

GSPH-KD

API 682 4th Edition Category 1, 2 & 3
Seal type A (Rotating)
Configuration 3NC-BB (Non Contacting – Back-to-Back)

Product Description

1. API 682 Category 1, 2 and 3, Type A, Arrangement 3 seal
2. Dual seal in back-to-back configuration
3. Gas-lubricated
4. Independent of direction of rotation (with U-grooves)
5. Cartridge construction
6. Contact free operation, no friction
7. Rotary multiple springs

Technical Features

1. Suitable for both, retrofits and original equipment
2. Varied selection of materials available
3. Safe operation due to metal torque transmission at the rotating carbon seal rings

Typical Industrial Applications

- API 610/ISO 13709 pumps
- Media with gaseous leakage
- Oil and gas industry
- Petrochemical industry
- Refining technology
- Process pumps

Performance Capabilities

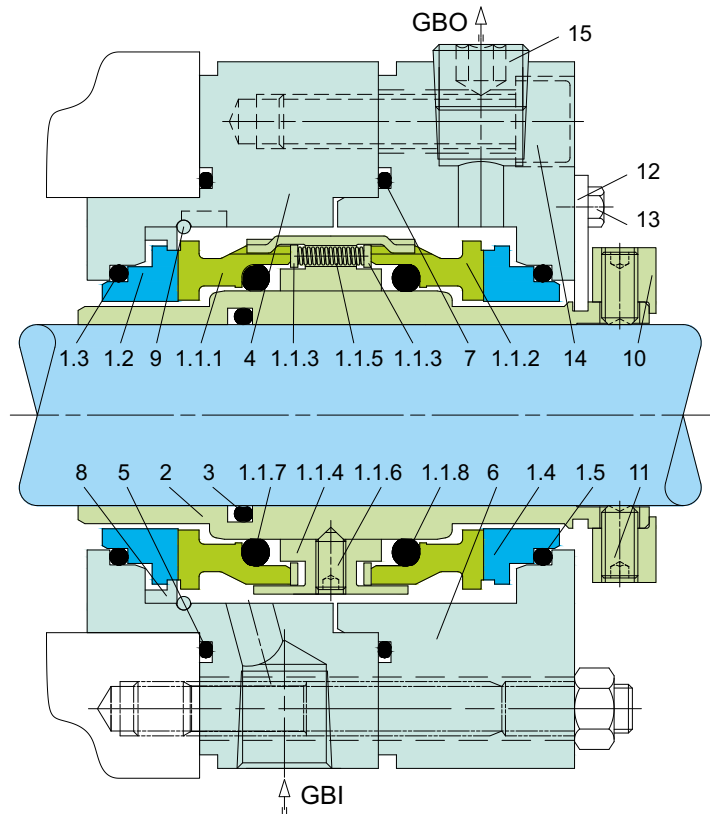
Shaft diameter: $d = 20 \dots 110 \text{ mm}$ (0.79" ... 4.33")
Pressure: $p_1 = 23 \text{ bar}$ (333 PSI)
Temperature: $t = -20 \dots +176 \text{ }^\circ\text{C}$ (-4°F ... +350°F)
Sliding velocity: $v_g = 23 \text{ m/s}$ (76 ft/s)
Axial movement: $\pm 1.0 \text{ mm}$

Materials

Seal rings: Blister resistant carbon, Silicon carbide SSiC (Q1)
Mating rings: Silicon carbide SSiC (Q1), RBSiC (Q2)
Secondary seals: EPDM (E), NBR (P), FKM (V), FFKM (K)
Springs: Hastelloy® C-4 (M)* and C-276 (M5)
Metal parts: CrNiMo steel 316 (G) or equivalent, optional materials on request.
* Sealmatic standard

Recommended piping plans

Process side*: 01, 02, 03, 11, 12, 21, 22, 31, 32, 41
Between seals: 74
* Piping plans 11 ... 41:
Integration in seal to be dimensionally checked.



Item	Description
1.1.1, 1.1.2	Seal ring
1.1.3	Thrust ring
1.1.4	Driver
1.1.5	Spring
1.1.6, 11	Set screw
1.1.7, 1.1.8, 1.3, 1.5, 3, 5, 7	O-ring
1.2, 1.4	Mating ring
2	Shaft sleeve
4	Intermediate gland
6	Gland
8	Washer
9	Retaining ring
10	Set ring
12	Assembly Plate
13	Hexagonal screw
14	HSH cap screw
15	Plug
GBI	Gas Barrier IN
GBO	Gas Barrier OUT