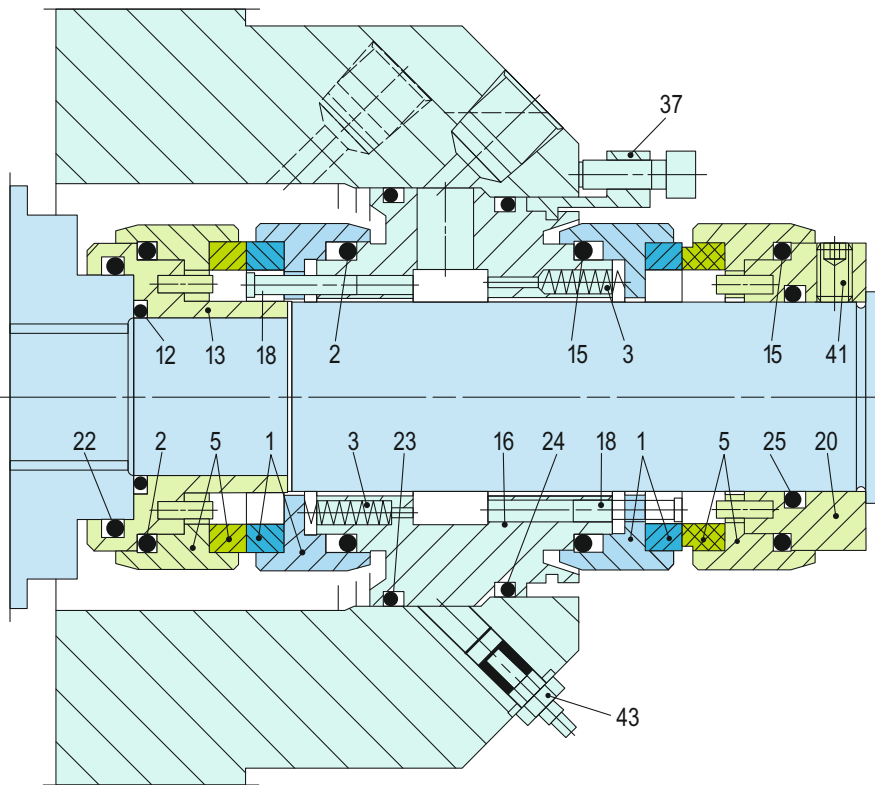


### Product Description

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 buffer 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



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

Pulp and paper industry  
 Chemical industry  
 Clean, abrasive or corrosive liquids  
 Stocks of various kind  
 Applications where crystallization is a problem

### Performance Capabilities

Temperature:  $t = -20\text{ °C} \dots +140\text{ °C}$   
 ( $-4\text{ °F} \dots +284\text{ °F}$ )  
 (180 °C (356 °F) with FFKM elastomers)  
 Pressure:  $p_1 \dots 25\text{ bar}$  (363 PSI),  $p_3$   
 Speed = 20 m/s (66 ft/s)

Non-flow operation:  
 Temperature:  $t = +5\text{ °C} \dots +100\text{ °C}$   
 ( $+41\text{ °F} \dots +212\text{ °F}$ )  
 Pressure:  $p_1$  max. 10 bar (145 PSI),  $p_3 > p_1$   
 Sliding velocity:  $v_g \dots 20\text{ m/s}$  (66 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