

# GSPH-Ta

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

## Product Description

1. API 682 Category 1, 2 and 3, Type A, Arrangement 2 seal
2. Dual seal in face-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. Designed for vaporizing media
4. Operation close to vapor pressure

## Typical Industrial Applications

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

## Performance Capabilities

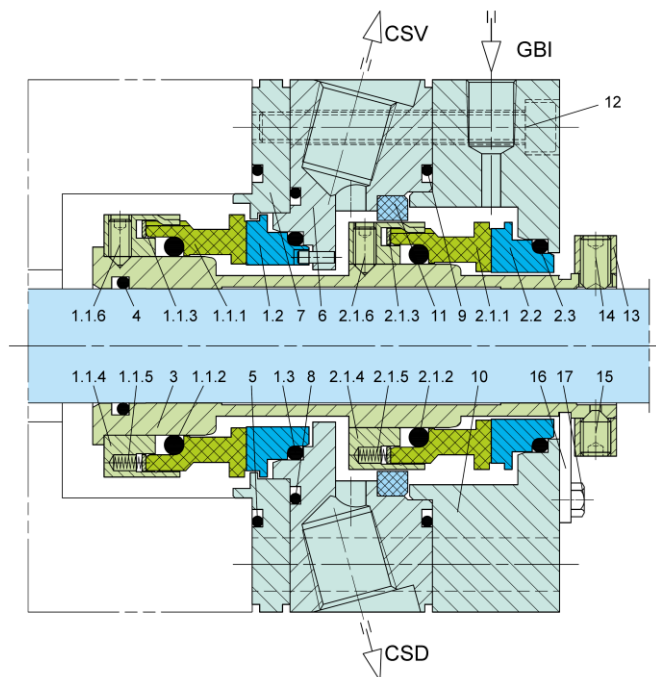
Shaft diameter:  $d_1 = 20 \dots 110 \text{ mm}$  (0.79" ... 4.33")  
 Pressure:  $p_1 = 20 \text{ bar}$  (290 PSI)  
 Temperature:  $t = -40 \text{ }^\circ\text{C} \dots +176 \text{ }^\circ\text{C}$  (-40 °F ... +350 °F)  
 Sliding velocity:  $v_g = 4 \dots 23 \text{ m/s}$  (13 ... 76 ft/s)  
 Axial movement:  $\pm 1.0 \text{ mm}$

## Materials

Seal rings: Blister resistant carbon, Silicon carbide SSiC (Q1), RBSiC (Q2)  
 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: 02, 03  
 Between seals: 71, 72, 76



Item	Description
1.1.1, 2.1.1	Seal ring
1.1.2, 1.3, 2.1.2, 2.3, 4, 5, 8, 9	O-ring
1.1.3, 2.1.3	Thrust ring
1.1.4, 2.1.4	Driver
1.1.5, 2.1.5	Spring
1.1.6, 2.1.6, 14, 15	Set screw
1.2, 2.2	Mating ring
3	Shaft sleeve
6	Intermediate gland
7	Gland
10	Cover
11	Throttle bush
12	HSH cap screw
13	Set ring
16	Assembly plate
17	Hexagon bolt
CSV	Containment Seal Vent
CSD	Containment Seal Drain
GBI	Gas Buffer IN