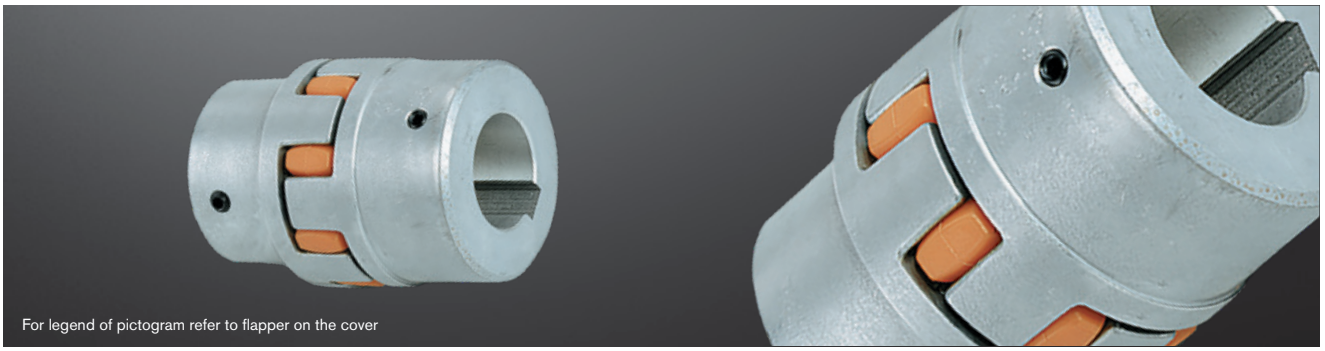
Materials: aluminium + cast + sinter material



ROTEX® Sintered steel (Sint)																		
Size	Compo-nent	Spider [1] (component 2) Rated torque [Nm]			Finish bore D (min. - max.)	Dimensions [mm]												
						General									Setscrew			
		92 ShA	98 ShA	64 ShD		DH	L	L1, L2	E	S	B1	DI1	DN	N	G	T	TA [Nm]	
14	1a	7.5	12.5	—	0-16	30	35	11	13	1.5	10	10	30	–	M 4	5	1.5	
19	1a	10	17	—	0-25	40	66	25	16	2.0	12	18	40	–	M 5	10	2	
24	1a	35	60	—	0-35	56	78	30	18	2.0	14	27	56	–	M 5	10	2	
ROTEX® Aluminium diecast (Al-D)																		
19	1	10	17	—	0-19	41	66	25	16	2	12	18	32	20	M 5	10	2	
	1a				19-24								41					
24	1	35	60	—	0-24	56	78	30	18	2	14	27	40	24	M 5	10	2	
	1a				22-28								56					
28	1	95	160	—	0-24	66	90	35	20	2.5	15	30	48	28	M 8	15	10	
	1a				24-38								66					
38	1	190	325	—	0-38	114	45	24	18	3.0	80	38	66	36	M 8	15	10	
	1a				25-45								77					
ROTEX® Aluminium (Al-H)																		
14	1a	7.5	12.5	16	0-16	30	35	11	13	1.5	10	10.5	-	-	M 4	5	1.5	
19	1a	10	17	26	0-24	40	66	25	16	2.0	12	18	-	-	M 5	10	2	
24	1a	35	60	75	0-28	55	78	30	18	2.0	14	27	-	-	M 5	10	2	
28	1a	95	160	200	0-38	65	90	35	20	2.5	15	30	-	-	M 8	15	10	
38	1a	190	325	405	0-45	80	114	45	24	3.0	18	38	-	-	M 8	15	10	
42	1a	265	450	560	0-55	95	126	50	26	3.0	20	46	-	-	M 8	20	10	
48	1a	310	525	655	0-62	105	140	56	28	3.5	21	51	-	-	M 8	20	10	

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

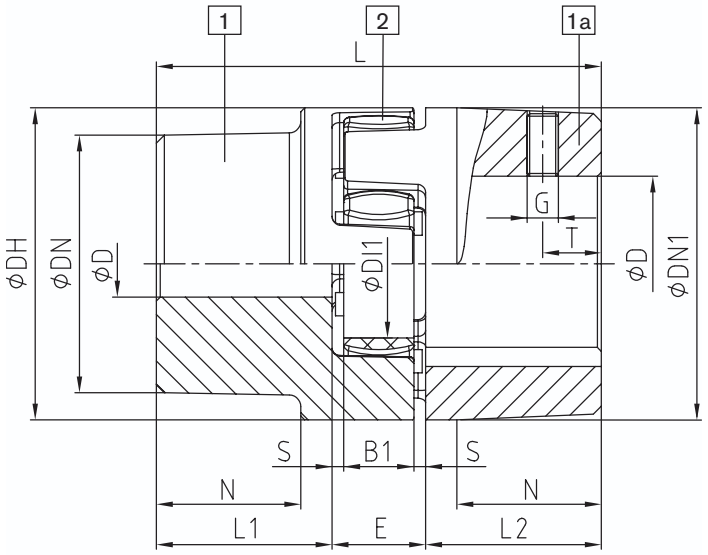
ROTEX® Cast iron (GJL)																	
38	1	190	325	405	12-40	80	114	45	24	3	18	38	66	37	M 8	15	10
	1a				38-48								78				
	1b				12-48		164	70						62			
42	1	265	450	560	14-45	95	126	50	26	3	20	46	75	40	M 8	20	10
	1a				42-55								94				
	1b				14-55		176	75						65			
48	1	310	525	655	15-52	105	140	56	28	3.5	21	51	85	45	M 8	20	10
	1a				48-62								104				
	1b				15-62		188	80						69			
55	1	410	685	825	20-60	120	160	65	30	4	22	60	98	52	M 10	20	17
	1a				55-74								118				
65	1	625	940	1175	22-70	135	185	75	35	4.5	26	68	115	61	M 10	20	17
75	1	1280	1920	2400	30-80	160	210	85	40	5	30	80	135	69	M 10	25	17
90	1	2400	3600	4500	40-100	200	245	100	45	5.5	34	100	160	81	M 12	30	40
ROTEX® Nodular iron (GJS)																	
100	1	3300	4950	6185	50-115	225	270	110	50	6	38	113	180	89	M 12	30	40	
110	1	4800	7200	9000	60-125	255	295	120	55	6.5	42	127	200	96	M 16	35	80	
125	1	6650	10000	12500	60-145	290	340	140	60	7	46	147	230	112	M 16	40	80	
140	1	8550	12800	16000	60-160	320	375	155	65	7.5	50	165	255	124	M 20	45	140	
160	1	12800	19200	24000	80-185	370	425	175	75	9	57	190	290	140	M 20	50	140	
180	1	18650	28000	35000	85-200	420	475	195	85	10.5	64	220	325	156	M 20	50	140	

■ =Unless any material is specified in the order, it is defined with the calculation/order.
[1] Maximum torque of the coupling $T_{K\,max}$ = rated torque of the coupling T_{KN} x 2. For selection see page 14 et seqq.

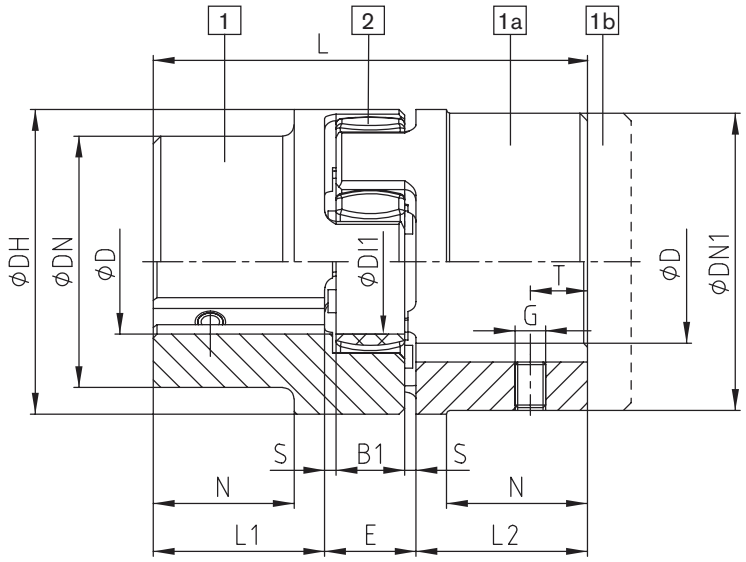
Ordering example:

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

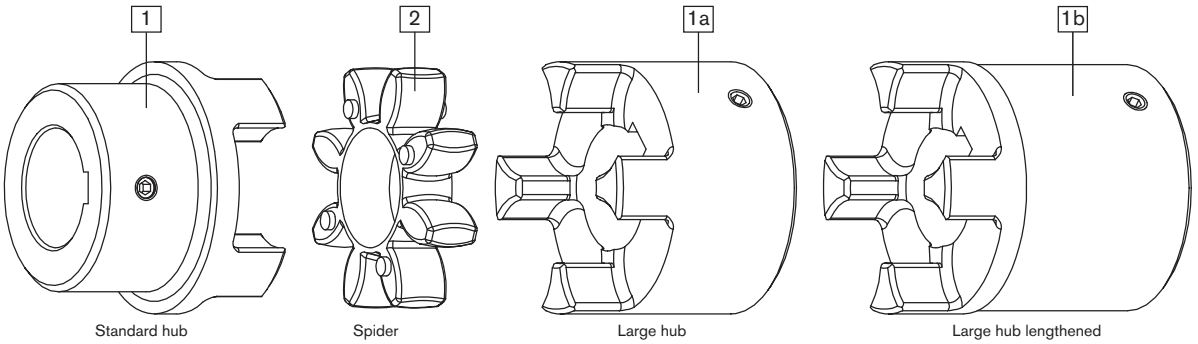
Components



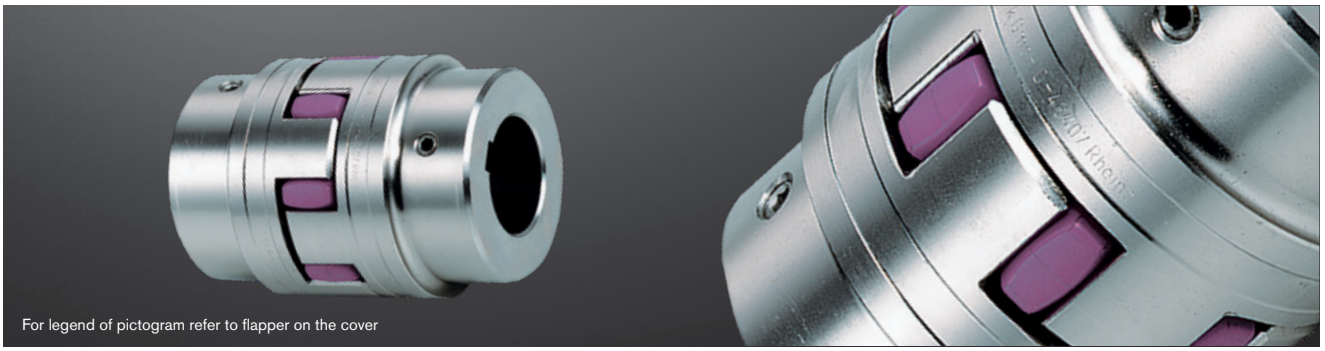
AI-D (thread opposite the keyway)

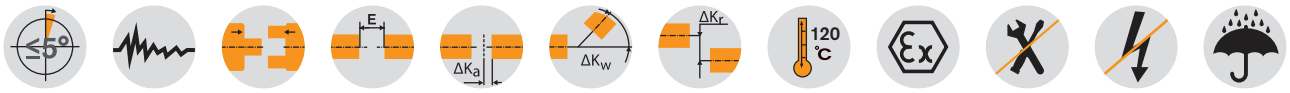


GJL / GJS (thread on the keyway)



Material steel/stainless steel





ROTEX® Steel (St)

Size	Compo-nent	Spider [1] (component 2) Rated torque [Nm]			Finish bore D (min. - max.)	Dimensions [mm]											
						General									Setscrew		
		92 ShA	98 ShA	64 ShD		DH	L	L1, L2	E	S	B1	DI1	DN	N	G	T	TA [Nm]
14	1a	7.5	12.5	16	0-16	30	35	11	13	1.5	10	10	30	—	M 4	5	1.5
	1b						50	18.5									
19	1a	10	17	21	0-25	40	66	25	16	2	12	18	40	—	M 5	10	2
	1b						90	37									
24	1a	35	60	75	0-35	55	78	30	18	2	14	27	55	—	M 5	10	2
	1b						118	50									
28	1a	95	160	200	0-40	65	90	35	20	2.5	15	30	65	—	M 8	15	10
	1b						140	60									
38	1	190	325	405	0-48	80	114	45	24	3	18	38	70	27	M 8	15	10
	1b						164	70					80	—			
42	1	265	450	560	0-55	95	126	50	26	3	20	46	85	28	M 8	20	10
	1b						176	75					95	—			
48	1	310	525	655	0-62	105	140	56	28	3.5	21	51	95	32	M 8	20	10
	1b						188	80					105	—			
55	1	410	685	825	0-75	120	160	65	30	4	22	60	110	37	M 10	20	17
	1b						210	90					120	—			
65	1	625	940	1175	0-80	135	185	75	35	4.5	26	68	115	47	M 10	20	17
	1b						235	100					135	—			
75	1	1280	1920	2400	0-95	160	210	85	40	5	30	80	135	53	M 10	25	17
	1b						260	110					160	—			
90	1	2400	3600	4500	0-110	200	245	100	45	5.5	34	100	160	62	M 12	30	40
	1b						295	125					200	—			
100	1	3300	4950	6185	0-115	225	270	110	50	6	38	113	180	89	M 12	30	40
110	1	4800	7200	9000	0-130	255	295	120	55	6.5	42	127	200	96	M 16	35	80
125	1	6650	10000	12500	60-145	290	340	140	60	7	46	147	230	112	M 16	40	80
140	1	8550	12800	16000	60-160	320	375	155	65	7.5	50	165	255	124	M 20	45	140
160	1	12800	19200	24000	80-185	370	425	175	75	9	57	190	290	140	M 20	50	140
180	1	18650	28000	35000	85-200	420	475	195	85	10.5	64	220	325	156	M 20	50	140

■ =Unless any material is specified in the order, it is defined with the calculation/order.
[1] Maximum torque of the coupling $T_{K\,max}$ = rated torque of the coupling T_{KN} x 2. For selection see page 14 et seqq.

ROTEX® Stainless steel

Size	Material	Spider (component 2) Rated torque [Nm]			Finish bore D (min. - max.)	Dimensions [mm]											
						General									Setscrew		
		92 ShA	98 ShA	64 ShD		DH	L	L1, L2	E	S	B1	DI1	DN	N	G	T	T_A [Nm]
19	1.4305	10	17	21	0-25	40	66	25	16	2	12	18	40	-	M 5	10	2
24	1.4305	35	60	75	0-35	55	78	30	18	2	14	27	55	-	M 5	10	2
28	1.4305	95	160	200	0-40	65	90	35	20	2.5	15	30	65	-	M 8	15	10
38	1.4305	190	325	405	0-48	80	114	45	24	3	18	38	70	27	M 8	15	10
42	1.4305	265	450	560	0-55	95	126	50	26	3	20	46	85	28	M 8	20	10
48	1.4305	310	525	655	0-62	105	140	56	28	3.5	21	51	95	32	M 8	20	10

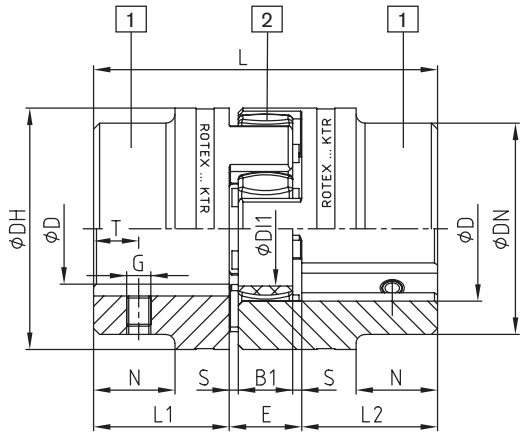
Material 1.4571 on request.

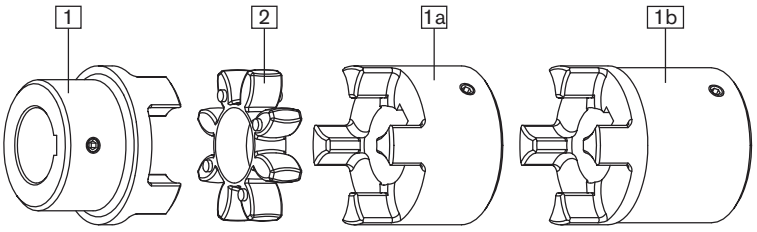
Ordering example:

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

DIN EN 10204 - 3.1 and 3.2 material test certificate

Components





Steel (thread on the keyway)

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

[1] S355 suitable for feather key connections, 42CrMoS4+QT for oil press-fits
[2] Notch impact strength with -40 °C
[3] Notch impact strength with -20 °C

Marine programme:

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

UL

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

Sizes available:

ROTEX® UL Listed								
Size	Compo-nent	Material	Spider (component 2) Rated torque [Nm] 92 ShA	Dimensions [mm] Finish bore D (min. - max.)	DH	L	L1; L2	E
42	1	St	265	18-55	95	126	50	26
55	1	St	410	24-74	120	160	65	30
65	1	St	625	24-80	135	185	75	35
75	1	St	1280	24-95	160	210	85	40
90	1	St	2400	30-110	200	245	100	45

* for complete dimensions see table on page 40