



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:

 $d1 = 20 \dots 500 \text{ mm} (0.79^{\circ} \dots 19.69^{\circ})$

Pressure:

p1 = vacuum ... 250 bar (... 3,625 PSI)*,

p3 = p1 +10 %

Temperature:

t1 = -40 °C... +200 (350**) °C

(-40 °F ... +392 (662**) °F)

Sliding velocity:

vg = 0 ... 5 m/s (0 ... 16 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

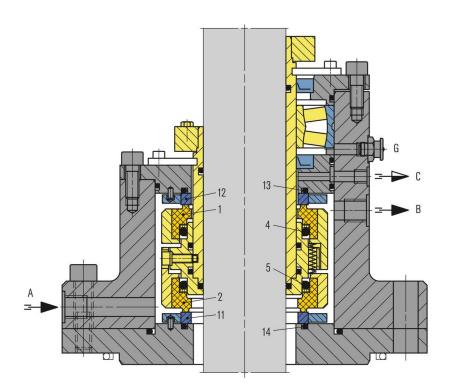
e.g. EagleBurgmann SPA, EagleBurgmann SPN

Product links:

EagleBurgmann SPA
EagleBurgmann SPN manual
EagleBurgmann SPN automatic







Item no. Description

Seal face, atmosphere side
 Seal face, product side

4, 5, 13, 14 O-Ring

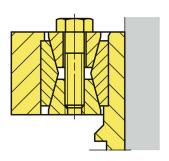
Seat, product sideSeat, atmosphere side



a member of **EKK** and **FREUDENBERG**

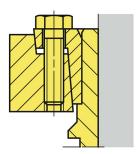
RELY ON EXCELLENCE

Torque transmissions

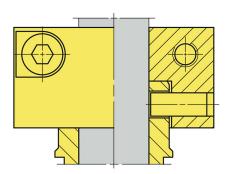


Clamping set



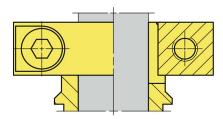


Clamping ring with pin





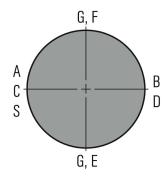
Clamping ring





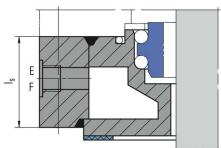


Installation, details, options



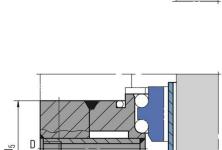
Supply connections

- 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.



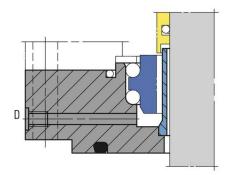
E

Leakage drain with cooling flange

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

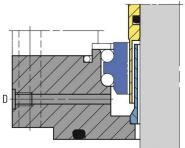






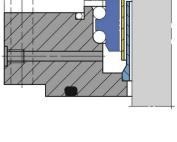
Leakage drain

Can be used alternatively as a flush.

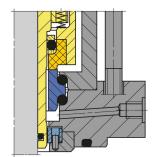


Polymerization barrier

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



Flush





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.