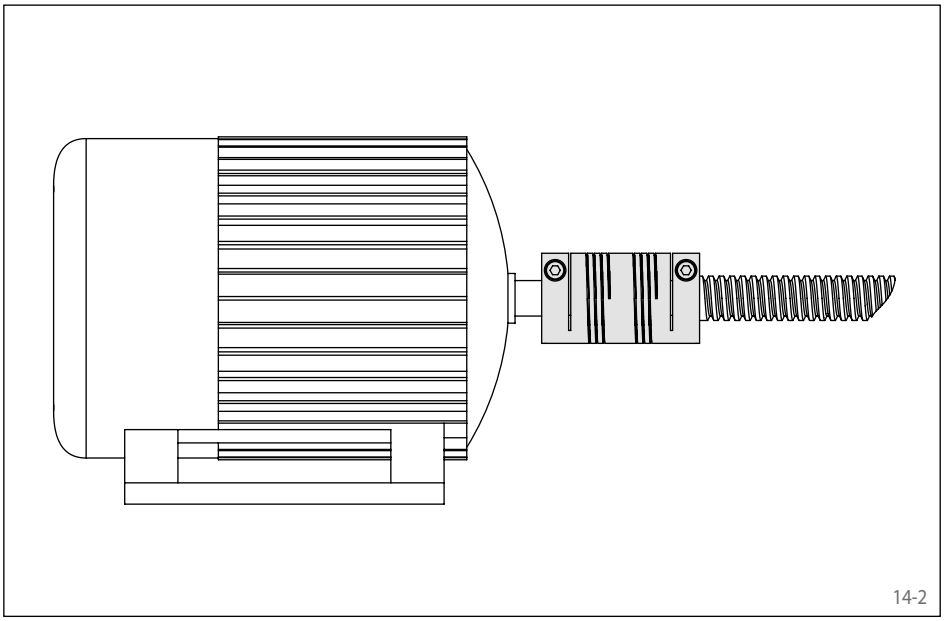
# Double Beam Couplings RBC … DWC-STE

**with clamp**
**made of steel, stainless**


## Features

- Small coupling for universal use
- Backlash-free angle-synchronous transmission of rotary movements
- High radial misalignment
- For medium torques
- Made of stainless steel 17-4PH, Material no. 1.4542
- Optimum compensation of shaft misalignments
- Typical applications: General mechanical engineering, apparatus engineering, spindle drives




## Application example

The Beam Coupling RBC … DWC made of steel offers the possibility of transmitting higher torques thanks to its high strength. It is ideal for more power-intensive applications such as spindle drives, where stability and load capacity are the focus, while at the same time effectively compensating for misalignment.

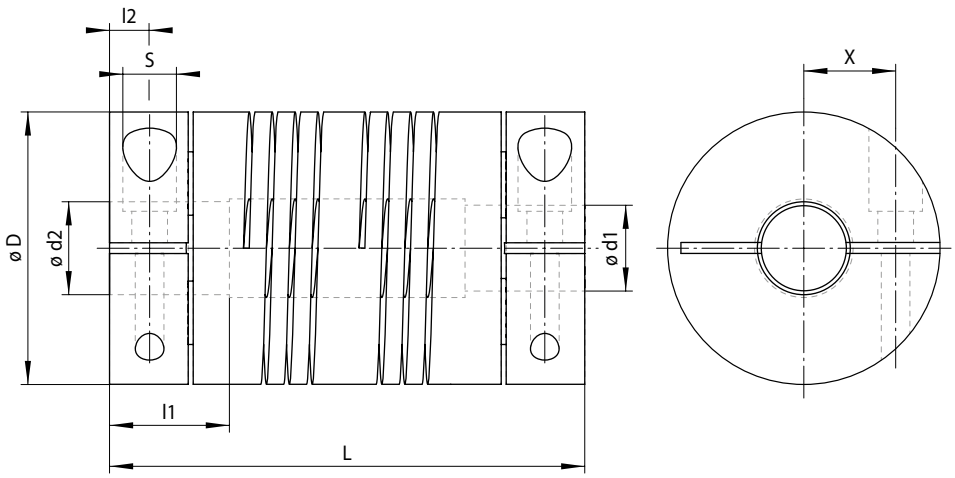
| **Order example** | Code |
|---|---|
| Coupling design | RBC |
| Coupling size | 0100 |
| Type | DWC |
| Material:<br>• Steel, stainless | STE |
| Bore diameter<br>d1 = 10 mm | 010.00 |
| Bore diameter<br>d2 = 8 mm | 008.00 |

RBC 0100 DWC-STE-010.00-008.00

# Double Beam Couplings RBC … DWC-STE

RINGSPANN®

## with clamp
## made of steel, stainless




15-1

| 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 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 ° |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 0100 | 6 / 6 | 6,8 | 3,4 | 1,7 | 3 600 | 70 | 56 | 12,6 | 2,0 | ± 0,25 | ± 0,75 | 5 |
| | 8 / 6 | 5,9 | 3,0 | 1,5 | | 47 | 36 | | | | | |
| | 8 / 8 | 5,9 | 3,0 | 1,5 | | 47 | 36 | | | | | |
| | 10 / 6 | 5,0 | 2,5 | 1,3 | | 30 | 22 | | | | | |
| | 10 / 8 | 5,0 | 2,5 | 1,3 | | 30 | 22 | | | | | |
| | 10 / 10 | 5,0 | 2,5 | 1,3 | | 30 | 22 | | | | | |
| 0125 | 8 / 8 | 14,2 | 7,1 | 3,6 | 3 600 | 130 | 64 | 42,3 | 4,7 | ± 0,25 | ± 0,75 | 5 |
| | 12 / 8 | 9,6 | 4,8 | 2,4 | | 66 | 31 | | | | | |
| | 12 / 12 | 9,6 | 4,8 | 2,4 | | 66 | 31 | | | | | |
| | 15 / 8 | 7,3 | 3,7 | 1,8 | | 29 | 17 | | | | | |
| | 15 / 12 | 7,3 | 3,7 | 1,8 | | 29 | 17 | | | | | |
| | 15 / 15 | 7,3 | 3,7 | 1,8 | | 29 | 17 | | | | | |
| 0150 | 12 / 12 | 23,5 | 11,8 | 5,9 | 3 600 | 190 | 78 | 96,1 | 4,7 | ± 0,25 | ± 0,75 | 5 |
| | 14 / 12 | 20,7 | 10,4 | 5,2 | | 143 | 60 | | | | | |
| | 14 / 14 | 20,7 | 10,4 | 5,2 | | 143 | 60 | | | | | |
| | 16 / 12 | 17,5 | 8,8 | 4,4 | | 105 | 46 | | | | | |
| | 16 / 14 | 17,5 | 8,8 | 4,4 | | 105 | 46 | | | | | |
| | 16 / 16 | 17,5 | 8,8 | 4,4 | | 105 | 46 | | | | | |
| 0200 | 10 / 10 | 54,2 | 27,1 | 13,6 | 3 600 | 637 | 106 | 349,8 | 16,0 | ± 0,25 | ± 0,75 | 5 |
| | 12 / 12 | 52,4 | 26,2 | 13,1 | | 530 | 81 | | | | | |
| | 14 / 14 | 48,8 | 24,4 | 12,2 | | 434 | 62 | | | | | |
| | 16 / 16 | 44,2 | 22,1 | 11,1 | | 356 | 48 | | | | | |
| | 18 / 18 | 40,5 | 20,3 | 10,2 | | 286 | 40 | | | | | |
| | 19 / 19 | 38,6 | 19,3 | 9,7 | | 258 | 36 | | | | | |
| 0225 | 10 / 10 | 83,3 | 41,7 | 20,9 | 3 600 | 1 180 | 227 | 646,6 | 16,0 | ± 0,25 | ± 0,75 | 5 |
| | 12 / 12 | 83,3 | 41,7 | 20,9 | | 1 000 | 171 | | | | | |
| | 14 / 14 | 81,4 | 40,7 | 20,4 | | 848 | 132 | | | | | |
| | 15 / 15 | 78,2 | 39,1 | 19,6 | | 758 | 118 | | | | | |
| | 16 / 16 | 78,2 | 39,1 | 19,6 | | 708 | 104 | | | | | |
| | 18 / 18 | 69,0 | 34,5 | 17,3 | | 595 | 84 | | | | | |
| | 19 / 19 | 64,2 | 32,1 | 16,1 | | 547 | 76 | | | | | |
| | 20 / 20 | 62,1 | 31,1 | 15,6 | | 494 | 70 | | | | | |
| | 22 / 22 | 59,2 | 29,6 | 14,8 | | 328 | 59 | | | | | |
| | 25 / 25 | 51,5 | 25,8 | 12,9 | | 295 | 45 | | | | | |

[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 |
|---|---|---|---|---|---|---|---|
| 0100 | 25,4 | 44,5 | 9,4 | 3,8 | M3 | 7,9 | 150 |
| 0125 | 31,8 | 60,2 | 13,0 | 5,6 | M4 | 9,7 | 315 |
| 0150 | 38,1 | 66,5 | 16,8 | 5,6 | M4 | 13,0 | 507 |
| 0200 | 50,8 | 76,2 | 18,9 | 6,6 | M6 | 16,7 | 1 044 |
| 0225 | 57,2 | 88,9 | 21,8 | 10,2 | M6 | 20,0 | 1 534 |

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