

RELY ON EXCELLENCE

CobaSeal

Mechanical seals | Compressor seals | Separation seals



Features

- Gas-lubricated
- Bi-directional
- Ready-to-fit cartridge unit
- Self cleaning 3D gas grooves
- Aerostatic and aerodynamic lift-off

Advantages

- Extremely low leakage
- Double arranged (co-axial) dry gas seal with just one pair of seal faces
- Insensitive to oil contamination due to its special design
- Wear-free, non-contacting operation in all conditions
- Insensitive to radial vibrations due to axial sealing gap
- Slow-roll or turning operation capable (static lift-off)
- No limits regarding dew point of separation gas (silicon carbide instead of carbon)
- Lower N₂ consumption than any other system
- N₂ can be switched off during standstill – the gap will close and still provide the best oil sealing performance
- Best in class oil sealing by extremely small sealing gap and sling effect of rotating ring

Operating range

Shaft diameter:
29.5 ... 355 mm (1.16" ... 13.97")
Design pressure (vent):
p = 0 ... 15 bar (0 ... 218 PSI)
Operating pressure:
p = 2.7 bar (39.16 PSI)
Temperature:
t = -20 °C ... +200 °C (-4 °F ... +392 °F)
Sliding velocity:
vg = 0 ... 150 m/s (0 ... 492 ft/s)
Dew point: No limitation

Materials

Seal face: Silicon carbide*
Seat: Ductile stainless steel*
Secondary seals: FKM
Metal parts: 1.4006

* With special EagleBurgmann high performance iDLC (in situ Diamond-Like-Carbon) coating

Standards and approvals

- NACE

Notes

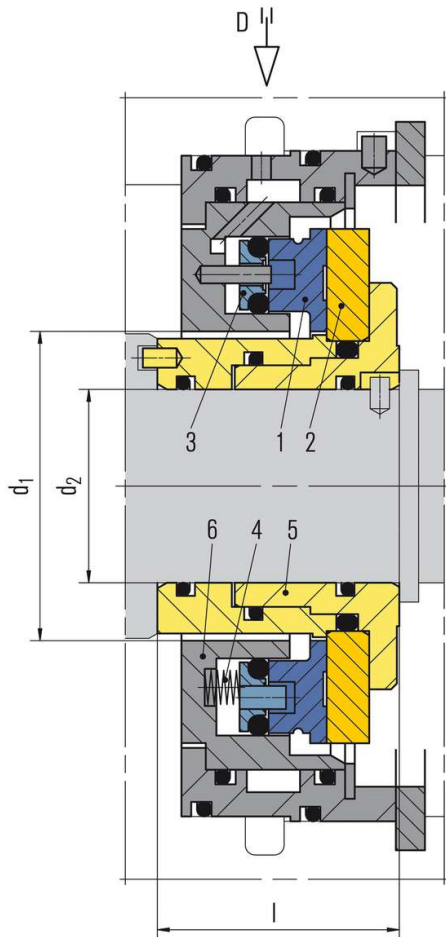
Since it was launched on the market, this innovative sealing solution has proven its worth worldwide in both first fit and retrofit applications. It consists of a rotating seat made of ductile material and a stationary, spring-loaded seal face. The separation gas is routed through axial holes in the stationary seal ring into the middle of the sliding face. It is then divided in the sealing gap into two leakage flows which are routed to the inner and outer diameters of the seal face.

Dimensions on request.

Recommended applications

- Oil and gas industry
- Refining technology
- Petrochemical industry
- Nitrogen
- Air
- Centrifugal compressors
- Blowers

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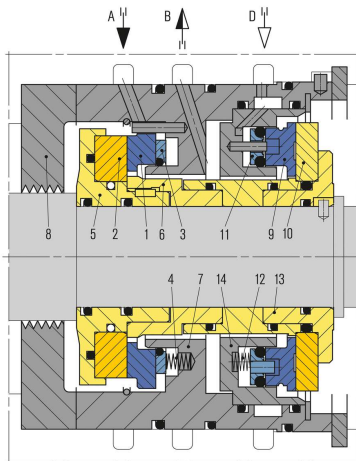


Item Description

- 1 Seal face, stationary
- 2 Seat, rotating
- 3 Thrust ring
- 4 Spring
- 5 Shaft sleeve and seat retainer
- 6 Housing (size matched to installation space)
- D Separation gas

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Product variants



Option: Single DGS + CobraSeal = Tandem seal

The CobraSeal is not just an excellent separation seal. It can also be used as a true back-up seal for greater safety. A DGS-CobraSeal tandem arrangement can be operated at sealing pressures up to 20 bar (290 PSI). It does not need an intermediate labyrinth with N₂ supply and existing single seals can be simply retrofitted, thus benefitting from increased operational safety. The single DGS + CobraSeal combination is also shorter than conventional tandem seals with separation seal and costs can be saved on the gas supply system in low pressure applications.

Item Description

- 1, 9 Seal face, stationary
- 2, 10 Seat, rotating
- 3, 11 Thrust ring
- 4, 12 Spring
- 5, 13 Shaft sleeve
- 6 Adapter sleeve
- 7, 14 Housing
- 8 Labyrinth