

HS-D

Mechanical seals | Agitator seals | Liquid-lubricated seals



Features

- For top entry drives
- Double seal
- Unbalanced
- 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 medium pressure range
- Connection dimensions to customers' requirements
- Self-closing on product side
- ATEX certification on request

Operating range

Shaft diameter:
 $d_1 = 20 \dots 500 \text{ mm (0.79" } \dots \text{ 19.69")}$
 Pressure: $p_1 = \text{vacuum } \dots \text{ 30 bar (... 435 PSI)}$
 Temperature:
 $t_1 = -40 \text{ }^\circ\text{C } \dots \text{ +200 (350}^*\text{)} \text{ }^\circ\text{C}$
 $(-40 \text{ }^\circ\text{F } \dots \text{ +392 (662}^*\text{)) } \text{ }^\circ\text{F}$
 Sliding velocity:
 $vg = 0 \dots 5 \text{ m/s (0 } \dots \text{ 16 ft/s)}$

* with cooling flange

For applications beyond this range, 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: Carbon graphite or Silicon carbide, FDA conform
 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

Recommended piping plans

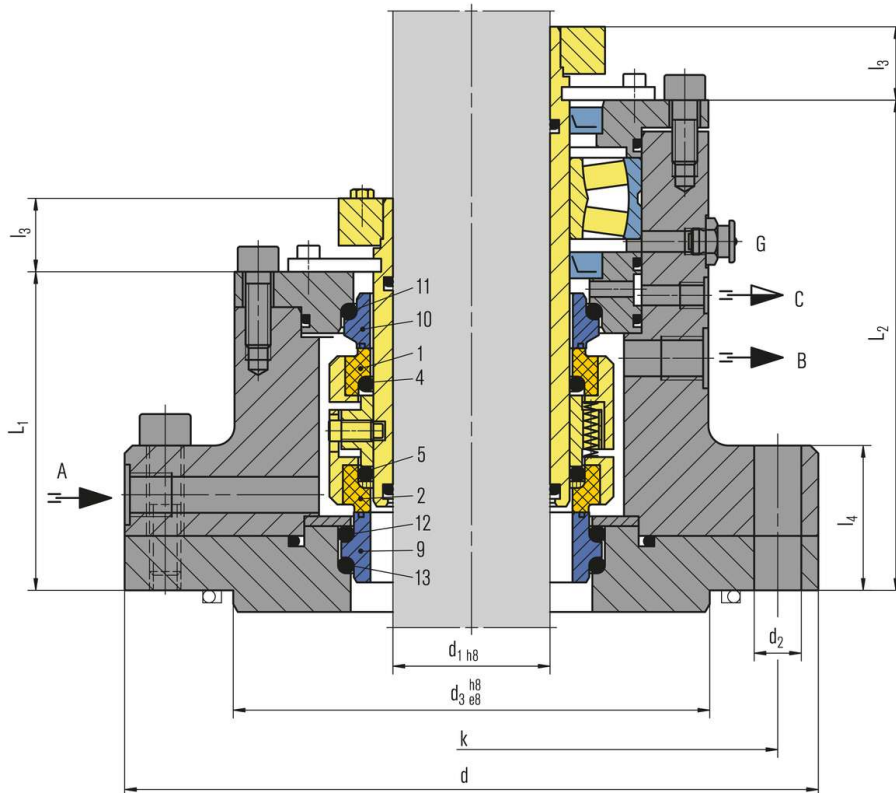
Open circuit

e.g. EagleBurgmann SPA, EagleBurgmann SPN

Product links:

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

RELY ON EXCELLENCE

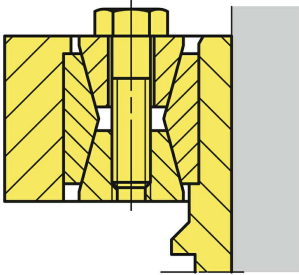


Item no.	Description
1	Seal face, atmosphere side
2	Seal face, product side
4, 5, 11, 12, 13	O-Ring
9	Seat, product side
10	Seat, atmosphere side

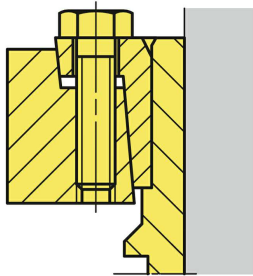
RELY ON EXCELLENCE

Torque transmissions

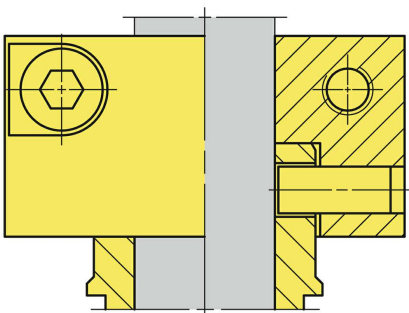
Clamping set



Shrink disk

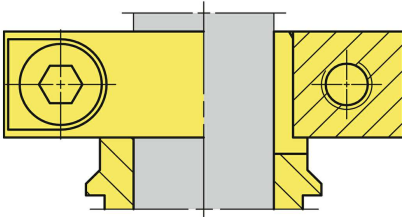


Clamping ring with pin



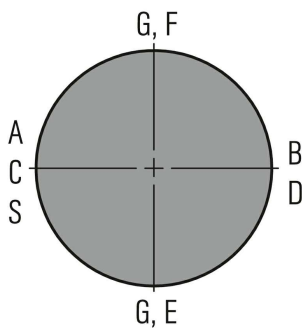
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Clamping ring



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Installation, details, options

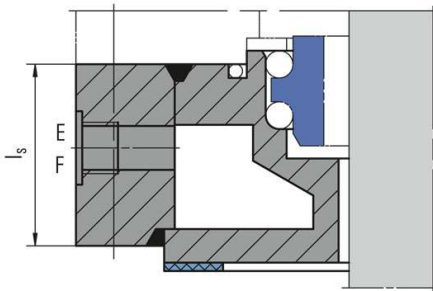


Supply connections

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

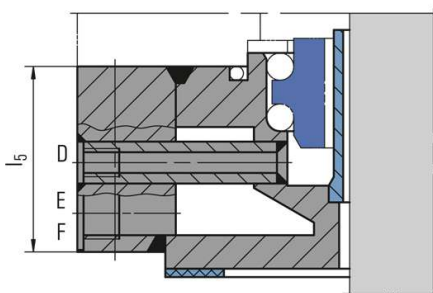
Cooling flange

Can be used alternatively as a heating flange.

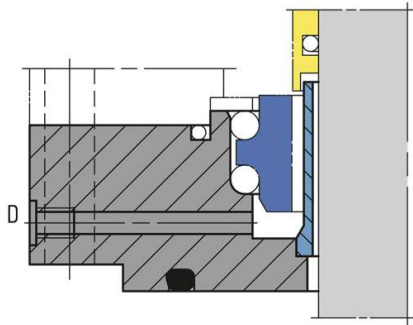


Leakage drain with cooling flange

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

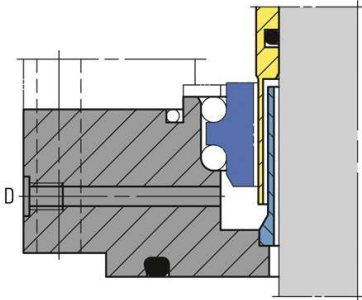


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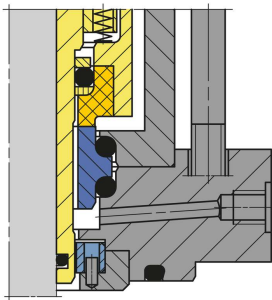
Leakage drain

Can be used alternatively as a flush.



Polymerization barrier

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



Flush

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Product variants

HS ... -D

Double seal

HS .. L-D

Double seal with integrated floating bearing.

HS ..(L)U-D

Double seal for bottom and side entry drives with or without floating bearing.

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.

Dimensions

d ₁	d	n x d ₂	d ₃	[k	l ₁	l ₂	l ₃	l ₄
40	200	6 x 18	80	170	115	170	35	45
50	230	8 x 18	100	200	120	185	35	55
60	255	8 x 18	120	225	140	210	35	60
80	295	8 x 23	145	260	145	230	44	60
100	315	8 x 23	170	280	160	245	44	65
120	345	8 x 23	190	310	160	250	50	65
140	380	12 x 23	215	345	165	265	50	65
160	440	12 x 27	240	395	185	300	50	75
180	475	12 x 27	260	430	185	310	55	75
200	465	12 x 27	290	420	190	290	55	75

Dimensions in millimeter