

RELY ON EXCELLENCE

CSE

Mechanical seals | Compressor seals | Separation seals



Features

- Non-contacting bushing seal
- Gas-lubricated
- Bi-directional
- Ready-to-fit cartridge unit
- Equipped with Espey carbon rings type WKA400

Advantages

- Low leakage
- Slow roll capability
- Insensitive to dry nitrogen

Operating range

Shaft diameter:
38 ... 390 mm (1,50" ... 15,35")
Design pressure:
 $p = \dots 10 \text{ bar (145 PSI)}$
Operating pressure:
 $p = 0.07 \text{ bar (1.02 PSI)}$
Temperature:
 $t = -20 \text{ }^{\circ}\text{C} \dots +200 \text{ }^{\circ}\text{C} (-4 \text{ }^{\circ}\text{F} \dots +392 \text{ }^{\circ}\text{F})$
Sliding velocity:
 $vg = 0 \dots 200 \text{ m/s (0 ... 656 ft/s)}$
Dew point: No limitation

Project specific special designs possible.

Materials

Seal face: Carbon graphite impregnated
Secondary seals: FKM
Shaft sleeve: Stainless steel, TC-coated
Metal parts: 1.4006 or other stainless steels

Standards and approvals

- NACE
- API 692

Notes

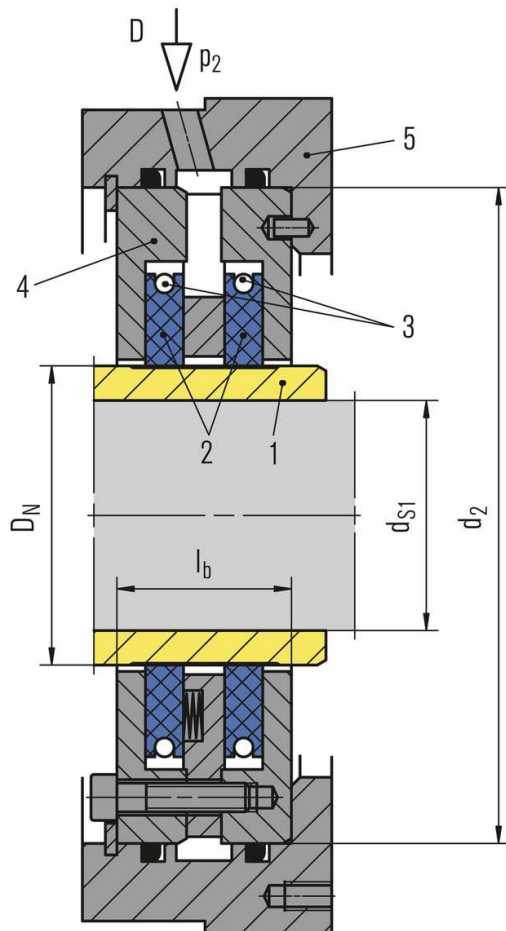
The service-proven non-contacting bushing seal with low gas consumption. Non contact type carbon rings are segmented rings held together by a garter spring at the outer diameter. A defined minimum radial gap provides a contact-free operation. Robust design and reliable operation provide secure oil sealing even at extreme conditions.

Dimensions on request.

Recommended applications

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

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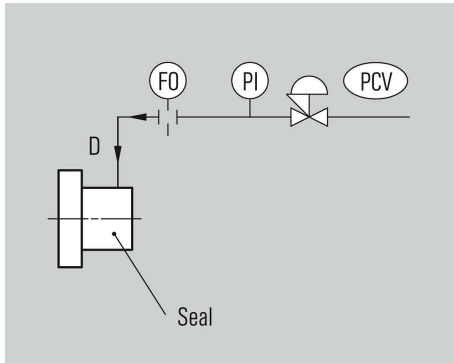


Item Description

- | | |
|---|--|
| 1 | Shaft sleeve |
| 2 | Segmented carbon ring |
| 3 | Garter spring |
| 4 | Housing of the standardized sub-cartridge |
| 5 | Housing (size matched to installation space) |
| D | Separation gas |

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Installation, details, options



Piping and instrumentation diagram of a CSE (flow controlled separating gas supply).