

RELY ON EXCELLENCE

RGS-D

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



Features

- API 682 Category 2 and 3, Type A, Arrangement 3 seal
- Dual seal in back-to-back arrangement
- Gas-lubricated
- Balanced
- Cartridge unit
- Independent of direction of rotation
- Stationary spring on process and atmospheric side
- Contact free operation, no friction

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:
 $d1 = 20 \dots 110 \text{ mm} (0.79 \dots 4.33 \text{")}$ *
 Pressure: $p1 = 42 \text{ bar} (609 \text{ PSI})$
 Temperature:
 $t = -20 \text{ °C} \dots +176 \text{ °C} (-4 \text{ °F} \dots +350 \text{ °F})$
 Sliding velocity:
 $vg = 4 \dots 23 \text{ m/s} (13 \dots 76 \text{ ft/s})$
 Axial movement: $\pm 1.0 \text{ mm}$

Materials

Seal rings: Blister resistant carbon, Silicon carbide 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.

* EagleBurgmann standard

Standards and approvals

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

Recommended applications

- Gases and liquids
- Media which require high purity
- Environmental harmful media
- Refining technology
- Petrochemical industry
- Oil and gas industry
- API 610 / ISO 13709 pumps
- Process pumps

Recommended piping plans

Process side*:

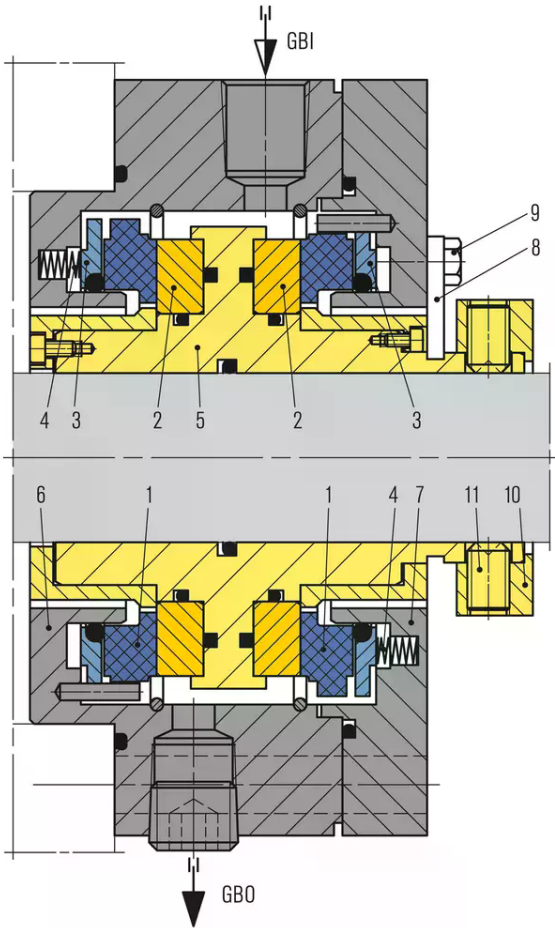
[API Plan 01](#)
[API Plan 02](#)
[API Plan 03](#)
[API Plan 11](#)
[API Plan 12](#)
[API Plan 21](#)
[API Plan 22](#)
[API Plan 31](#)
[API Plan 32](#)
[API Plan 41](#)

Between seals:

[API Plan 74](#)

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



Item	Description
1	Seal ring
2	Mating ring
3	Thrust ring
4	Spring
5	Seal sleeve
6, 7	Gland plate
8	Setting device
9	Hexagon bolt
10	Set ring
11	Set screw

GBI Gas barrier IN
 GBO Gas barrier OUT