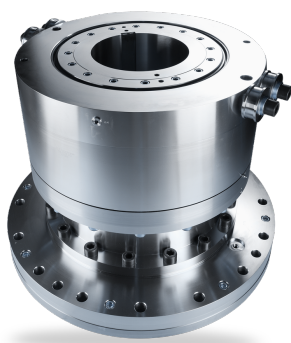


## HSH-D

Mechanical seals | Agitator seals | Liquid-lubricated seals



### Features

- For top entry drives
- Double seal
- Balanced
- Independent of direction of rotation
- Multiple springs rotating
- Liquid-lubricated
- Cartridge unit

### Advantages

- Ready-to-fit and factory-tested unit
- With or without bearing available
- Patented hydrodynamic grooves
- Designed for high pressure range
- Connection dimensions to customers' requirements
- ATEX certification on request

### Operating range

Shaft diameter:  
 $d_1 = 20 \dots 500 \text{ mm} (0.79" \dots 19.69")$   
 Pressure:  
 $p_1 = \text{vacuum} \dots 250 \text{ bar} (\dots 3,625 \text{ PSI})^*$ ,  
 $p_3 = p_1 + 10 \%$   
 Temperature:  
 $t_1 = -40 \text{ }^\circ\text{C} \dots +200 (350^{**}) \text{ }^\circ\text{C}$   
 $(-40 \text{ }^\circ\text{F} \dots +392 (662^{**}) \text{ }^\circ\text{F})$   
 Sliding velocity:  
 $vg = 0 \dots 5 \text{ m/s} (0 \dots 16 \text{ ft/s})$

\* Depending on size, from 100 ... 150 bar (1,450 ... 2,175 PSI) executed as tandem seal (pressure reduction in 2 stages).  
 \*\* with cooling flange

! 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: Carbon graphite  
 Seats: Silicon carbide, FDA conform  
 Secondary seals and metallic parts acc. to application and customers' requirement.

### Standards and approvals

- FDA

### Notes

Options:

- Cooling resp. heating flange
- Leakage drain
- Flush
- Polymerization barrier

### Recommended applications

- Refining technology
- Petrochemical industry
- Chemical industry
- Pharmaceutical industry
- Reactors
- Agitators
- Special rotating equipment with top entry drive

### Recommended piping plans

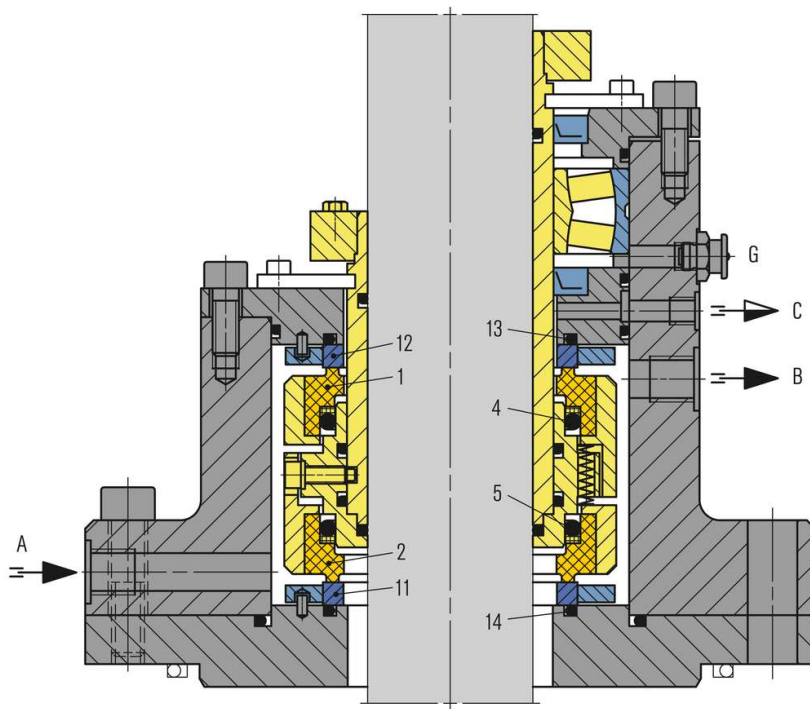
Open circuit  
 e.g. EagleBurgmann SPA, EagleBurgmann SPN

Product links:

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

RELY ON EXCELLENCE

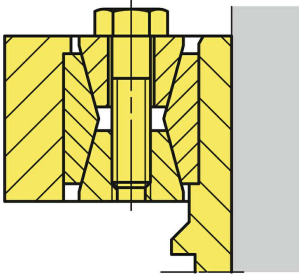
Item no.	Description
1	Seal face, atmosphere side
2	Seal face, product side
4, 5, 13, 14	O-Ring
11	Seat, product side
12	Seat, atmosphere side



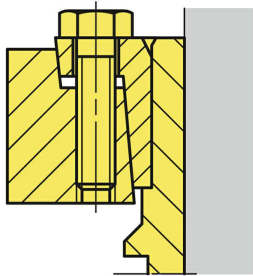
RELY ON EXCELLENCE

## Torque transmissions

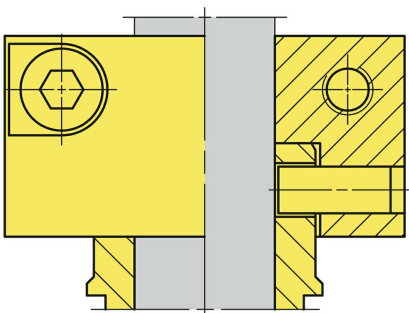
Clamping set



Shrink disk

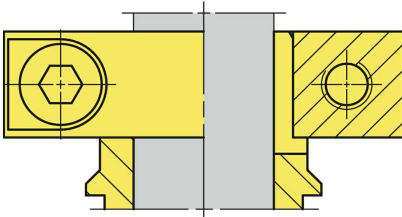


Clamping ring with pin



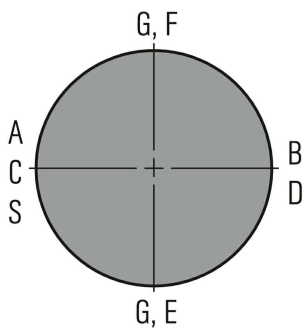
RELY ON EXCELLENCE

## Clamping ring



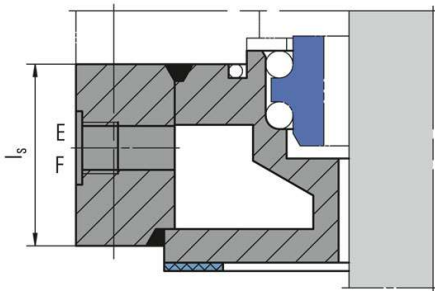
## RELY ON EXCELLENCE

### Installation, details, options



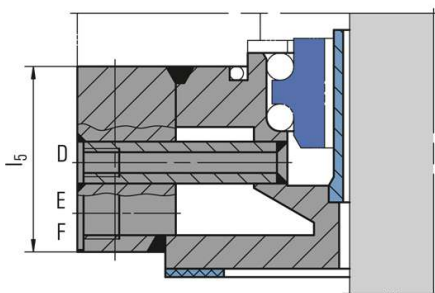
#### Supply connections

- A Barrier fluid IN
- B Barrier fluid OUT
- C Drainage
- D Leakage drain
- E Cooling IN
- F Cooling OUT
- G Grease
- S Flush



#### Cooling flange

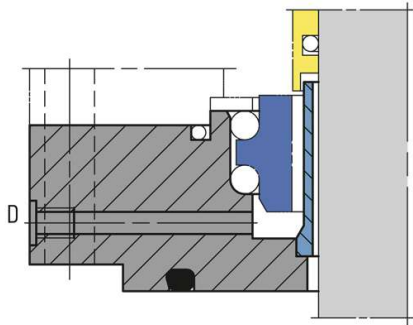
Can be used alternatively as a heating flange.



#### Leakage drain with cooling flange

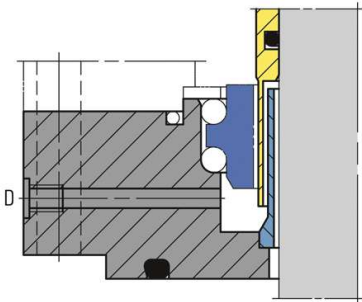
Can be used alternatively as a flush or as a heating flange.

## RELY ON EXCELLENCE



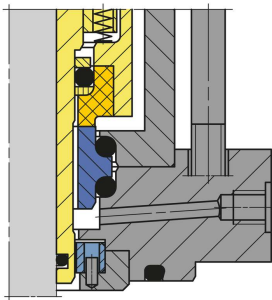
### Leakage drain

Can be used alternatively as a flush.



### Polymerization barrier

Can be used alternatively as a leakage drain or a flush.



### Flush

## RELY ON EXCELLENCE

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### Product variants

#### HSH(V)-D

Double seal

#### HSH(V)L-D

Double seal with integrated floating bearing (axial thrust bearing on request).

These seals are designed to be self-closing on the product side, i.e. they will remain closed even with pressure variations or a pressure reversal.