

RELY ON EXCELLENCE

H75VA4-S

API 682 4th edition product range | Mechanical seals | Balanced pusher seals



Features

- API 682 Category 2 and 3, Type A, Arrangement 1 seal
- Single seal
- Balanced
- Cartridge unit
- Bi-directional design
- Rotating multiple springs
- Integrated pumping device available
- Replaces the H75VN seal

Advantages

- Compact design
- Universally applicable both for retrofits or original equipment
- Efficient stock-keeping due to standardized components
- Extended selection of materials
- Extended field of operation in terms of temperature and pressure
- Metal parts also in special materials available

Operating range

Shaft diameter:

$d_1 = 20 \dots 110 \text{ mm (0.79" ... 4.33")}$

Pressure: $p_1 = \dots 42 \text{ bar (609 PSI)}$

Temperature:

$t = -40 \text{ °C ... } +176 \text{ °C (-40 °F ... } +349 \text{ °F)}^*$

Sliding velocity: $v_g = 23 \text{ m/s (75 ft/s)}$

Axial movement:

$d < 50 \text{ mm } \pm 1,0 \text{ mm}$

$d \geq 50 \text{ mm } \pm 1,5 \text{ mm}$

* Engineered up to 260 °C (500 °F) with FFKM (K) secondary seals.

Materials

Seal ring: Blister resistant carbon, Silicon carbide SSiC (Q1), RBSiC (Q2)

Mating ring:

Silicon carbide SSiC (Q1), RBSiC (Q2)

Secondary seals:

EPDM (E), NBR (P), FKM (V), FFKM (K)

Springs: Hastelloy® C-276 (M5)

Metal parts: CrNiMo steel 316 (G) or equivalent, optional materials on request.

Standards and approvals

- API 682 / ISO 21049
- API 682 4th ed. Cat. 2/3 - 1CW-FL

Recommended applications

- Highly volatile hydrocarbons
- Refining technology
- Oil and gas industry
- Petrochemical industry
- Chemical industry
- Power plant technology
- CCUS
- Hydrogen
- Sustainable plastics production
- Alternative fuels production
- Nuclear power technology
- LPG plants
- API 610 / ISO 13709 pumps
- Process pumps

Recommended piping plans

Process side:

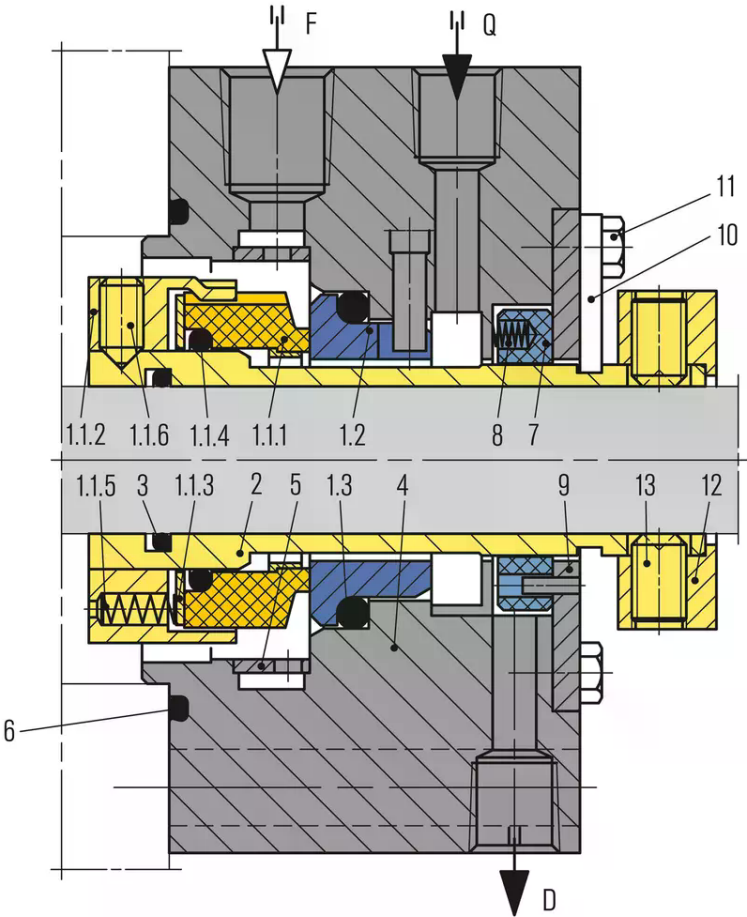
- API Plan 01
- API Plan 02
- API Plan 03
- API Plan 11
- API Plan 12
- API Plan 13
- API Plan 14
- API Plan 21
- API Plan 22
- API Plan 23

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API Plan 31
 API Plan 32
 API Plan 41

Atmospheric side:

API Plan 51
 API Plan 61
 API Plan 62
 API Plan 65A
 API Plan 65B
 API Plan 66A
 API Plan 66B



| Item | Description |
|------------------|------------------|
| 1.1.1 | Seal ring |
| 1.1.2 | Driver |
| 1.1.3 | Thrust ring |
| 1.1.4, 1.3, 3, 6 | O-Ring |
| 1.1.5, 8 | Spring |
| 1.1.6, 13 | Set screw |
| 1.2 | Mating ring |
| 2 | Seal sleeve |
| 4 | Gland plate |
| 5 | Flow distributor |
| 7 | Throttle ring |
| 9 | Disc |
| 10 | Setting device |
| 11 | Hexagon bolt |
| 12 | Set ring |

F Flush
 Q Quench
 D Drain