

RELY ON EXCELLENCE

## HSMR34

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 (with standard diameters)

### Notes

Options:

- Cooling resp. heating flange
- Temperature sensor
- Metal-free on product side

Please inquire.

### 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:

d1 = 35 ... 140 (500) mm  
(1.38" ... 5.51" (19.68"))

Axial offset shaft/housing:

d1 = 35 ... 60 mm  
(1.38" ... 2.36"): max. ±1.5 mm (0.059")  
d1 > 60 mm (2.36"): max. ±2.0 mm (0.079")

Radial offset shaft/housing:

max. ±0.3 mm (0.012")

Pressure:

p1 = vacuum ... 14 (23) bar (203 (334) PSI)

p3 = max. 16 (25) bar (232 (363) PSI)

$\Delta p3-p1 = 2 \dots 10$  bar (29 ... 145 PSI),

higher  $\Delta p$  on request

Temperature: t1 = -20 °C ... +200 (300) °C  
(-4 °F ... +392 (572) °F)

Sliding velocity:

vg = 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

### 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 TSA2](#)

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

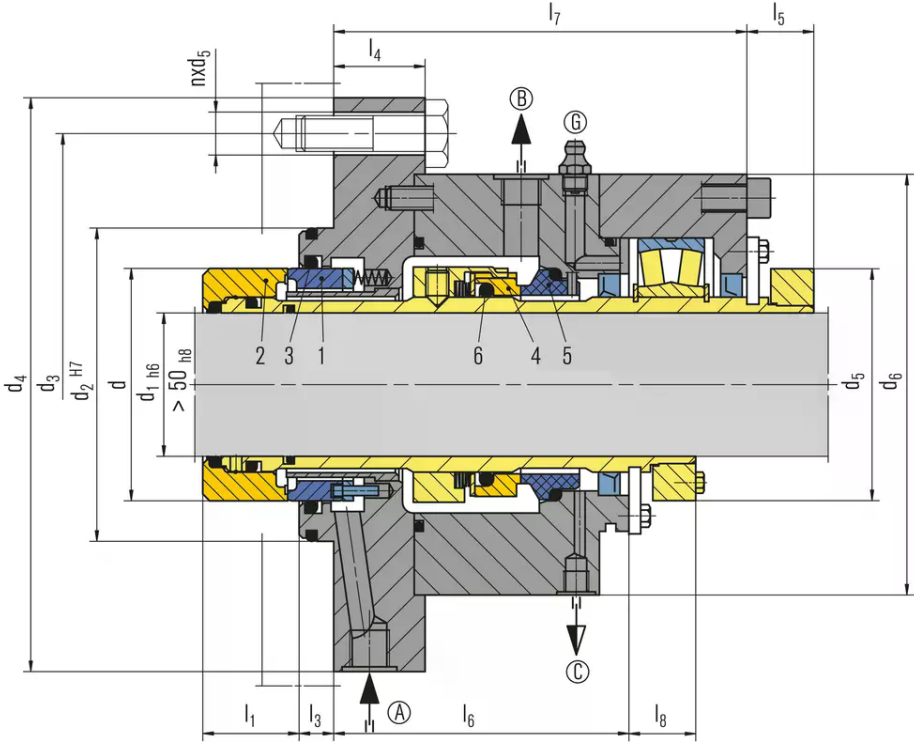
[EagleBurgmann DRU](#)

[EagleBurgmann SPA](#)

[EagleBurgmann SPN manual](#)

[EagleBurgmann SPN automatic](#)

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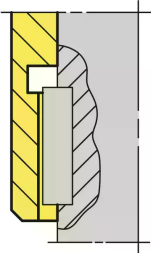


Item	Description
1	Seal face, product side
2	Seat, product side
3, 6	O-Ring, dynamic
4	Seal face, atmosphere side
5	Seat, atmosphere side

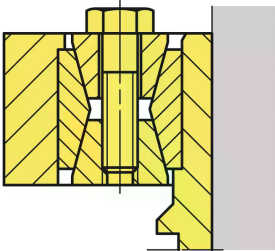
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## Torque transmissions

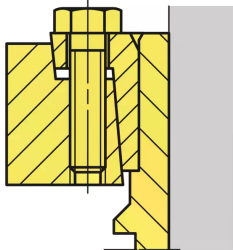
Drive key



Clamping set

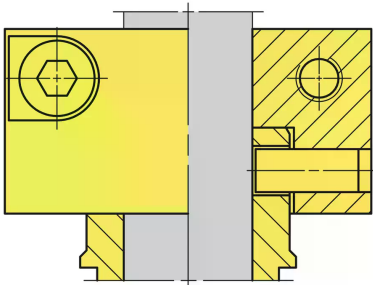


Shrink disc

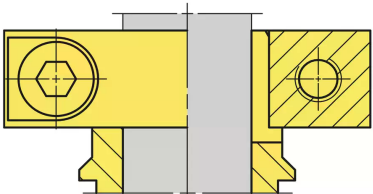


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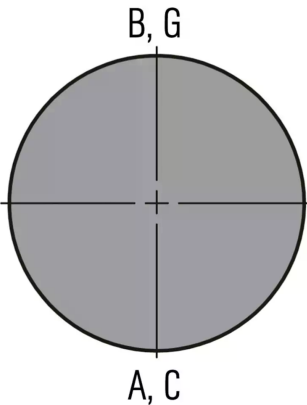
Clamping ring with pin



Clamping ring



### Installation, details, options



- Supply connections**  
A Barrier fluid IN  
B Barrier fluid OUT  
C Drainage  
G Grease

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### Dimensions

d <sub>1</sub>	d	l <sub>1</sub>	d <sub>2</sub>	l <sub>3</sub>	d <sub>3</sub>	n x d <sub>5</sub>	d <sub>4</sub>	l <sub>4</sub>	d <sub>5</sub>	d <sub>6</sub>	l <sub>5</sub>	l <sub>6</sub>	l <sub>7</sub>	l <sub>8</sub>
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