

CTXAPI-DN

API 682 4th Edition Category 1

Seal Type A (Rotating)

Configuration 2CW-CW (Contacting Wet – Contacting Wet)

Configuration 3CW-FB (Contacting Wet – Face-to-Back)

Product Description

1. API 682 Category 1, Type A, Arrangement 2 & 3
2. Dual seal in face-to-back configuration
3. Balanced design
4. Independent of direction of rotation
5. Cartridge construction
6. Robust construction with shrink-fitted seal faces
7. Heavy duty solid seat design

Technical Features

1. Designed to accommodate shaft deflections and process fluctuations
2. Efficient construction for heat dissipation
3. Compact installation design
4. Factory assembled cartridge unit for easy installation
5. Springs are product protected to avoid contamination
6. Can accommodate reverse pressure
7. Can handle extensive applications in various temperatures and pressures
8. Versatile in design to fit various seal chambers

Typical Industrial Applications

- Chemical industry
- Light volatile and highly viscous hydrocarbons
- Low solids content and low abrasive media
- Media with poor lubrication properties
- Oil and gas industry
- Petrochemical industry
- Toxic and hazardous media
- Standard pumps
- Vertical and horizontal ANSI chemical pumps

Performance Capabilities

Shaft diameter: $d_1 = 20 \dots 110 \text{ mm}$ (0.79" ... 4.33")
 Pressure: $p_1 = 22 \text{ bar}$ (319 PSI)
 Temperature: $t = -40 \text{ }^\circ\text{C} \dots +176 \text{ }^\circ\text{C}$ (-40 °F ... +349 °F)
 (>176 °C (349 °F) please enquire)
 Sliding velocity: $v_g = 23 \text{ m/s}$ (75 ft/s)

Materials

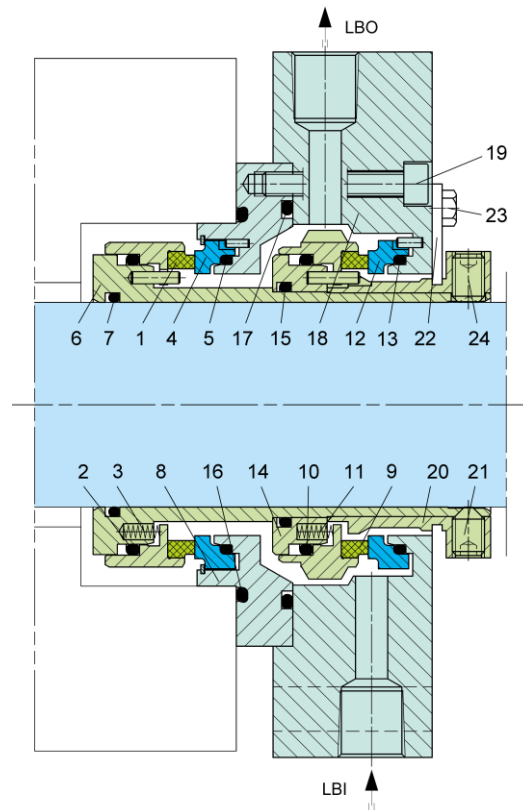
Seal rings: Blister resistant carbon, Silicon carbide SSiC (Q12)
 Mating rings: Silicon carbide SSiC (Q1)
 Secondary seals: EPDM (E), NBR (P), FKM (V), FFKM (K)
 Springs: Hastelloy® C-4 (M)* and C-276 (M5)
 Metal parts: CrNiMo steel 316 (G) or equivalent, optional materials on request.
 * Sealmatic standard

Recommended piping plans – 2CW-CW

01, 02, 03, 11, 12, 13, 14, 21, 22, 23, 31, 41, 32
 Between seals: 52, 55
 Atmospheric side*: 61, 62, 65A, 65B
 * Depending on application, please enquire

Recommended piping plans – 3CW-FB

Process side:
 01, 02, 03, 11, 12, 13, 14, 21, 22, 23, 31, 41, 32
 Between seals: 53A, 53B, 53C, 54
 Atmospheric side*: 61, 62, 65A, 65B
 * Depending on application, please enquire



Item	Description
1, 9	Seal ring
2, 5, 7, 10, 13, 15, 16, 17	O-ring
3, 11	Spring
4, 12	Mating ring
6	Shaft sleeve
8	Intermediate Gland
14	Driver
19	HSH Cap screw
18	Gland
20	Set ring
21, 24	Set screw
22	Setting plate
23	Hexagon bolt
LBI	Liquid Buffer IN
LBO	Liquid Buffer OUT