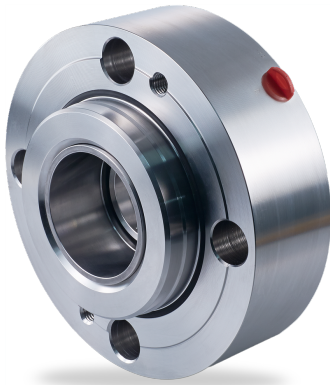


RELY ON EXCELLENCE

SH(V)

Mechanical seals | Mechanical seals for pumps | Engineered seals



Features

- Cartridge design
- Single seal
- Balanced
- Multiple springs
- Stationary spring loaded unit
- Shrink-fitted seal face

Advantages

- Deformation-optimized seal for high pressures and high sliding velocities (static up to 500 bar (7,250 PSI) and dynamic up to 150 bar (2,175 PSI))
- Economical due to standardized inner components
- High flexibility due to adaptation of the connection parts to the pump seal chamber
- Insensitive to shaft deflections due to stationary design
- Pre-assembled unit for quick and easy installation
- Suitable for use in compliance with API 682, type ES
- Version with loose-fitted seal face available, for extreme applications
- Only small number of components

Operating range

Shaft diameter:
 $d1^* = 40 \dots 250 \text{ mm} (1.57'' \dots 9.84'')$
 Pressure: $p1 = 150 \text{ bar} (2,175 \text{ PSI})$
 Temperature: $t = +200 \text{ }^\circ\text{C} (+394 \text{ }^\circ\text{F})$,
 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:

SiC-C-Si silicon impregnated carbon (Q3),
 Carbon graphite antimony impregnated (A)
 Seat: Silicon carbide (Q)

Secondary seals:

FKM (V), EPDM (E), FFKM (K)
 Springs: Hastelloy® C-4 (M)
 Metal parts: CrNiMo steel (G), Duplex (G1),
 Super Duplex (G4), Titanium (T2), Hastelloy®
 C-4 (M)

Standards and approvals

- API 682 / ISO 21049

Recommended applications

- Oil and gas industry
- Refining technology
- Petrochemical industry
- Chemical industry
- Power plant technology
- Pulp and paper industry
- Water and waste water technology
- Hot water
- Sour water
- Caustic soda
- Amines
- Crystallizing media
- Crude oil
- Process water
- Crude oil feed pumps
- Injection pumps
- Multiphase pumps

Recommended piping plans

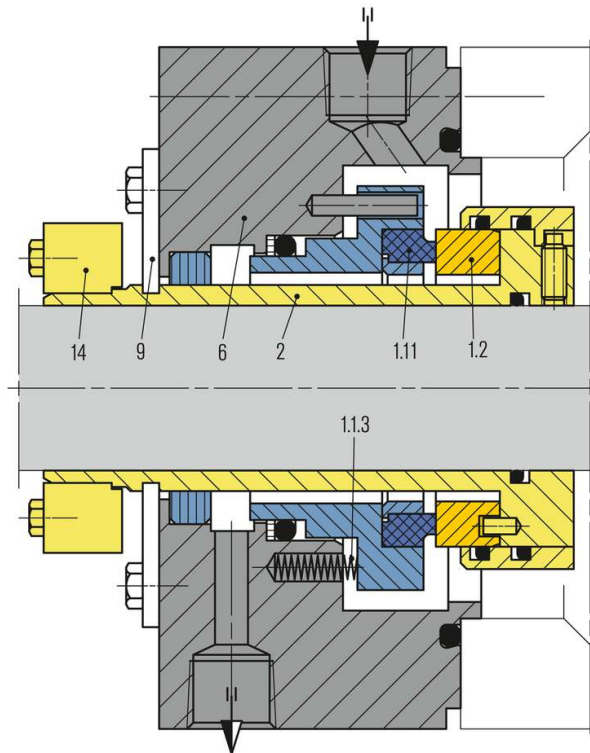
[API Plan 11](#)
[API Plan 13](#)
[API Plan 31](#)
[API Plan 32](#)
[API Plan 41](#)
[API Plan 61](#)

All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications, however, means that they can serve only as guide values.

We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. This is subject to change.

RELY ON EXCELLENCE

API Plan 62



Item Description

- 1.1.1 Seal face
- 1.1.3 Spring
- 1.2 Seat
- 2 Shaft sleeve
- 6 Cover
- 9 Assembly fixture
- 14 Shrink disk

Product variants

SH(V) Same design as SH(V) but with loosely inserted seal face for extreme applications.
 Pressure: $p_1 = 200 \text{ bar (2,900 PSI)}$

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