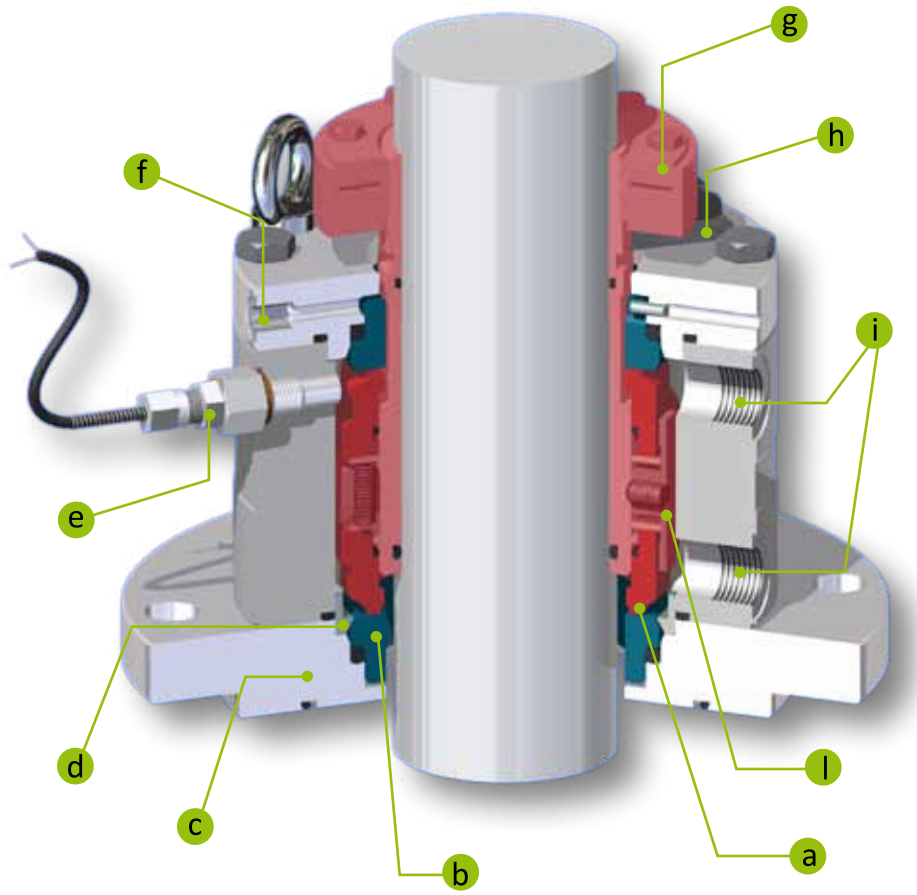
Dual seals for high pressures

GT 1924 A

A preassembled, back-to-back double cartridge seal suitable for operation with a pressurised barrier fluid. A double balanced seal suitable for high working pressures and the ability to operate under reverse pressure if there is a loss of barrier fluid pressure.
Designed using API 682 construction guidelines.



Characteristics

a) Double balanced design able to tolerate unexpected reverse pressure.

b) High performance solid seal rings developed with FEA Analysis to avoid deformation.

c) Optional: sanitary gland to avoid product contamination and cooling jacket for high temperature applications.

d) Retained stationary ring to prevent blow out during reverse pressure.

e) Optional thermocouple for ATEX applications.

f) Atmosphere leakage monitoring connection.

g) Shrink disk drive to guarantee and maintain correct seal axial position under high process pressure conditions.

h) Positioning device for easy, precise installation.

i) Flushing connections designed to ensure air is always vented.

l) Robust drive lugs that can tolerate run-out and vibration.

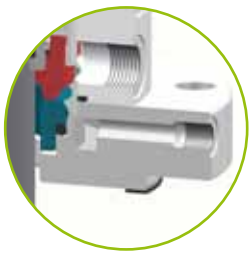
*NOTE: barrier fluid pressure must always be higher than the process pressure with **ΔP** as per operating limits.

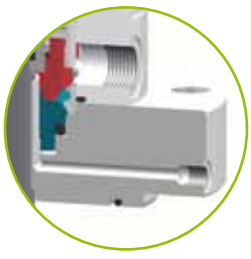
Operating limits

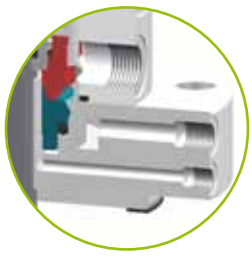
DIAMETER *(mm)*	**FROM 50 TO 250**
SPEED *(m/s)*	**≤ 20**
TEMPERATURE *(°C)*	**FROM -50 TO 250**
ΔP= minimum 1 - 2 *bar See NOTE**	
PROCESS PRESSURE *(bar)*	**VACUUM TO 75**

For operating limits other than those specified, please consult our Technical Department. The pressure and speed values indicated are not absolute limits, but should be evaluated by calculating the pressure x velocity value (PV) and considering the temperature, chemical and physical characteristics of the fluid to be sealed.

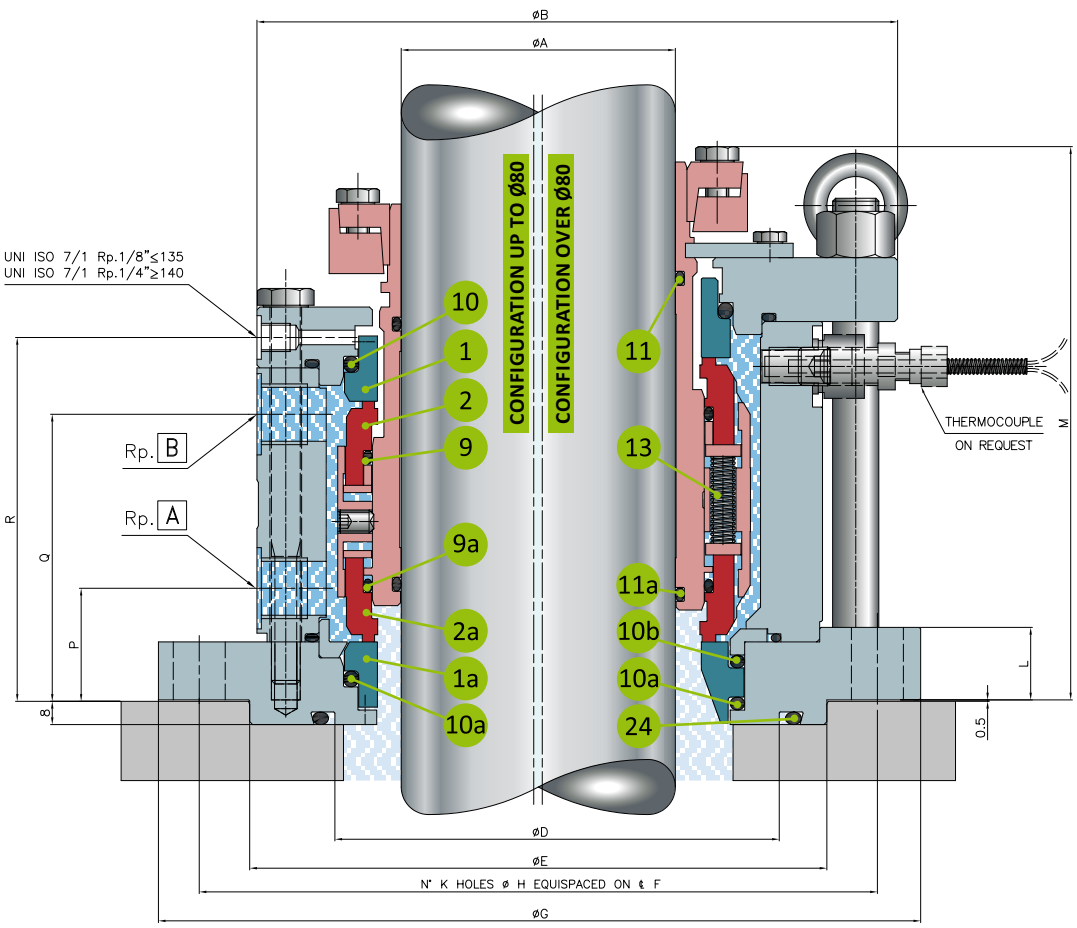
OPTIONAL FLANGES (see pg. 41)


Flange with cooling chamber


Sanitary flange


Sanitary flange with cooling chamber

FOOD INDUSTRY
CHEMICAL INDUSTRY
PHARMACEUTICAL INDUSTRY
WET LUBRICATED
BI-DIRECTIONAL
TOP ENTRY



COMPONENT KEY (standard materials)

1 Silicon carbide stationary ring (U31)
1a Silicon carbide stationary ring (U31)
2 Rotating ring in AISI 316 + graphite (Z32) or solid graphite (Z11)
2a Rotating ring in AISI 316 + graphite (Z32) or solid graphite (Z11)
9 Rotating seal gasket in FKM (V) or EPDM (D)
9a Rotating ring gasket in FKM (V), EPDM (D) or FFKM (G720)
10 Stationary ring gasket in FKM (V) or EPDM (D)
10a Stationary ring gasket in FKM (V), EPDM (D) or PTFE (T)
10b Stationary ring gasket in FKM (V) or EPDM (D)
11 Atmosphere side sleeve gasket in FKM (V) or EPDM (D)
11a Product side sleeve gasket in FKM (V), EPDM (D) or Fluigam: energized PTFE (T3)
13 Springs and other metal parts in AISI 316 (E)
24 Flange gasket in PTFE (T)

Rp. A - Rp. B: auxiliary fluid input/output

II 1 GD c X

Model GT 1924 is available in version GT 1934, ATEX certified for Zone 0 Cat. 1 (see pg. 8). Requests for this particular configuration should be referred to the Technical Sales Department during the offer negotiation phase.

A *h6*	SEAL *Ø*	B	D	E *e8*	F	G	K *HOLES*	H *Ø*	L	M	P	Q	R	Rp.A-B *UNI ISO 7/1*
35 / 40	50	124	76	130	155	185	6	18	20	148	37	84	107	3/8"
45 / 50	60	138	83	135	165	195	6	18	20	156	37	89	115	3/8"
55 / 60	70	160	114	165	195	225	6	18	20	165	37	97	122	3/8"
65 / 70	80	170	127	180	210	240	6	18	20	177	38	97	123	3/8"
75 / 80	95	180	126	180	215	245	8	18	20	177	39	99	126	1/2"
85 / 90 / 95	115	249	167	200	235	265	8	18	25	192	43	116	144	1/2"
100 / 105	125	270	173	210	260	290	8	18	30	200	50	119	147	1/2"
110 / 115	140	310	186	240	285	320	8	22	28	209	50	123	154	1/2"
120 / 125	150	315	210	250	285	320	8	22	28	210	50	121	153	1/2"
130	160	340	210	260	305	340	8	22	35	242	56	150	182	1/2"
135 / 140	170	345	229	285	330	365	12	22	35	247	56	153	185	1/2"
145 / 150	180	370	254	300	340	380	12	22	35	247	56	153	187	1/2"
155 / 160	190	370	267	310	350	390	12	22	35	247	56	153	187	1/2"
165 / 170	200	380	280	320	360	400	12	22	35	257	56	153	187	1/2"
175 / 180	210	390	290	330	370	410	12	22	35	266	56	161	195	1/2"
185 / 190	220	400	300	340	380	420	12	22	35	261	56	156	190	1/2"
195 / 200	230	410	310	350	390	430	12	22	35	261	56	156	190	1/2"
210 / 220	250	420	311	360	400	440	12	22	35	261	56	156	190	1/2"

Measurements are expressed in millimetres. For measurements differing from those listed or measurements in inches, please contact our Technical Sales Department at info@fluiten.it

GT 1811/GT 1810

Alternative flanges for Double seal with pressurized or non-pressurized flushing.
The cooling chamber flange is recommended for temperatures exceeding 250°C.

Flange with cooling chamber (C)

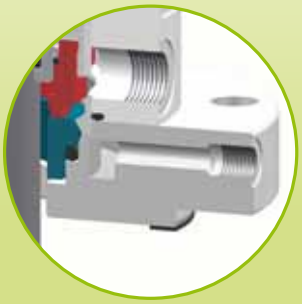
Sanitary flange (D)

Sanitary flange with cooling chamber (E)

GT 1924/GT 1923

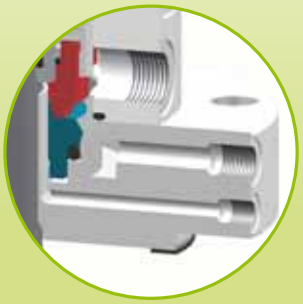
Alternative flanges for Double seal suitable for high pressure.
The cooling chamber flange is recommended for temperatures exceeding 250°C.

Flange with cooling chamber (C)



Sanitary flange (D)

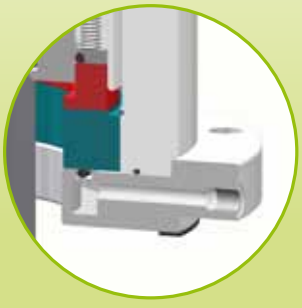
Sanitary flange with cooling chamber (E)



GT 1911/GT 1910

Alternative flanges for Double gas seal.

Flange with cooling chamber (C)



Sanitary flange (D)

Sanitary flange with cooling chamber (E)