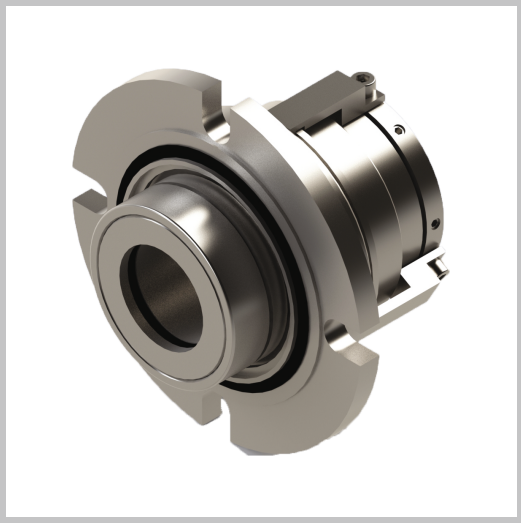
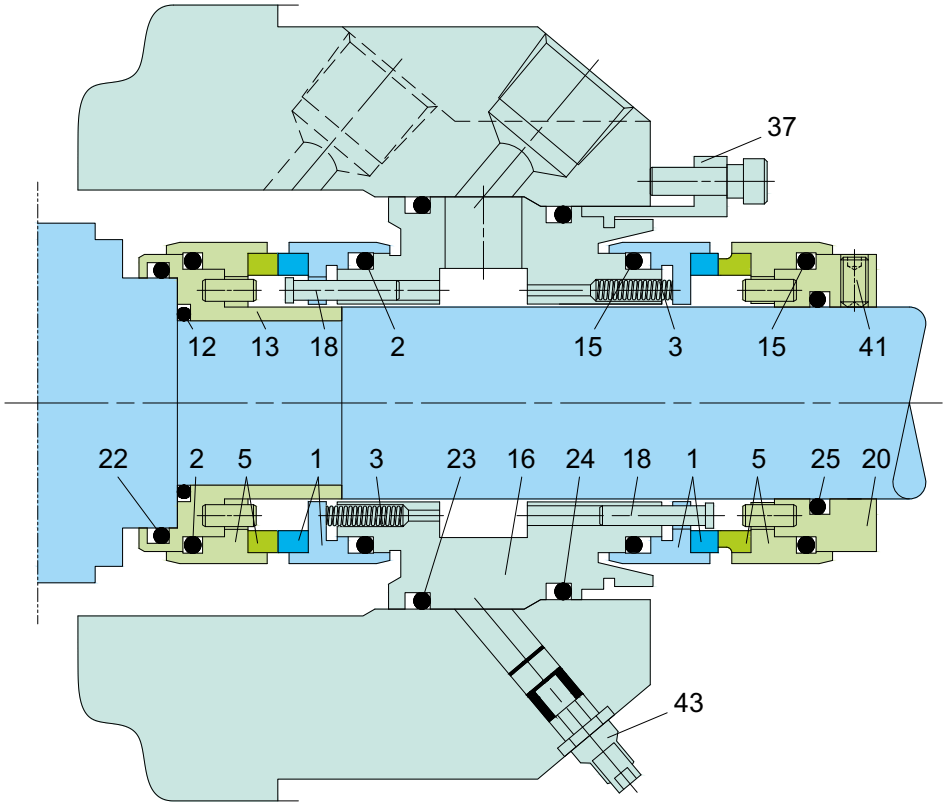


Product Description

1. Dual seal configuration
2. Balanced design
3. Independent of direction of rotation
4. Semi-Cartridge construction
5. Double pressure balanced design
6. Designed with provision for internal barrier fluid circulation
7. No dynamic O-ring on the shaft
8. Robust construction with shrink-fitted seal faces
9. Seal faces have a large clearance to the shaft
10. Static springs on both the sides

Technical Features

1. Seals can be operated with pressurized barrier fluid or with quench
2. O-rings are dynamically loaded to prevent shaft damage
3. Easy and trouble-free installation
4. Due to large radial clearance, the damage to the seal faces are avoided, in addition to the seal faces being protected by strong steel parts
5. Misalignment during installation and operations is reduced due to the static springs on both the faces
6. Dual seal can also be used as a single seal by removing the atmospheric seal parts



Note: The item numbers as depicted above are based on our technical experience and knowledge and are placed in the chronological order of their assembly procedure.

Item	Description
1	Seal face
5	Seat
13	Sleeve
16	Housing
18	Pin
37	Assembly fixture
2, 12, 15, 22, 23, 24, 25	O-ring
43	Plug

Typical Industrial Applications

Chemical	Large solids containing liquids
Clean liquids	Lightly contaminated liquids
Corrosive liquids	Self-priming applications
Crystallization applications	Stocks
Fibrous slurries	
Gas containing liquids	

Performance Capabilities

Temperature	t = -20 °C ... +140 °C (-4 °F ... + 284 °F) (180 °C (356 °F) with FFKM elastomers)
Pressure	p_1... 25 bar (363 PSI), p_3 < 12 bar (174 PSI)
Speed	20 m/s (66 ft/s)
Non-flow operation:	
Temperature	t = +5 °C ... +100 °C (+41 °F ... +212 °F)
Pressure	p_1 max 10 bar (145 PSI), p3>p1
Sliding velocity	v_g < 10 m/s (33 ft/s)

Materials

Seal face	Silicon carbide (Q12), Carbon (A)
Secondary seals	FKM (V), EPDM (E), FFKM (K)
Metal parts	CrNiMo steel (G), Grade 5A (4T), SMO 654 (4U)

Suitable for following equipments

Ahlstar UP A MS21 range of pumps
Sulzer A, APP/APT pumps
Sulzer SL mixers
Metso conical refiners
Stock pumps