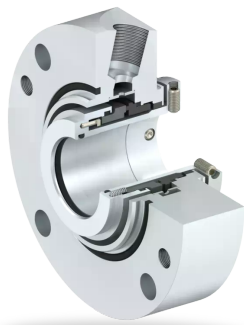


RELY ON EXCELLENCE

API_{tex}-S

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



Features

- API 682 Category 1, Type A, Arrangement 1 seal
- Single seal
- Balanced
- Cartridge unit
- Independent of direction of rotation
- Solid seal face
- Solid seat

Advantages

- 100 % API compliant
- Security due to proofed design (API Seal qualification test)
- Insensitive to shaft deflections and process fluctuations
- Pre-assembled, ready to install unit
- Low space requirements
- Springs protected from the product
- Multipoint Ring Injection for optimized cooling distribution
- Quench connections as standard

Operating range

Shaft diameter:

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

Pressure: $p_1 = 22 \text{ bar (319 PSI)}$

Temperature: $t = -40 \text{ }^\circ\text{C} \dots +176 \text{ }^\circ\text{C}^*$

$(-40 \text{ }^\circ\text{F} \dots +349 \text{ }^\circ\text{F})$

Sliding velocity: $v_g = 23 \text{ m/s (75 ft/s)}$

* API standard, other on request

Materials

Seal ring: Silicon carbide SSiC (Q1)

Mating ring: Silicon carbide SSiC (Q1), antimony impregnated carbon graphite (B)

Secondary seals:

EPDM (E), FKM (V), FFKM (K)

Springs: Hastelloy C-4 (M)

Metal parts: CrNiMo steel 316 (G) or equivalent, optional materials on request.

Standards and approvals

- API 682 3rd ed. Cat. 1 / ISO 21049
- API 682 4th ed. Cat. 1

Recommended applications

- Highly volatile hydrocarbons
- Toxic and hazardous media
- Media with poor lubrication properties
- Low solids content and low abrasive media
- CCUS
- Lithium
- Hydrogen
- Sustainable plastics production
- Alternative fuels production
- Power generation
- Process industry
- Oil and gas industry
- Refining technology
- Petrochemical industry
- Chemical industry
- Vertical and horizontal ANSI chemical standard pumps

Recommended piping plans

Process side:

[API Plan 01](#)

[API Plan 02](#)

[API Plan 03](#)

[API Plan 11](#)

[API Plan 12](#)

[API Plan 13](#)

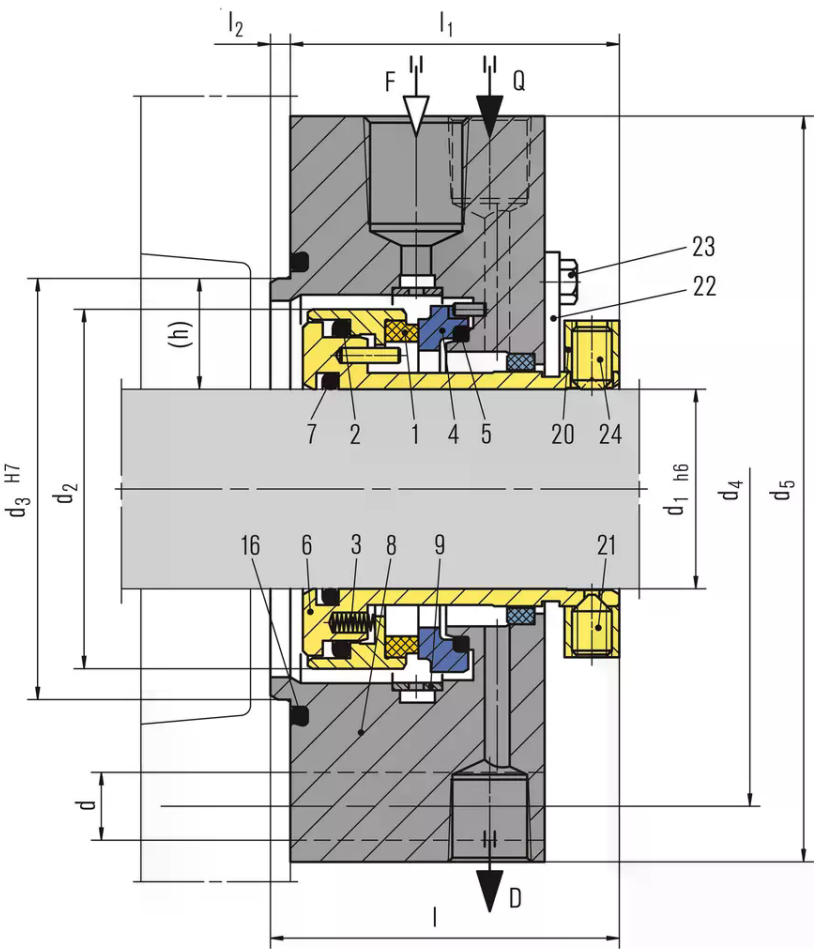
[API Plan 14*](#)

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API Plan 21
 API Plan 22
 API Plan 23*
 API Plan 31
 API Plan 32
 API Plan 41

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

* Non standard



Item	Description
1	Seal face
2, 5, 7, 10	O-Ring
3	Spring
4	Seat
6	Shaft sleeve
8	Cover
9	Inset
11	Set ring
12, 15	Set screw
13	Assembly fixture
14	Socket head screw
16	Screw plug

F Flush
 Q Quench
 D Drain

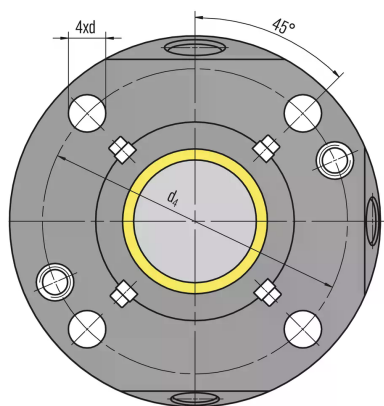
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Seat alternatives

PF L

Item Description
2.1 Stationary seat
2.2 O-Ring

Installation, details, options



APItex-S Seal Cover

Dimensions

d ₁	d-2 ~	d-3 ~	d ₄	d ₅	l	l ₁	l ₂	d	Qty.	Acc. ASME B73.1 (h min.)
20	50.4	58	105	127	70.5	66.5	4	13.5	4	19.05
25	55.4	63	110	132	70.5	66.5	4	13.5	4	19.05
30	60.4	68	115	137	70.5	66.5	4	13.5	4	19.05
35	65.4	73	120	142	70.5	66.5	4	13.5	4	19.05
40	70.4	78	125	147	70.5	66.5	4	13.5	4	19.05
45	75.4	83	135	162	70.5	66.5	4	17.5	4	19.05
50	80.4	88	140	167	72.5	68.5	4	17.5	4	19.05
55	85.4	93	145	172	72.5	68.5	4	17.5	4	19.05
60	96	105	160	187	87	83	4	17.5	4	22.22
65	101	110	165	192	87	83	4	17.5	4	22.22
70	106	115	170	197	87	83	4	17.5	4	22.22
75	111	120	175	202	87	83	4	17.5	4	22.22
80	116	125	185	218	87	83	4	22	4	22.22
85	123.5	136	190	223	86	71.5	14.5*	22	4	25.4
90	128.5	141	195	228	86	71.5	14.5*	22	4	25.4
95	133.5	146	200	233	86	71.5	14.5*	22	4	25.4
100	138.5	151	205	238	86	71.5	14.5*	22	4	25.4
105	143.5	156	210	243	86	71.5	14.5*	22	4	25.4
110	152.5	161	215	248	86	71.5	14.5*	22	4	25.4

Dimensions in mm