

RELY ON EXCELLENCE

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:
 $d_1 = 20 \dots 500 \text{ mm (0.79" } \dots 19.69\text{'')}$
 Pressure:
 $p_1 = \text{vacuum } \dots 250 \text{ bar (... 3,625 PSI)*}$,
 $p_3 = p_1 + 10 \%$
 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

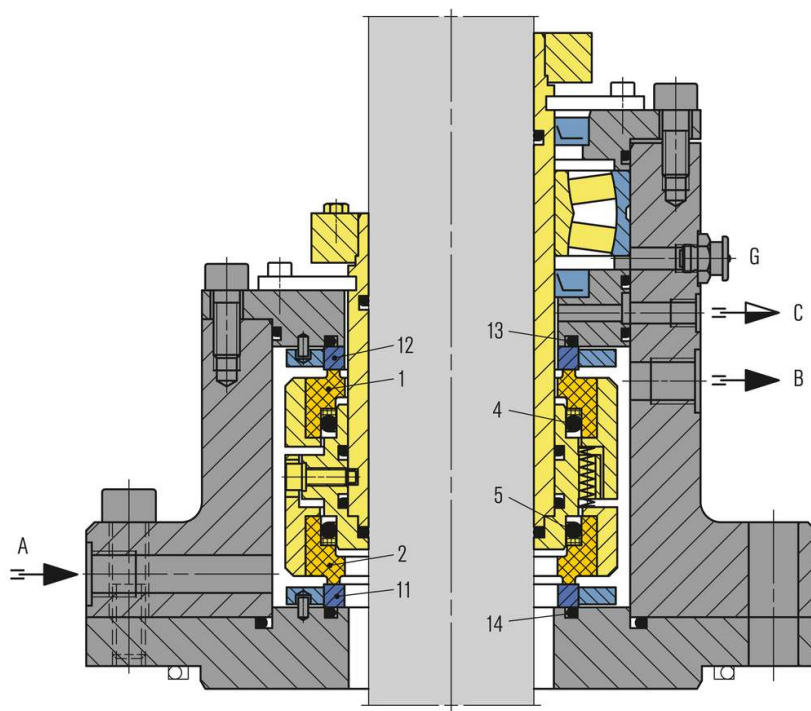
Product links:

[EagleBurgmann SPA](#)

[EagleBurgmann SPN manual](#)

[EagleBurgmann SPN automatic](#)

RELY ON EXCELLENCE

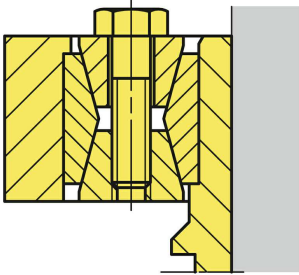


Item no.	Description
1	Seal face, atmosphere side
2	Seal face, product side
4, 5, 13, 14	O-Ring
11	Seat, product side
12	Seat, atmosphere side

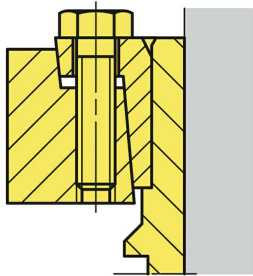
RELY ON EXCELLENCE

Torque transmissions

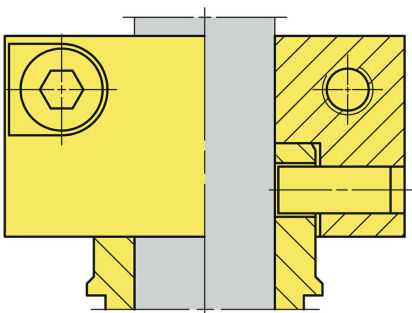
Clamping set



Shrink disk

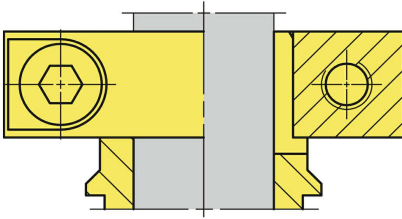


Clamping ring with pin



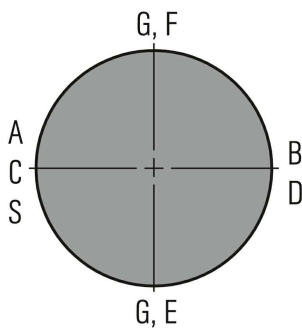
RELY ON EXCELLENCE

Clamping ring



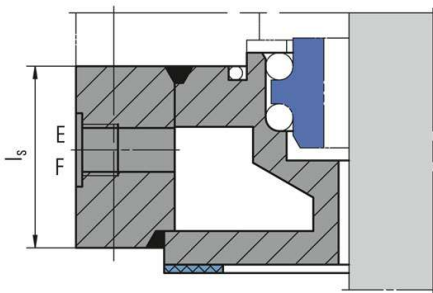
RELY ON EXCELLENCE

Installation, details, options



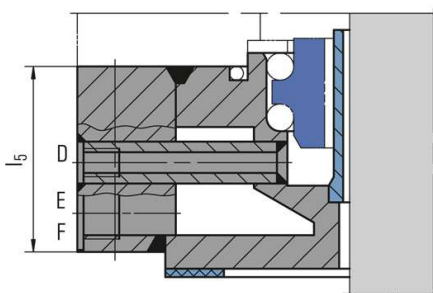
Supply connections

- 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

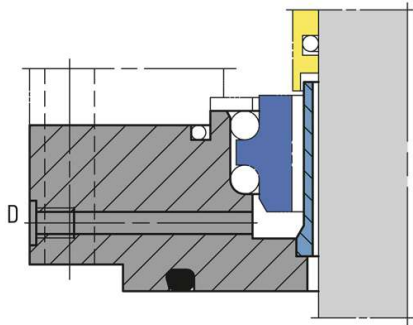
Can be used alternatively as a heating flange.



Leakage drain with cooling flange

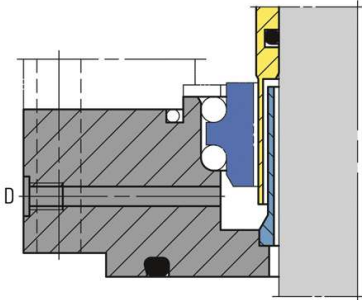
Can be used alternatively as a flush or as a heating flange.

RELY ON EXCELLENCE



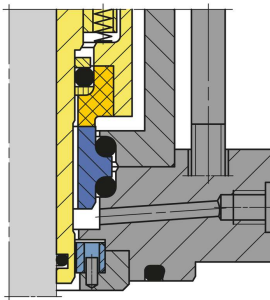
Leakage drain

Can be used alternatively as a flush.



Polymerization barrier

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



Flush

RELY ON EXCELLENCE

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.