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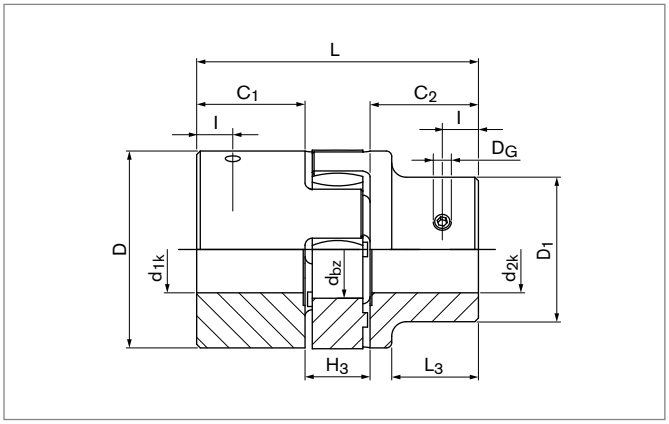
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Elastomer Jaw Couplings

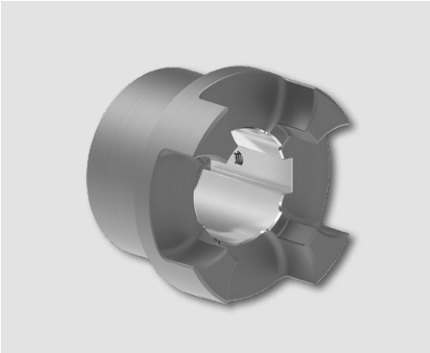
RINGFEDER® ECE 6418

Type with Freely Combinable Steel Hubs and Elastomer Spiders of Various Hardnesses

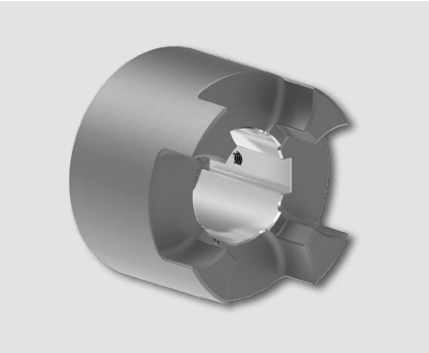




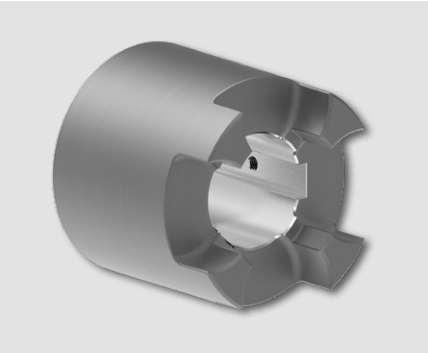
Hub Designs



Hub Design 1



Hub Design 1a



Hub Design 1b

Size	Hub Design	d_{1kmin}-d_{1kmax}	d_{2kmin}-d_{2kmax}	D	C_1	C_2	D_1	H_3	l	L	L_3
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
19	1	6 - 19	6 - 19	40	25	25	32	16	10	66	20
19	1a	6 - 25	6 - 25	40	25	25	40	16	10	66	---
19	1b	6 - 25	6 - 25	40	37	37	40	16	10	90	---
24	1	6 - 24	6 - 24	55	30	30	40	18	10	78	24
24	1a	6 - 35	6 - 35	55	30	30	55	18	10	78	---
24	1b	6 - 35	6 - 35	55	50	50	55	18	10	118	---
28	1	6 - 28	6 - 28	65	35	35	48	20	15	90	28
28	1a	6 - 40	6 - 40	65	35	35	65	20	15	90	---
28	1b	6 - 40	6 - 40	65	60	60	65	20	15	140	---
38	1	6 - 48	6 - 48	80	45	45	66	24	15	114	37
38	1a	6 - 48	6 - 48	80	45	45	70	24	15	114	---
38	1b	6 - 48	6 - 48	80	70	70	80	24	15	164	---

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Elastomer Jaw Couplings RINGFEDER® ECE 6418

Size	Hub Design	d_{1kmin}-d_{1kmax}	d_{2kmin}-d_{2kmax}	D	C_1	C_2	D_1	H_3	I	L	L_3
		mm	mm	mm	mm	mm	mm	mm	mm	mm	mm
42	1	6 - 42	6 - 42	95	50	50	75	26	20	126	40
42	1a	6 - 55	6 - 55	95	50	50	95	26	20	126	---
42	1b	6 - 55	6 - 55	95	75	75	95	26	20	176	---
48	1	6 - 48	6 - 48	105	56	56	85	28	20	140	45
48	1a	6 - 62	6 - 62	105	56	56	105	28	20	140	---
48	1b	6 - 62	6 - 62	105	80	80	105	28	20	188	---
55	1	6 - 55	6 - 55	120	65	65	98	30	20	160	52
55	1a	6 - 74	6 - 74	120	65	65	118	30	20	160	---
55	1b	6 - 74	6 - 74	120	90	90	120	30	20	210	---
65	1	6 - 65	6 - 65	135	75	75	115	35	20	185	61
65	1a	6 - 80	6 - 80	135	75	75	132	35	20	185	---
65	1b	6 - 80	6 - 80	135	100	100	135	35	20	235	---
75	1	6 - 75	6 - 75	160	85	85	135	40	25	210	69
75	1a	6 - 95	6 - 95	160	85	85	158	40	25	210	---
75	1b	6 - 95	6 - 95	160	110	110	160	40	25	260	---
90	1	6 - 90	6 - 90	200	100	100	160	45	30	245	81
90	1a	6 - 110	6 - 110	200	100	100	196	45	30	245	---
90	1b	6 - 110	6 - 110	200	125	125	200	45	30	295	---

Size	Hub Design	T_{KN} [1)]	d_{bZ}	D_G	T_A	Gw
		Nm	mm	mm	Nm	kg
19	1	10	18	5	2	0,415
19	1a	10	18	5	2	0,551
19	1b	10	18	5	2	0,791
24	1	35	27	5	2	0,809
24	1a	35	27	5	2	1,233
24	1b	35	27	5	2	1,971
28	1	95	30	8	10	1,342
28	1a	95	30	8	10	3,795
28	1b	95	30	8	10	3,288
38	1	190	38	8	10	2,961
38	1a	190	38	8	10	3,795
38	1b	190	38	8	10	5,711
42	1	265	46	8	10	4,408
42	1a	265	46	8	10	5,97
42	1b	265	46	8	10	8,69
48	1	310	51	8	10	6,181
48	1a	310	51	8	10	7,927
48	1b	310	51	8	10	10,971
55	1	410	60	10	17	9,377
55	1a	410	60	10	17	12,109
55	1b	410	60	10	17	16,389
65	1	940	68	10	17	14,407
65	1a	940	68	10	17	17,549
65	1b	940	68	10	17	22,915
75	1	1920	80	10	17	22,374
75	1a	1920	80	10	17	28,074
75	1b	1920	80	10	17	35,746
90	1	3550	100	12	40	38,166
90	1a	3550	100	12	40	50,854
90	1b	3550	100	12	40	62,648

1) T_{KN} is specified for corresponding standard elastomer spider.
Coupling sizes 19-55: Yellow elastomer spider (92 SH A). Coupling sizes 65-90: Red elastomer spider (98 SH A).

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Elastomer Jaw Couplings RINGFEDER® ECE 6418

Technical Data of Elastomer Spiders

Size	Hardness	n_{max}	T_{KN}	T_{KW}	T_{Kmax}	ψ	C_{Tdyn} at 1*T_{KN}	C_{Tdyn} at 0,5*T_{KN}	C_{Tdyn} at 0,25*T_{KN}	d_{bZ}	ΔK_a at n = 1500 1/min	ΔK_r at n = 1500 1/min	ΔK_w at n = 1500 1/min	ϕ at T_{Kmax}
		1/min	Nm	Nm	Nm		10^3 Nm/rad	10^3 Nm/rad	10^3 Nm/rad	mm	mm	mm	degrees	degrees
19	64 SH D	19000	21	5,5	42	0,75	1,99	1,37	0,98	18	-0,5 +1,2	0,13	1,1	3,6
19	92 SH A	19000	10	2,6	20	0,8	0,52	0,34	0,24	18	-0,5 +1,2	0,2	1,2	5
19	98 SH A	19000	17	4,4	34	0,8	1,59	1,16	0,8	18	-0,5 +1,2	0,2	1,2	5
24	64 SH D	14000	75	19,5	150	0,75	7,92	5,45	3,91	27	-0.5 +1.4	0,15	0,8	3,6
24	92 SH A	14000	35	9,1	70	0,8	1,96	1,29	0,92	27	-0,5 +1,4	0,22	0,9	5
24	98 SH A	14000	60	16	120	0,8	6,24	4,53	3,14	27	-0,5 +1,4	0,22	0,9	5
28	64 SH D	11800	200	52	400	0,75	18,88	12,98	9,31	30	-0,7 +1,5	0,18	0,8	3,6
28	92 SH A	11800	95	25	190	0,8	4,95	3,24	2,32	30	-0,7 +1,5	0,25	0,9	5
28	98 SH A	11800	160	42	320	0,8	15,32	11,12	7,71	30	-0,7 +1,5	0,25	0,9	5
38	64 SH D	9500	405	105	810	0,75	38,14	22,41	15,54	38	-0,7 +1,8	0,21	0,9	3,6
38	92 SH A	9500	190	49	380	0,8	9,8	6,42	4,59	38	-0,7 +1,8	0,28	1	5
38	98 SH A	9500	325	85	650	0,8	30,89	22,41	15,54	38	-0,7 +1,8	0,28	1	5
42	64 SH D	8000	560	146	1120	0,75	60,4	45,5	29,8	46	-1 +2	0,23	0,9	3,6
42	92 SH A	8000	265	69	530	0,8	15,4	10,4	7,4	46	-1 +2	0,32	1	5
42	98 SH A	8000	450	117	900	0,8	45,5	33,2	23,0	46	-1 +2	0,32	1	5
48	64 SH D	7100	655	170	1310	0,75	71,0	53,5	35,0	51	-1 +2,1	0,25	1	3,6
48	92 SH A	7100	310	81	620	0,8	17,8	12,0	8,6	51	-1 +2,1	0,36	1,1	5
48	98 SH A	7100	525	137	1050	0,8	52,3	38,1	26,4	51	-1 +2,1	0,36	1,1	5
55	64 SH D	6300	825	215	1650	0,75	92,3	69,5	45,5	60	-1 +2,2	0,27	1	3,6
55	92 SH A	6300	410	107	820	0,8	24,5	16,5	11,8	60	-1 +2,2	0,38	1,1	5
55	98 SH A	6300	685	178	1370	0,8	70,6	51,4	35,6	60	-1 +2,2	0,38	1,1	5
65	64 SH D	5600	1175	306	2350	0,75	141,1	102,5	59,8	68	-1 +2,6	0,3	1,1	3,6
65	92 SH A	5600	590	160	1220	0,8	40,4	27,8	19,8	68	-1 +2,6	0,42	1,2	5
65	98 SH A	5600	940	244	1880	0,8	100,7	73,7	51,0	68	-1 +2,6	0,42	1,2	5
75	64 SH D	4750	2400	624	4800	0,75	294,4	213,8	124,8	80	-1,5 +3	0,34	1,1	3,6
75	92 SH A	4750	1220	326	2500	0,8	84,6	58,1	41,4	80	-1,5 +3	0,48	1,2	5
75	98 SH A	4750	1920	499	3840	0,8	209,6	153,5	106,3	80	-1,5 +3	0,48	1,2	5
90	64 SH D	3800	4500	1128	9000	0,75	550,5	338,4	183,3	100	-1,5 +3,4	0,36	1,1	3,6
90	92 SH A	3800	2350	610	4700	0,8	158,7	109,1	77,7	100	-1,5 +3,4	0,5	1,2	5
90	98 SH A	3800	3550	880	7100	0,8	413,4	273,0	134,2	100	-1,5 +3,4	0,5	1,2	5

T_{KN} = Nominal torque of coupling given in Nm
Continuous torque which can be transmitted throughout the entire speed range, taking into consideration operational factors such as ambient temperatures and torsional stiffness.

T_{Kmax} = Maximum torque of coupling given in Nm
Torque which can be transmitted as dynamic load ≥10^5 times or 5 x 10^4 as alternating load, respectively, during the entire operating life of the coupling, taking into account the operating factors.

T_{KW} = Alternating torque of coupling given in Nm
Amplitude of the permissible continuous torque fluctuation with max. f = 10 Hz and a basic load up to T_{KN}.

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Elastomer Jaw Couplings RINGFEDER® ECE 6418

Explanations

$d_{1k,2kmin}$	= Min. bore diameter with keyway acc. to DIN 6885-1	D_G	= Thread	ΔK_a at n = 1500 1/min	= Max. permissible axial misalignment at n = 1500 1/min
$d_{1k,2kmax}$	= Max. bore diameter with keyway acc. to DIN 6885-1	T_A	= Max. tightening torque of the clamping screws	ΔK_r at n = 1500 1/min	= Max. permissible radial misalignment at n = 1500 1/min
D	= Max. outer diameter	Gw	= Weight	ΔK_w at n = 1500 1/min	= Max. permissible angular misalignment at n = 1500 1/min
C_1	= Guided length in hub bore d_1	n_{max}	= Max. rotational speed	ϕ at T_{Kmax}	= Torsional angle at T_{Kmax}
C_2	= Guided length in hub bore d_2	T_{KW}	= Transmissible torque for changing direction of rotation		
D_1	= Outer diameter hub	T_{Kmax}	= Max. transmissible torque		
H_3	= Length of damping component	ψ	= Relative damping		
l	= Distance between center screw hole and hub end	C_{Tdyn} at $1*T_{KN}$	= Dynamic torsional stiffness at $1*T_{KN}$		
L	= Totel length	C_{Tdyn} at $0,5*T_{KN}$	= Dynamic torsional stiffness at $0,5*T_{KN}$		
L_3	= Section length	C_{Tdyn} at $0,25*T_{KN}$	= Dynamic torsional stiffness at $0,25*T_{KN}$		
T_{KN}	= Transmissible torque at given T_A				
d_{bz}	= Inner diameter elastomer spider				

Technical Information

- All dimensions are in millimeters, unless otherwise specified.
- Hubs made of steel, elastomer spiders made of polyurethane.
- Shaft tolerance to be within fit tolerance: g6, h7.
- For coupling sizes 19-55, as standard with yellow elastomer spider (92 SH A). For coupling sizes 65-90, as standard with red elastomer spider (98 SH A).
- Different hub designs can be combined. Hubs optionally available without bore.
- Available are: Complete couplings, single hubs, single elastomer spiders.
- The values given for max. permissible axial, angular and radial shaft misalignment may not occur simultaneously.

Ordering example

Series	Type	Size	Design Hub 1	Bore diameter d_{1k}	Design Hub 2	Bore diameter d_{2k}	Elastomer Spider Hardness
ECE	6418	24	1	22	1a	26	98 SH A

Further information on
RINGFEDER® ECE 6418
on **www.ringfeder.com**

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