Der neue Werkstoff / The new material / La nouvelle matière: T-PUR®

	ALT *PREVIOUS* *ANCIEN*		NEU *NEW* *NOUVEAU*	
92 Shore A	Material: **Polyurethan (PUR)** Farbe: gelb *Material:* ***Polyurethane (PUR)*** *Colour: yellow* *Matière :* ***Polyuréthane (PUR)*** *Couleur : jaune*			Material: **T-PUR®** Farbe: orange *Material:* ***T-PUR®*** *Colour: orange* *Matière :* ***T-PUR®*** *Couleur : orange*
98 Shore A	Material: **Polyurethan (PUR)** Farbe: rot *Material:* ***Polyurethane (PUR)*** *Colour: red* *Matière :* ***Polyuréthane (PUR)*** *Couleur : rouge*			Material: **T-PUR®** Farbe: lila *Material:* ***T-PUR®*** *Colour: purple* *Matière :* ***T-PUR®*** *Couleur : violet*
64 Shore D	Material: **Polyurethan (PUR)** Farbe: weiß mit Markierung *Material:* ***Polyurethane (PUR)*** *Colour: white with marking* *Matière :* ***Polyuréthane (PUR)*** *Couleur : blanc avec marquage*			Material: **T-PUR®** Farbe: blassgrün *Material:* ***T-PUR®*** *Colour: pale green* *Matière :* ***T-PUR®*** *Couleur : vert pâle*

Made for Motion KTR

Der neue Werkstoff / The new material / La nouvelle matière: T-PUR®

IHRE VORTEILE

- Längere Einsatzdauer
- Ein erweiterter Temperaturbereich von über 40 %
- In den Temperaturbereichen von +40° C bis +90° C eine Verbesserung des Temperaturfaktors von bis zu 23 %
- Beibehaltung aller technischen Eigenschaften
- Gleicher Preis wie klassisches Programm

YOUR BENEFITS

- Longer service life
- Extended temperature range of more than 40 %
- In the temperature ranges from +40° C to +90° C the temperature factor has been improved by up to 23 %
- Maintaining all technical properties
- Same price as the traditional spiders

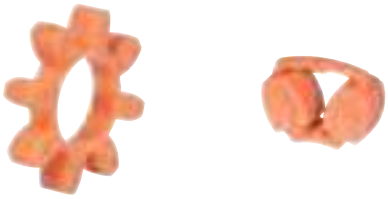
VOS AVANTAGES

- Allongement de la durée de vie
- Extension de la plage de température de plus de 40 %
- Amélioration du facteur de température jusqu'à 23% dans la plage de température comprise entre +40°C et +90°C
- Propriétés techniques inchangées
- Mêmes prix que la gamme traditionnelle

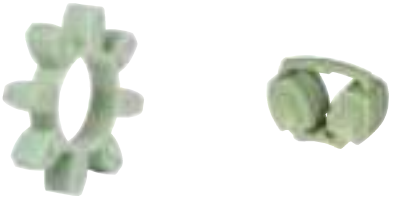
Temperaturfaktor S_t *Temperature factor S_t* *Facteur de température S_t*	-50° C	-30° C +30° C	+40° C	+50° C	+60° C	+70° C	+80° C	+90° C	+100° C	+110° C	+120° C
NEU/ *NEW / NOVEAU*	1,0	1,0	1,1	1,2	1,3	1,45	1,6	1,8	2,1	2,5	3,0
ALT / *PREVIOUS / ANCIEN*	-	1,0	1,2	1,3	1,4	1,55	1,8	2,2	-	-	-

www.ktr-stop-and-go.com

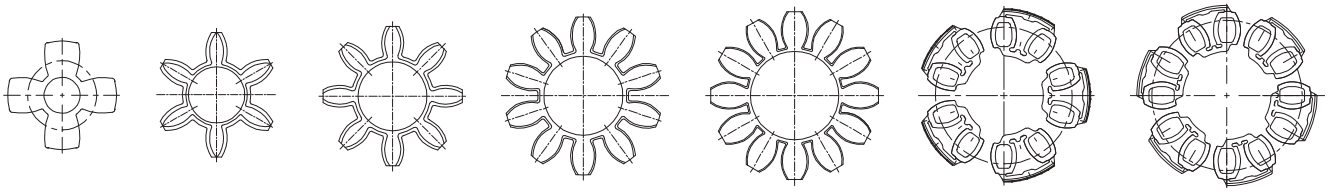
Properties of standard spiders

Spider type (Shore hardness)	92 Shore-A (T-PUR®)	DZ 92 Shore-A (T-PUR®)	92 Shore-A
	 T-PU R®		
Size	14 to 180	100 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	– significantly higher service life expectancy – very good temperature resistance – improved damping of vibrations – good damping, average elasticity – suitable for all hub materials		– good damping, average elasticity – suitable for all hub materials

Spider type (Shore hardness)	98 Shore-A (T-PUR®) 1)	DZ 98 Shore-A (T-PUR®)	98 Shore-A 1)
	 T-PUR®		
Size	14 to 180	100 to 180	14 to 90
Material	T-PUR®		Polyurethane (PUR)
Permissible temperature range 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	– significantly higher service life expectancy – very good temperature resistance – improved damping of vibrations – transmission of high torques with average damping – recommended hub material: steel, GJL and GJS		– transmission of high torques with average damping – recommended hub material: steel, GJL and GJS

Spider type (Shore hardness)	64 Shore-D (T-PUR®)	DZ 64 Shore-D (T-PUR®)	64 Shore-D
	 T-PUR®		
Size	14 to 180	100 to 180	14 to 90
Material	T-PUR®		Polyurethane (PUR)
Permissible temperature range 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	– significantly higher service life expectancy – very good temperature resistance – improved damping of vibrations – transmission of very high torques with low damping – recommended hub material: steel and GJS		– transmission of very high torques with low damping – suitable to shift critical speeds – resistant to hydrolysis – recommended hub material: steel and GJS

ROTEX® 14 ROTEX® 19 ROTEX® 24 - 65 ROTEX® 75 - 160 ROTEX® 180 ROTEX® DZ 100 - 160 ROTEX® DZ 180



Technical data of standard spiders

92 Shore-A spider made of T-PUR® and PUR

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

98 Shore-A spider made of T-PUR® and PUR

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

64 Spider 64 Shore-D made of T-PUR® and PUR

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

Temperature factor St

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

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

Technical data and properties of special spiders

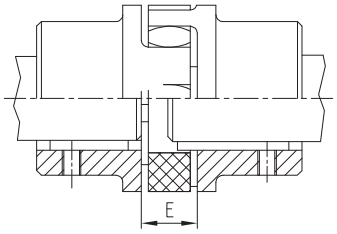
		
Spider type	PA	PEEK
Material	Polyamide	Polyetheretherketone
Permissible temperature range Permanent temperature Short-term temperature	 -20 °C to +130 °C 1) -30 °C to +150 °C 1)	 up to +180 °C (ATEX to +160 °C) up to +250 °C
Properties	– small twisting angle and high torsion spring stiffness – transmission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

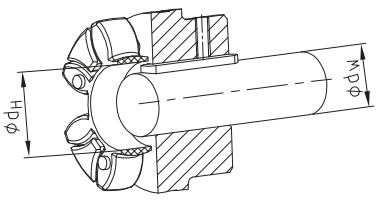
1) different properties depending on compound

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

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

Installation of spider



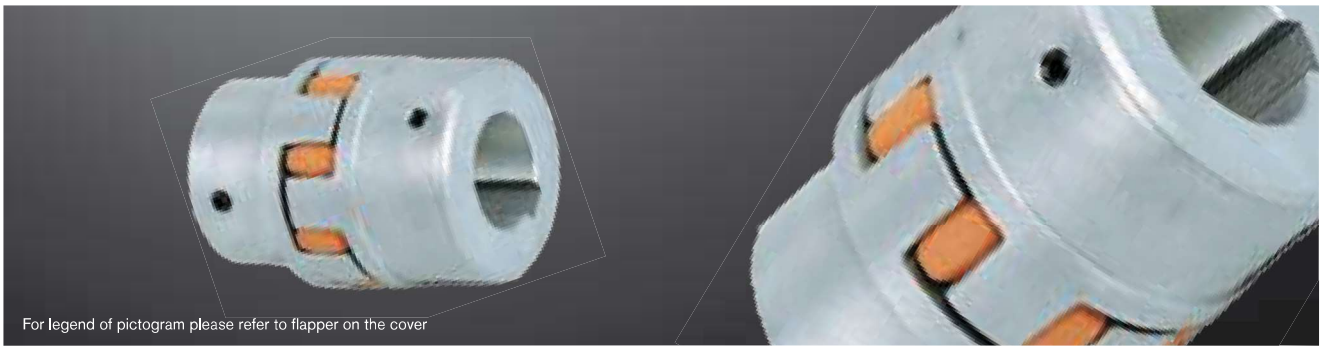


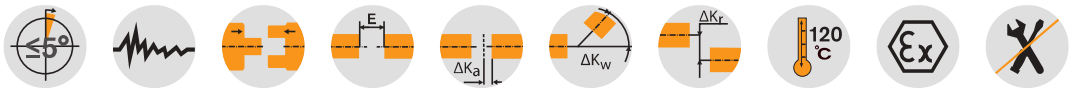
Shaft ØdW with feather key (acc. to DIN 6885 sheet 1) protuding into the spider ØdH

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

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

Material cast + powder metal





ROTEX® Sintered steel (Sint)

Size	Compo-nent	Spider (part 2) 1) Rated torque [Nm]		Finish bore d	Dimensions [mm] General									Thread for setscrew		
		92 Sh-A	98 Sh-A		L	l_1; l_2	E	b	s	D_H	d_H	D	N	G	t	T_A [Nm]
14	1a	7,5	12,5	ungeb.: 8, 10, 11, 12, 14, 15, 16	35	11	13	10	1,5	30	10	30	M4	5	1,5	1,5
19	1a	10	17	ungeb., 14, 16, 19, 20, 22, 24	66	25	16	12	2,0	40	18	40	M5	10	2	2
24	1a	35	60	ungeb., Ø 24	78	30	18	14	2,0	56	27	40	M5	10	2	2

ROTEX® Aluminium diecast (Al-D)

Size	Compo-nent	Spider (part 2) 1) Rated torque [Nm]			Finish bore d (min-max)	Dimensions [mm] General										Thread for setscrew		
		92 Sh-A	98 Sh-A	64 Sh-D		L	l_1; l_2	E	b	s	D_H	D_Z	d_H	D; D_1	N	G	t	T_A [Nm]
19	1	10	17	—	6-19	66	25	16	12	2	41	—	18	32	20	M5	10	2
	1a				19-24									41				
24	1	35	60	—	9-24	78	30	18	14	2	56	—	27	40	24	M5	10	2
	1a				22-28									56				
28	1	95	160	—	10-28	90	35	20	15	2,5	66	—	30	48	28	M8	15	10
	1a				28-38									66				

ROTEX® Cast iron (GJL)

38	1	190	325	405	12-40	114	45	24	18	3	80	—	38	66	37	M8	15	10
	1a				38-48									78				
	1b				12-48	164	70								62			
42	1	265	450	560	14-45	126	50	26	20	3	95	—	46	75	40	M8	20	10
	1a				42-55									94				
	1b				14-55	176	75								65			
48	1	310	525	655	15-52	140	56	28	21	3,5	105	—	51	85	45	M8	20	10
	1a				48-62									104				
	1b				15-62	188	80								69			
55	1	410	685	825	20-60	160	65	30	22	4	120	—	60	98	52	M10	20	17
	1a				55-74									118				
65	1	625	940	1175	22-70	185	75	35	26	4,5	135	—	68	115	61	M10	20	17
75	1	1280	1920	2400	30-80	210	85	40	30	5	160	—	80	135	69	M10	25	17
90	1	2400	3600	4500	40-97	245	100	45	34	5,5	200	218	100	160	81	M12	30	40

ROTEX® Nodular iron (GJS)

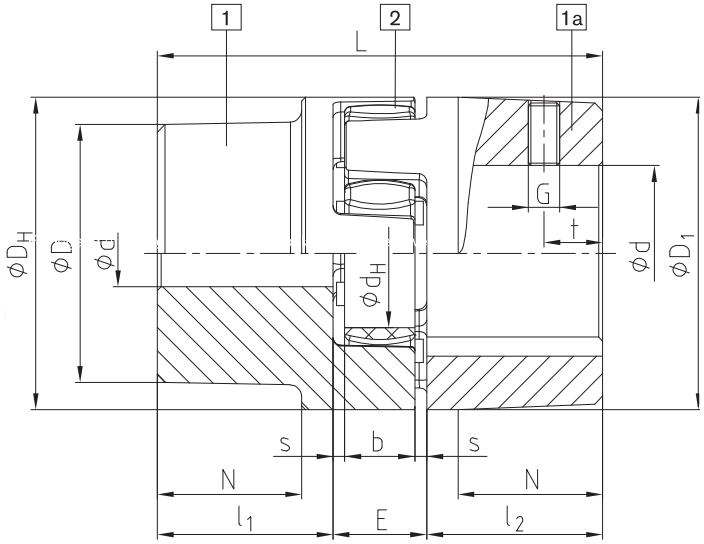
100	1	3300	4950	6185	50-115	270	110	50	38	6	225	246	113	180	89	M12	30	40
110	1	4800	7200	9000	60-125	295	120	55	42	6,5	255	276	127	200	96	M16	35	80
125	1	6650	10000	12500	60-145	340	140	60	46	7	290	315	147	230	112	M16	40	80
140	1	8550	12800	16000	60-160	375	155	65	50	7,5	320	345	165	255	124	M20	45	140
160	1	12800	19200	24000	80-185	425	175	75	57	9	370	400	190	290	140	M20	50	140
180	1	18650	28000	35000	85-200	475	195	85	64	10,5	420	450	220	325	156	M20	50	140

■ = If no material is specified in the order, it is stipulated in the calculation/order.
1) Maximum torque of the coupling $T_{Kmax.}$ = rated torque of the coupling $T_{K\ rated}$ x 2. For selection see page 10 et seqq.

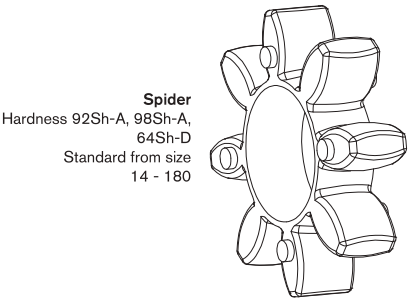
Ordering example:

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

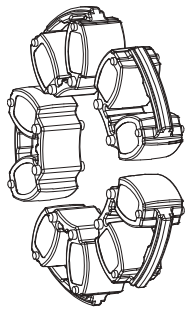
Components



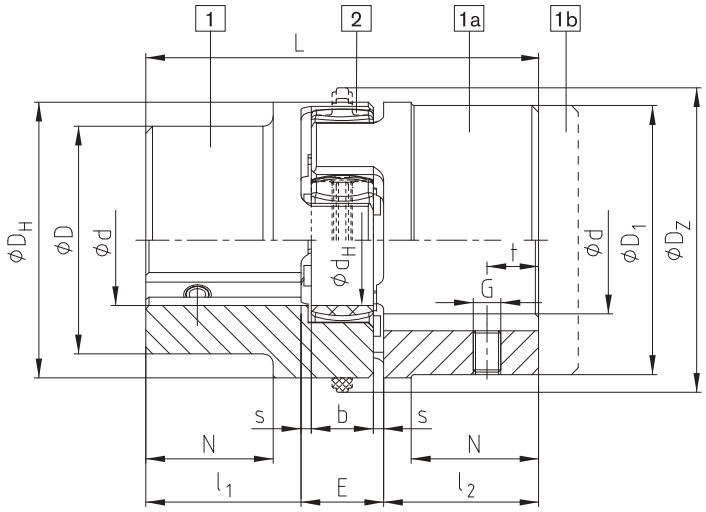
AL-D (thread opposite to the keyway)



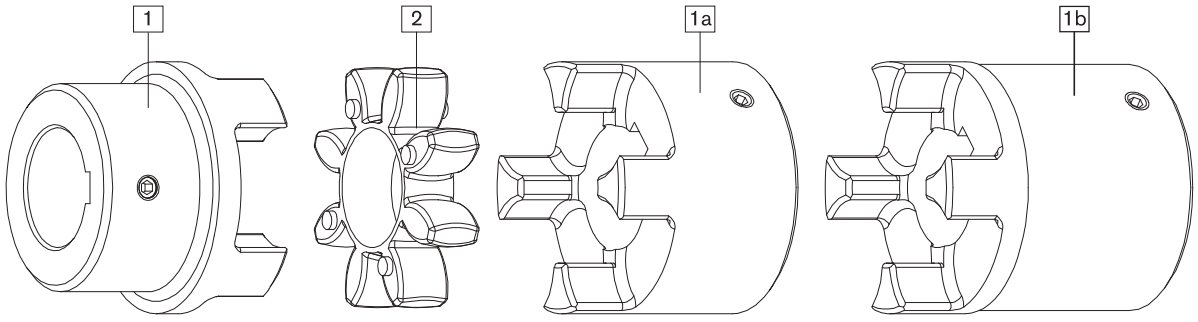
Spider
Hardness 92Sh-A, 98Sh-A, 64Sh-D
Standard from size 14 - 180



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

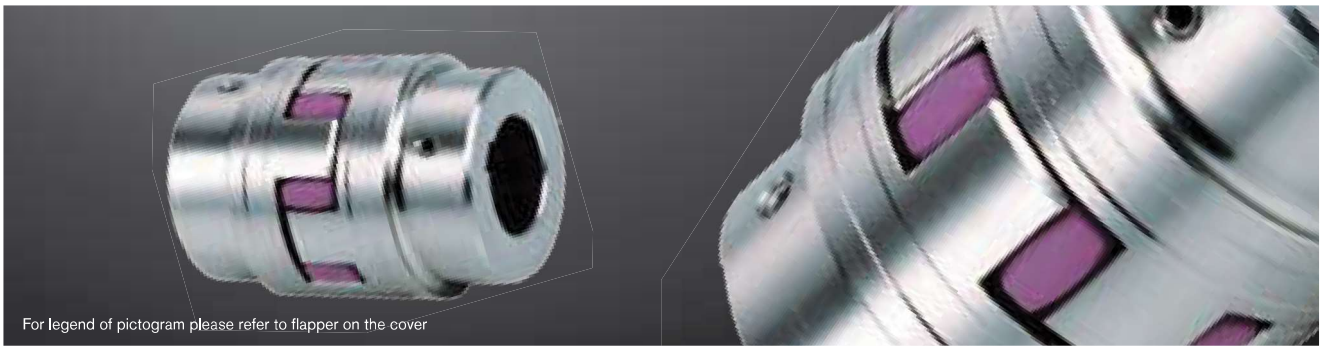


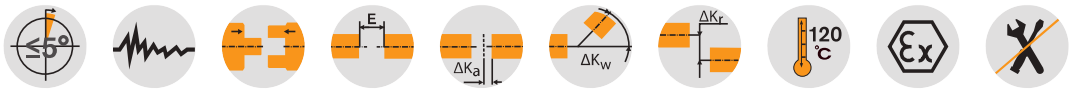
GJL / GJS (thread on the keyway)



Standard hub | Spider | Large hub | Large hub lengthened

Material steel / UL / marine





ROTEX® Steel (St)

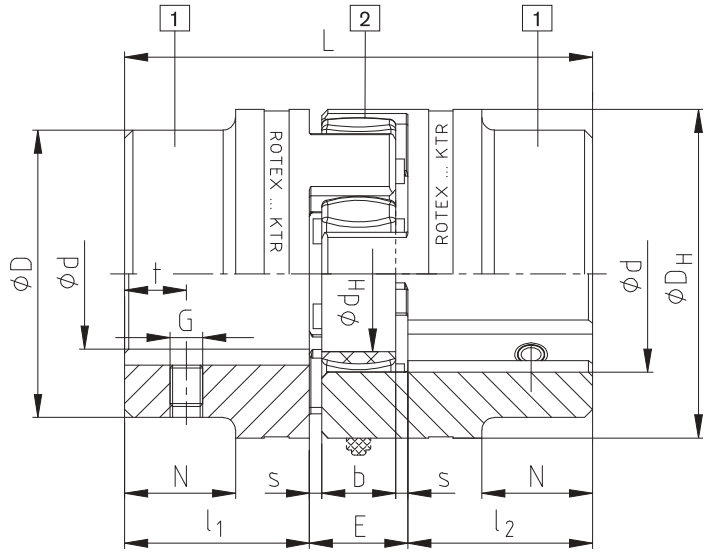
Size	Compo-nent	Spider (part 2) rated torque [Nm]			Dimensions [mm]												
					Finish bore	General									Thread for setscrew		
		92 Sh-A	98 Sh-A	64 Sh-D	d (min-max)	L	l_1; l_2	E	b	s	D_H	d_H	D	N	G	t	T_A [Nm]
14	1a	7,5	12,5	16	0-16	35	11	13	10	1,5	30	10	30	—	M4	5	1,5
	1b					50	18,5										
19	1a	10	17	21	0-25	66	25	16	12	2	40	18	40	—	M5	10	2
	1b					90	37										
24	1a	35	60	75	0-35	78	30	18	14	2	55	27	55	—	M5	10	2
	1b					118	50										
28	1a	95	160	200	0-40	90	35	20	15	2,5	65	30	65	—	M8	15	10
	1b					140	60										
38	1	190	325	405	0-48	114	45	24	18	3	80	38	70	27	M8	15	10
	1b					164	70						80	—			
42	1	265	450	560	0-55	126	50	26	20	3	95	46	85	28	M8	20	10
	1b					176	75						95	—			
48	1	310	525	655	0-62	140	56	28	21	3,5	105	51	95	32	M8	20	10
	1b					188	80						105	—			
55	1	410	685	825	0-74	160	65	30	22	4	120	60	110	37	M10	20	17
	1b					210	90						120	—			
65	1	625	940	1175	0-80	185	75	35	26	4,5	135	68	115	47	M10	20	17
	1b					235	100						135	—			
75	1	1280	1920	2400	0-95	210	85	40	30	5	160	80	135	53	M10	25	17
	1b					260	110						160	—			
90	1	2400	3600	4500	0-110	245	100	45	34	5,5	200	100	160	62	M12	30	40
	1b					295	125						200	—			
100	1	3300	4950	6185	0-115	270	110	50	38	6	225	113	150	89	M12	30	40
110	1	4800	7200	9000	0-125	295	120	55	42	6,5	255	127	200	96	M16	35	80
125	1	6650	10000	12500	60-145	340	140	60	46	7	290	147	230	112	M16	40	80
140	1	8550	12800	16000	60-160	375	155	65	50	7,5	320	165	255	124	M20	45	140
160	1	12800	19200	24000	80-185	425	175	75	57	9	370	190	290	140	M20	50	140
180	1	18650	28000	35000	85-200	475	195	85	64	10,5	420	220	325	156	M20	50	140

■ = If no material is specified in the order, it is stipulated in the calculation/order.
[1] Maximum torque of coupling $T_{Kmax.}$ = rated torque of coupling $T_{K\ rated}$ x 2. For selection see page 10 et seqq.

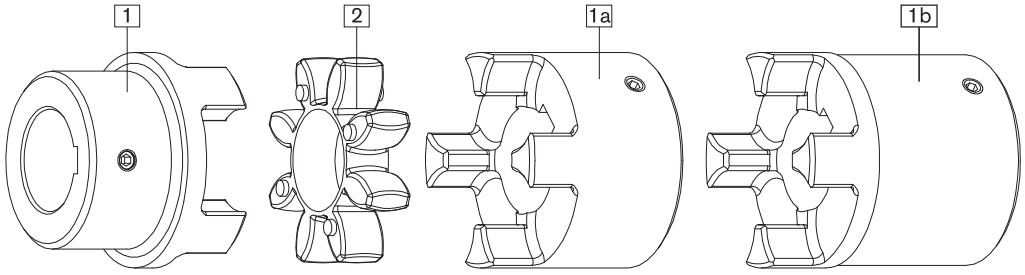
Ordering example:

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

Components



Steel (thread on the keyway)



Standard hub | Spider | Large hub | Large hub length-ened

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

DNV·GL ABS Lloyd's Register

UL LISTED

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.

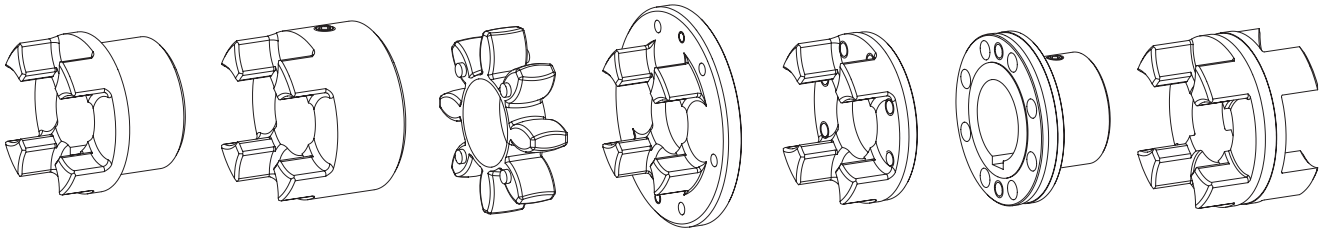
Sizes available:

ROTEX® UL-Listed								
Size	Compo-nent	Material	Spider (part 2) Rated torque [Nm] 92 Sh-A	Dimensions [mm] Finish bore d (min-max)	L	l_1; l_2	E	D_H
42	1	St	265	18-55	126	50	26	95
55	1	St	410	24-74	160	65	30	120
65	1	St	625	24-80	185	75	35	135
75	1	St	1280	24-95	210	85	40	160
90	1	St	2400	30-110	245	100	45	200

* For complete dimensions see table on page 36

Weights and mass moments of inertia

1 1a 2 3b 3Na 4N 6

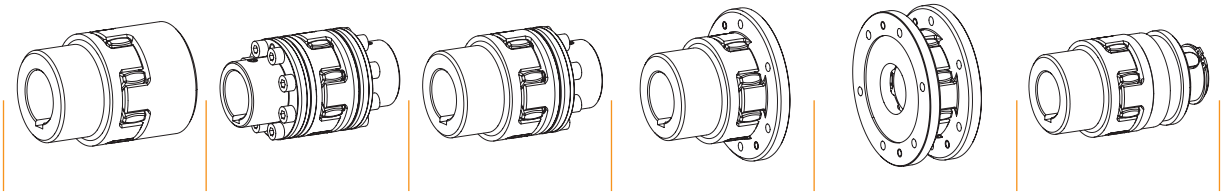


ROTEX® individual components

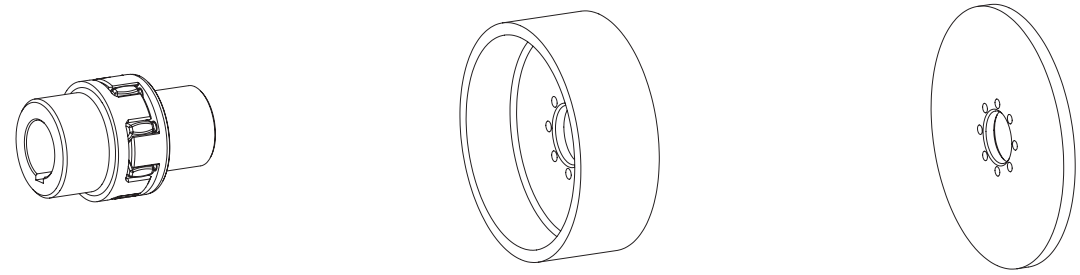
Size	Standard hub				Large hub			Spider	Driving flange			Coupling flange	DKM spacer
	Component 1				Component 1a			Compo-nent 2	Component 3b	Component 3Na		Component 4N	Compo-nent 6
	Alu [kg] [kgm²]	GJL [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	Alu [kg] [kgm²]	GJL [kg] [kgm²]	St [kg] [kgm²]	Polyurethane (Vulkollan) [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	GJS [kg] [kgm²]	St [kg] [kgm²]	Alu [kg] [kgm²]
14	—	—	—	—	0.020	—	—	0.0044	—	—	—	—	—
	—	—	—	—	0.000003	—	—	0.0000005	—	—	—	—	—
19	0.064	—	—	—	0.074	—	0.25	0.0056	—	—	—	—	—
	0.00001	—	—	—	0.00002	—	0.00006	0.000001	—	—	—	—	—
24	0.123	—	—	—	0.174	—	0.55	0.014	0.028	0.145	—	0.30	0.14
	0.00004	—	—	—	0.00008	—	0.00023	0.000006	0.00023	0.00007	—	0.00009	0.00006
28	0.200	—	—	—	0.264	—	0.89	0.024	0.54	0.232	—	0.49	0.22
	0.00010	—	—	—	0.00019	—	0.00053	0.000010	0.0007	0.00017	—	0.0002	0.00013
38	0.44	1.16	—	1.6	0.470	1.32	1.74	0.042	0.73	—	0.313	0.87	0.35
	0.00033	0.00086	—	0.00151	0.00046	0.00135	0.00155	0.00003	0.001	—	0.00038	0.0005	0.00035
42	0.69	1.75	—	2.44	0.772	2.05	2.74	0.065	1.26	—	0.608	1.4	0.47
	0.00067	0.00178	—	0.00281	0.00111	0.00291	0.00343	0.00007	0.0032	—	0.00089	0.0011	0.00068
48	0.80	2.44	—	3.34	1.01	2.78	3.72	0.086	1.45	—	0.755	1.92	0.62
	0.0012	0.00308	—	0.00473	0.00174	0.00484	0.00570	0.00013	0.0043	—	0.001358	0.0018	0.0011
55	—	3.68	—	5.05	—	4.08	5.57	0.11	2.58	—	1.243	2.93	0.90
	—	0.00615	—	0.00948	—	0.00926	0.01193	0.00023	0.0105	—	0.002920	0.0037	0.0021
65	—	5.67	—	6.79	—	6.04	8.22	0.17	3.10	—	1.635	4.36	1.31
	—	0.01240	—	0.01516	—	0.01789	0.02079	0.00042	0.0149	—	0.004891	0.0069	0.0039
75	—	8.72	—	10.5	—	9.53	14.3	0.32	4.46	—	2.511	6.80	1.97
	—	0.02644	—	0.03269	—	0.03946	0.05069	0.00116	0.0281	—	0.01050	0.0151	0.0082
90	—	14.8	—	18.7	—	18.2	24.0	0.57	6.94	—	4.151	12.84	3.45
	—	0.06730	—	0.08742	—	0.15086	0.13151	0.00323	0.0651	—	0.02723	0.0448	0.0224
100	—	—	19.7	—	—	—	—	0.81	10.2	—	6.350	16.16	—
	—	—	0.11694	—	—	—	—	0.00588	0.1165	—	0.05273	0.0798	—
110	—	—	27.4	—	—	—	—	1.19	—	—	8.578	21.35	—
	—	—	0.20465	—	—	—	—	0.01097	—	—	0.09121	0.2824	—
125	—	—	42.3	—	—	—	—	1.63	—	—	12.598	34.33	—
	—	—	0.40727	—	—	—	—	0.01972	—	—	0.17469	0.3229	—
140	—	—	58.1	—	—	—	—	2.11	—	—	17.271	48.69	—
	—	—	0.67739	—	—	—	—	0.03129	—	—	0.29247	0.4917	—
160	—	—	84.2	—	—	—	—	3.21	—	—	26.305	71.08	—
	—	—	1.31729	—	—	—	—	0.06323	—	—	0.59436	0.9693	—
180	—	—	118.5	—	—	—	—	5.25	—	—	33.076	109.43	—
	—	—	2.30835	—	—	—	—	0.13789	—	—	0.97394	1.9650	—

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

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 [1)]		
Brake drum $ØD_B$ x B	Weight [kg]	Mass moment of inertia J [kgm2]
160 x 60	2.12	0.01
200 x 75	3.45	0.03
250 x 95	6.87	0.08
315 x 118	14.95	0.28
400 x 150	31.20	0.89
500 x 190	60.00	2.70
630 x 236	112.00	8.01
710 x 265	161.00	14.9
800 x 300	202.00	27.2

Brake disk for SBAN [1)]		
Brake disk ØA x G_S	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