

# **UFL850-D**

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

#### **Product Description**

- 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
- 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: d1 = 20 ... 110 mm (0.79" ... 4.33")

Pressure: p = vacuum ... 20 bar (290 PSI)

Temperature:  $t = -40 \, ^{\circ}\text{C} \dots +200 \, ^{\circ}\text{C} \, (-40 \, ^{\circ}\text{F} \dots +392 \, ^{\circ}\text{F})$ 

Sliding velocity: vg ... 23 m/s (75 ft/s)

## Materials

Seal rings: Blister resistant carbon

Mating rings: Silicon carbide SSiC (Q1), RBSiC (Q2)

Bellows: Hastelloy® C-276 (M5),

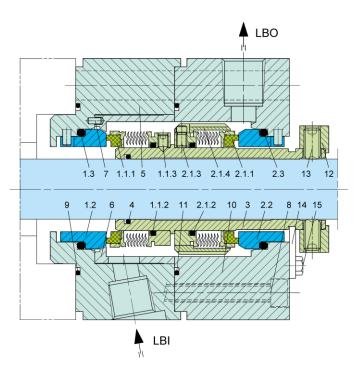
option: Inconel® 718 (M6)

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