

RELY ON EXCELLENCE

H75A4-B

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



Features

- API 682 Category 2 and 3, Type A, Arrangement 3 seal
- Dual seal in back-to-back arrangement
- Balanced
- Cartridge unit
- Rotating multiple springs
- Integrated pumping device
- Suitable for pressure reversals
- Replaces the H75VK seal

Advantages

- 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
- Safe operation due to metal torque transmission at the rotating carbon seal rings

Operating range

Shaft diameter:
 $d_1 = 20 \dots 110 \text{ mm} (0.79" \dots 4.33")$
 Pressure: $p_1 = 42 \text{ bar} (609 \text{ PSI})$
 Temperature:
 $t = -40 \text{ °C} \dots +176 \text{ °C} (-40 \text{ °F} \dots +350 \text{ °F})^*$
 Sliding velocity: $v_g = 23 \text{ m/s} (76 \text{ ft/s})$
 Axial movement:
 $d \leq 50 \text{ mm} \pm 1.0 \text{ mm}$
 $d > 50 \text{ mm} \pm 1.5 \text{ mm}$

* Engineered up to $260 \text{ °C} (500 \text{ °F})$ with FFKM (K) secondary seals.

Materials

Seal rings: Blister resistant carbon, Silicon carbide SSiC (Q1), RBSiC (Q2)
 Mating rings: Silicon carbide SSiC (Q1), RBSiC (Q2)
 Secondary seals: EPDM (E), NBR (P), FKM (V), FFKM (K)
 Springs: 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 - 3CW-BB
- Compliant to TA Luft (German Clean Air Act)

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

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API Plan 31
API Plan 32
API Plan 41

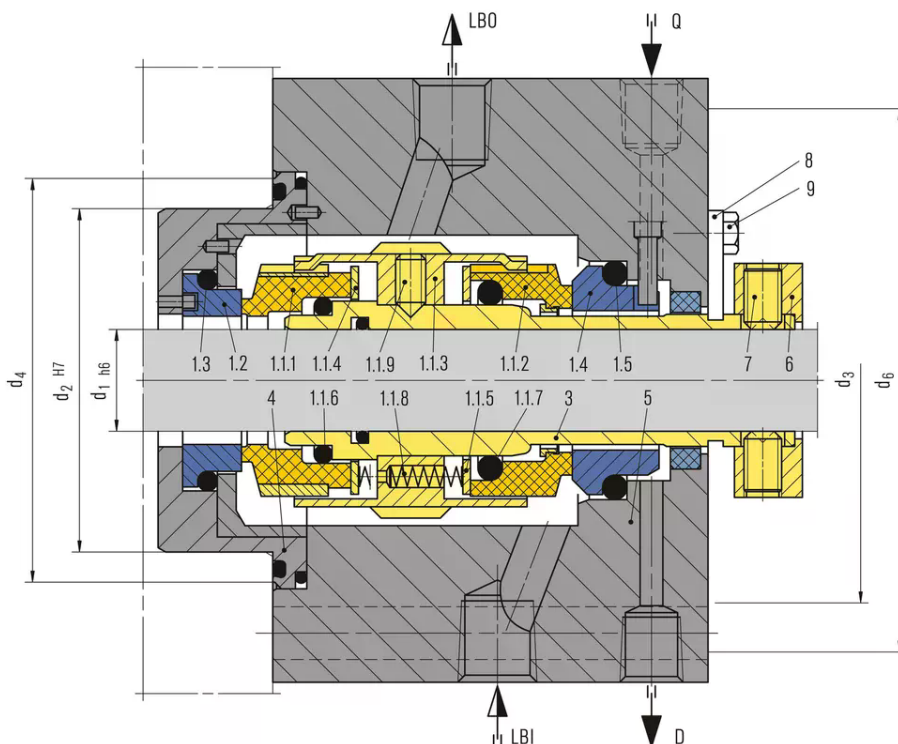
Between seals:
API Plan 53A
API Plan 53B
API Plan 53C
API Plan 54

Atmospheric side**:

API Plan 61
API Plan 62
API Plan 65A
API Plan 65B

* Piping plans 11 ... 41: Integration in seal to be dimensionally checked.

** Throttle bushing on request.



Item	Description
1.1.1, 1.1.2	Seal ring
1.1.3	Driver
1.1.4, 1.1.5	Thrust ring
1.1.6, 1.1.7, 1.3, 1.5	O-Ring
1.1.8	Spring
1.1.9, 7	Set screw
1.2, 1.4	Mating ring
3	Seal sleeve
4, 5	Gland plate
6	Set ring
8	Setting device
9	Hexagon bolt

LBO Liquid barrier OUT
Q Quench
LBI Liquid barrier IN
D Drain