

RELY ON EXCELLENCE

API_{Itex}-T

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



Features

- API 682 Category 1, Type A, Arrangement 2 or 3 seal
- Dual seal in face-to-back arrangement
- Balanced
- Cartridge unit
- Independent of direction of rotation
- Shrink-fitted seal faces
- Solid mating rings

Advantages

- Suitable for pressure reversal
- Insensitive to shaft deflections and process fluctuations
- Cover distortion cannot cause mating ring misalignment
- Good heat dissipation
- No external pump necessary
- Pre-assembled unit, ready to install
- Low space requirements
- Security due to proofed design
- Springs protected from the product

Operating range

Shaft diameter:
 $d_1 = 20 \dots 110 \text{ mm (0.79" ... 4.33")}$
 Pressure: $p_1 = 22 \text{ bar (319 PSI)}$
 Temperature: $t = -40 \text{ °C ... +176 °C}$
 ($-40 \text{ °F ... +349 °F}$)
 ($>176 \text{ °C (349 °F)}$ please inquire)
 Sliding velocity: $v_g = 23 \text{ m/s (75 ft/s)}$

Materials

Seal ring: Blister resistant carbon, Silicon carbide SSiC (Q12)
 Mating ring: Silicon carbide SSiC (Q1)
 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. 1 - 2CW-CW
- API 682 4th ed. Cat. 1 - 3CW-FB

Recommended applications

- Highly volatile hydrocarbons
- Toxic and hazardous media
- Media with poor lubrication properties
- Low solids content and low abrasive media
- 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
 API Plan 21
 API Plan 22
 API Plan 23
 API Plan 31

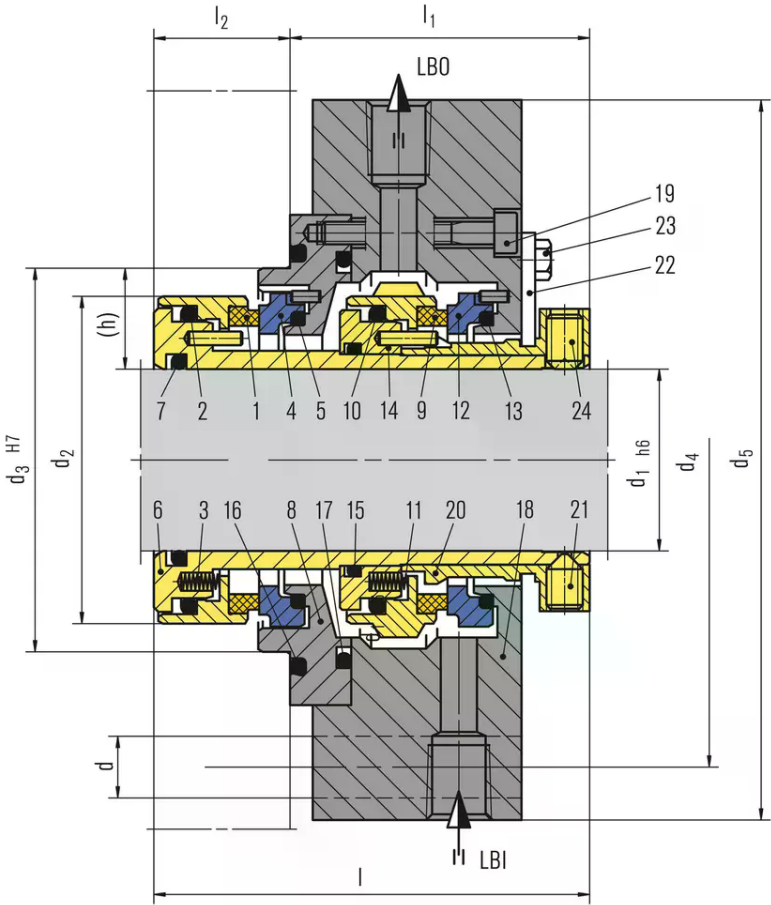
RELY ON EXCELLENCE

API Plan 32
API Plan 41

Between seals:
API Plan 52
API Plan 53A
API Plan 53B
API Plan 53C
API Plan 54
API Plan 55

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

* Depending on application, please inquire.



Item	Description
1, 9	Seal ring
2, 5, 7, 10, 13, 15, 16, 17	O-Ring
3, 11	Spring
4, 12	Mating ring
6	Seal sleeve
8, 18	Gland plate
14	Driver
19	HSH Cap screw
20	Set ring
21, 24	Set screw
22	Setting device
23	Hexagon bolt

LBO Liquid buffer/barrier OUT
LBI Liquid buffer/barrier IN

RELY ON EXCELLENCE

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	96.5	68.5	28	13.5	4	19.05
25	55.4	63	110	132	96.5	68.5	28	13.5	4	19.05
30	60.4	68	115	137	96.5	68.5	28	13.5	4	19.05
35	65.4	73	120	142	96.5	68.5	28	13.5	4	19.05
40	70.4	78	125	147	96.5	68.5	28	13.5	4	19.05
45	75.4	83	135	162	96.5	68.5	28	17.5	4	19.05
50	80.4	88	140	167	100	72	28	17.5	4	19.05
55	85.4	93	145	172	100	72	28	17.5	4	19.05
60	96	105	160	187	127.5	88	39.5	17.5	4	22.22
65	101	110	165	192	127.5	88	39.5	17.5	4	22.22
70	106	115	170	197	127.5	88	39.5	17.5	4	22.22
75	111	120	175	202	127.5	88	39.5	17.5	4	22.22
80	116	125	185	218	127.5	88	39.5	22	4	22.22
85	123.5	136	190	223	131.5	92	39.5	22	4	25.4
90	128.5	141	195	228	131.5	92	39.5	22	4	25.4
95	133.5	146	200	233	131.5	92	39.5	22	4	25.4
100	138.5	151	205	238	131.5	92	39.5	22	4	25.4
105	143.5	156	210	243	131.5	92	39.5	22	4	25.4
110	152.5	161	215	248	131.5	92	39.5	22	4	25.4

Dimensions in millimeter