

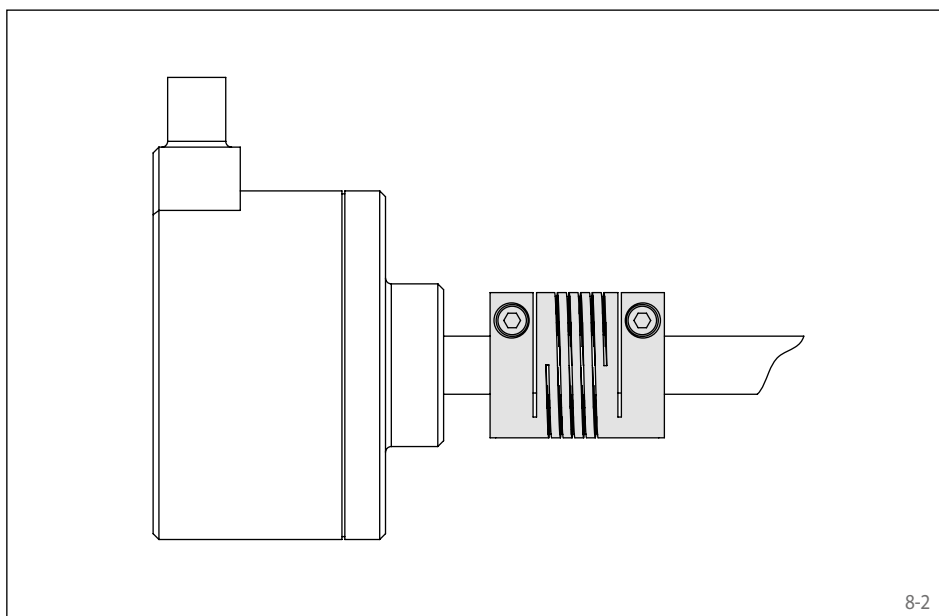
Single Beam Couplings RBC ... EWC-ALU

with clamp
made of aluminium



Features

- Small coupling for universal use
- Backlash-free angle-synchronous transmission of rotary movements
- For light applications
- Made of aluminium 7075-T6, material no. 3.4365
- Optimum compensation of shaft misalignments
- Typical applications: Encoders, tachogenerators, spindle drives



Application example

The Beam Coupling RBC ... EWC made of aluminium is ideal for applications with rotary encoders, as it enables precise torque transmission and reliably compensates for misalignment. Thanks to its low weight and corrosion resistance, it is particularly suitable for compact and sensitive systems. In encoder applications, it ensures precise signal transmission and minimises mechanical distortion, thereby increasing the accuracy and reliability of the measured values.

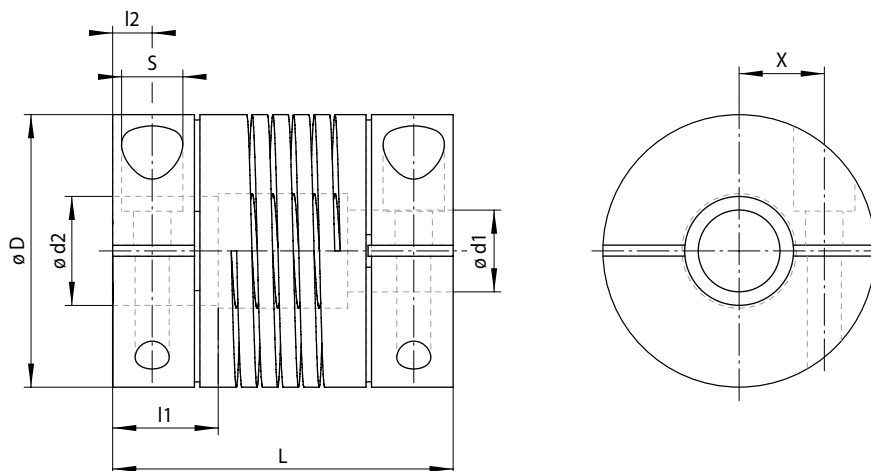
Order example

	Code
Coupling design	RBC
Coupling size	0030
Type	EWC
Material: • Aluminium	ALU
Bore diameter d1 = 12 mm	012.00
Bore diameter d2 = 10 mm	010.00

RBC 0030 EWC-ALU-012.00-010.00

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Coupling size	Standard bore combinations d1 / d2 mm	Torque			Max. speed min ⁻¹	Stiffness			Moment of inertia ¹⁾ x10 ⁻⁶ kgm ²	Screw tightening torque Nm	Permissible shaft misalignment		
		short-term Nm	one-sided Nm	reversing Nm		Torsional stiffness Ct Nm/rad	Radial spring stiffness N/mm	Axial spring stiffness N/mm			Axial mm	Radial mm	Angular °
0015	3/3	0,71	0,36	0,18	10 000	11,2	169	44	0,26	0,5	± 0,25	± 0,25	5
	4/3	0,66	0,33	0,17		8,0	131	29					
	4/4	0,66	0,33	0,17		8,0	131	29					
	5/3	0,59	0,3	0,15		5,7	102	20					
	5/4	0,59	0,3	0,15		5,7	102	20					
0020	5/5	0,59	0,3	0,15	10 000	5,7	102	20	1,09	2,0	± 0,25	± 0,25	5
	4/4	1,3	0,7	0,4		21,2	179	29					
	5/4	1,2	0,6	0,3		16,4	149	21					
	5/5	1,2	0,6	0,3		16,4	149	21					
	6/4	1,1	0,6	0,3		12,7	124	15					
0025	6/5	1,1	0,6	0,3	10 000	12,7	124	15	2,89	2,0	± 0,25	± 0,25	5
	6/6	1,1	0,6	0,3		12,7	124	15					
	6/6	2,9	1,5	0,8		38,2	236	34					
	8/6	2,6	1,3	0,7		26,0	175	21					
	8/8	2,6	1,3	0,7		26,0	175	21					
0030	10/6	2,2	1,1	0,6	10 000	16,4	126	14	7,02	4,7	± 0,25	± 0,25	5
	10/8	2,2	1,1	0,6		16,4	126	14					
	10/10	2,2	1,1	0,6		16,4	126	14					
	8/8	4,9	2,5	1,3		52,1	219	31					
	10/8	4,6	2,3	1,2		44,1	192	25					
0040	10/10	4,6	2,3	1,2	10 000	44,1	192	25	31,60	9,5	± 0,25	± 0,25	5
	12/8	4,0	2,0	1,0		30,2	147	18					
	12/10	4,0	2,0	1,0		30,2	147	18					
	12/12	4,0	2,0	1,0		30,2	147	18					
	12/12	12,0	6,0	3,0		127,3	340	44					
0050	14/14	11,0	5,5	2,8	10 000	97,1	280	33	77,50	16,0	± 0,25	± 0,25	5
	16/16	9,7	4,9	2,5		73,5	227	25					
	14/14	19,0	9,5	4,8		229,2	375	34					
	16/16	18,0	9,0	4,5		184,9	322	27					
	19/19	16,0	8,0	4,0		133,3	254	19					
	20/20	15,0	7,5	3,8		117,0	234	17					

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	X mm	Weight ¹⁾ g
0015	15	22	6,0	2,5	M2	4,3	9
0020	20	28	8,6	3,7	M3	5,5	21
0025	25	30	8,6	3,7	M3	7,7	35
0030	30	38	11,0	5,0	M4	8,8	60
0040	40	50	15,5	5,8	M5	12,5	145
0050	50	54	15,5	6,7	M6	16,3	230

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