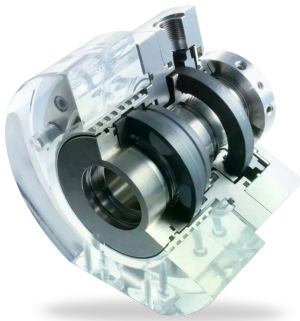


RELY ON EXCELLENCE

HRGS-DD

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



Features

- API 682 Category 2 and 3, Type A, Arrangement 3 seal
- Dual seal in face-to-back arrangement
- Gas-lubricated
- Balanced
- Cartridge unit
- Independent of direction of rotation
- Stationary springs
- 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:

$d_1 = 20 \dots 110 \text{ mm} (0.79 \dots 4.33)^*$

Pressure: $p_1 = 42 \text{ bar} (609 \text{ PSI})$

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 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.

* EagleBurgmann standard

Standards and approvals

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

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](#)

RELY ON EXCELLENCE

Between seals:
API Plan 74

Item	Description
1, 8	Seal ring
4, 11	Spring
5, 12	Mating ring
15	Seal sleeve
19	Insert
23	Gland plate

GBI Gas barrier IN
GBO Gas barrier OUT

