EagleBurgmann
a member of EKK and FREUDENBERG

RELY ON EXCELLENCE

LEK777

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

Features

- API 682 Category 2 and 3, Type A, Arrangement 1 seal
- Single seal
- Balanced
- Cartridge unit
- Stationary multiple springs
- Solid seal faces

Advantages

- Suitable for higher speeds
- Good followability due to no influence from run-out, squareness or vibration of the shaft
- Compact design
- Low heat generation and power consumption due to narrow seal face width
- Longer seal life
- Pressure-balanced design prevents mating ring being forced out under reverse pressure
- No damage to shaft sleeve as dynamic O-Ring is not in direct contact with the sleeve

Operating range

Shaft diameter:
d1 = 20 ... 110 mm (0.79" ... 4.33")
Pressure (product seal):
p = vacuum ... 60 bar (... 870 PSI)
Temperature:
t = -40 °C ... +176 °C (-40 °F ... +349 °F)*
Sliding velocity: vg = 50 m/s (164 ft/s)

* Engineered up to 260 °C (500 °F) with FFKM (K) secondary seals.

Materials

Seal ring: Blister resistant carbon, Silicon carbide SSiC (Q1), RBSiC (Q2)
Mating ring:
Silicon carbide SSiC (Q1), RBSiC (Q2)
Secondary seals:
EPDM (E), NBR (P), FKM (V), FFKM (K)
Springs: Hastelloy® C-276 (M5)
Metal parts: CrNiMo steel 316 (G)

Standards and approvals

- API 682 / ISO 21049
- API 682 4th ed. Cat. 2/3 - 1CW-FL

Recommended applications

- Light volatile hydrocarbons
- Refining technology
- Oil and gas industry
- Petrochemical industry
- Chemical industry
- Power plant technology
- CCUS
- Alternative fuels production
- LPG plants
- 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 13
API Plan 14
API Plan 21
API Plan 22
API Plan 23
API Plan 31
API Plan 32
API Plan 41

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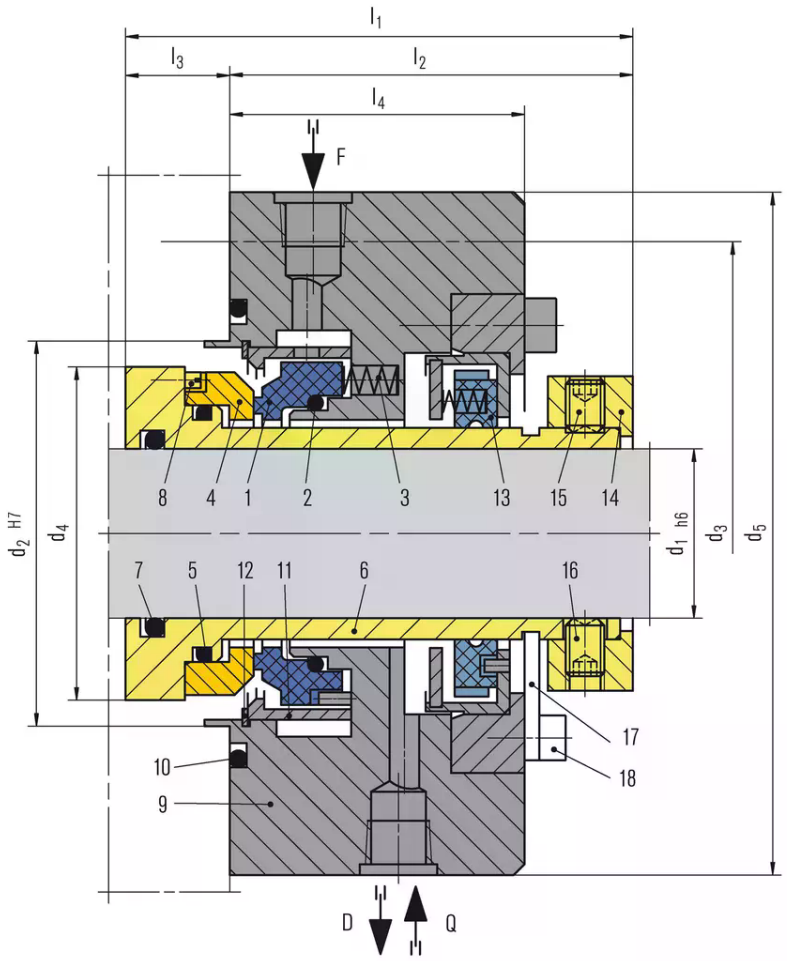
All technical specifications are based on extensive tests and our many years of experience. The diversity of possible applications means, however, that they can serve only as guide values.
We must be notified of the exact conditions of application before we can provide any guarantee for a specific case. Subject to change.



Atmospheric side:
API Plan 51
API Plan 61
API Plan 62
API Plan 65A
API Plan 65B
API Plan 66A
API Plan 66B

Item	Description
1	Seal ring
2, 5, 7, 10	O-Ring
3	Spring
4	Mating ring
6	Seal sleeve
8	Drive screw
9	Gland plate
11	Flow distributor
12	Retaining ring
13	Throttle bushing
14	Drive collar
15, 16	Set screw
17	Setting device
18	HSH Cap screw

F Flush
D Drain
Q Quench

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Dimensions

API/d_1	API/d_2	API/d_3	d_4	d_5	l_1	l_2	l_3	l_4
20	70	105	51	128	100	70	30	50
30	80	115	63	138	102	70	32	50
40	90	125	74	148	105	70	35	50
50	100	140	84	168	105	70	35	50
60	120	160	99	188	107	72	35	52
70	130	170	108	198	107	72	35	52
80	140	180	120	208	107	72	35	52
90	160	205	138	248	114	79	35	59
100	170	215	148	258	115	80	35	60
110	180	225	157	268	120	80	40	60

Dimensions in millimeter

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