

# **GSPH-KD**

## API 682 4th Edition Category 1, 2 & 3 Seal type A (Rotating) Configuration 3NC-BB (<u>N</u>on <u>C</u>ontacting – <u>B</u>ack-to-<u>B</u>ack)

## **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 Ugrooves)
- 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 ... 110 mm (0.79"... 4.33")Pressure: p1 = 23 bar (333 PSI)Temperature: t = -20 ... +176 °C (-4 °F ... +350 °F)Sliding velocity: vg = 23 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<sup>®</sup> 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