# UFL850-Ta

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

#### **Product Description**

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

#### **Technical Features**

- Suitable for high and low temperature application 1.
- Compact design 2.
- 3. No dynamically loaded O-ring which reduces chances of seal face hang-up.
- Pumping screw for media with higher viscosity 4. also available
- 5. Short installation length possible
- 6. Rugged design for long operating life
- Bellows design efficiently ensure self-cleaning 7.
- Bellows design minimizes variation in face load 8. 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: d1 = 20 ... 110 mm (0.79" ... 4.33") Pressure: p = vacuum ... 20 bar (290 PSI) Temperature:  $t = -40 \,^{\circ}\text{C} ... + 200 \,^{\circ}\text{C} (-40 \,^{\circ}\text{F} ... + 392 \,^{\circ}\text{F})$ 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 2CW-CW**

Process side:

01, 02, 03, 11, 12, 13, 14, 21, 22, 23, 31, 32, 41

Between seals: 52, 55

Atmospheric side\*: 61, 62, 65A, 65B

\* Throttle bushing on request

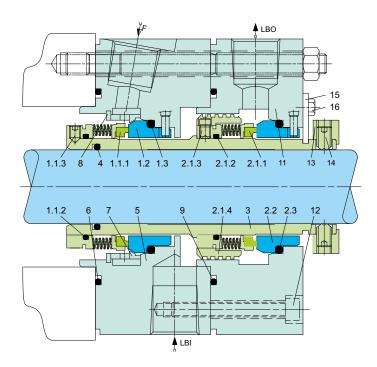
## **Recommended piping plans 3CW-FB**

Process side:

01, 02, 03, 11, 12, 13, 14, 21, 22, 23, 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, 6, 9	O-ring
1.1.3, 2.1.3, 14	Set screw
2.1.4	Pumping sleeve
1.2, 2.2	Mating ring
3	Shaft sleeve
5	Gland
7	Multi-flow Distributor
8	Retaining ring
11	Cover
12	HSH cap screw
13	Set ring
15	Setting plate
16	Hexagon screw
F	Flush
LBI	Liquid Buffer/Barrier IN
LBO	Liquid Buffer/Barrier OUT