

Product Description

1. API 682 Category 2 and 3, Type A, Arrangement 1 seal
2. Single seal configuration
3. Balanced design
4. Independent of direction of rotation
5. Cartridge construction
6. Stationary design with multiple springs
7. Designed with integrated pumping device for increased efficiency in circulation
8. Robust construction with shrink-fitted seal face
9. Heavy duty design of solid seat

Technical Features

1. Accommodates shaft deflections due to stationary design
2. Can be designed for individual pump application with corresponding connection parts to be adopted to the pump seal chamber
3. Optimum heat dissipation due to integrated pumping device available for increased efficiency in circulation and optimized seat design
4. Cartridge unit factory assembled for easy installation, which reduces downtime
5. Trouble-free long-term operation due to heavy duty single seat design with bandage
6. Can operate under high sliding velocities and high pressures

Typical Industrial Applications

- Oil and gas industry
- Refining technology
- Chemical industry
- Hot water
- Sour water
- Caustic soda
- Amines
- Crystallizing media
- Crude oil
- Process water
- Crude oil feed pumps
- Injection pumps
- Multiphase pumps

Performance Capabilities

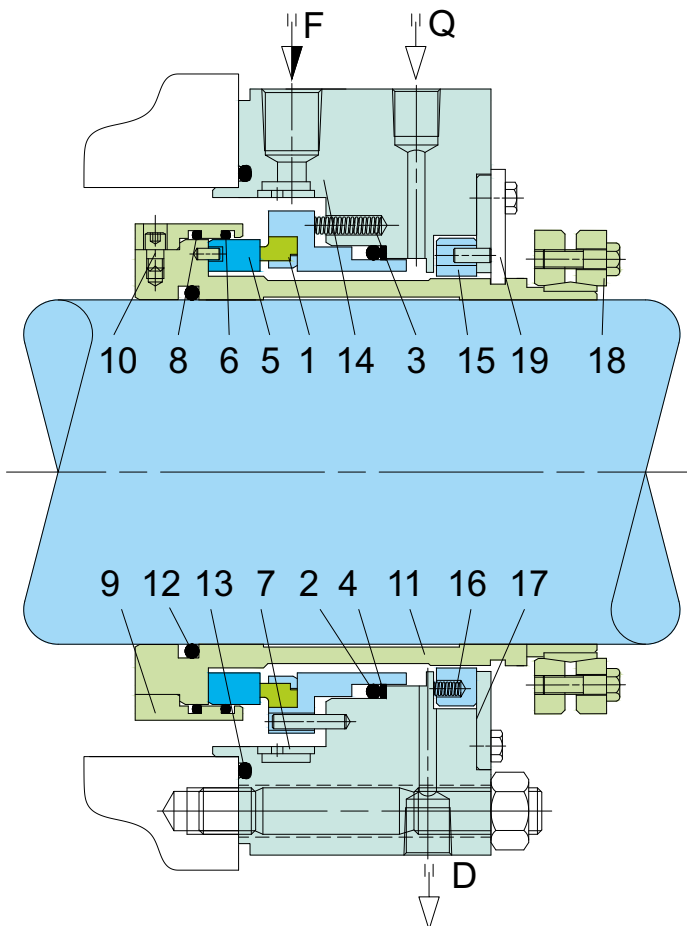
Shaft diameter: $d_1 = 40 \dots 110$ (250) mm
(1.57" ... 4.33 (9.84)")
Pressure: $p_1 = 42$ (150) bar (609 (2,175) PSI)
Temperature: $t = -40$ °C ... $+176$ (+200) °C
(-40 °F ... $+350$ (+394) °F)
Sliding velocity: $v_g = 23$ (60) m/s (76 (197) ft/s)
Axial movement: ± 3.0 mm

Materials

Seal ring: Blister resistant carbon,
Silicon carbide SSiC (Q1), RBSiC (Q2, Q3)
Mating ring: Silicon carbide SSiC (Q1), RBSiC (Q2)
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

Process side:
01, 02, 03, 11, 12, 13, 14, 21, 22, 23, 31, 32, 41
Atmospheric side: 51, 61, 62, 65A, 65B, 66A, 66B



Item	Description
1	Seal ring
2, 6, 8, 12, 13	O-ring
3, 16	Spring
4	Back-up ring
5	Mating ring
7	Multi-flow distributor
9	Sleeve
10	Set screw
11	Shaft sleeve
14	Gland
15	Throttle bushing
17	Washer
18	Shrink Disc
19	Setting plate
20	Hexagon bolt
F	Flush
Q	Quench
D	Drain