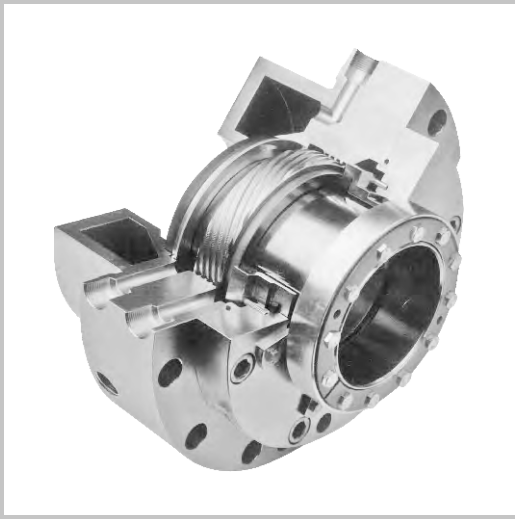
SHARK FEED-S

Feed Water Seal

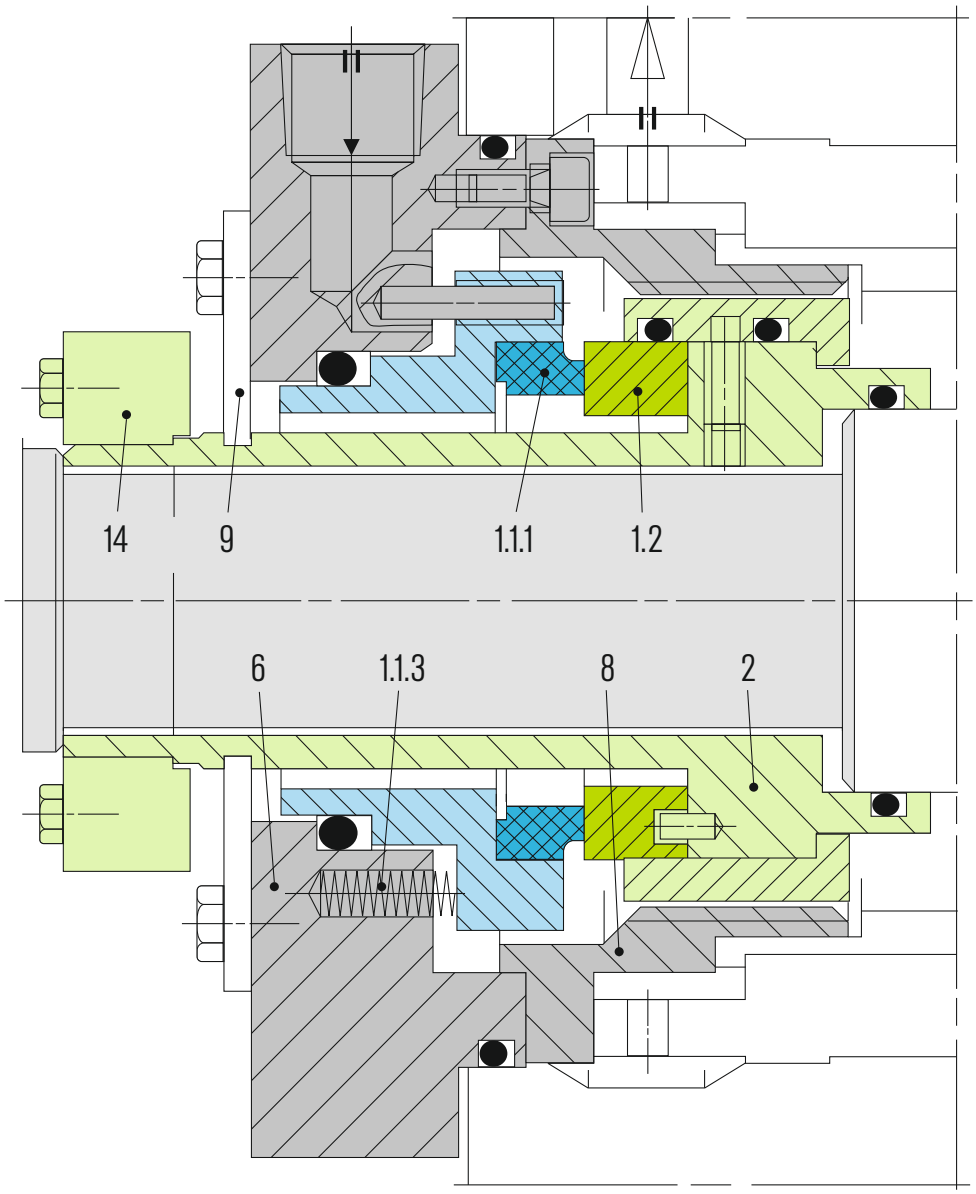


Product Description

1. Balanced
2. Cartridge design
3. Dependent of direction of rotation
4. Integrated pumping device
5. Multiple springs
6. Shrink-fitted seal face
7. Single seal
8. Stationary spring loaded unit

Technical Features

1. Suitable for high sliding velocities and medium pressures
2. Accommodates shaft deflections due to stationary design
3. Cost effective due to standardized inner components
4. High flexibility due to adaptation of the connection parts to the pump seal chamber
5. Optimum heat dissipation due to integrated pumping device and optimized seat design
6. Pre-assembled unit for quick and easy installation
7. Versatile application for OEM or retrofits of boiler feed water pumps



Typical Industrial Applications

Boiler/Nuclear main feed water pumps
Power plant technology

Performance Capabilities

Sizes: d1* = Up to 10.000"
Pressure: p1 = 725 PSIG
Temperature: t = 572 °F
Speed = 197 ft/s
Permissible axial movement: ±0.125"

Materials

Stationary seal face: Silicon carbide (S), Carbon graphite antimony impr (A), Carbon graphite resin impregnated (C)
Rotating seal face: Silicon carbide (S2)
Secondary seals: EPDM (E), FFKM (K)
Springs: 316 ss (1)
Metal parts: 316 SS (1)

Design Variations

FEED-S-J
Single Mechanical Seal with integrated jacket cooling, for boiler feed pumps

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

SHARK SEALS

SHARK FEED-D

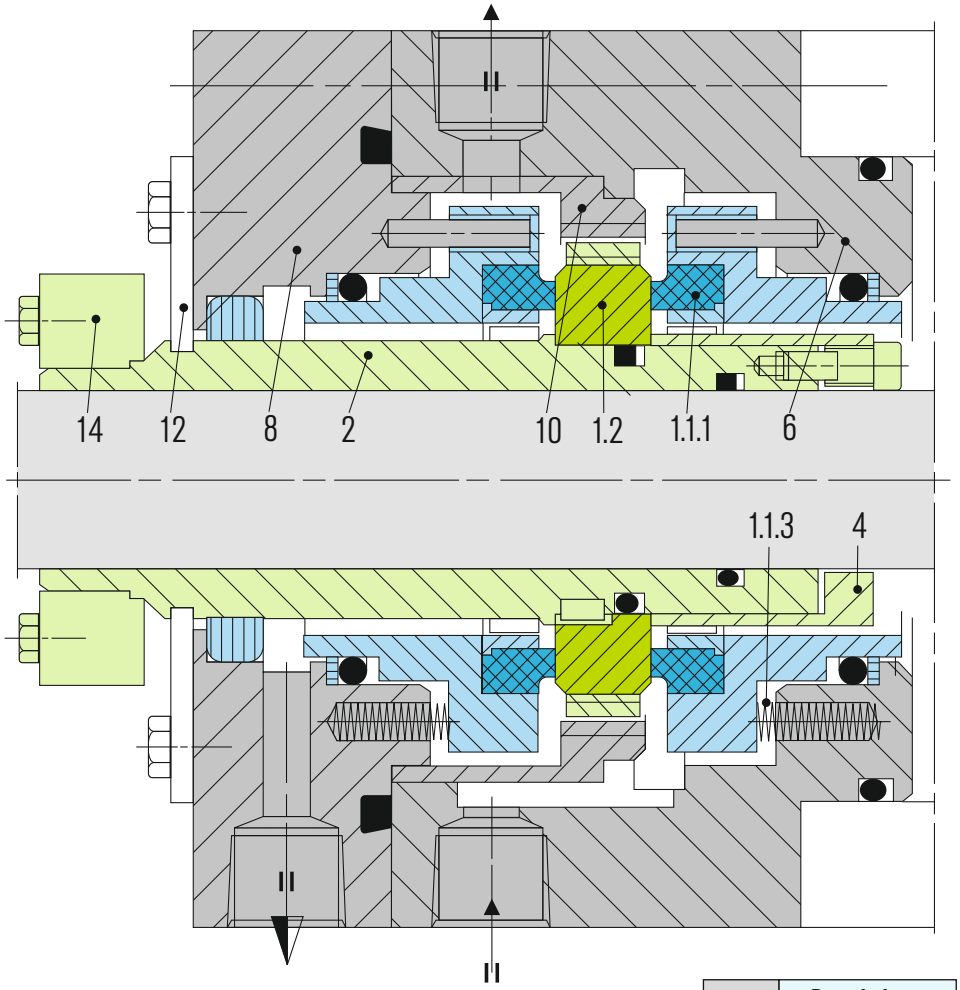
Feed Water Seal

Product Description

1. Balanced
2. Cartridge design
3. Dual seal
4. Integrated pumping device
5. Multiple springs arrangement
6. Shrink-fitted seal face
7. Single robust stationary seat
8. Stationary spring loaded unit

Technical Features

1. Accommodates shaft deflections due to stationary design
2. Cost effective due to standardized inner components
3. High flexibility due to adaptation of the connection parts to the pump seal chamber
4. Optimum heat dissipation due to integrated pumping device and optimized seat design
5. Pre-assembled unit for quick and easy installation
6. Reliable operation due to single robust seat with bandage
7. Suitable for high sliding velocities and medium pressures
8. Suitable for use in compliance with API 682, type ES
9. Versatile application for OEM or retrofits of boiler feed water pumps
10. Version with loose-fitted seal face available, for extreme applications



Item	Description
1.1.1	Seal face
1.1.3	Spring
1.2	Seat
2	Shaft sleeve
4	Clamping sleeve
6	Housing
8	Cover
10	Pumping sleeve
12	Assembly fixture
14	Shrink disk

Typical Industrial Applications

Power Generation
Chemical Industry
Crude oil feed pumps
Injection pumps
Multi-phase pumps
Oil and gas industry
Process water
Refining technology
Volatile and non-volatile hydrocarbons

Standards

API 682 / ISO 21049

Performance Capabilities

Sizes: d1* = Up to 10.000"
Pressure: p1 = 2,175 PSIG
Temperature: t = 392 °F
Speed = 197 ft/s

Materials

Stationary IB seal face: Silicon impregnated carbon (S3)
Stationary OB seal face: Carbon antimony impr (A)
Rotating seal face: Silicon carbide (S)
Secondary seals: FKM (V), EPDM (E), FFKM (P)
Springs: Hastelloy® C-4 (C)
Metal parts: 316 SS (1), Duplex (D), Super Duplex (SD), Pure Titanium (T), Hastelloy® C-4 (C)

Design Variations

FEED-DH

Same design as FEED-D but with loosely inserted seal face for extreme applications.
Pressure: p1 = 2900 PSIG

SHARK SEALS