

B750VK-D

API 682 4th Edition Category 2 & 3
Seal type A (Rotating)
Configuration 3CW-BB (Contacting Wet – Back-to-Back)

Product Description

1. API 682 Category 2 and 3, Type A, Arrangement 3 seal
2. Dual seal in back-to-back configuration
3. Balanced design
4. Independent of direction of rotation
5. Cartridge construction
6. Pumping device available for increased efficiency in circulation
7. Rotary unit with multiple springs
8. Can accommodate reverse pressure

Technical Features

1. Can handle extensive applications in various temperatures and pressures
2. Versatile in design to fit various seal chambers
3. Material of construction available in special metallurgy
4. Special torque transmission design for high performance
5. Operation reliability due to rugged metal torque transmission at the rotating seal face

Typical Industrial Applications

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

Performance Capabilities

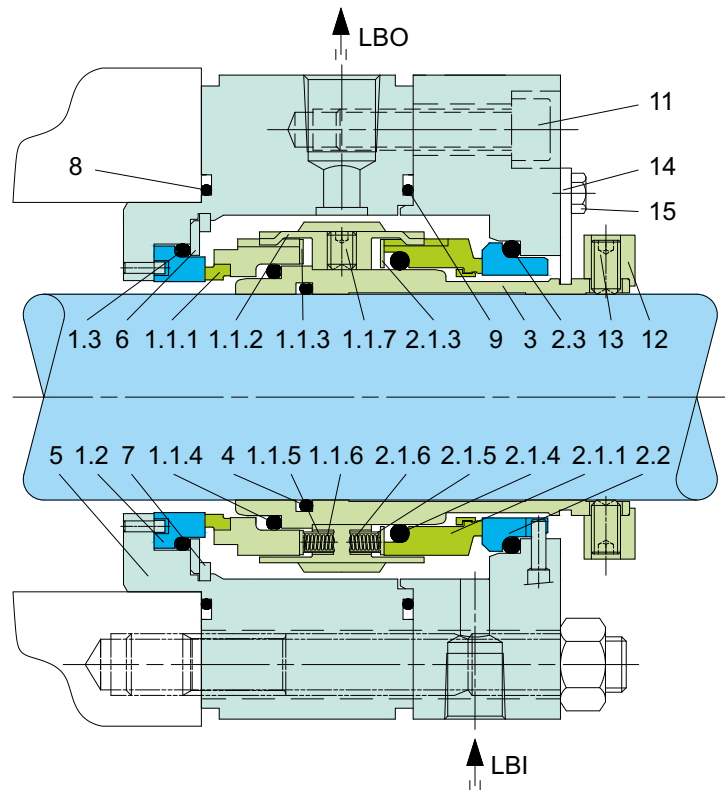
Shaft diameter: $d = 20 \dots 110 \text{ mm}$ (0.79" ... 4.33")
Pressure: $p_1 = \dots 42 \text{ bar}$ (609 PSI)
Temperature: $t = -40 \text{ }^\circ\text{C} \dots +176 \text{ }^\circ\text{C}$
($-40 \text{ }^\circ\text{F} \dots +350 \text{ }^\circ\text{F}$)*
Sliding velocity: $v_g = 23 \text{ m/s}$ (76 ft/s)
Axial movement: $d \leq 40 \text{ mm} \pm 1.0 \text{ mm}$, $d > 40 \text{ mm} \pm 1.5 \text{ mm}$
* Engineered up to $260 \text{ }^\circ\text{C}$ (500 °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.

Recommended piping plans

Process side*: 01, 02, 03, 11, 12, 13, 14, 21, 22, 31, 32, 41
Between seals: 53A, 53B, 53C, 54
Atmospheric side**: 61, 62, 65A, 65B
* Piping plans 11 ... 41:
Integration in seal to be dimensionally checked.
** Throttle bushing on request.



Item	Description
1.1.1, 2.1.1	Seal ring
1.1.2, 2.1.2	Driver
1.1.3, 2.1.3	Thrust ring
1.1.4, 1.3, 2.1.4, 2.3, 4, 8, 9	O-ring
1.1.5, 2.1.5,	Spring sleeve
1.1.6, 2.1.6,	Spring
1.1.7, 2.1.7	Set screw
1.2, 2.2	Mating ring
3	Shaft sleeve
5	Adapter
6	Washer
7	Retaining ring
10	Cover
11	HSH cap screw
12	Set ring
13	Set screw
14	Assembly plate
15	Hexagonal bolt
LBI	Liquid Barrier IN
LBO	Liquid Barrier OUT