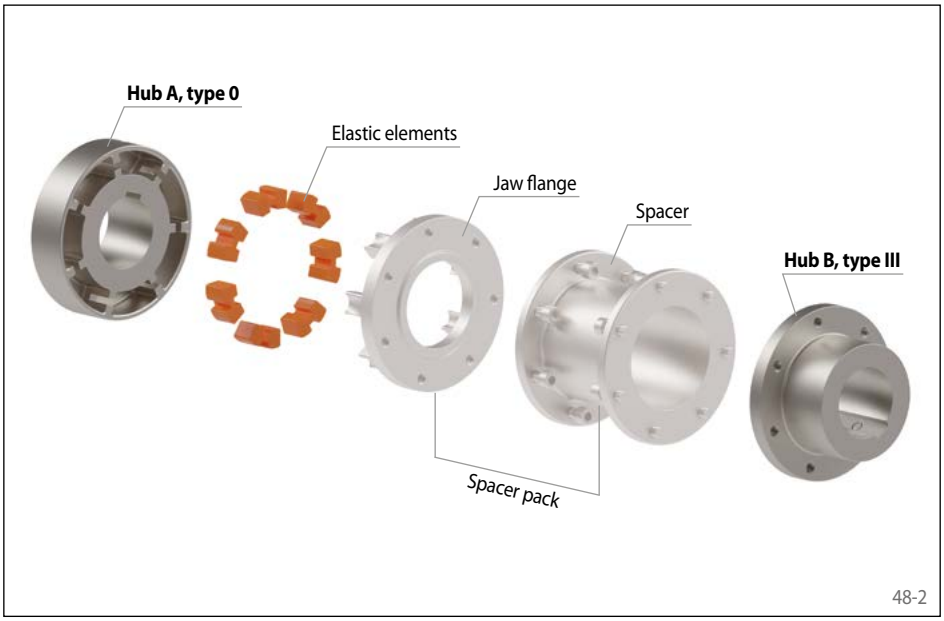
Jaw Couplings REK … DGZ

elastic for dynamic applications with enclosed elastic elements and spacer

RINGSPANN®



Features

- Compensation of axial, radial and angular misalignments
- Adsorbs vibrations
- Progressive torsion spring properties due to primarily pressurised elastic elements
- Fail-safe in the event of the failure of the elastic elements
- Easy replacement of elastic elements without disassembly of the coupling halves
- Easy separation of the drivetrain through disassembly of the coupling spacer
- Maintenance free, no lubrication necessary
- Complies with ATEX 2014/34/EU
- Typical application: Pump drives, ventilator drives, crane trolleys

Order example	Code
Coupling design	REK
Coupling size	0028
Type	DGZ
Material of the hub: • Cast iron	GJL
Hub A, type: • 0, elastomer part	0
Hub A, design: • finish bored with keyway • roughbored	FB VA
Bore diameter hub A	025
Hub B, type: • III, flange part	3
Hub B, design: • finish bored with keyway • roughbored	FB VA
Bore diameter hub B	032
Elastic elements: • NBR 75 Shore-A • PU 92 Shore-A • HTrans	 NB75 PU92 HT00
DBSE L3	0140

REK 0028 DGZ-GJL-0FB025-3FB032-NB75-0140

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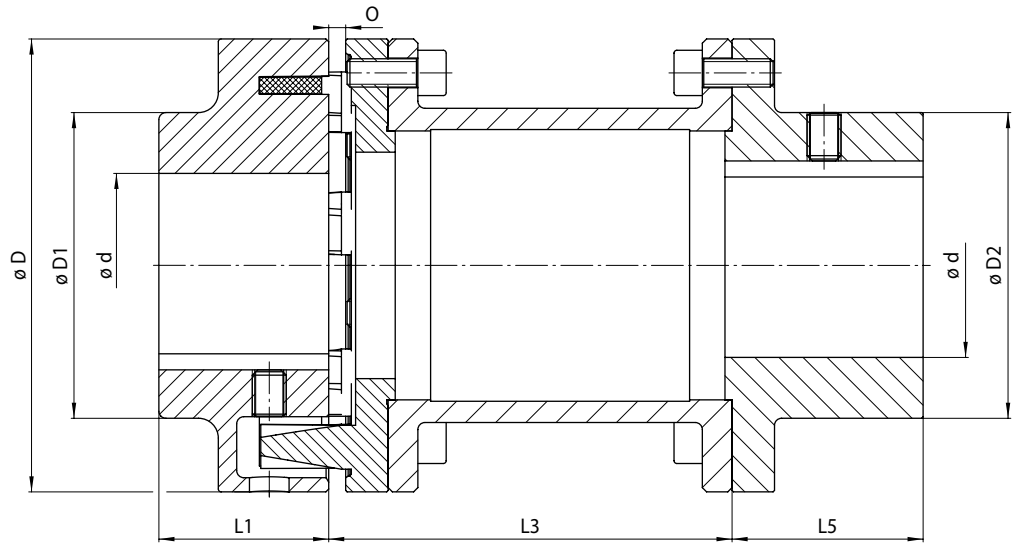

Type 0 **Type III**

49-1

Coupling size	Max. speed n_{max}	Moment of inertia with max. bore J_K	Pilot bore d*		Min. bore d*		Max. bore d*	D	D1	D2	L1	L3	L5	O	Permissible misalignments			Weight with max. bore
			Hub type 0	Hub type III	Hub type 0	Hub type III									Axial	Radial	Angular	
	min^{-1}	kgm^2	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	mm	°	kg
0028	6000	0,0014 0,0015	13	8	14	9	30/32	80	-	55	30	100 140	45	5				2,8 2,9
0042	5500	0,0028 0,0031	13	13	14	14	42	95	76	70	35	100 140	45	5				3,9 4,2
0048	5300	0,0056 0,0060 0,0064	13	13	14	14	48	110	86	80	40	100 140 180	50	5				5,8 6,2 6,6
0055	5100	0,0099 0,0100 0,0110	13	13	14	14	55	125	100	90	50	100 140 180	50	5				8,2 8,7 9,2
0060	4900	0,0190 0,0200	13	13	14	14	60	140	100	100	55	140 180	65	5				11,8 12,3
0065	4250	0,0320 0,0340	13	13	14	14	65	160	108	108	60	140 180	70	6	± 1,5	0,4	1	15,2 16,0
0075	3800	0,0540 0,0580	23	23	24	24	75	180	125	125	70	140 180	80	6				21,0 21,9
0080	3400	0,1000 0,1050 0,1100	25	25	26	26	85	200	140	140	80	180 200 250	90	6				30,3 30,9 32,1
0090	3000	0,1600 0,1700 0,1800	35	35	36	36	90	225	150	150	90	180 200 250	100	6				39,0 39,7 41,5
0100	2750	0,2800 0,3000	44	44	45	45	100	250	165	165	100	200 250	110	8				54,7 56,5

For finish bores, please specify bore diameter hub A and hub B. Tolerance of finish bores H7. Keyways in accordance with DIN 6885, sheet 1. Keyway tolerance JS9.
Upon request: Hub type III in extended design; Spacers for varying DBSEs L3
For vertical installation, please contact RINGSPANN.
See following pages for performance data.
* Bores also available in inch size, see page 65.

Elastic elements

Elastic element NBR 75 Shore-A

Material: Nitrile rubber

Hardness: 75 ±5 Shore-A

Temperature range: -40 °C to +100 °C

Colour: black

Coupling size	Nominal torque T_{KN} Nm	Nominal power at 100 min^{-1} P_{K100} kW	Max. torque $T_{K\,max}$ Nm	Alternating torque T_{kW} Nm	Torsional stiffness $C_{T\,dyn}$ Nm/rad x 10^3 1,0 T_{KN}	0,5 T_{KN}	0,25 T_{KN}	Relative damping ψ at 0,5 T_{KN}
0028	60	0,63	180	9	8,0	2,7	1,1	2,2
0042	100	1,1	300	15	12,0	4,1	1,7	
0048	160	1,7	480	24	19,0	6,8	2,7	
0055	240	2,5	720	36	28,8	10,4	4,2	
0060	360	3,8	1080	54	42,0	15,0	6,0	
0065	560	5,9	1680	84	77,0	28,0	11,0	
0075	880	9,2	2640	132	145,5	58,1	26,9	
0080	1340	14	4020	201	228,0	91,0	42,0	
0090	2000	21	6000	300	341,8	122,0	63,0	
0100	2800	29	8400	420	472,0	169,0	87,0	

Elastic element PU 92 Shore-A

Material: Polyurethane

Hardness: 92 ±5 Shore-A

Temperature range: -30 °C to +80 °C

Colour: orange

Coupling size	Nominal torque T_{KN} Nm	Nominal power at 100 min^{-1} P_{K100} kW	Max. torque $T_{K\,max}$ Nm	Alternating torque T_{kW} Nm	Torsional stiffness $C_{T\,dyn}$ Nm/rad x 10^3 1,0 T_{KN}	0,5 T_{KN}	0,25 T_{KN}	Relative damping ψ at 0,5 T_{KN}
0028	90	0,95	270	14	5,0	4,0	3,4	1,7
0042	150	1,65	450	23	7,0	6,1	5,2	
0048	240	2,55	720	36	12,0	10,0	8,6	
0055	360	3,75	1080	54	18,3	15,3	13,2	
0060	540	5,70	1620	81	27,0	22,0	19,0	
0065	840	8,85	2520	126	50,0	41,0	35,0	
0075	1320	13,80	3960	198	99,2	71,5	54,0	
0080	2010	21,00	6030	302	155,0	112,0	84,0	
0090	3000	31,50	9000	450	230,4	182,1	134,4	
0100	4200	43,50	12600	630	318,0	252,0	186,0	

Elastic elements

Elastic element HTrans

Material: Polyurethane

Hardness: 55 ±2 Shore-D

Temperature range: -30 °C to +120 °C

Colour: white

Coupling size	Nominal torque T_{KN} Nm	Nominal power at 100 min^{-1} P_{K100} kW	Max. torque $T_{K\,max}$ Nm	Alternating torque T_{kW} Nm	Torsional stiffness $C_{T\,dyn}$ Nm/rad x 10^3 1,0 T_{KN}	0,5 T_{KN}	0,25 T_{KN}	Relative damping ψ at 0,5 T_{KN}
0028	150	1,58	450	23	12	18,9	6,478	0,8
0042	250	2,75	750	38	19	29,0	9,925	
0048	400	4,25	1200	60	31	47,4	16,244	
0055	600	6,25	1800	90	47	49,7	45,314	
0060	900	9,50	2700	135	69	73,0	25,000	
0065	1400	14,75	4200	210	127	133,6	66,560	
0075	2200	23,00	6600	330	248	167,0	130,000	
0080	3350	35,00	10050	503	388	261,0	203,000	
0090	5000	52,50	15000	750	591	472,0	355,000	
0100	7000	72,50	21000	1050	817	652,0	491,000	