

MR-D

Mechanical seals | Agitator seals | Liquid-lubricated seals



Features

- For top, side and bottom entry drives
- Seat at product side rotating
- Unbalanced
- Liquid-lubricated
- Double seal
- Independent of direction of rotation
- Cartridge unit
- With or without bearing available

Advantages

- Smooth surface, free of dead spaces
- CIP-/SIP (Cleaning in Place, Sterilization in Place) capable
- Sliding materials FDA conform
- Variant for sterile applications available
- ATEX certification on request

Operating range

Shaft diameter:
 $d_1 = 35 \dots 140$ (500) mm
 (1.38" ... 5.51" (19.68"))
 Axial offset shaft/housing:
 $d_1 = 35 \dots 60$ mm
 (1.38" ... 2.36"): max. ± 1.5 mm (0.059")
 $d_1 > 60$ mm (2.36"): max. ± 2.0 mm (0.079")
 Radial offset shaft/housing:
 max. ± 0.3 mm (0.012")
 Pressure:
 $p_1 = \text{vacuum} \dots 14$ (23) bar (203 (334) PSI)
 $p_3 = \text{max. } 16$ (25) bar (232 (363) PSI)
 $\Delta p_3 - p_1 = 2 \dots 10$ bar (29 ... 145 PSI),
 higher Δp on request
 Temperature: $t_1 = -20$ °C ... $+200$ (300) °C
 (-4 °F ... $+392$ (572) °F)
 Sliding velocity:
 $vg = \text{max. } 10$ (20) m/s (33 (66) ft/s)

For applications beyond this range and for values in brackets, please inquire.

! It should be noted that the extremal values of each operating parameter cannot be applied at the same time because of their interaction.

Materials

Seal faces: Silicon carbide, FDA conform
 Seat: Carbon graphite (atmosphere side) resp. Silicon carbide (product side), FDA conform
 Secondary seals and metallic parts acc. to application and customers' requirement.

Standards and approvals

- FDA

Notes

- Options:
- Cooling resp. heating flange
 - Temperature sensor
 - Axial expansion joint (shaft movement)
 - Wiper ring (shaft movement)
 - Shaft sleeve not in contact with product (with standard diameters)
 - Metal-free on product side
- Please inquire.

Recommended applications

- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Food and beverage industry
- Mixers
- Dryers
- Mills
- Kneaders
- Reactors
- Pressure filters

Recommended piping plans

Closed circuit: EagleBurgmann TS system, EagleBurgmann DRU pressure booster,
 Open circuit: EagleBurgmann SPA / SPN

Product links:

[EagleBurgmann TS1000](#)

[EagleBurgmann TS2000](#)

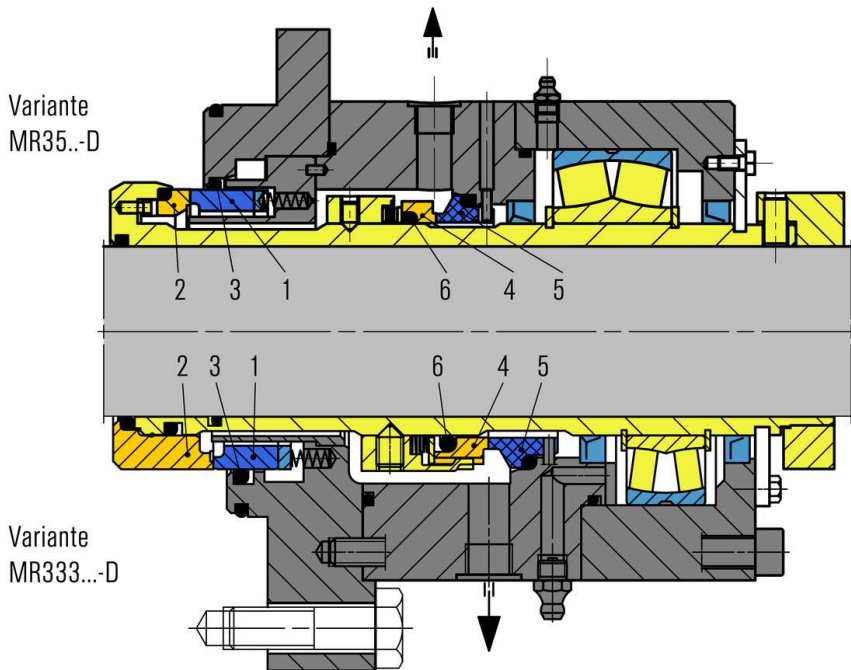
[EagleBurgmann TS3016 \(sterile version\)](#)

RELY ON EXCELLENCE

[EagleBurgmann DRU](#)
[EagleBurgmann SPA](#)
[EagleBurgmann SPN manual](#)
[EagleBurgmann SPN automatic](#)

Item Description

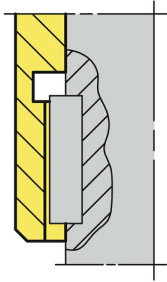
- 1 Seal face, product side
- 2 Seat, product side
- 3, 6 O-Ring, dynamic
- 4 Seal face, atmosphere side
- 5 Seat, atmosphere side



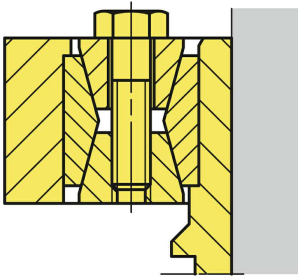
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Torque transmissions

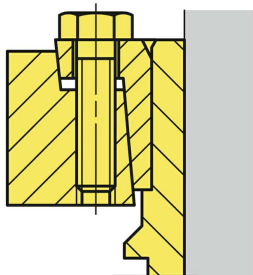
Drive key



Clamping set

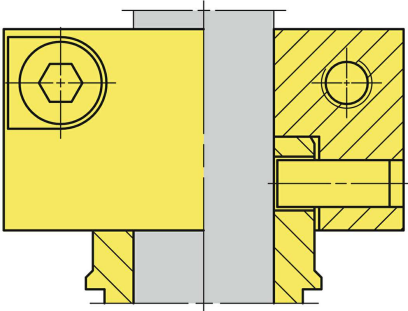


Shrink disc

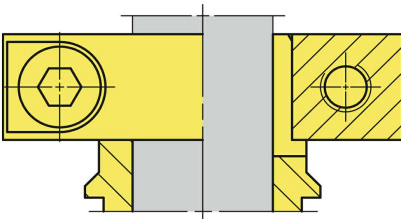


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Clamping ring with pin

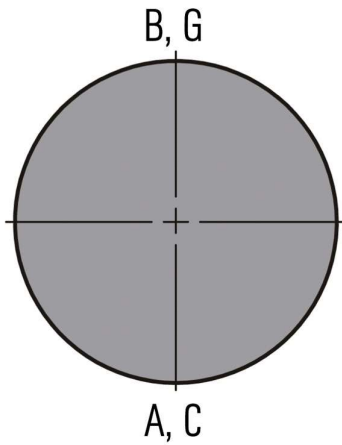


Clamping ring



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Installation, details, options



Supply connections

- A Barrier fluid IN
- B Barrier fluid OUT
- C Drainage
- G Grease

Dimensions

Dimensions on request.