

RELY ON EXCELLENCE

## CGSH-KD

API 682 4th edition | Mechanical seals | Balanced pusher seals



### Notes

- API 682 Category 2 and 3, Type A, Arrangement 3 seal
- Dual seal in back-to-back arrangement
- Cartridge unit
- Independent of direction of rotation (with U-grooves)
- Gas-lubricated
- Contact free operation, no friction
- Rotating multiple springs

### Advantages

- Universally applicable both for retrofits or original equipment
- Efficient stock keeping due to standardized components
- Extended selection of materials
- Metal parts also in special materials available

### Operating range

Shaft diameter:

d1 = 20 ... 110 mm (0.79" ... 4.33")

Pressure: p1 = 23 bar (333 PSI)

Temperature:

t = -20 ... +176 °C (-4°F ... +350°F)

Sliding velocity: v<sub>g</sub> = 23 m/s (76 ft/s)

Axial movement: ±1.0 mm

### Materials

Seal ring: Blister resistant carbon, Silicon carbide SSiC (Q1)

Mating ring:

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.

\* EagleBurgmann standard

### Standards and approvals

- API 682 / ISO 21049
- API 682 4th ed. Cat. 2/3 - 3NC-BB
- API 682 4th ed. Cat. 1 - 3NC-BB

### Recommended applications

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

### Recommended piping plans

Process side\*:

[API Plan 01](#)

[API Plan 02](#)

[API Plan 03](#)

[API Plan 11](#)

[API Plan 12](#)

[API Plan 21](#)

[API Plan 22](#)

[API Plan 31](#)

[API Plan 32](#)

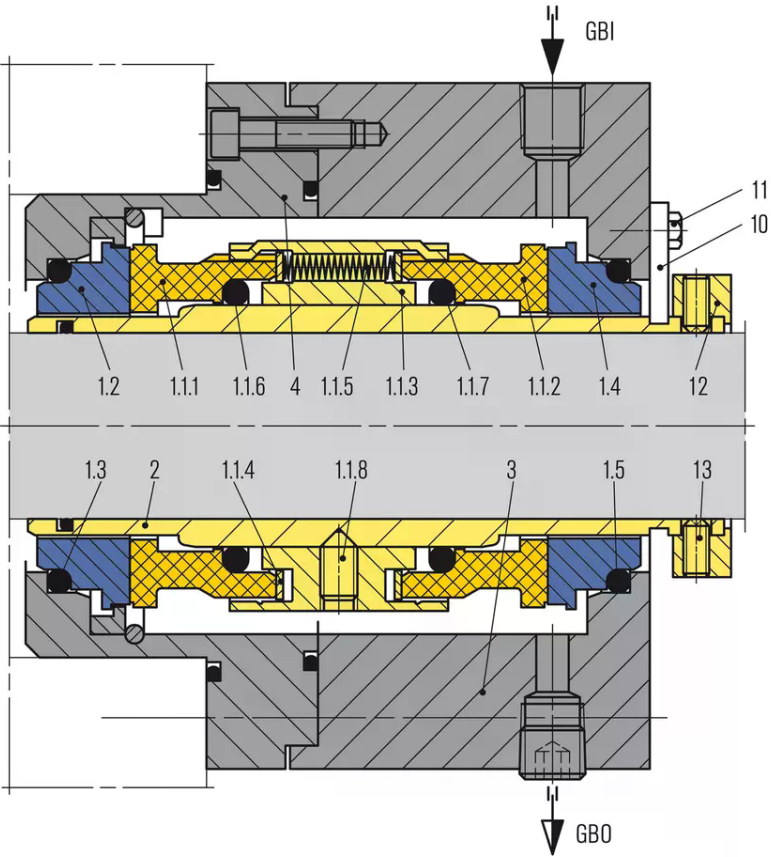
[API Plan 41](#)

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Between seals:

[API Plan 74](#)

\* Piping plans 11 ... 41: Integration in seal to be dimensionally checked.



Item	Description
1.1, 1.1.2	Seal ring
1.1.3	Driver
1.1.4	Thrust ring
1.1.5	Spring
1.1.6, 1.1.7, 1.3, 1.5	O-Ring
1.1.8, 13	Set screw
1.2, 1.4	Mating ring
2	Seal sleeve
3, 4	Gland plate
10	Setting device
11	Hexagon bolt
12	Set ring

GBI Gas barrier IN  
GBO Gas barrier OUT