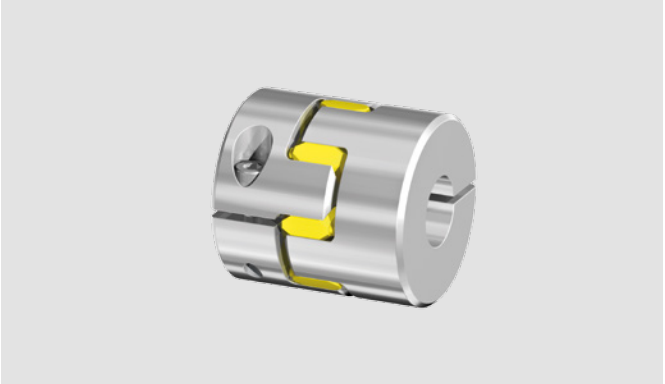
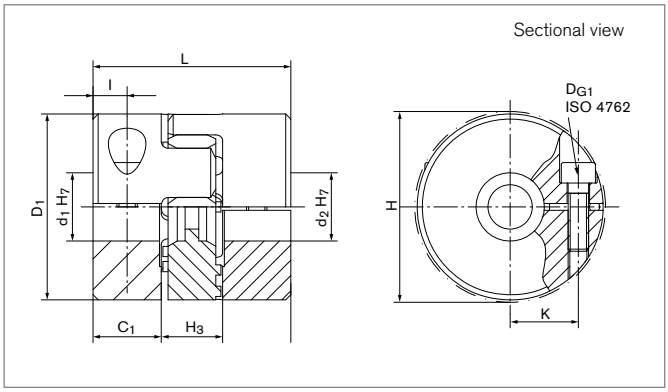
Elastomer Jaw Couplings

RINGFEDER® GWE 5103

Servo-Insert coupling with clamping hubs, short length and single slit





Size	$d_1;d_2$ min-max Without keyway	$d_{1k};d_{2k}$ min-max With keyway	C_1	D_1	H	H_3	l	K	L
	mm	mm	mm	mm	mm	mm	mm	mm	mm
7	3 - 7	6 - 7	6	14	16,5	8	3	5	20
9	4 - 11	6 - 11	8	19,5	23	10	4	7,5	26
12	4 - 12	6 - 12	7	25	26	12	3,5	8,5	26
14	5 - 15	6 - 15	9,5	29,5	33	13	5	10,5	32
19	8 - 22	8 - 22	17	39,5	43	16	6	15	50
24	10 - 31	10 - 31	20	54,5	56	18	10	20	58
28	14 - 35	14 - 35	21,5	64,5	67	19	11	23,5	62
38	15 - 46	15 - 46	31	79,5	88	23	13	30	85
42	20 - 56	20 - 56	38	94,5	95	26	14	35	102

Transmission of the couplings transmissible torque T can not longer be guaranteed for certain with borings < d_{min}. Types with borings < d_{min}, however, can be supplied.

Moment of inertia and weight (mass) are calculated with reference to the largest bore size.

Size	T	H_{es}	n_{max}	J	Gw	D_{G1}	T_{A1}
	Nm		1/min	$10^{-3}kgm^2$	kg	mm	Nm
7	1,2	92 SH A	27000	0,0001	0,006	1 x M2	0,35
9	3	92 SH A	19000	0,0002	0,019	1 x M2,5	0,75
12	5	92 SH A	15000	0,00223	0,023	1 x M3	1,5
14	12,5	98 SH A	13000	0,006	0,049	1 x M4	5
19	17	98 SH A	10000	0,029	0,12	1 x M5	10
24	60	98 SH A	7000	0,121	0,28	1 x M6	18
28	160	98 SH A	6000	0,236	0,355	1 x M8	36
38	325	98 SH A	5000	0,797	0,85	1 x M10	84
42	450	98 SH A	4000	1,779	1,5	1 x M10	84

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Transmissible torque T [Nm] of the Shaft-Hub-Connection

Size	Ø3	Ø4	Ø5	Ø6	Ø8	Ø10	Ø12	Ø14	Ø15	Ø18	Ø20	Ø25	Ø26	Ø28	Ø30	Ø35	Ø40	Ø45	Ø50	Ø55	Ø56
7	0,7	0,9	1,1	1,2	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
9	---	1,7	2,1	2,4	3	3	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
12	---	2,9	3,6	4,2	5	5	5	---	---	---	---	---	---	---	---	---	---	---	---	---	---
14	---	---	9	10,6	12,5	12,5	12,5	12,5	12,5	---	---	---	---	---	---	---	---	---	---	---	---
19	---	---	---	---	17	17	17	17	17	17	17	---	---	---	---	---	---	---	---	---	---
24	---	---	---	---	---	43,9	51,8	60	60	60	60	60	60	60	60	---	---	---	---	---	---
28	---	---	---	---	---	---	---	92	98	115	126	153	159	160	160	160	---	---	---	---	---
38	---	---	---	---	---	---	---	---	191	226	248	302	312	325	325	325	325	325	---	---	---
42	---	---	---	---	---	---	---	---	---	---	250	305	316	337	358	409	450	450	450	450	450

Explanations

$d_1;d_{2min}$ = Min. bore diameter d_1/d_2

$d_1;d_{2max}$ = Max. bore diameter d_1/d_2

$d_{1k};d_{2kmin}$ = Min. bore diameter d_1/d_2 With keyway acc. to DIN 6885-1

$d_{1k};d_{2kmax}$ = Max. bore diameter d_1/d_2 With keyway acc. to DIN 6885-1

C_1 = Guided length in hub bore

D_1 = Outer diameter

H = Clearance diameter

H_3 = Length of damping module

I = Distance between center screw hole and hub end

K = Distance shaft axis - clamping screw axis

L = Total length

T = Transmissible torque at given T_A

H_{es} = Hardness of the elastomeric spider

n_{max} = Max. rotation speed

J = Total moment of inertia

Gw = Weight

D_{G1} = Thread

T_{A1} = Tightened torque of clamping screw D_{G1}

Ordering example

Series Size	Bore diameter d_1	Bore diameter d_2	Spider hardness (optional) [1]	Spider bore d_{bz} (optional) [1]	Further details
GWE 5103-42	20	42	64 SH D	42	*

[1] If a different spider hardness is selected, the detailed technical data for the sprockets must be observed. See chapter „Elastomer Jaw Couplings RINGFEDER® GWE Technical description“ in Product Paper & Tech Paper „RINGFEDER® Elastomer Jaw Couplings“

* Keyway or stainless steel

Further information on
RINGFEDER® GWE 5103
on **www.ringfeder.com**

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