EagleBurgmann.

Rely on excellence

LY9DZSS

Features

- API 682 Category 2 and 3, Type B, Arrangement 3 seal
- Dual seal in back-to-back arrangement
- Same seal size of inboard and outboard seal
- Balanced
- Cartridge unit
- Rotating metal bellows
- Shrink fitted seal ring and solid mating ring

Advantages

- Compact design
- Bellows design allows use of balanced seal with plain sleeve
- Absence of dynamic O-Ring eleminates/ reduces seal face hang-up
- Bellows design minimizes variation in face load due to shaft expansion or face wear
- Resistant to abrasive particles in the medium, no shaft or sleeve fretting
- Low heat generation and power consumption due to narrow seal face width
- Longer seal life



| | l ₃ | l ₁ l ₂ l ₄ | |
|-------|----------------|--|--|
| 02 H7 | 15 4 1 16 2 | 3 | 20 18 |
| | | 13 14 17 | 19 P P P P P P P P P P P P P P P P P P P |
| | | | 22 |

| Item | Description |
|---------------|-----------------------------|
| 1 | Seal ring with bellows unit |
| 2, 5, 12, 16 | O-Ring |
| 3, 14, 19, 20 | Set screw |
| 4 | Mating ring |
| 11 | Seal sleeve |
| 13 | Pumping ring |
| 15, 17 | Gland plate |
| 18 | Drive collar |
| 21 | Setting device |
| 22 | HSH Cap screw |
| | |

LY9DZSS (2)

Recommended applications

- Refining technology
- Oil and gas industry
- Petrochemical industry
- Chemical industry
- Power plant technology
- LPG plants
- API 610 / ISO 13709 pumps
- Process pumps

Standards and approvals

- API 682 / ISO 21049

Operating range

Pressure: p = vacuum ... 20 bar (290 PSI) Temperature: t = -40 °C ... +200 °C (-40 °F ... +392 °F)

Sliding velocity: vg ... 23 m/s (75 ft/s) Viscosity: ... 1,000 mPas

Solids content: ... 0.5 wt.%

Materials

Seal ring: Blister resistant carbon Mating ring: Silicon carbide SSiC (Q1), RBSiC (Q2) Bellows: Hastelloy® C-276 (M5), option: Inconel® 718 (M6) Secondary seals: FKM (V), FFKM (K), EPDM (E), NBR (P) Metal parts: CrNiMo steel 316 (G), Hastelloy® C-276 (M5)

Recommended piping plans

Process side: 02, 11, 12, 13, 14, 21, 22, 31, 32, 41 Between seals: 53A, 53B, 53C, 54 Atmospheric side*: 61, 62, 65A, 65B

* Throttle bushing on request

| Dimensions | | | | | | | | |
|--------------------|--------------------|--------------------|----------------|-----|----------------|----------------|----|--|
| API/d ₁ | API/d ₂ | API/d ₃ | d ₅ | 11 | l ₂ | l ₃ | 14 | |
| 20 | 70 | 105 | - | - | - | | | |
| 30 | 80 | 115 | 138 | 125 | 98 | 27 | 82 | |
| 40 | 90 | 125 | 148 | 128 | 98 | 30 | 82 | |
| 50 | 100 | 140 | 168 | 137 | 107 | 30 | 87 | |
| 60 | 120 | 160 | 188 | 137 | 107 | 30 | 87 | |
| 70 | 130 | 170 | 198 | 137 | 107 | 30 | 87 | |
| 80 | 140 | 180 | 208 | 137 | 107 | 30 | 87 | |
| 90 | 160 | 205 | 238 | 145 | 115 | 30 | 95 | |
| 100 | 170 | 215 | 248 | 150 | 115 | 35 | 95 | |
| 110 | 180 | 225 | 258 | 150 | 115 | 35 | 95 | |

Dimensions in millimeter