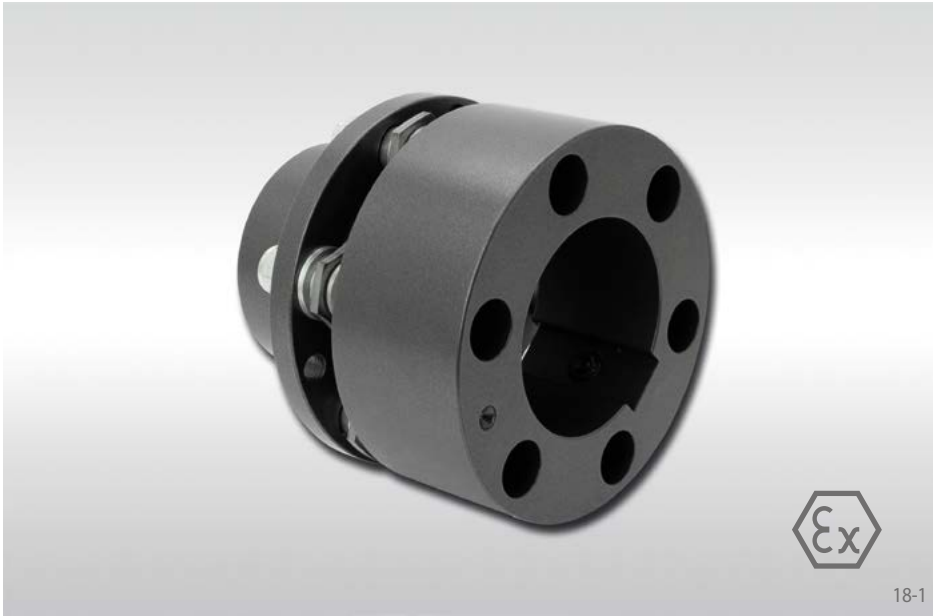


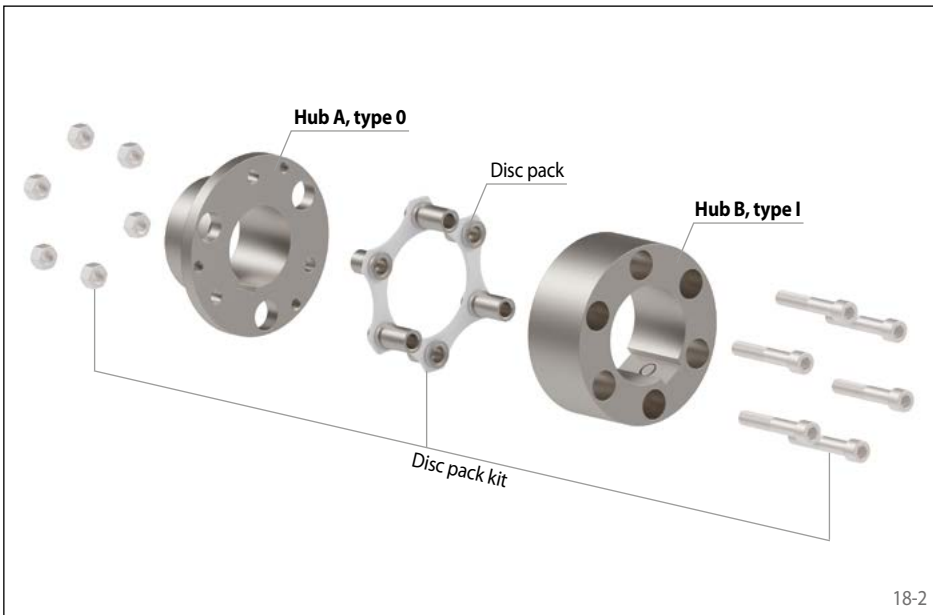
# Disc Couplings RDL ... DSO

torsionally rigid  
single disc pack



## Features

- Nominal torques up to 18 700 Nm
- High torque capacity
- Backlash free
- Compensation of axial and angular misalignments
- High torsional rigidity with low axial rigidity
- Temperature range -20 °C to +280 °C
- Maintenance free and long life with proper alignment
- Complies with ATEX 2014/34/EU
- Typical application: Pumps, fans, packaging machines, paper machines, printing machines, conveyor systems, dynamometers, gantry systems

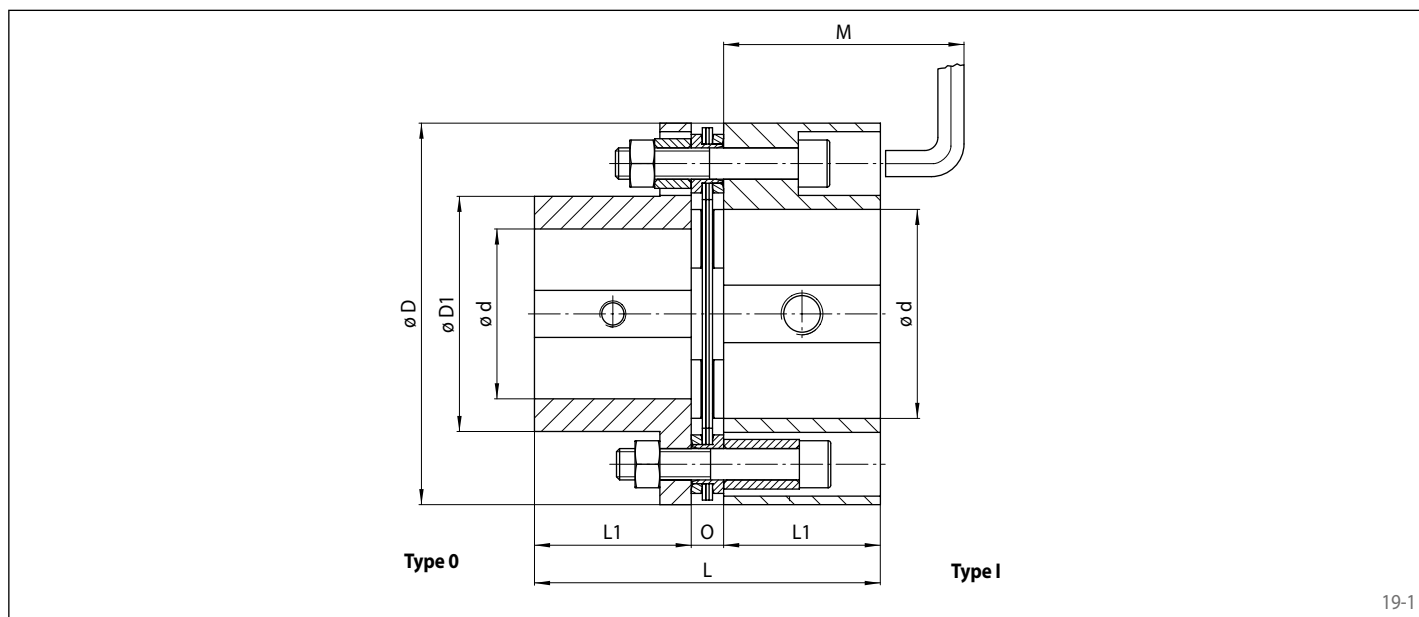


## Order example

| Order example  | Code     |
|--|----------|
| Coupling design  | RDL      |
| Coupling size  | 0038     |
| Type   | DSO      |
| Material of the hub:<br>• Steel                              | STA      |
| Hub A, type:<br>• 0, standard<br>• I, increased max. bore    | 0<br>1   |
| Hub A, design:<br>• finish bored with keyway<br>• roughbored | FB<br>VA |
| Bore diameter hub A  | 025      |
| Hub B, type:<br>• 0, standard<br>• I, increased max. bore    | 0<br>1   |
| Hub B, design:<br>• finish bored with keyway<br>• roughbored | FB<br>VA |
| Bore diameter hub B  | 038      |

RDL 0038 DSO-STA-0FB025-1FB038

torsionally rigid  
single disc pack



19-1

| Coupling size | Nominal torque<br>$T_{KN}$<br>Nm | Nominal power at<br>$100 \text{ min}^{-1}$<br>$P_{K100}$<br>kW | Max. speed<br>$n_{max}$<br>$\text{min}^{-1}$ | Torsional stiffness<br>$C_T$<br>MNm/rad | Moment of inertia<br>$J_K$<br>$\text{kgm}^2$ | Permissible misalignments |  |              |
|---------------|----------------------------------|--|--|---|--|---------------------------|--|--------------|
|               |                                  |  |  |   |  | Axial<br>mm               | Radial<br>mm   | Angular<br>° |
| 0024          | 96                               | 1,0  | 7500   | 0,041                                   | 0,00047                                      | ±1                        | Due to design,<br>no radial<br>misalignments<br>are permissible. | 0,75         |
| 0038          | 232                              | 2,4  | 7000   | 0,093                                   | 0,00170                                      |                           |  |              |
| 0048          | 620                              | 6,5  | 6000   | 0,248                                   | 0,00820                                      |                           |  |              |
| 0065          | 1200                             | 12,6   | 5200   | 0,529                                   | 0,01430                                      |                           |  |              |
| 0075          | 1910                             | 20,0   | 4800   | 0,895                                   | 0,02630                                      |                           |  |              |
| 0100          | 3460                             | 36,3   | 4400   | 1,665                                   | 0,06400                                      |                           |  |              |
| 0110          | 5600                             | 58,5   | 4200   | 2,393                                   | 0,13200                                      |                           |  |              |
| 0125          | 7100                             | 74,2   | 4000   | 3,490                                   | 0,32110                                      |                           |  |              |
| 0140          | 10400                            | 108,7  | 3800   | on demand                               | 0,39450                                      |                           |  |              |
| 0150          | 14500                            | 152,2  | 3700   |   | 0,63500                                      |                           |  |              |
| 0160          | 18700                            | 196,0  | 3600   |   | 1,00500                                      | ±2                        |  |              |

Torsional stiffness and moment of inertia refer to a combination of hub type 0 and hub type I with max. possible bore diameter respectively.

| Coupling size | Pilot bore<br>$d^*$<br>mm | Min. bore<br>$d^*$ |                  | Max. bore<br>$d^*$ |                  | D<br>mm | D1<br>mm | L<br>mm | L1<br>mm | M**<br>mm | Gap O<br>mm | Weight<br>kg |
|---------------|---------------------------|--------------------|------------------|--------------------|------------------|---------|----------|---------|----------|-----------|-------------|--------------|
|               |                           | Hub type 0<br>mm   | Hub type I<br>mm | Hub type 0<br>mm   | Hub type I<br>mm |         |          |         |          |           |             |              |
| 0024          | 8                         | 10                 | 23               | 22                 | 25               | 63      | 35       | 66,5    | 30       | 75        | 6,5         | 0,9          |
| 0038          | 10                        | 12                 | 31               | 30                 | 38               | 82      | 45       | 86,5    | 40       | 85        | 6,5         | 1,8          |
| 0048          | 15                        | 17                 | 41               | 40                 | 50               | 102     | 57       | 98,0    | 45       | 95        | 8,0         | 3,2          |
| 0065          | 15                        | 17                 | 53               | 52                 | 70               | 128     | 77       | 119,5   | 55       | 110       | 9,5         | 5,8          |
| 0075          | 20                        | 22                 | 66               | 65                 | 80               | 146     | 94       | 132,0   | 60       | 120       | 12,0        | 8,5          |
| 0100          | 25                        | 27                 | 81               | 80                 | 100              | 176     | 115      | 153,0   | 70       | 140       | 13,0        | 14,0         |
| 0110          | 30                        | 32                 | 91               | 90                 | 115              | 197     | 132      | 194,5   | 90       | 175       | 14,4        | 22,2         |
| 0125          | 40                        | 42                 | 106              | 105                | 130              | 225     | 147      | 206,1   | 95       | 185       | 16,2        | 30,5         |
| 0140          | 45                        | 47                 | 116              | 115                | 140              | 250     | 162      | 229,4   | 105      | 195       | 19,5        | 42,7         |
| 0150          | 50                        | 52                 | 121              | 120                | 155              | 275     | 178      | 251,5   | 115      | 215       | 21,5        | 57,3         |
| 0160          | 60                        | 62                 | 136              | 135                | 165              | 300     | 190      | 283,6   | 130      | 235       | 23,5        | 76,1         |

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 J59, different bore and keyway tolerances on request.

The weight refers to a combination of hub type 0 and hub type I with max. possible bore diameter respectively.

In deviation from figure 19-1, the combination of the hub type 0 / 0 and type I / I is possible.

Upon request, also available with taper bushes.

Upon request, couplings larger than frame size 0160 also available.

For vertical installation, please contact RINGSPANN.

\* Bores also available in inch size, see page 65.

\*\* Distance M is required to tighten and loosen the screws for hub type I.