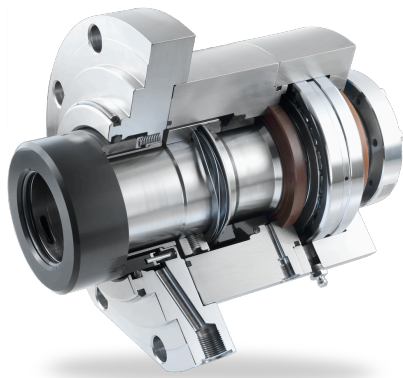


RELY ON EXCELLENCE

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
- Shaft sleeve not in contact with product

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)
- 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:

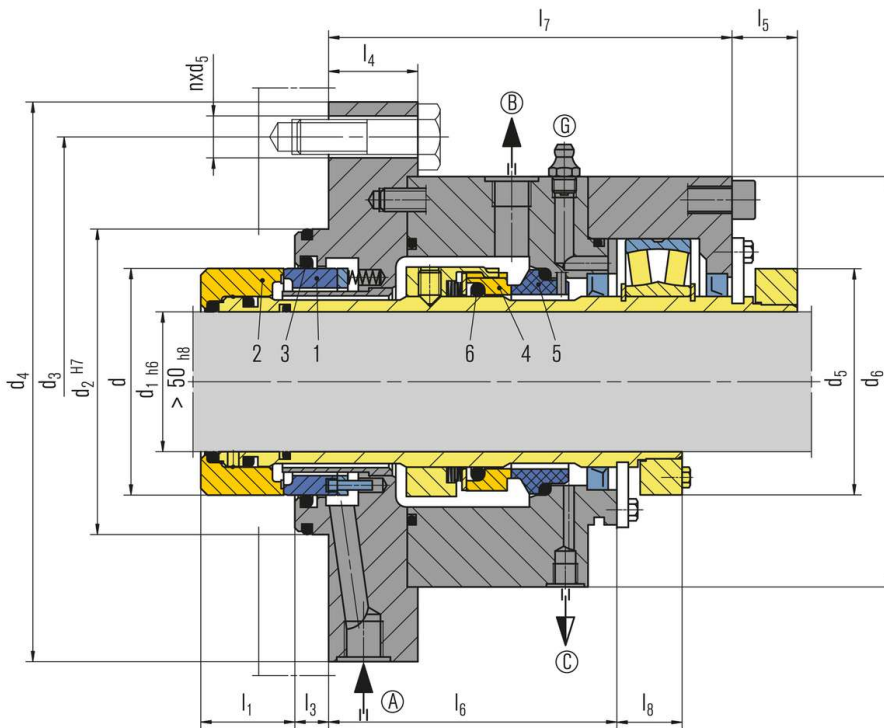
[EagleBurgmann TS1000](#)
[EagleBurgmann TS2000](#)
[EagleBurgmann TS3016 \(sterile version\)](#)
[EagleBurgmann DRU](#)
[EagleBurgmann SPA](#)

RELY ON EXCELLENCE

EagleBurgmann SPN manual
EagleBurgmann SPN automatic

Item Description

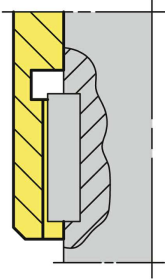
- 1 Seal face, product side
- 2 Seat, product side
- 3, 6 O-Ring, dynamic
- 4 Seal face, atmosphere side
- 5 Seat, atmosphere side



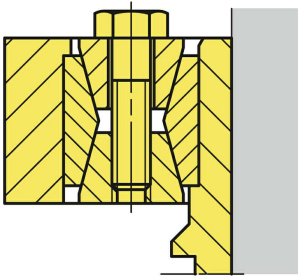
RELY ON EXCELLENCE

Torque transmissions

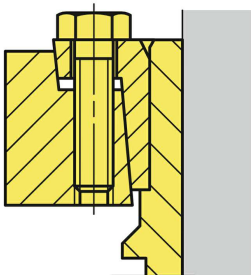
Drive key



Clamping set

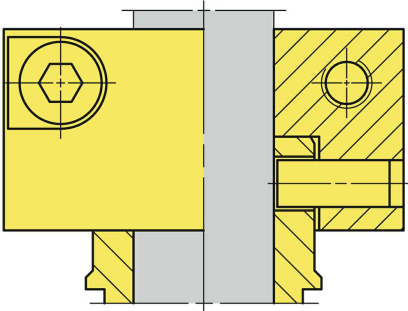


Shrink disc

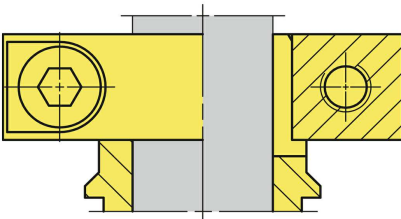


RELY ON EXCELLENCE

Clamping ring with pin

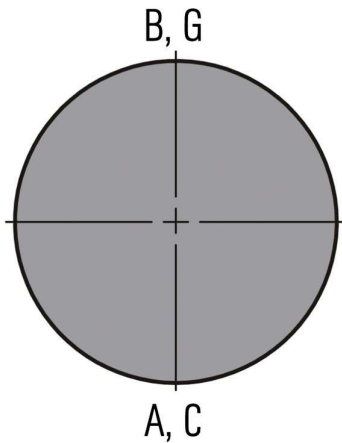


Clamping ring



RELY ON EXCELLENCE

Installation, details, options



Supply connections

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

Dimensions

d ₁	d	l ₁	d ₂	l ₃	d ₃	n x d ₅	d ₄	l ₄	d ₅	d ₆	l ₅	l ₆	l ₇	l ₈
35	68.0	41	105.0	15	148	8 x 13.5	170	35.5	69	118.5	20.5	97.0	141.0	30.5
45	82.7	41	119.5	15	166	8 x 13.5	190	43.0	86	138.0	26.0	103.0	149.5	34.5
50	90.0	41	119.5	15	190	8 x 17.5	220	40.5	90	158.0	28.5	110.0	165.0	28.5
60	100.0	42	134.5	15	200	8 x 17.5	230	41.0	100	168.0	28.0	118.0	173.0	28.0
80	130.0	46	160.5	15	248	8 x 17.5	280	48.0	130	208.0	34.0	133.0	212.0	34.0
100	150.0	46	181.5	15	264	8 x 22.0	300	54.0	150	223.0	33.5	145.0	219.0	33.5
120	172.0	46	209.5	15	293	8 x 22.0	330	52.0	174	253.0	40.0	148.0	232.0	40.0
140	195.0	46	224.5	15	338	12 x 22.0	375	52.0	194	288.0	39.5	160.5	251.5	39.5

Dimensions in millimeter