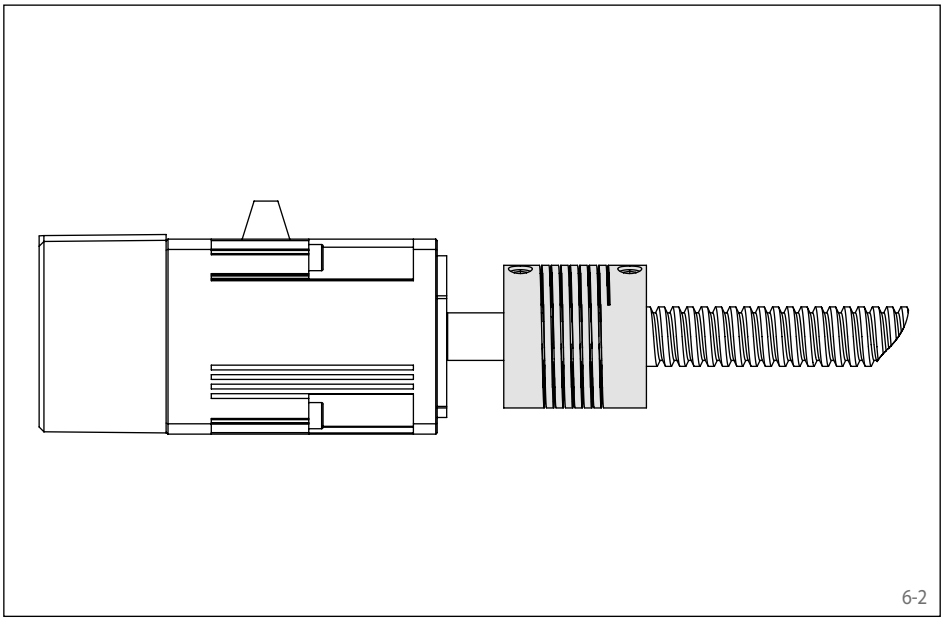
Single Beam Couplings RBC … EWS-STE

with set screw
made of steel, stainless


6-1

Features

- Small coupling for universal use
- Backlash-free angle-synchronous transmission of rotary movements
- For medium torques
- Made of stainless steel 17-4PH, Material no. 1.4542
- Optimum compensation of shaft misalignments
- Typical applications: Encoders, tachogenerators, spindle drives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Application example

The steel Beam Coupling RBC … EWS is also ideal for spindle drives. Due to its higher strength and load capacity, it is particularly suitable for more power-intensive applications where the Beam Couplings RBC … EWS made of aluminium reach their limits.

Order example	Code
Coupling design	RBC
Coupling size	0030
Type	EWS
Material: • Steel, stainless	STE
Bore diameter d1 = 12 mm	012.00
Bore diameter d2 = 10 mm	010.00

RBC 0030 EWS-STE-012.00-010.00

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RINGSPANN®

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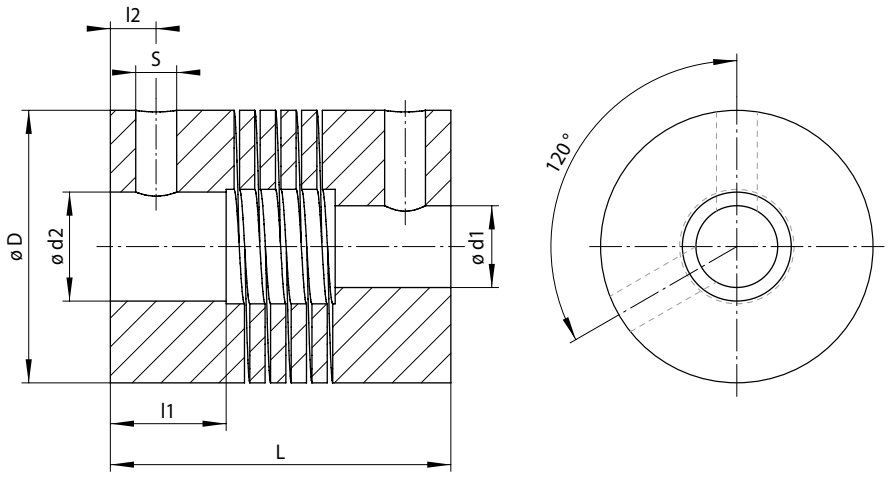

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Coupling size	Standard bore combinations d1 / d2 mm	Torque short-term Nm	Torque one-sided Nm	Torque reversing Nm	Max. speed min^{-1}	Stiffness Torsional stiffness Ct Nm/rad	Stiffness Radial spring stiffness N/mm	Stiffness Axial spring stiffness N/mm	Moment of inertia[1] x10^{-6} kgm^2	Screw tightening torque Nm	Permissible shaft misalignment Axial mm	Permissible shaft misalignment Radial mm	Permissible shaft misalignment Angular °
0015	4 / 4	1,3	0,65	0,33	10 000	22,0	368	81	0,67	1,0	± 0,25	± 0,25	5
	5 / 4	1,2	0,6	0,3		15,5	285	55					
	5 / 5	1,2	0,6	0,3		15,5	285	55					
0020	5 / 5	2,5	1,3	0,7	10 000	44,1	418	58	2,13	1,0	± 0,25	± 0,25	5
	6 / 5	2,3	1,2	0,6		35,8	346	42					
	6 / 6	2,3	1,2	0,6		35,8	346	42					
0025	6 / 6	5,7	2,9	1,5	10 000	101,0	662	95	6,45	2,1	± 0,25	± 0,25	5
	8 / 6	5,1	2,6	1,3		69,9	490	58					
	8 / 8	5,1	2,6	1,3		69,9	490	58					
	10 / 6	4,3	2,2	1,1		44,1	354	38					
	10 / 8	4,3	2,2	1,1		44,1	354	38					
	10 / 10	4,3	2,2	1,1		44,1	354	38					
0030	10 / 10	8,9	4,5	2,3	10 000	119,4	538	71	16,2	4,7	± 0,25	± 0,25	5
	12 / 10	7,7	3,9	2,0		81,9	412	49					
	12 / 12	7,7	3,9	2,0		81,9	412	49					
0040	12 / 12	23,0	11,5	5,8	10 000	358,2	952	124	81,8	7,7	± 0,25	± 0,25	5
	14 / 14	21,0	10,5	5,3		272,9	783	93					
	16 / 16	19,0	9,5	4,8		204,7	636	71					
0050	14 / 14	37,0	18,5	9,3	10 000	622,9	1 050	96	239,3	7,7	± 0,25	± 0,25	5
	16 / 16	35,0	17,5	8,8		521,0	902	75					
	19 / 19	31,0	15,5	7,8		358,2	711	54					
	20 / 20	30,0	15,0	7,5		318,4	655	48					

[1] Values based on the smallest bore diameter • Bore tolerance: 0/+ 0.05 mm; Shaft tolerance (recommended): - 0.005/- 0.013 mm

Coupling size	D mm	L mm	l1 mm	l2 mm	S mm	Weight[1] g
0015	15	20	4,8	2,5	M3	23
0020	20	20	4,8	2,5	M3	41
0025	25	24	5,9	3,0	M4	78
0030	30	30	6,8	3,5	M5	132
0040	40	50	17,0	6,7	M6	375
0050	50	54	17,0	7,5	M6	710

[1] Values based on the smallest bore diameter • Other sizes and designs with special bores (including inch dimensions) on request