

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

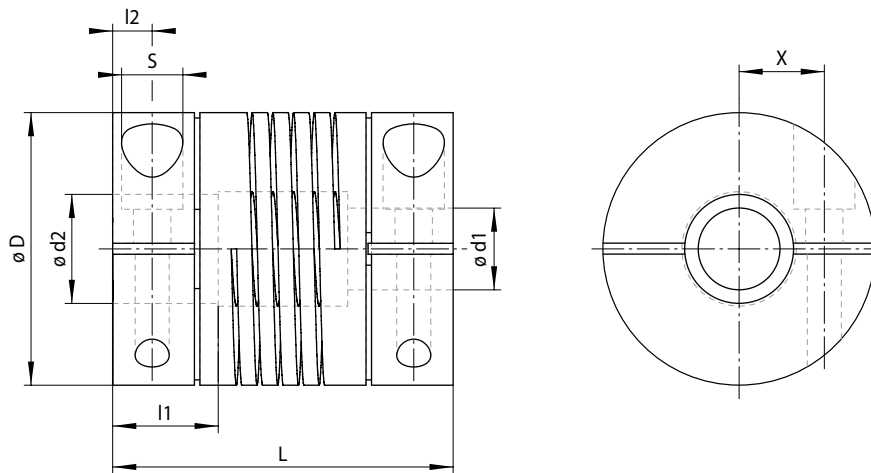
Order example

| | Code |
|-----------------------------|--------|
| Coupling design | RBC |
| Coupling size | 0030 |
| Type | EWC |
| Material: • Aluminium | ALU |
| Bore diameter d1 = 11 mm | 011.00 |
| Bore diameter d2 = 10 mm | 010.00 |

RBC 0030 EWC-ALU-011.00-010.00

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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 | | | | | |
| | 5/5 | 0,59 | 0,3 | 0,15 | | 5,7 | 102 | 20 | | | | | |
| 0020 | 4/4 | 1,3 | 0,7 | 0,4 | 10 000 | 21,2 | 179 | 29 | 1,09 | 2,0 | ± 0,25 | ± 0,25 | 5 |
| | 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 | | | | | |
| | 6/5 | 1,1 | 0,6 | 0,3 | | 12,7 | 124 | 15 | | | | | |
| | 6/6 | 1,1 | 0,6 | 0,3 | | 12,7 | 124 | 15 | | | | | |
| 0025 | 6/6 | 2,9 | 1,5 | 0,8 | 10 000 | 38,2 | 236 | 34 | 2,89 | 2,0 | ± 0,25 | ± 0,25 | 5 |
| | 8/6 | 2,6 | 1,3 | 0,7 | | 26,0 | 175 | 21 | | | | | |
| | 8/8 | 2,6 | 1,3 | 0,7 | | 26,0 | 175 | 21 | | | | | |
| | 10/6 | 2,2 | 1,1 | 0,6 | | 16,4 | 126 | 14 | | | | | |
| | 10/8 | 2,2 | 1,1 | 0,6 | | 16,4 | 126 | 14 | | | | | |
| | 10/10 | 2,2 | 1,1 | 0,6 | | 16,4 | 126 | 14 | | | | | |
| 0030 | 8/8 | 4,9 | 2,5 | 1,3 | 10 000 | 52,1 | 219 | 31 | 7,02 | 4,7 | ± 0,25 | ± 0,25 | 5 |
| | 10/8 | 4,6 | 2,3 | 1,2 | | 44,1 | 192 | 25 | | | | | |
| | 10/10 | 4,6 | 2,3 | 1,2 | | 44,1 | 192 | 25 | | | | | |
| | 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 | | | | | |

Bore tolerance: 0/+ 0.05 mm; Shaft tolerance (recommended): - 0.005/- 0.013 mm

¹⁾ Values based on the smallest bore diameter

| Coupling size | D | L | l1 | l2 | S | X | Weight ¹⁾ |
|---------------|----|----|------|-----|----|-----|----------------------|
| | mm | mm | mm | mm | mm | mm | 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 |

¹⁾ Values based on the smallest bore diameter

Other sizes and designs with special bores (including inch dimensions) on request