

RELY ON EXCELLENCE

SHF / SHP

Mechanical seals | Mechanical seals for pumps | Engineered seals



Features

- Cartridge design
- Single seal
- Balanced
- Multiple springs
- Dependent of direction of rotation
- Integrated pumping device
- Stationary spring loaded unit
- Shrink-fitted seal face

Advantages

- Deformation-optimized seal for high sliding velocities and medium pressures
- Economical due to standardized inner components
- Universal application for OEM or retrofits of boiler feed water pumps with floating ring seals, labyrinths or packings
- High flexibility due to adaptation of the connection parts to the pump seal chamber
- Optimum heat dissipation due to integrated pumping device and optimized seat design
- Insensitive to shaft deflections due to stationary design
- Short built

Operating range

Shaft diameter:
 $d1^* = 40 \dots 250 \text{ mm} (1.57'' \dots 9.84'')$
 Pressure: $p1 = 50 \text{ bar} (725 \text{ PSI})$
 Temperature: $t = +300 \text{ }^\circ\text{C} (+572 \text{ }^\circ\text{F})$
 Sliding velocity: $v_g = 60 \text{ m/s} (197 \text{ ft/s})$
 Axial movement: $\pm 3 \text{ mm}$

* 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)

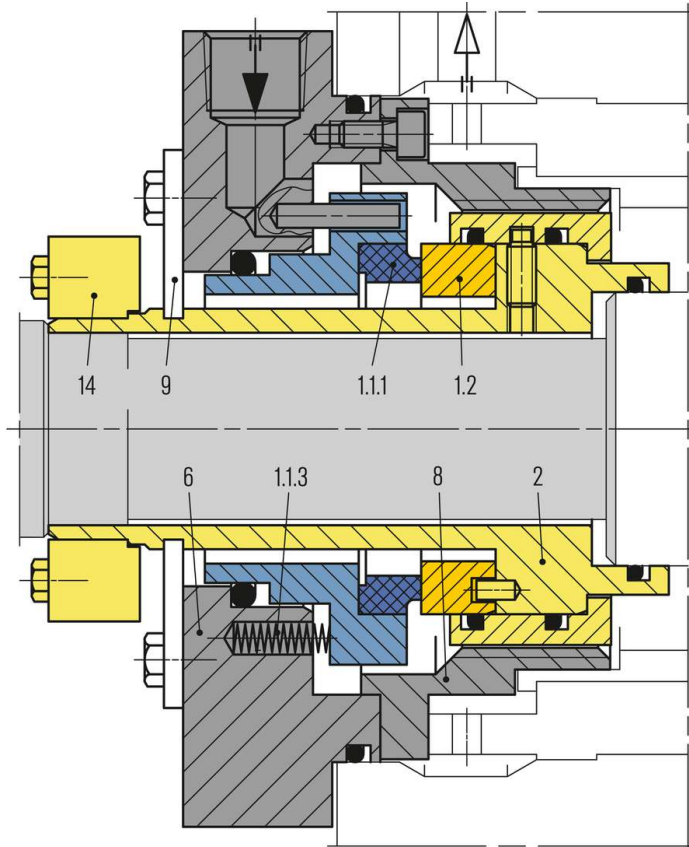
Recommended applications

- Power plant technology
- Oil and gas industry
- Refining technology
- Petrochemical industry
- Chemical industry
- Boiler feed water pumps

Recommended piping plans

- [API Plan 23](#)

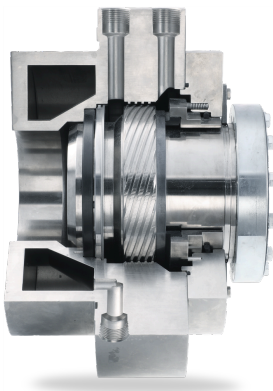
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Item Description

- 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

Product variants



SHF4

Single mechanical seal with integrated jacket cooling, for boiler feed pumps.