

# BGSR-Ta

API 682 4th Edition Category 2/3  
 Seal type A (Stationary)  
 Configuration 3NC-FB (Non Contacting – Face-to-Back)

### Product Description

1. API 682 Category 2 and 3, Type A, Arrangement 3 seal
2. Dual seal in face-to-back configuration
3. Gas-lubricated
4. Cartridge construction
5. Balanced design
6. Independent of direction of rotation
7. Contact free operation, no friction
8. Stationary springs

### Technical Features

1. Suitable for both, retrofits and original equipment
2. Varied selection of materials available
3. Metal parts available in special materials

### Typical Industrial Applications

- API 610/ISO 13709 pumps
- Media with gaseous leakage
- Oil and gas industry
- Petrochemical industry
- Refining technology
- Process pumps
- Media which require high purity
- Environmentally harmful media

### Performance Capabilities

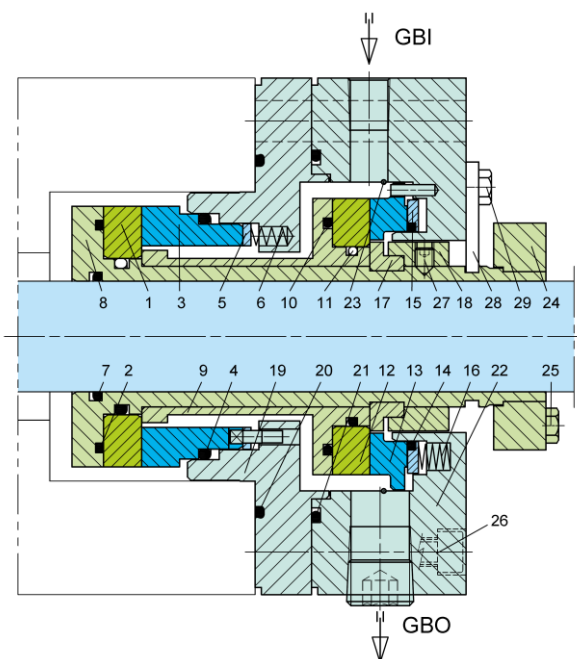
Shaft diameter:  $d = 20 \dots 110 \text{ mm}$  (0.79" ... 4.33")  
 Pressure :  $p_1 = 42 \text{ bar}$  (609 PSI)  
 Temperature:  $t = -20 \text{ }^\circ\text{C} \dots +176 \text{ }^\circ\text{C}$  (-4 °F ... +350 °F)  
 Sliding velocity:  $v_g = 4 \dots 23 \text{ m/s}$  (13 ... 76 ft/s)  
 Axial movement:  $\pm 1.0 \text{ mm}$

### Materials

Seal ring (product side): Silicon carbide Q19, SSiC (Q1)  
 Seal ring (atmospheric side): Blister resistant carbon, Silicon carbide SSiC (Q1), Q19  
 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



Item	Description
1, 12	Seal ring
2, 4, 7, 10, 11, 14, 20, 21	O-ring
3, 13	Mating ring
5, 15	Thrust ring
6, 16	Spring
8	Shaft sleeve
9	Adapter sleeve
17	Support ring
18	Pusher ring
19	Intermediate gland
22	Gland
23	Retaining ring
24	Set ring
25, 29	Hexagonal bolt
26	HSH cap screw
27	Set screw
28	Assembly plate
GBI	Gas Barrier IN
GBO	Gas Barrier OUT