EagleBurgmann
a member of EKK and FREUDENBERG

RELY ON EXCELLENCE

RoTechSeal

Mechanical Seals | Compressor seals | Gas-lubricated seals

Features

The efficient sealing solution with advanced robustness against seal gas supply contamination(particles/liquids)

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

Notes

One of the biggest challenges in operating centrifugal compressors with dry gas seals is seal gas supply contamination. Liquids or particles in the supply gas are the main causes of shortened seal life. With special features, the RoTechSeal increases the lifetime of a normal seal in a wet and dirty environment. The robust seal features will be defined case-by-case based on the operating conditions and failure analysis.

Dimensions on request.

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

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)

Project specific special designs possible

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

Standards and approvals

- NACE
- API 617
- API 692

Recommended applications

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

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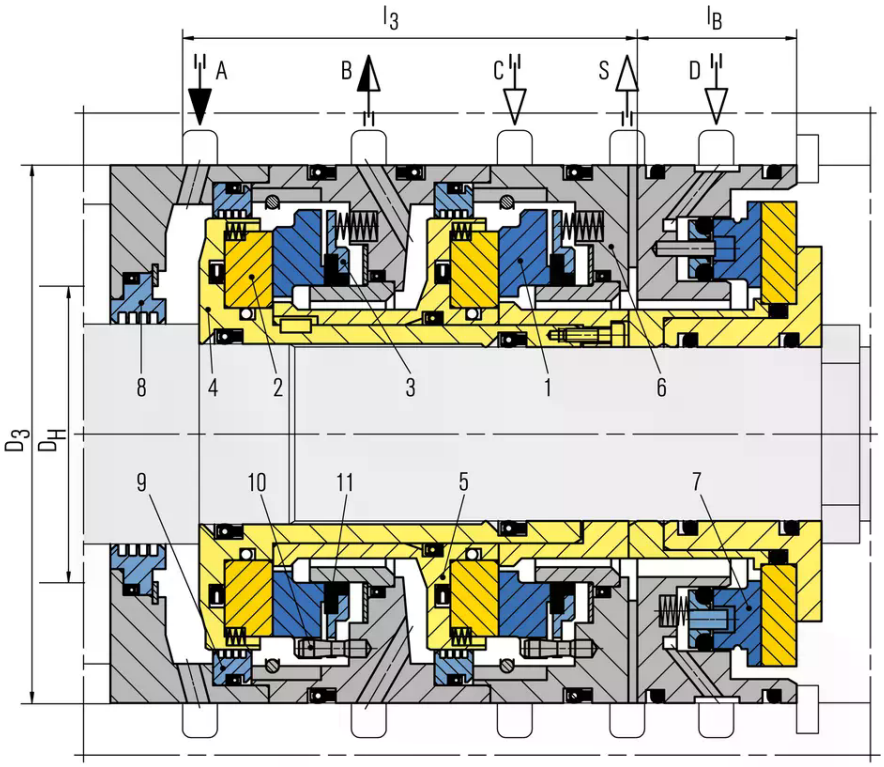
All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications means, however, that they can serve only as guide values.
We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. Subject to change.



RoTechSeal tandem seal

A	Primary seal gas supply
B	Primary vent
C	Secondary seal gas supply
S	Secondary vent
D	Separation gas supply

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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

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