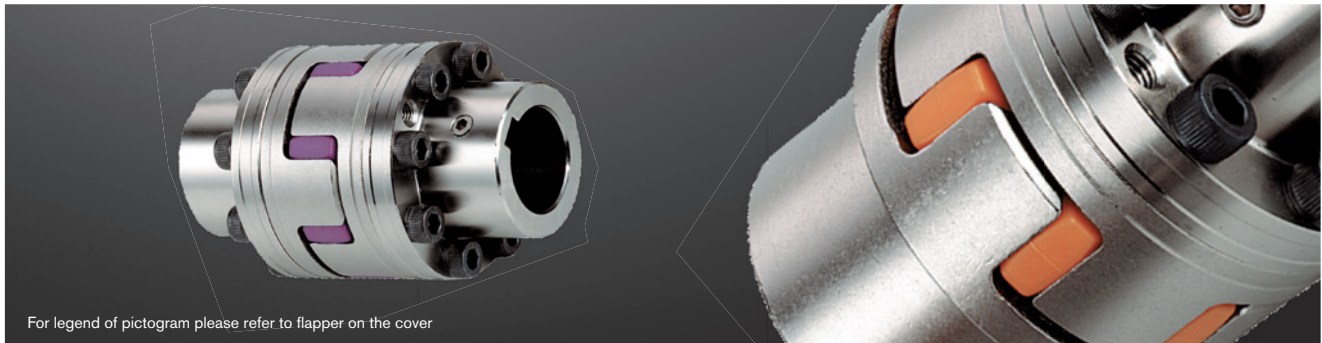
**Type 2.3**  
Clamping hub with spline bore  
(For a selection of our  
programme of spline bores please  
see page 32)

### Ordering example:

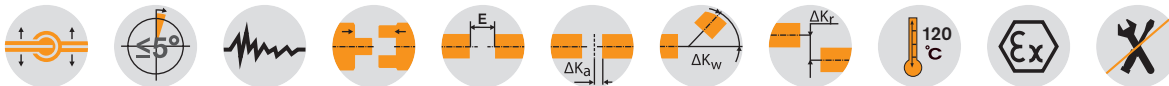
ROTEX® 24	98 Sh-A	2.1	Ø 24	2.0	Ø20
Coupling size	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

# ROTEX® AFN and BFN Flexible jaw couplings

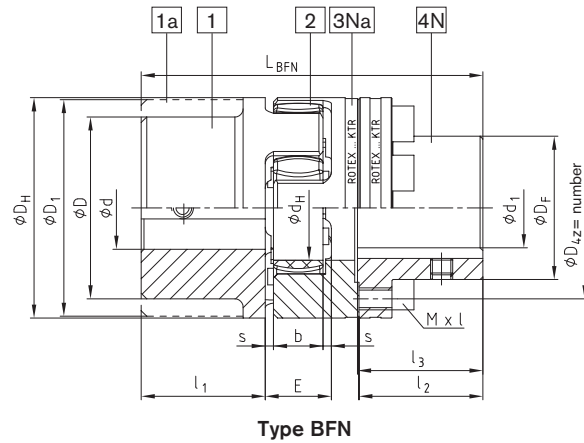
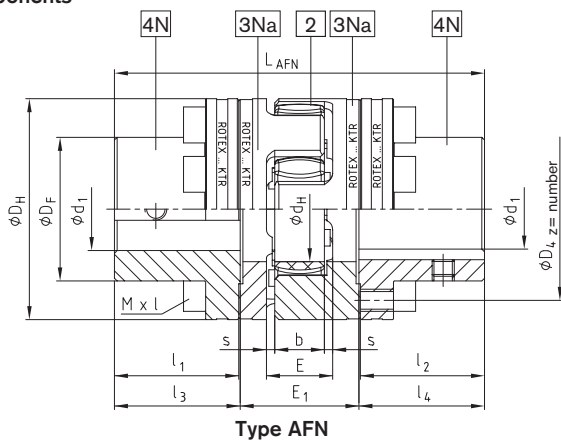
## Flange programme



For legend of pictogram please refer to flapper on the cover



### Components



ROTEX® Type AFN (No. 002) and BFN (No. 004)																		
Size	Pilot bored Ød; ØD; ØD1	Component 4N max. finish bore Ød1	Dimensions [mm]												Cyl. screws <sup>3)</sup> DIN EN ISO 4762 - 12.9			
			DH	DF	D4	dH	l <sub>1</sub> ; l <sub>2</sub>	E	E <sub>1</sub>	s	b	l <sub>3</sub> ; l <sub>4</sub>	LAFN	LBFN	Mxl	z	Pitch <sup>2)</sup>	<sup>1)</sup> T <sub>A</sub> [Nm]
24	See jaw couplings on page 34 to 39 Stock programme/basic programme on page 32 and 33	24	55	36	45	27	30	18	33	2,0	14	30,5	94	86	M5x16	8		10
28		28	65	42	54	30	35	20	39	2,5	15	35,5	110	100	M6x20	8	8x45°	17
38		38	80	52	66	38	45	24	43	3,0	18	45,5	134	124	M8x22	8		41
42		42	95	62	80	46	50	26	48	3,0	20	51,0	150	138	M8x25	12		41
48		48	105	70	90	51	56	28	50	3,5	21	57,0	164	152	M8x25	12	16x22,5°	41
55		55	120	80	102	60	65	30	60	4,0	22	66,0	192	176	M10x30	8	8x45°	83
65		65	135	94	116	68	75	35	65	4,5	26	76,0	217	201	M10x30	12	16x22,5°	83
75		75	160	108	136	80	85	40	75	5,0	30	86,5	248	229	M12x40	15		120
90		100	200	142	172	100	100	45	82	5,5	34	101,5	285	265	M16x40	15		295
100		110	225	158	195	113	110	50	97	6,0	38	111,5	320	295	M16x50	15		295
110		125	255	178	218	127	120	55	103	6,5	42	122,0	347	321	M20x50	15	20x18°	580
125		145	290	206	252	147	140	60	116	7,0	46	142,0	400	370	M20x60	15		580
140		165	320	235	282	165	155	65	128	7,5	50	157,5	443	409	M20x60	15		580
160		190	370	270	325	190	175	75	146	9,0	57	177,5	501	463	M24x70	15		1000
180		220	420	315	375	220	195	85	159	10,5	64	198,0	555	515	M24x80	18	24x15°	1000

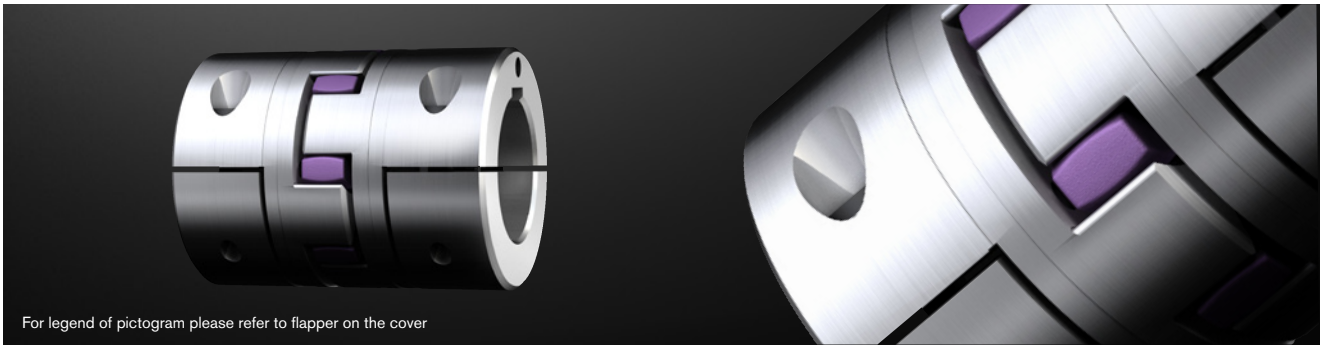
<sup>1)</sup> Screw tightening torque T<sub>A</sub> [Nm].  
<sup>2)</sup> Thread in driving flange between cams.  
<sup>3)</sup> Coupling is delivered not assembled.

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

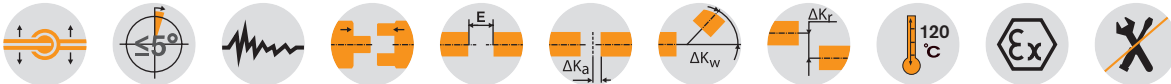
# ROTEX® A-H

## Flexible jaw couplings

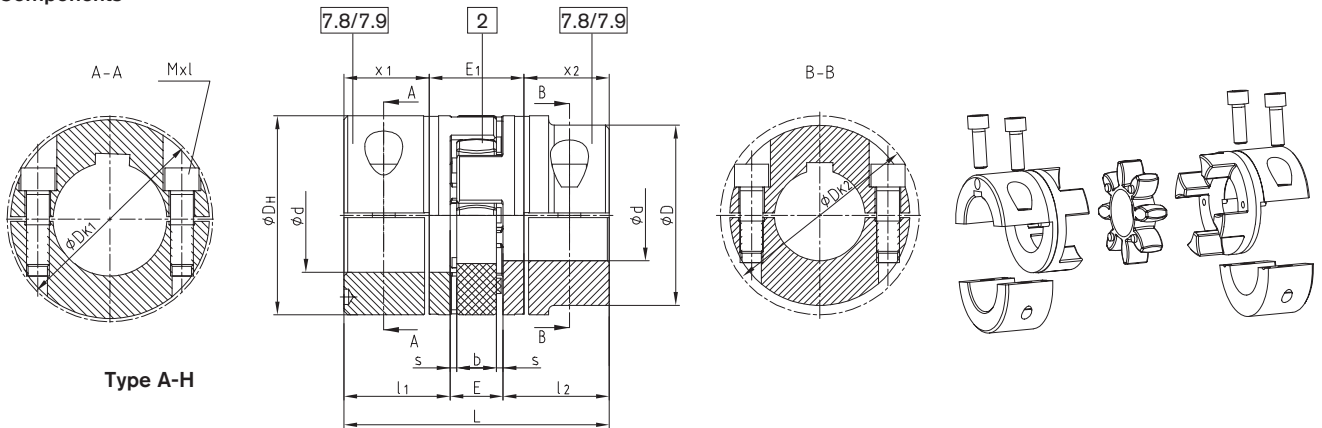
### Drop-out center design coupling



For legend of pictogram please refer to flapper on the cover



#### Components



Type A-H

ROTEX® Type A-H															
Size	Max. finish bore Ød [mm]	Dimensions [mm]											Cyl. screws DIN EN ISO 4762		
		L	l <sub>1</sub> ; l <sub>2</sub>	E	b	s	D <sub>H</sub>	D	DK <sub>1</sub>	DK <sub>2</sub>	x <sub>1</sub> /x <sub>2</sub>	E <sub>1</sub>	Mx1	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							—	97	—					
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	

Please note:

With maximum bore the feather keyways are offset to each other by approx. 5°

Hub material up to size 90: steel, from size 100: GJS

7.8= Shell clamping hub without feather key max. circumferential speed of 35 m/sec. from a circumferential speed of \*<sub>1</sub>

7.9= Shell clamping hub with feather key max. circumferential speed of 35 m/sec. from a circumferential speed of \*<sub>1</sub>

Speed: max. circumferential speed of 25 m/sec. on the outside diameter D<sub>H</sub> of the coupling

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

\*<sub>1</sub> With 25 m/sec. dynamic balancing is required

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

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

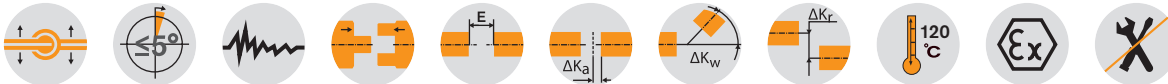
# ROTEX® S-H

## Flexible jaw couplings

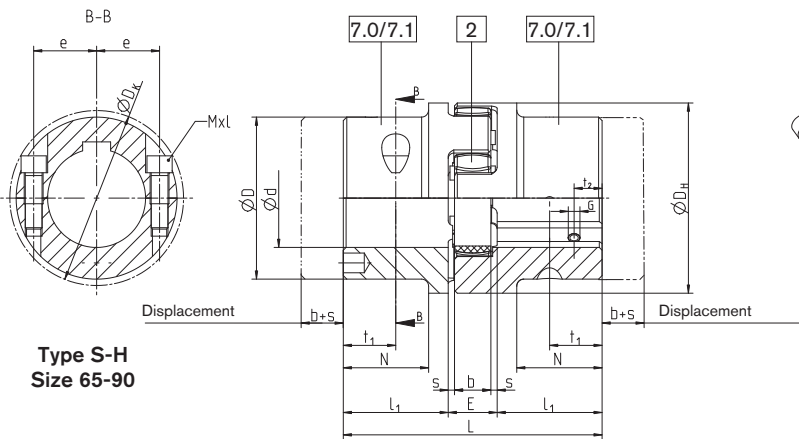
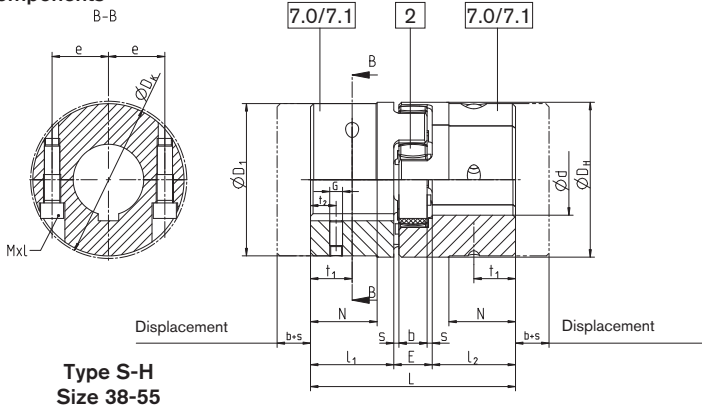
### Drop-out center design coupling with SPLIT hubs



For legend of pictogram please refer to flapper on the cover



#### Components



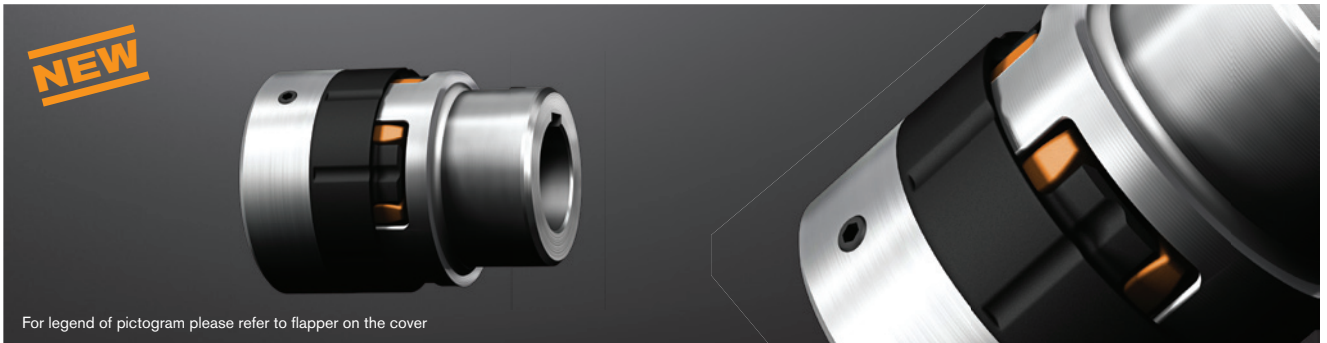
ROTEX® Type S-H																		
Size	Finish bore Ød [mm]		Dimensions [mm]														Cyl. screws DIN EN ISO 4762	
	minimum	maximum	L	l <sub>1</sub> ; l <sub>2</sub>	E	b	s	D <sub>H</sub>	D <sub>1</sub>	D <sub>K</sub>	N	e	t <sub>1</sub>	t <sub>2</sub>	G	Mxl	Tightening torque T <sub>A</sub> [Nm]	
38	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			M10x30	67	
48	24	60	140	56	28	21	3,5	105	104	108,5	45	35	28			M12x35	115	
55	24	70	160	65	30	22	4	120	118	122	52	40	32,5	20		M12x40	115	
65	24	70	185	75	35	26	4,5	135	115	123,5	61	45	37,5		M10	M12x40	115	
	70	80							135	132,5		50						
75	40	80	210	85	40	30	5	160	135	147	69	51	42,5	25		M16x50	290	
	80	90							160	158		57						
90	40	90	245	100	45	34	5,5	200	160	176	81	60	50	30	M12	M20x60	560	
	90	110							200	197		72						

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

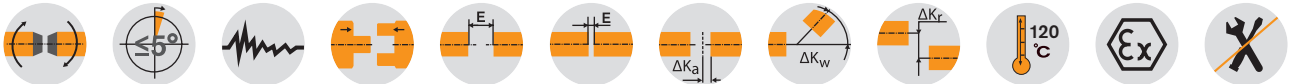
Ordering example:	ROTEX® 38	S-H	98 Sh-A	7.1	Ø 38	7.1	Ø30
	Coupling size	Type	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

# ROTEX® SP GN and EN Flexible jaw couplings

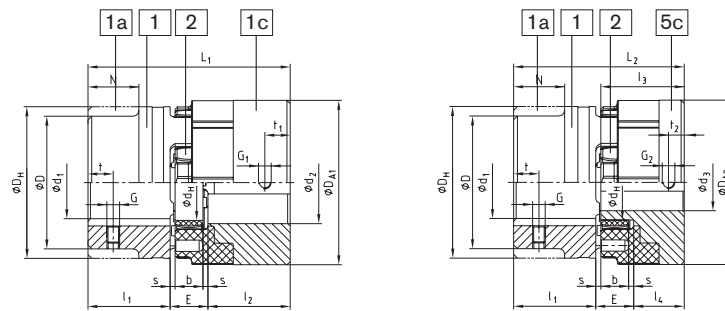
## Single-cardanic shaft coupling (Non Sparking)



For legend of pictogram please refer to flapper on the cover



### Components



ROTEX® Standard (St) <sup>3)</sup>			ROTEX® SP Type GN (No. 080)							ROTEX® SP Type EN (No. 081)							
Size	Spider (part 2) 1) Rated torque [Nm]	Component steel (St)	Component SP	Dimensions [mm] ROTEX® SP component 1c						Component SP	Dimensions [mm] ROTEX® SP component 5c						
				maximum 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>		maximum 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							7	90
28	95	1a	1c	32	35	72	M8	15	90	5c	22	42	26	72	M8	7	81
		115							106								
38	190	1	1c	42	45	87	M8	15	114	5c	28	50	30	87	M8	7	99
		139							124								
42	265	1	1c	48	50	103	M8	20	126	5c	35	56	34	103	M8	10	110
		151							135								
48	310	1	1c	55	56	114	M8	20	140	5c	40	60	36	114	M8	10	120
		164							124								
55	410	1	1c	65	65	130	M10	20	160	5c	45	66	40	130	M10	17	135
		185							160								
65	625	1	1c	75	75	146	M10	20	185	5c	55	75	44	146	M10	17	154
		210							179								

ROTEX® Standard (GJL) <sup>4)</sup>			ROTEX® SP Type GN (No. 080)							ROTEX® SP Type EN (No. 081)							
Size	Spider (part 2) 1) Rated torque [Nm]	Component cast iron (GJL)	Component (SP)	Dimensions [mm] ROTEX® SP component 1c						Component SP	Dimensions [mm] ROTEX® SP component 5c						
				maximum d <sub>2</sub> <sup>2)</sup>	l <sub>2</sub>	DA	G	t	L		maximum 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
		139							124								
42	265	1	1c	48	50	103	M8	20	126	5c	35	56	34	103	M8	10	110
		151							135								
48	310	1	1c	55	56	114	M8	20	140	5c	40	60	36	114	M8	10	120
		164							144								
55	410	1	1c	65	65	130	M10	20	160	5c	45	66	40	130	M10	17	135
		185							160								
65	625	1	1c	75	75	146	M10	20	185	5c	55	75	44	146	M10	17	154
		210							179								

<sup>1)</sup> Maximum torque of coupling TK<sub>max.</sub> = rated torque of coupling TK rated x 2. Transmittable torque acc. to 92 Sh-A

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

<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

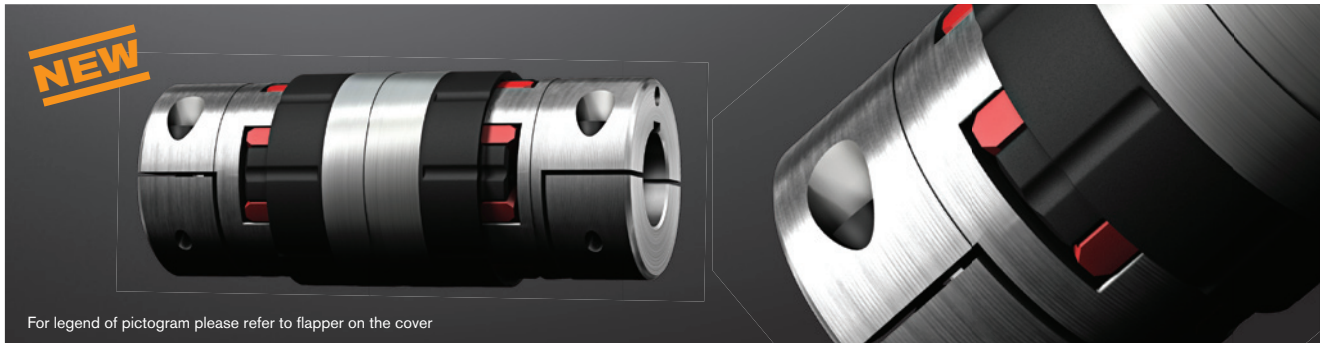
Ordering example:	ROTEX® SP 38	GJL	92 Sh-A	1a	Ø45	1c	Ø42
	Coupling size	Material of component 1;1a;1b	Spider hardness	Component	Finish bore	Component	Finish bore



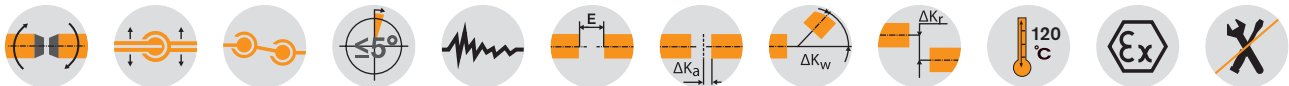
# ROTEX® SP ZS-DKM-C

## Flexible jaw couplings

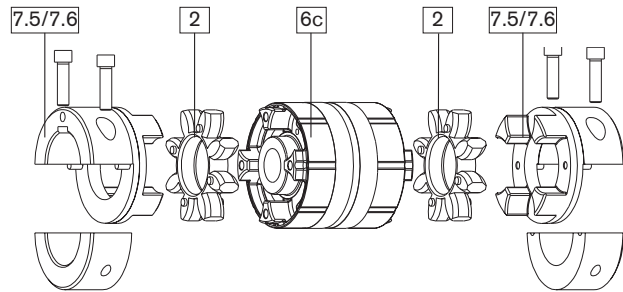
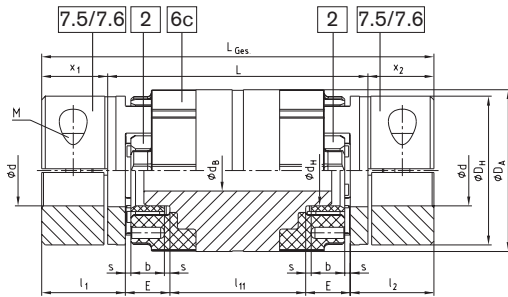
### Double-cardanic shaft coupling (Non Sparking)



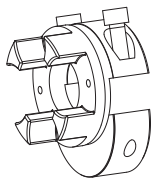
For legend of pictogram please refer to flapper on the cover



#### Components



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



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

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

<sup>1)</sup> Maximum torque of coupling TK<sub>max.</sub> = rated torque of coupling TK rated x 2. Transmittable torque acc. to 92 Sh-A-GS

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

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

■ = Available from stock

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

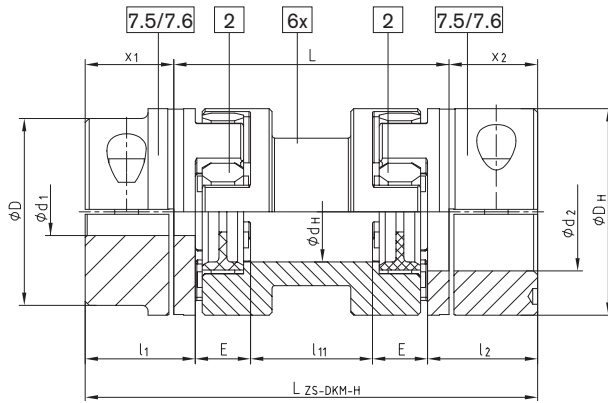
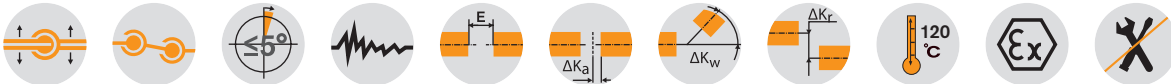
# ROTEX® ZS-DKM-H

## Flexible jaw couplings

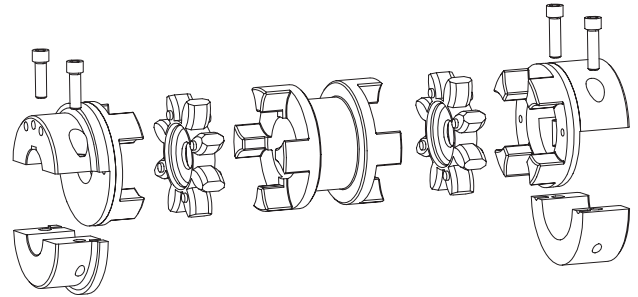
### Double-cardanic shaft coupling



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 $\phi d_1/d_2$ [mm]	Spider (part 2) <sup>1)</sup> $T_{KN}$ [Nm]	Dimensions [mm]								Cyl. screws DIN EN ISO 4762 - 12.9		Max. displacements				Weight <sup>2)</sup> [kg]	
				$\phi D_H$	$d_H$	$l_1; l_2$	$x_1; x_2$	$l_{11}$	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	1,40
	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	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	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
	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
	62							230		1,57				1,18					
55	100	70	410	120	60	65	50,0	10	30	200	M12	120	2,2	0,70	1,0	0,52	0,75	1,40	11,20
	50							240		1,40				1,05					
	90							280		2,09				1,57					
	110							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		2,00	16,10
	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		1,37	23,60
	65							315		1,83				1,64					
	85							335		2,19				1,64					
	135							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		2,19	48,90
	123							413		2,93				2,19					

<sup>1)</sup> Maximum torque of coupling  $T_{Kmax.}$  = rated torque of coupling  $T_{KN} \times 2$

Size 24 to 90 spider type 98 Sh-A-GS

ZS-DKM-H: transmittable torque according to 92 Sh-A-GS

<sup>2)</sup> Referring to max. bore

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

7.5= Shell clamping hub without feather key for a double-cardanic connection

7.6= Shell clamping hub with feather key for a double-cardanic connection

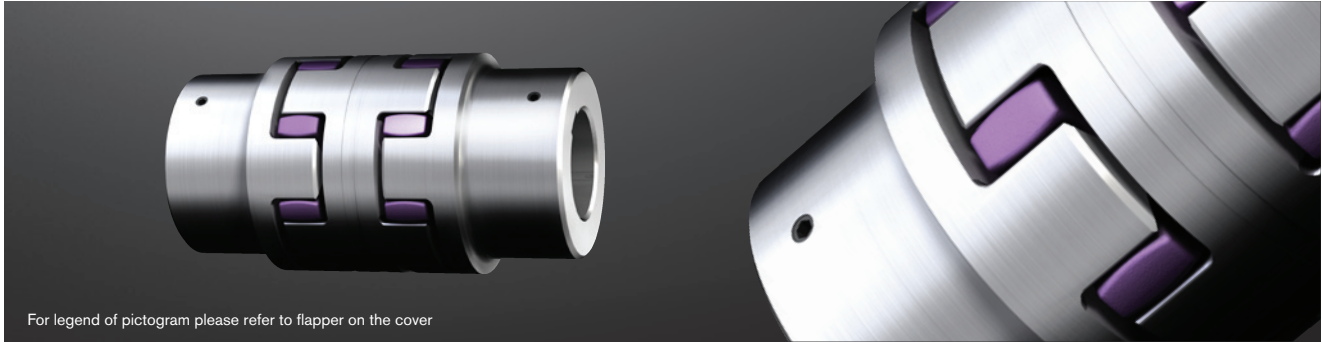
ATTENTION: The standard line is only applicable for horizontal assembly. Vertical assembly on request.

Ordering example:	ROTEX® 38	ZS-DKM-H	140	98 Sh-A-GS	7.5	Ø 38	7.5	Ø30
	Coupling size	Type	Shaft distance dimension L	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

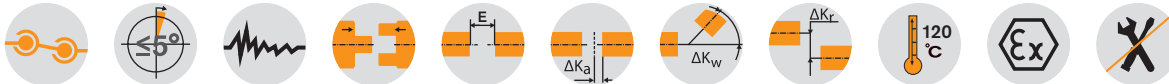
# ROTEX® DKM

## Flexible jaw couplings

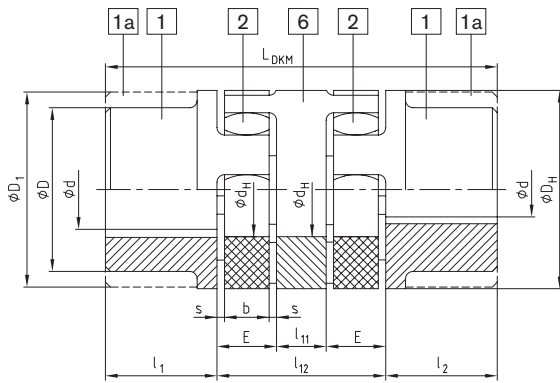
### Double-cardanic shaft coupling



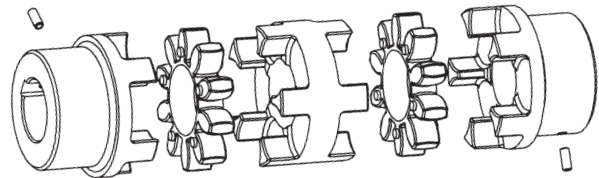
For legend of pictogram please refer to flapper on the cover



#### Components



Type DKM



#### ROTEX® Type DKM (No. 018)

Größe	Ød, ØD, ØD1	Spider (part 2)		Dimensions [mm]									Max. displacement with n = 1500 rpm		
		Rated torque [Nm] <sup>1)</sup>		D <sub>H</sub>	d <sub>H</sub>	l <sub>1</sub> ; l <sub>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 39. Stock programme/basic programme on page 32 and 33.	92 Sh-A	98 Sh-A	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

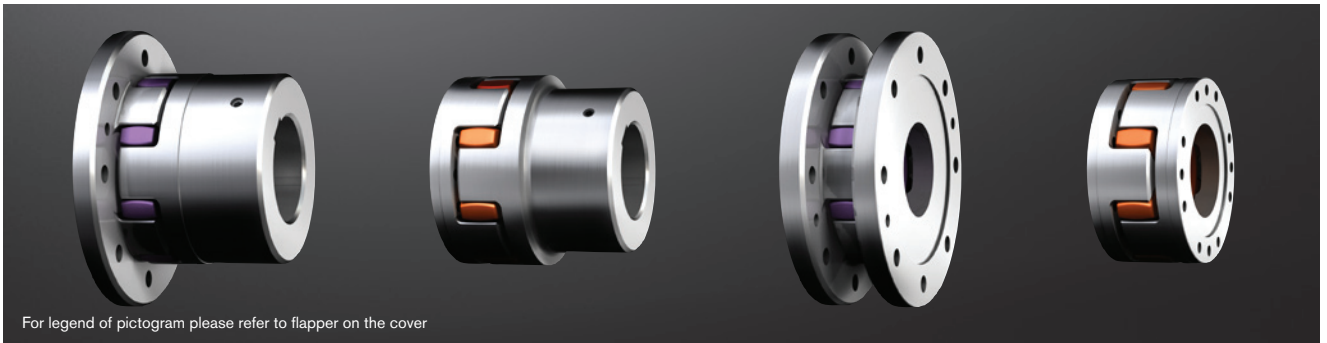
<sup>1)</sup> For selection please see page 10 et seqq.  
Finish bore according to ISO fit H7, feather keyway according to DIN 6885 sheet 1 - JS9

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

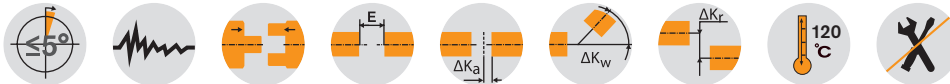
ROTEX®  
 Flexible jaw and pin & bush couplings  
 POLY-NORM®  
 POLY  
 REVOLEX®

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

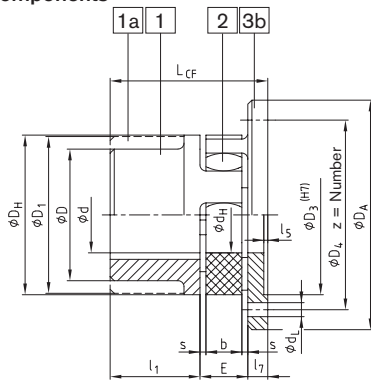
## Flange programme



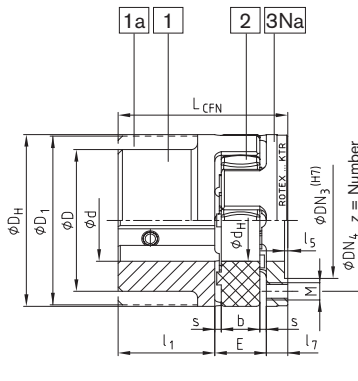
For legend of pictogram please refer to flapper on the cover



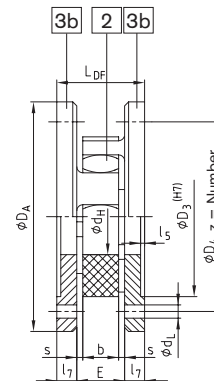
### Components



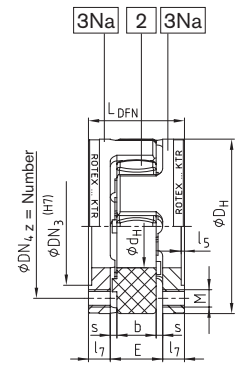
Type CF



Type CFN



Type DF



Type DFN

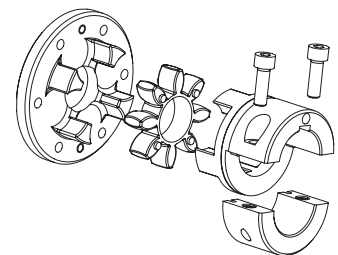
ROTEX® Type CF, CFN (No. 005) and DF, DFN (No. 006)																							
Size	d, ØD <sub>1</sub> , ØD <sub>1</sub>	General dimension							Dimensions CF and DF							Dimensions CFN and DFN							
		D <sub>H</sub>	d <sub>H</sub>	l <sub>1</sub>	E	s	b	l <sub>5</sub>	l <sub>7</sub>	D <sub>A</sub>	D <sub>3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

For other flange programmes see page 43.

Other types: ROTEX® CF-H

Flange drop-out center design coupling

Please order our separate dimension sheet (M412069)

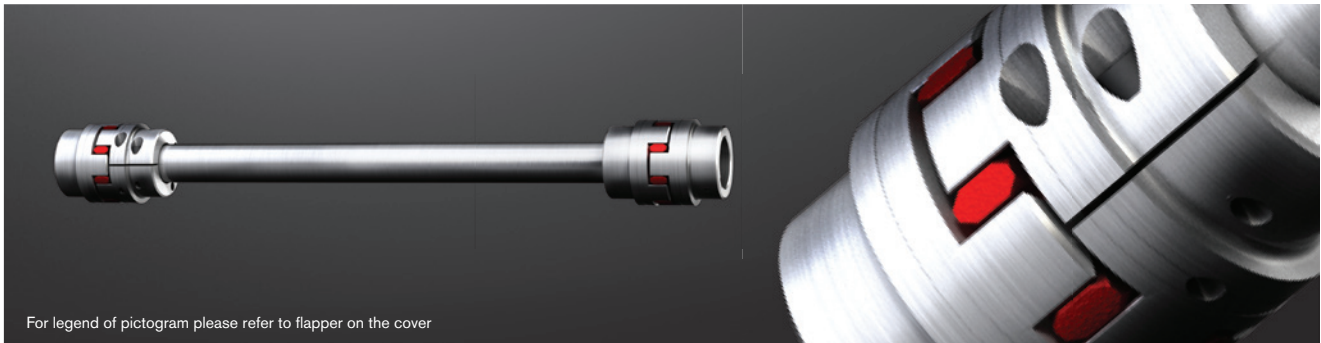


Ordering example:	ROTEX® 38	CF	92 Sh-A	1	GJL	Ø20
	Coupling size	Type	Spider hardness	Hub side Component	Material	Finish bore

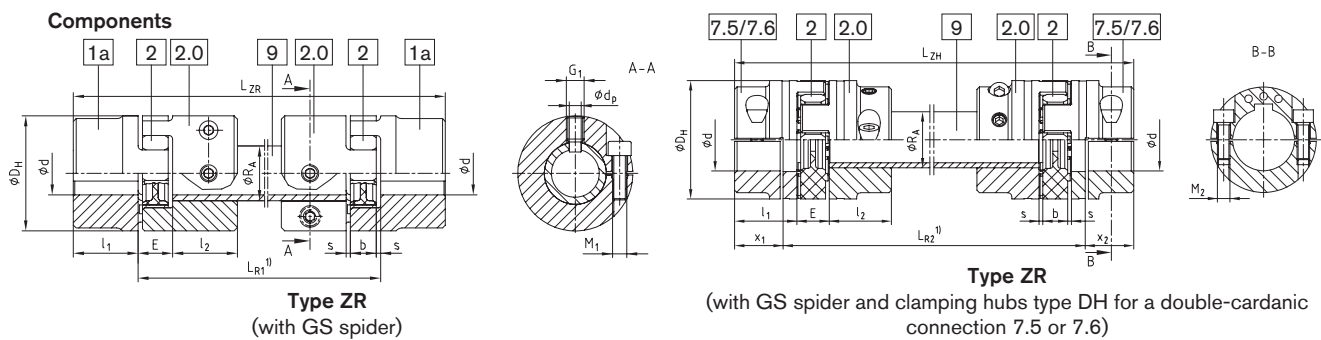
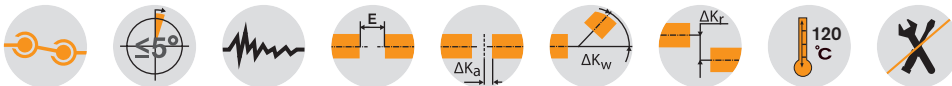
# ROTEX® ZR

## Flexible jaw couplings

### Intermediate shaft programme



For legend of pictogram please refer to flapper on the cover

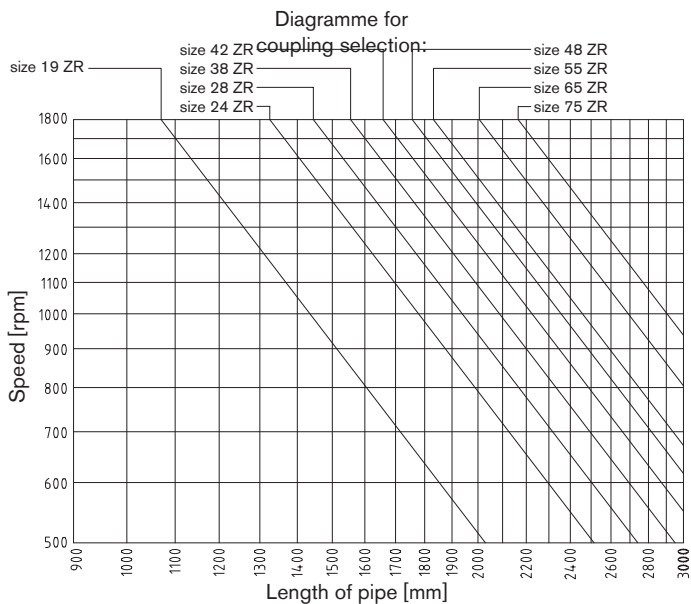


ROTEX® Type ZR (No. 037)																					
Size	Finish bore Ød		Dimensions [mm]						Intermediate pipe Torsional stiffness/m		Clamping screw Part 2.0		Clamping screw Component 7.5/7.6		LZR: LZH	min. LR1	min. LR2	Locking screw G1	Cone bore dp [mm]	Axial displacement [mm]	Angular displacement [degrees]
	Part 1a	Part 7.5/7.6	DH	l1; l2	x1; x2	E	s	b	RA	C <sup>2)</sup> [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	

<sup>1)</sup> For inquiries and orders please mention the shaft distance dimension LR1/LR2 along with the maximum speed to review the critical bending speed.  
<sup>2)</sup> Torsion spring stiffness with a length of 1 m of intermediate pipe  
 Finish bore acc. to ISO fit H7, feather keyway acc. to DIN 6885 sheet 1 - JS9

Friction torques of clamping hubs have to be taken into account. Please order dimension sheet No. 583613.

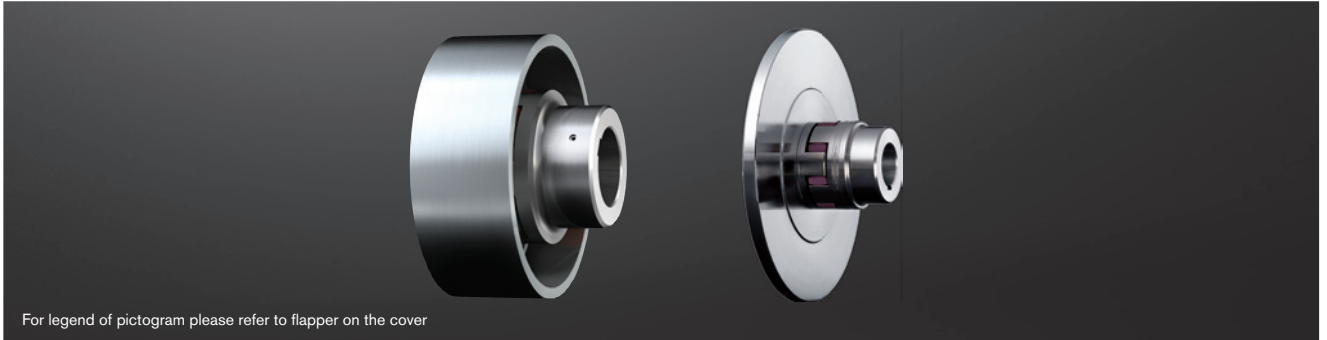
Not permissible for crane and hoisting gear drives



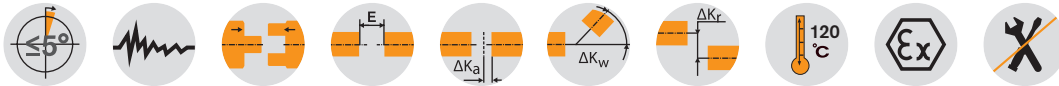
Ordering example:	ROTEX® 38	ZR	1200	98 Sh-A-GS	7.5	Ø 38	7.5	Ø30
	Coupling size	Type	Shaft dis. dimension LR1/LR2	Spider hardness	Hub type	Finish bore	Hub type	Finish bore

# ROTEX® BTAN and SBAN Flexible jaw couplings

With brake drum / with brake disk



For legend of pictogram please refer to flapper on the cover



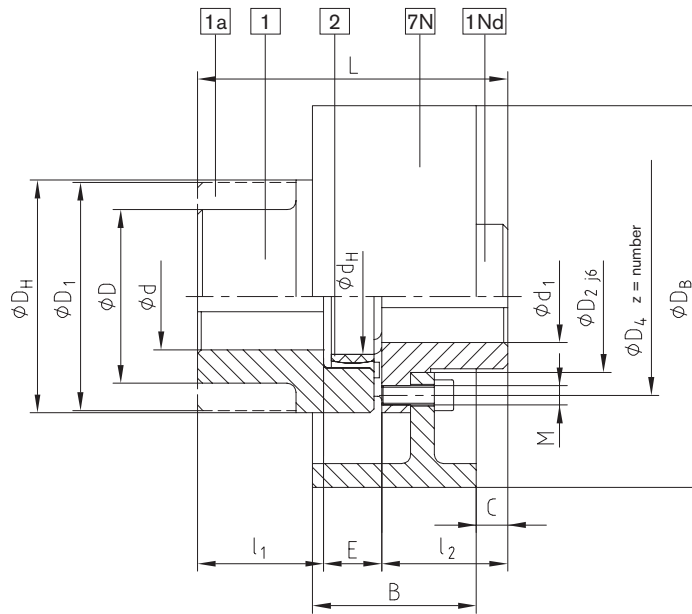
ROTEX® Type BTAN (No. 011) and SBAN (No. 013)														
Size	Pilot bore Ød; ØD ØD1	Finish bore max.d1		Dimensions [mm]										
		GJS	Steel	DH	D2	D4	dH	z	Pitch <sup>1)</sup>	M	TA [Nm]	l1; l2	E	L
38	See jaw couplings on page 34 to 39 Stock programme/basic programme on page 32 and 33	—	34	80	50	66	38	8	8 x 45°	M8	41	45	24	114
42		—	42	95	60	80	46	12	16 x 22,5°	M8	41	50	26	126
48		—	48	105	68	90	51	12		M8	41	56	28	140
55		—	55	120	78	102	60	8	8 x 45°	M10	83	65	30	160
65		—	65	135	92	116	68	12	16 x 22,5°	M10	83	75	35	185
75		—	75	160	106	136	80	15		M12	120	85	40	210
90		—	100	200	140	172	100	15		M16	295	100	45	245
100		100	—	225	156	195	113	15	20 x 18°	M16	295	110	50	270
110		110	—	255	176	218	127	15		M20	580	120	55	295
125		130	—	290	204	252	147	15		M20	580	140	60	340

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® SBAN 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

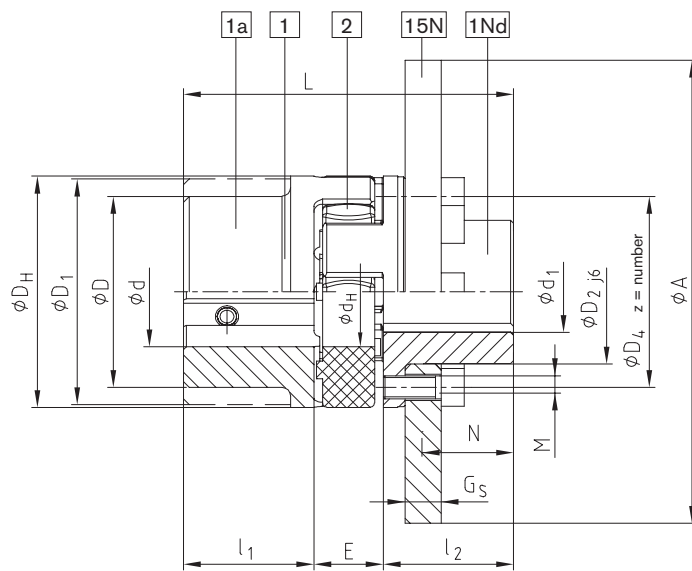
<sup>1)</sup> Thread in the hub between the cams  
 Other sizes on request according to dimension sheet No.:  
 BTAN:M 380821  
 SBAN straight: M380822; cranked: M 370065  
 FNN hub: M 380823  
 Finish bore according to ISO fit H7, feather keyway acc. to DIN 6885 sheet 1 - JS9

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

Components



Brake drum  
type BTAN



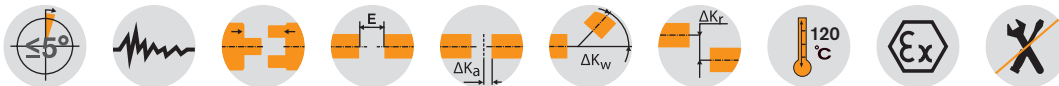
Brake disk  
type SBAN

# ROTEX® AFN-SB special Flexible jaw couplings

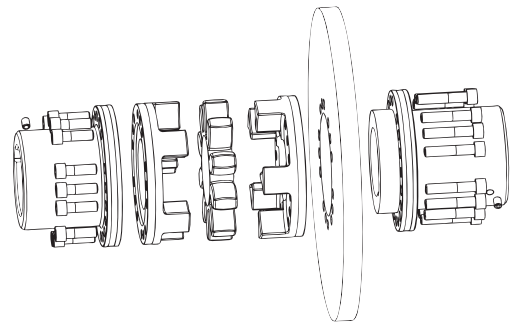
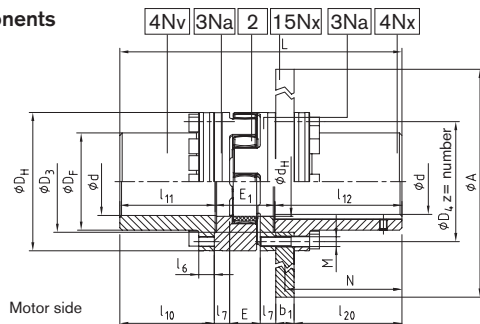
## Drop-out center design coupling with brake disk



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	65	135	94	96	116	68	35	65	M10	12	16x22,5°	83
75	30	75	160	108	112	136	80	40	75	M12	15		120
90	40	100	200	142	145	172	100	45	82	M16	15		295
100	46	110	225	158	165	195	113	50	97	M16	15		295
110	60	125	255	178	180	218	127	55	103	M20	15	20x18°	580
125	60	145	290	206	215	252	147	60	116	M20	15		580
140	60	165	320	235	245	282	165	65	128	M20	15		580
160	80	190	370	270	280	325	190	75	146	M24	15		1000
180	85	220	420	315	330	375	220	85	159	M24	18	24x15°	1000

### ROTEX® Type AFN-SB special

Size	Torque with 98Sh-A <sup>1)</sup>		Max. speed [rpm]	Max.braking torque [Nm] <sup>2)</sup>	Dimensions [mm]						
	T <sub>KN</sub>	T <sub>Kmax</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 b1										
	355x30	400x30	450x30	500x30	560x30	630x30	710x30	800x30	900x30	900x40	1000x40
65	x	x	x								
75		x	x	x							
90			x	x	x	x					
100				x	x	x					
110				x	x	x	x				
125						x	x	x			
140							x	x	x	x	x
160							x	x	x	x	x
180							x	x	x	x	x

<sup>1)</sup> For selection 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 for a brake disk width b1 of 40 mm.

### Ordering example:

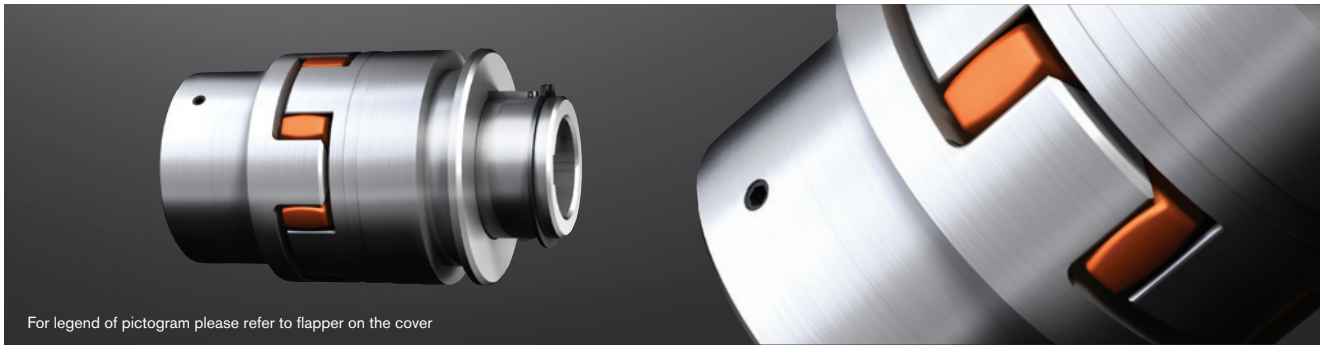
ROTEX® 90	AFN-SB special	Ø450x30	98 Sh-A	4Nv	Ø90	4Nx	Ø90
Coupling size	Type	ØBrake disk, x width	Spider hardness	Component	Finish bore	Component	Finish bore



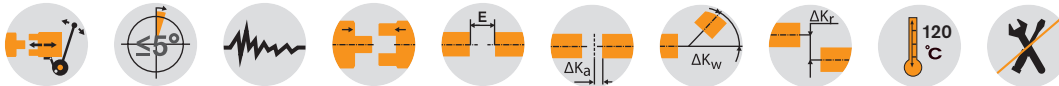
# ROTEX® SD

## Flexible jaw couplings

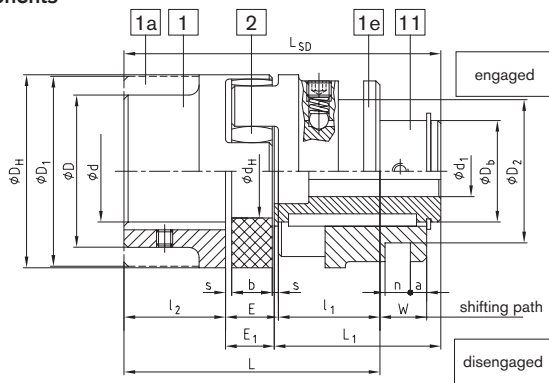
### Shiftable coupling shiftable at standstill



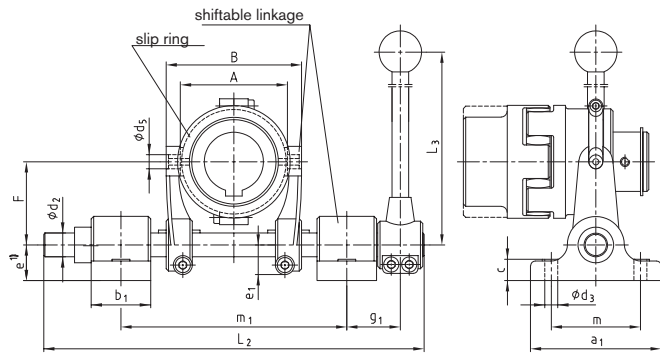
For legend of pictogram please refer to flapper on the cover



#### Components



Type SD



Type SD with slip ring and shiftable linkage

ROTEX® Type SD (No. 015)																					
Size	Ød, ØD, ØD1	Finish bore d1		Dimensions [mm]															Shifting force set in [N]	Slip ring size	Shiftable linkage size
		Min.	max.	DH	D2±0,1	Db	dH	l1;2	E	s	b	E1	L	L1	W	a	n±0,1	LSD			
24		8	18	55	41	30	27	30	18	2,0	14	16,5	78	51,5	16,0	6	6,0	98	110	—	—
28		10	22	65	58	36	30	35	20	2,5	15	18,0	90	60,0	17,5	8	8,0	113	130	—	—
38		12	28	80	70,5	45	38	45	24	3,0	18	22,0	114	73,0	21,0	8	12,5	140	150	1.1	1
42		14	32	95	70,5	50	46	50	26	3,0	20	24,0	126	82,0	23,0	8	12,5	156	180	1.1	1
48		15	40	105	89,5	60	51	56	28	3,5	21	25,5	140	90,5	24,5	6	17,5	172	200	2.2	2
55		18	48	120	112,5	70	60	65	30	4,0	22	27,0	160	103,0	26,0	6	18,0	195	250	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

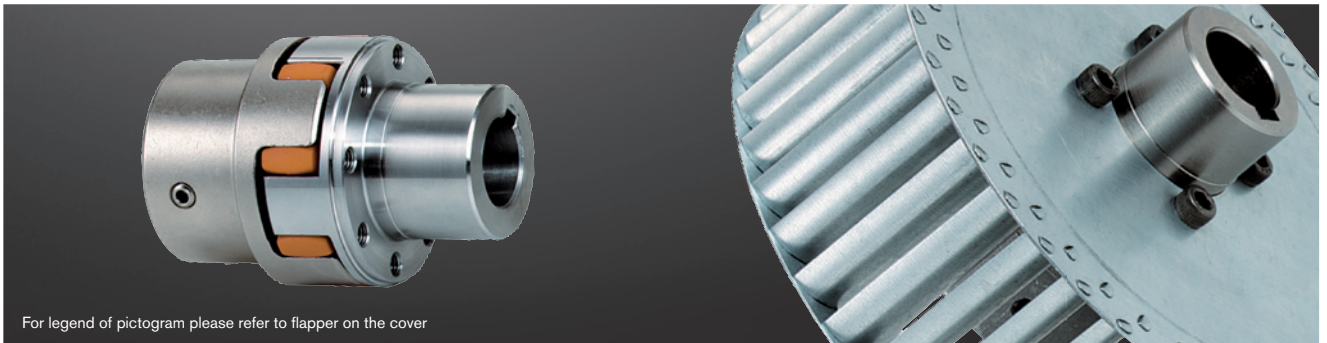
Slip ring and shiftable linkage																				
Size	Size of shiftable linkage	Dimensions [mm]															Max. speed [rpm] for slip ring			
		a1	b1	c	d2	d3	d5	e <sup>1)</sup>	e1	F	g1	L2	L3	m	m1 Min.	m1 max.		A	B	
38	1																			
42	1	110	50	18	20	11	12	30	25	70	55	320	400	75	180	190	90	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		60	25		13,5											170	210	1710	
90	4																			
100	4	160			35		21	50	37,5	147,5	70	565	750	120	321	365	200	244	1360	
110	4																			
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 acc. to DIN 6885 sheet 1 - JS9

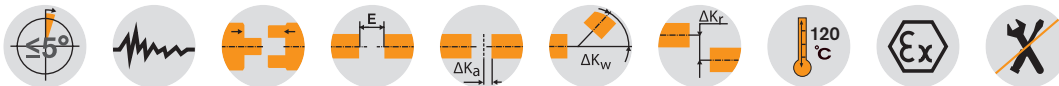
Ordering example:	ROTEX® 38	SD	With 1.1 and 1	98 Sh-A	1	Ø38	11	Ø28
	Coupling size	Type	with slip ring 1.1 and shifting linkage 1	Spider hardness	Component	Finish bore	Component	Finish bore

# ROTEX® FNN Flexible jaw couplings

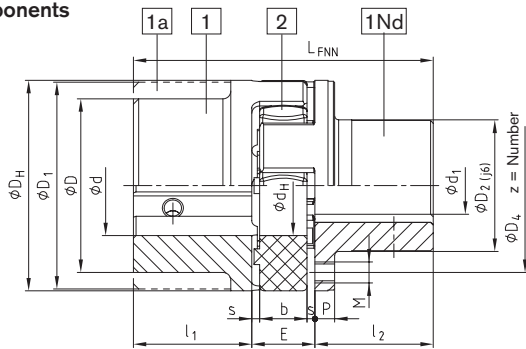
## For mounting of fan



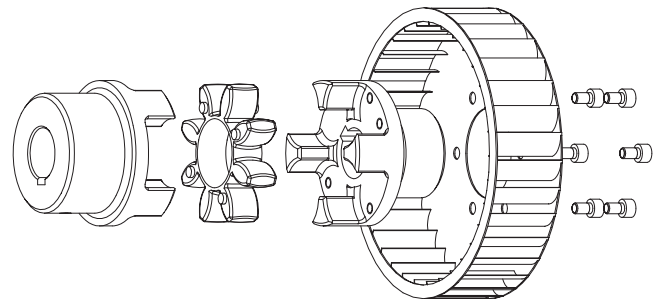
For legend of pictogram please refer to flapper on the cover



### Components



Type FNN



Type FNN with fan (type 1)

### ROTEX® Type FNN (No. 021)

Size	Ød, ØD, ØD1	Max. finish bore Ød1	Dimensions [mm]												
			DH	D2	D4	dH	E	s	b	l <sub>1,2</sub>	P	M	z	Pitch	LFNN
28	See jaw couplings on page 34 to 39 Stock programme/basic progr. see page 32 and 33	24	65	40	54	30	20	2,5	15	35	6,5	M6	8		90
38		34	80	50	66	38	24	3,0	18	45	7,5	M8	8	8x45°	114
42		42	95	60	80	46	26	3,0	20	50	9,5	M8	12		126
48		48	105	68	90	51	28	3,5	21	56	10,5	M8	12	16x22,5°	140
55		55	120	78	102	60	30	4,0	22	65	12,5	M10	8	8x45°	160
65		65	135	92	116	68	35	4,5	26	75	13,5	M10	12	16x22,5°	185
75		75	160	106	136	80	40	5,0	30	85	15,5	M12	15		210
90		100	200	140	172	100	45	5,5	34	100	18,5	M16	15	20x18°	245

Other sizes on request

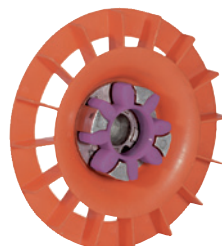
#### Type 1: Fan screwed on

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



#### Type 2: Fan injection-moulded

Low prices due to production volumes with higher quantities.



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

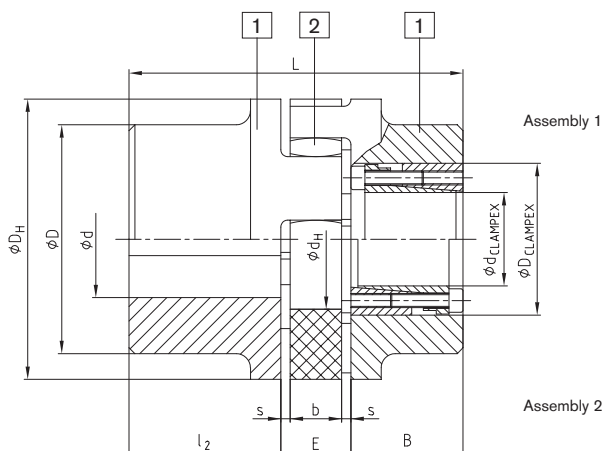
Special surface forming (knurling according to DIN 82) allows the fan to be pressed or glued onto the hub collar.



#### Ordering example:

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

## Other types with clamping sets

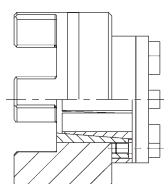


### Components

ROTEX® Type No. 001 with clamping set CLAMPEX® KTR 200															
Size	$\phi d, \phi D, \phi D1$	Hub material	CLAMPEX® KTR 200			Abmessungen [mm]									
			Max. size of KTR clamping set $d \times D$	Transmittable torque and axial force		B	$l_2$	E	s	b	$D_H$	D	$d_H$	L	
T [Nm]	F <sub>ax</sub> [kN]														
42	See jaw couplings on page 34 to 39 Stock programme/basic programme on page 32 and 33	Steel Part 1	30x55	769	51	48	50	26	3,0	20	95	—	46	length = $l_2 + E + B$ (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			

ROTEX® Type No. 001 with clamping set CLAMPEX® KTR 200																	
KTR 200 size	Length	Transmittable torque and axial force		Clamping screws DIN EN ISO 4762 - 12.9		KTR 200 size	Length	Transmittable torque and axial force		Clamping screws DIN EN ISO 4762 - 12.9		KTR 200 size	Length	Transmittable torque and axial force		Clamping screws DIN EN ISO 4762 - 12.9	
$d \times D$	B	T [Nm]	F <sub>ax</sub> [kN]	z <sub>xM</sub>	T <sub>A</sub> [Nm]	$d \times D$	B	T [Nm]	F <sub>ax</sub> [kN]	z <sub>xM</sub>	T <sub>A</sub> [Nm]	$d \times D$	B	T [Nm]	F <sub>ax</sub> [kN]	z <sub>xM</sub>	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					

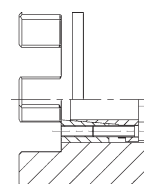
### Type 4.2 with CLAMPEX® clamping set KTR 250



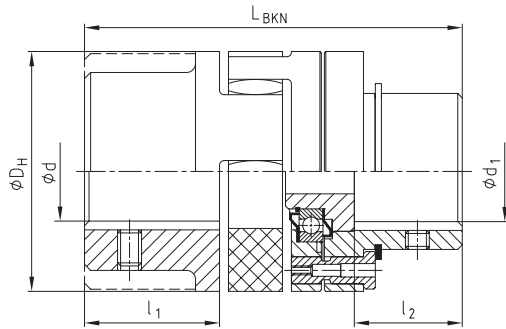
Frictionally engaged, backlash-free shaft-hub-connection for transmitting average torques.

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

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

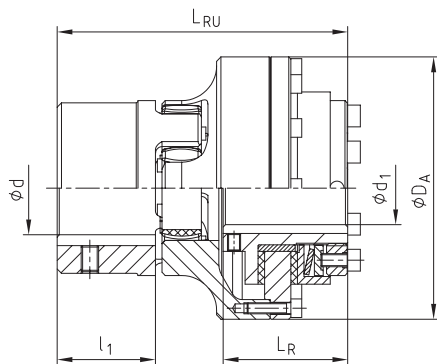


## Other types with torque limiters



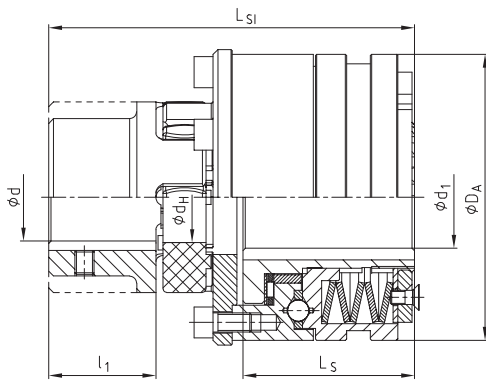
ROTEX® BKN - shear pin coupling, type BKN No. 009							
Size	Max. finish bore d	Max. finish bore d1	l <sub>1</sub>	l <sub>2</sub>	L <sub>BKN</sub>	D <sub>H</sub>	Min. fracture torque [Nm]
28	See shaft coupling on page 34 to 39 Stock progr./basic progr. on page 32/33	28	35	25	101	65	100
38		38	45	35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

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

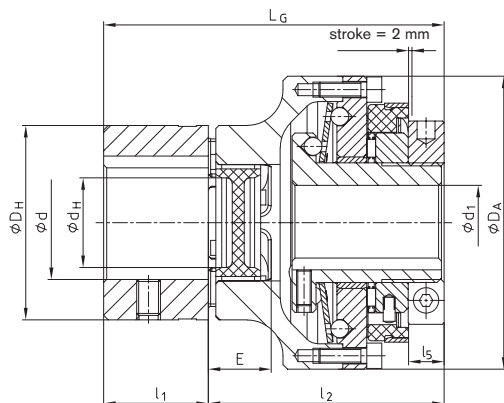


ROTEX® - RUFLEX® - Overload coupling, type No. 070								
ROTEX® size	RUFLEX® size	Ratchet torques [Nm]	d	d1 max.	D <sub>A</sub>	l <sub>1</sub>	L <sub>R</sub>	L <sub>RU</sub>
14	00	0,5 – 5	See shaft coupling on page 34 to 39 Stock progr./basic progr. on page 32/33	10	44	11	31	59
19	0	2 – 20		20 <sup>1)</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 ø 19, keyway according to 6885/3



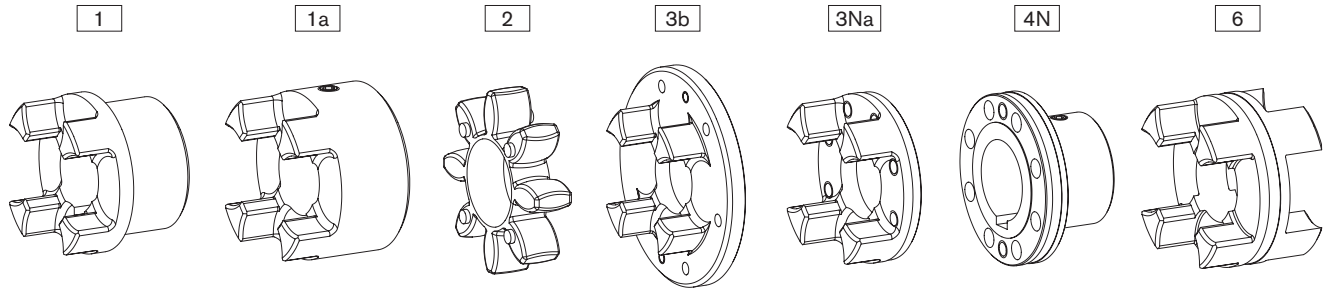
ROTEX® - KTR-SI - Overload coupling, type No. 070									
ROTEX® size	KTR-SI type	KTR-SI size	Ratchet torques [Nm]	d	max. d1	D <sub>A</sub>	l <sub>1</sub>	L <sub>S</sub>	L <sub>SI</sub>
28	DK	2	12-200	See shaft coupling on page 34 to 39 Stock progr./basic progr. on page 32/33	35	100	35	56	124
	SR/SGR	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

# ROTEX® Flexible jaw couplings

## Weights and mass moments of inertia



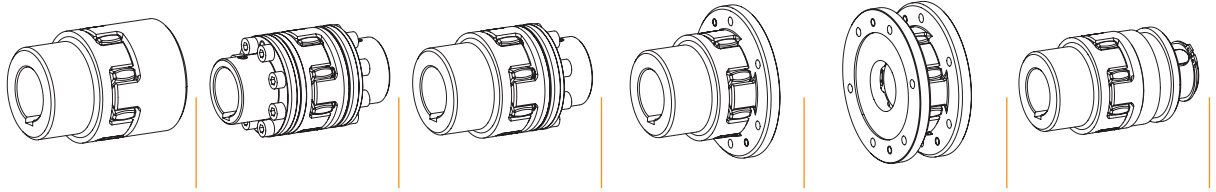
ROTEX® individual components													
Size	Standard hub				Large hub			Spider	Driving flange			C-flange	DKM spacer
	Part 1				Part 1a			Part 2	Part 3b	Part 3Na		Part 4N	Part 6
	Alu [kg] [kgm <sup>2</sup> ]	GJL [kg] [kgm <sup>2</sup> ]	GJS [kg] [kgm <sup>2</sup> ]	St [kg] [kgm <sup>2</sup> ]	Alu [kg] [kgm <sup>2</sup> ]	GJL [kg] [kgm <sup>2</sup> ]	St [kg] [kgm <sup>2</sup> ]	Polyurethane (Vulkollan) [kg] [kgm <sup>2</sup> ]	GJS [kg] [kgm <sup>2</sup> ]	St [kg] [kgm <sup>2</sup> ]	GJS [kg] [kgm <sup>2</sup> ]	St [kg] [kgm <sup>2</sup> ]	Alu [kg] [kgm <sup>2</sup> ]
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.

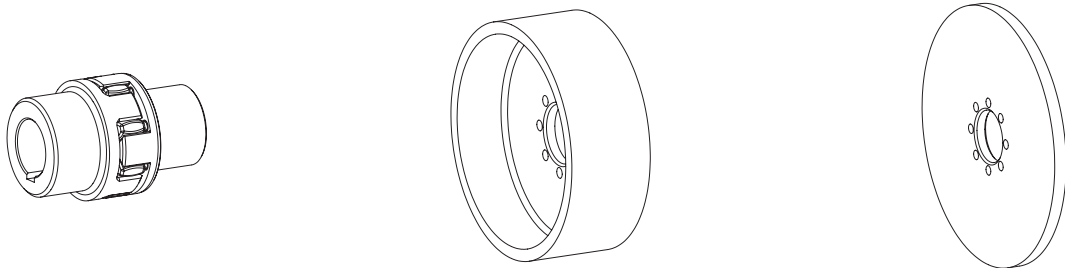
For continuously updated data please refer to our online catalogue at [www.ktr.com](http://www.ktr.com)

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

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