

UFL850-D

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

Product Description

1. API 682 Category 2 and 3, Type B, Arrangement 3 seal
2. Dual seal in back-to-back configuration
3. Balanced design
4. Independent of direction of rotation
5. Cartridge construction
6. For plain shafts
7. Rotary metal bellows design
8. Shrink fitted seal rings and solid mating rings

Technical Features

1. Suitable for high and low temperature application
2. Compact design
3. No dynamically loaded O-ring which reduces chances of seal face hang-up.
4. Pumping screw for media with higher viscosity also available
5. Short installation length possible
6. Rugged design for long operating life
7. Bellows design efficiently ensure self-cleaning
8. Bellows design minimizes variation in face load due to shaft expansion or face wear
9. Resistant to abrasive particles in the medium, no shaft or sleeve fretting

Typical Industrial Applications

- API 610/ISO 13709 pumps
- Chemical & Petrochemical industry
- Cold media
- Highly viscous media
- Hot media
- Power plant technology
- Refining technology
- Oil and gas industry
- Power plant technology
- LPG plants
- Process pumps

Performance Capabilities

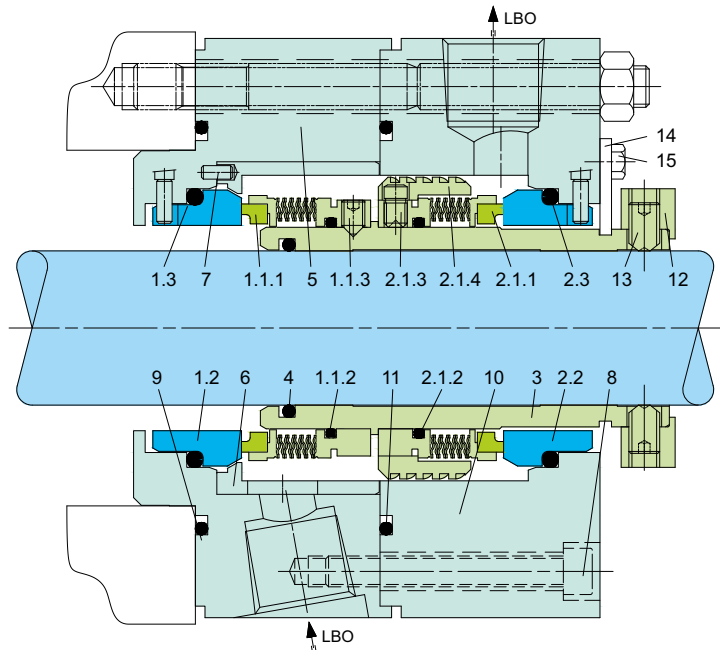
Shaft diameter: $d_1 = 20 \dots 110 \text{ mm}$ (0.79" ... 4.33")
Pressure: $p = \text{vacuum} \dots 20 \text{ bar}$ (290 PSI)
Temperature: $t = -40 \text{ }^\circ\text{C} \dots +200 \text{ }^\circ\text{C}$ (-40 °F ... +392 °F)
Sliding velocity: $v_g \dots 23 \text{ m/s}$ (75 ft/s)

Materials

Seal rings: Blister resistant carbon
Mating rings: 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:
01, 02, 03, 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



Item	Description
1.1.1, 2.1.1	Seal ring with Bellows Unit
1.1.2, 1.3, 2.1.2, 2.3, 4, 9, 11	O-ring
1.1.3, 2.1.3, 13	Set screw
1.2, 2.2	Mating ring
2.1.4	Pumping ring
3	Shaft sleeve
5	Gland
6	Adapter Sleeve
7	Pin
8	HSH cap screw
10	Intermediate Gland
12	Set ring
14	Assembly plate
15	Hexagonal bolt
LBI	Liquid Barrier IN
LBO	Liquid Barrier OUT