Mechanical Seal HBRotechSeal

Operating range

Shaft diameter: d = up to 410 mm (16.14")

Pressure: p = up to 450 bar (6,525 PSI) and more

Design-temperature: t = -200 °C … +230 °C (-328 °F … +446 °F)

Sliding velocity: vg = up to 227 m/s (744 ft/s)

Materials

- Seal face: Silicon carbide with DLC- or DiamondFace-coating
- Seat: Silicon carbide with DLC- or DiamondFace-coating
- Secondary seals: PTFE or FKM
- Metal parts: 1.4006, 1.4313-QT650, 1.4418, 1.4542, Inconel® or other stainless steels

  Other materials on request.

Features

- Gas-lubricated
- Uni- or bi-directional
- Ready-to-fit cartridge unit
- Available for all seal arrangements: single, double, tandem
- Based on proven HBGS or HBPGS design
- Separation seals as labyrinths, carbon rings or CobaSeal optional

Advantages

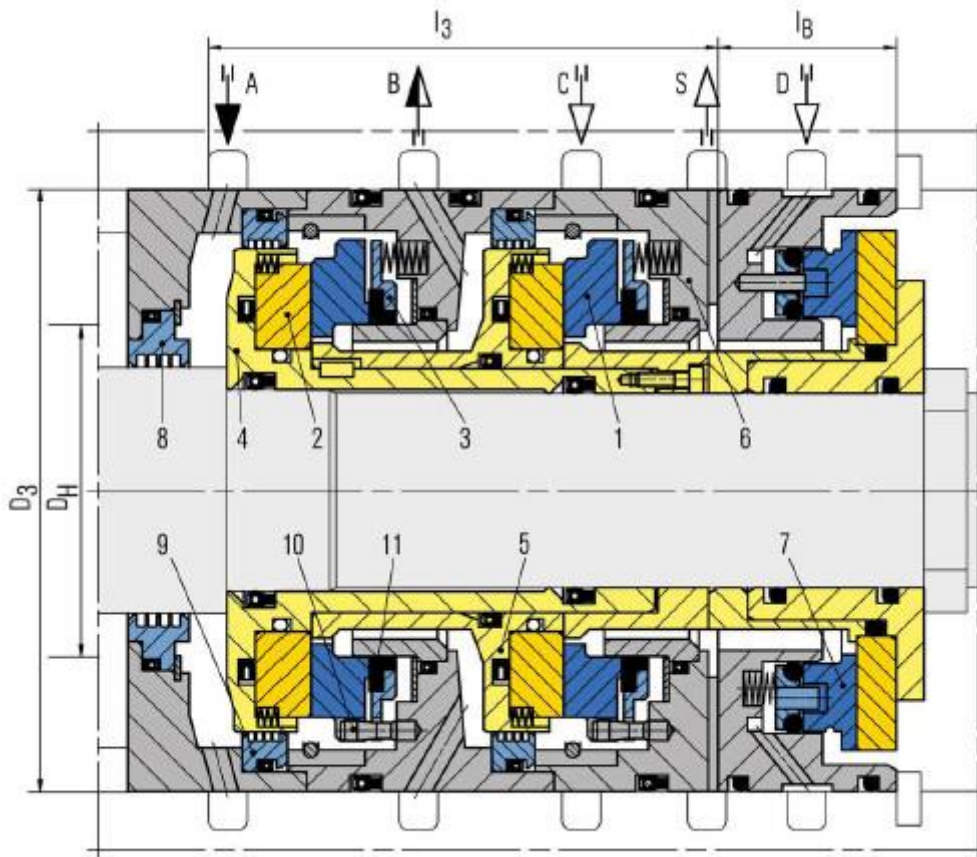The reliable DGS or PDGS is made even more robust by design measures and features

- "Smart Labyrinth"
- DiamondFace-coating
- Self-cleaning 3D gas grooves
- Soft torque transmission
- Debris resistant dynamic sealing element
- Leakage optimization

Recommended applications

- Oil and gas industry
- Refining technology
- Petrochemical industry
- Applications with upstream gas treatment (glycol)
- Hydrocarbon gas
- Ammonia
- Nitrogen
- All types of compressors

Item	Description
1	Seal face, stationary Feature option: primary seal face with DiamondFace-coating
2	Seat, rotating Feature option: primary seat with DiamondFace-coating
3	Thrust ring
4	Shaft sleeve
5	Adapter sleeve
6	Housing (size matched to installation space)
7	Separation seal (CobaSeal)
8	Labyrinth
9	Feature option: "smart labyrinth"
10	Feature option: "soft torque"
11	Feature option: debris resistant dynamic sealing element
A	Primary seal gas supply
B	Primary vent
C	Secondary seal gas supply
S	Secondary vent
D	Separation gas supply