

TCG/TCQ Single Seals

Mechanical Seals For Pumps - Engineered Seals



Product Description

1. Single seal configuration
2. Balanced design
3. Independent of direction of rotation
4. Cartridge construction
5. Stationary design with multiple springs
6. Designed with integrated pumping device for increased efficiency in circulation
7. Robust construction with shrink-fitted seal face
8. Heavy duty design of solid stationary 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 adapted 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 down-time
5. Trouble-free long-term operation due to heavy duty single seat design with bandage
6. Can operate under high sliding velocities and medium pressures

Typical Industrial Applications

Boiler feed water pumps
Power plant technology

Performance Capabilities

Sizes: d_1^* = Upto 250 mm (Upto 10.000")
Pressure: p_1 = 50 bar (725 PSI)
Temperature: t = 300 °C (572 °F)
Speed = 60 m/s (197 ft/s)
Permissible axial movement: ± 3 mm
* Other sizes on request

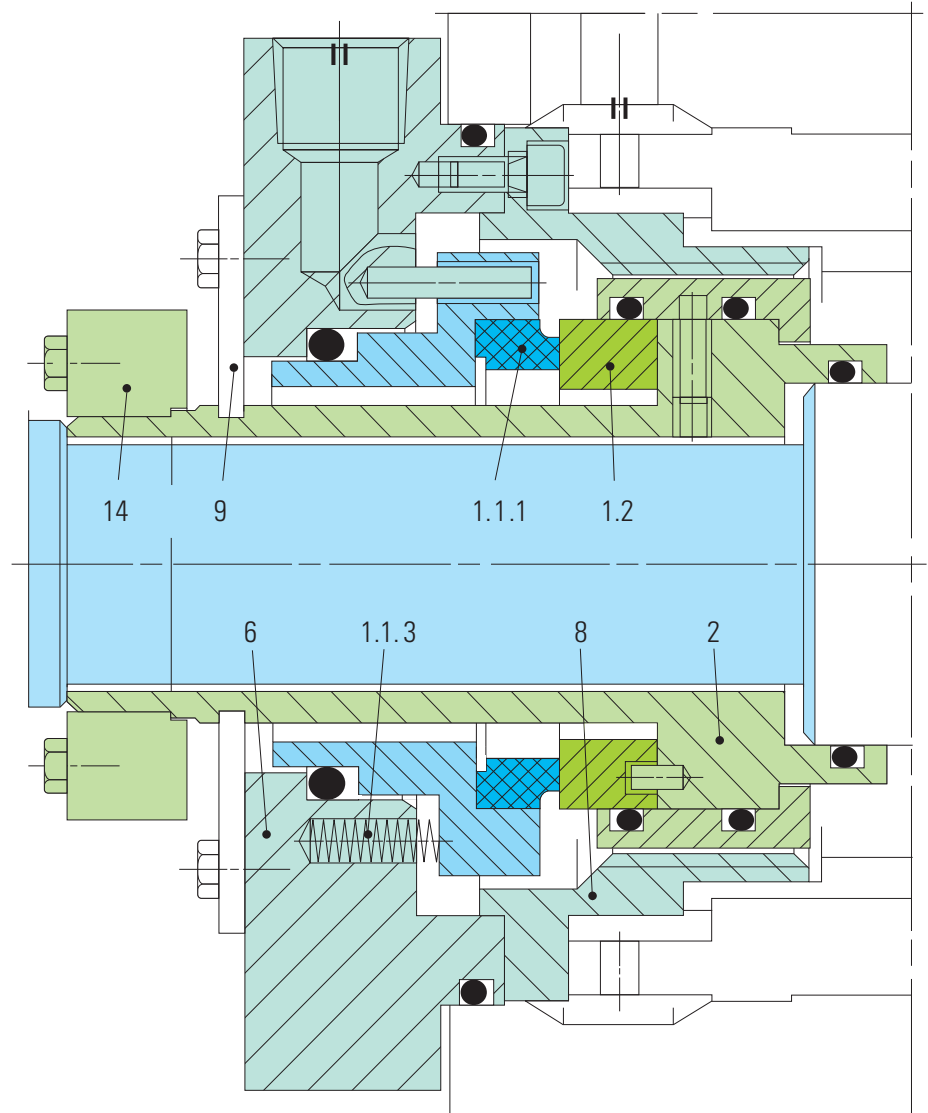
Materials

Seal face: Silicon carbide (Q), Carbon graphite antimony impregnated (A), Carbon graphite resin impregnated (B)
Seat: Silicon carbide
Secondary seals: EPDM (E), FFKM (K)
Springs: CrNiMo steel (G)
Metal parts: CrNiMo steel (G)

Design Variations

SBF4

Single Mechanical Seal with integrated jacket cooling, for boiler feed pumps



Item	Description
1.1.1	Seal face
1.1.3	Spring
1.2	Seat
2	Shaft sleeve
6	Cover
8	Pumping screw with flow guide
9	Assembly fixture
14	Shrink disk