



Options for diaphragm seal

- Other instrument connection: capillary socket or without connection (12 mm hole)
- Flange material: Duplex, Hastelloy, Monel, Titanium
- Diaphragm and wetted part material: Duplex, Hastelloy, Inconel, Monel, Tantalum, Titanium, Zirconium
- Coatings: Gold, Rhodium, PFA and PTFE
- Capillary length: custom length between 1m to 15m
- Other flange and diaphragm materials on request
- Other flange types and sealing face on request
- Sealing face not covered by exotic material
- Flushing ring to suit (see Flushing Ring datasheet)

Diaphragm and wetted parts	Process temperature limit
Stainless Steel 304L	400 °C
Stainless Steel 316L	400 °C
Stainless Steel 321	400 °C
Alloy 20	400 °C
Duplex 2205	300 °C
Hastelloy C276	400 °C
Inconel 600	400 °C
Inconel 625	400 °C
Incoloy 825	400 °C
Monel 400	400 °C
Tantalum	300 °C
Titanium G1	150 °C
Titanium G12	150 °C
Zirconium 702	400 °C
Gold plating	400 °C
Rhodium plating	400 °C
PFA coating	260 °C
PTFE foil	260 °C

Introduction

Flanged diaphragm seals model TETROSEAL with a flush welded diaphragm are used for contaminated, solidifying, hot or highly viscous media and when flange connections are required.

Special features

- Flush welded diaphragm (free of dead space)
- Diaphragm protected against rupture with backup convolution
- Helium leak tested to ensure integrity of diaphragm
- When exotic metal diaphragm or coating is required, all wetted parts including sealing face are made from same material

Diaphragm seal specifications

- Flange type: ASMEB16.5 Raised Face (RF) or Ring Type Joint (RTJ), EN 1092-1 Form B1, JIS B2220
- Flange body material: AISI 316L
- Wetted parts and diaphragm material: AISI 316L
- Instrument connection: 1/2" BSP female

Measuring range

- Max. dependant on flange rating

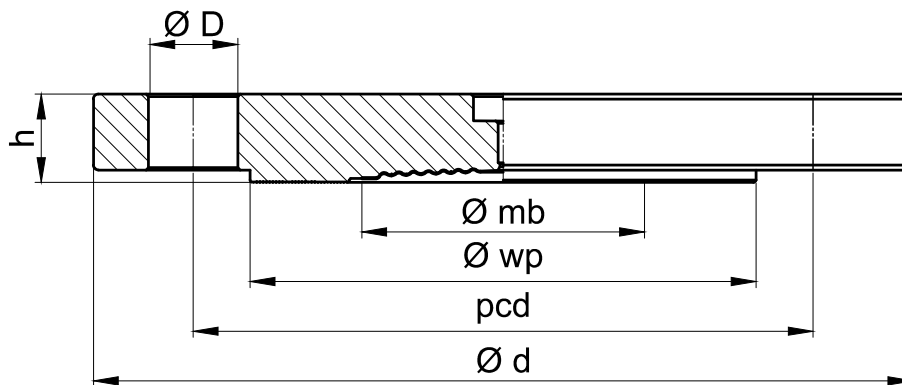
Available certification

- 2.1 Certificate of conformity
- 3.1 Material certificate
- 3.1 Material certificate with NACE conformity MR-01-75
- PMI Positive Material Identification
- Others on request

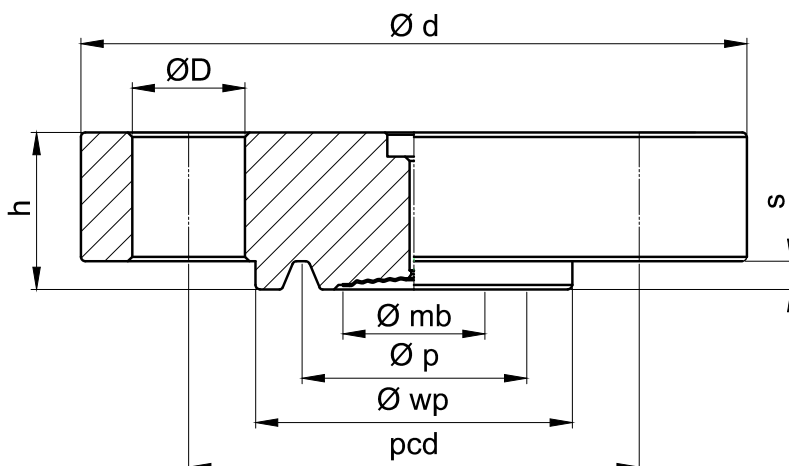
How to order

Please specify: model, instrument connection, size, rating, sealing face, diaphragm and wetted parts material, options, certificates

Example: TETROSEAL, 1/2" BSPF, 2" ANSI, 150#, RF, AISI 316L, 3.1 material certificate

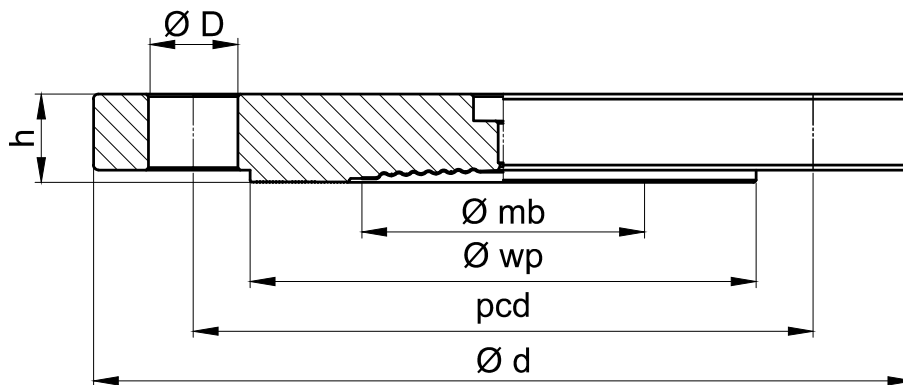


Flange connection according to ASME / ANSI B 16.5, RF (Raised Face)								
Size	Class rating	Dimensions in mm						Drill holes
		mb	d	h	D	pcd	wp	
1"	150	32	110	14.7	16	79.4	51	4
	300	32	125	17.9	19	88.9	51	4
1 1/2"	150	46	125	17.9	16	98.4	73	4
	300	46	155	21.1	22	114.3	73	4
	600	46	155	29.3	22	114.3	73	4
	1,500	46	180	38.8	29	123.8	73	4
	2,500	46	205	51.5	32	146	73	4
2"	150	57	150	19.5	19	120.7	92	4
	300	57	165	22.7	19	127	92	8
	600	57	165	32.4	19	127	92	8
	1,500	57	215	45.1	26	165.1	92	8
	2,500	57	235	57.9	29	171.4	92	8
3"	150	88	190	24.3	19	153.4	127	4
	300	88	210	29	22	168.3	127	8
	600	88	210	38.8	22	168.3	127	8
	900	88	240	45.1	26	190.5	127	8
	1,500	88	265	54.7	32	203.2	127	8
	2,500	88	305	73.7	35	228.6	127	8
4"	150	88	230	24.3	19	190.5	158	8
	300	88	255	32.2	22	200	158	8
	400	88	255	42	26	200	158	8
	600	88	275	45.1	26	215.9	158	8
	900	88	290	51.5	32	235	158	8
	1,500	88	310	61	35	241.3	158	8
	2,500	88	355	83.2	42	273	158	8

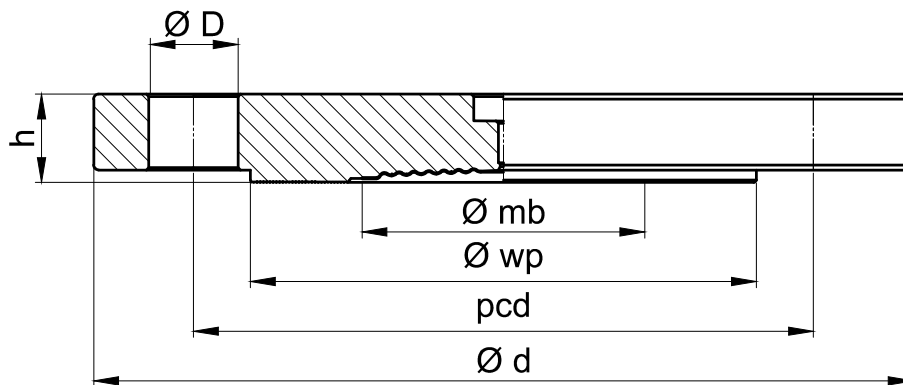


Flange connection according to ASME / ANSI B 16.5 RTJ, (Ring Type Joint)

Size	Class rating	mb	d	h	D (inch)	pcd	wp	s	p	Drill holes
1"	150	32	110	19	5/8"	79	64	6	48	4
	300	32	125	22	3/4"	89	70	6	51	4
	400-600	32	125	24	3/4"	89	70	6	51	4
	900-1500	32	150	35	1"	102	72	6	51	4
	2500	32	160	41	1"	108	83	6	60	4
1 1/2"	150	44	125	22	5/8"	98	83	6	65	4
	300	44	155	26	7/8"	114	91	6	68	4
	400-600	44	155	29	7/8"	114	91	6	68	4
	900-1500	44	180	38	1 1/8"	124	92	6	69	4
	2500	44	205	53	1 1/4"	146	114	8	83	4
2"	150	57	150	24	3/4"	121	102	6	83	4
	300	57	165	29	3/4"	127	108	8	83	8
	400-600	57	165	33	3/4"	127	108	8	95	8
	900-1500	63	215	46	1"	165	124	8	102	8
	2500	63	235	59	1 1/8"	171	133	8	114	8
3"	150	88	190	29	3/4"	152	133	6	124	4
	300	88	210	35	7/8"	168	146	8	124	8
	400-600	88	210	40	7/8"	168	146	8	124	8
	900	88	240	46	1"	191	156	8	137	8
	1500	88	265	56	1 1/4"	203	168	8	127	8
	2500	88	305	76	1 3/8"	229	168	10	149	8
4"	150	88	230	29	3/4"	191	171	6	149	8
	300	88	255	38	7/8"	200	175	8	149	8
	400	88	255	43	1"	200	175	8	149	8
	600	88	275	46	1"	216	175	8	149	8
	900	88	290	52	1 1/4"	235	181	8	149	8
	1500	88	310	62	1 3/8"	241	194	8	162	8
	2500	88	355	87	1 5/8"	273	203	11	157	8



Flange connection according to EN 1092-1, Form B1								
DN in mm	PN in bar	Dimensions in mm						Drill holes
		mb	d	h	D	pcd	wp	
25	10/40	32	115	18	14	85	68	4
	63/100	32	140	24	18	100	68	4
40	10/40	46	150	18	18	110	88	4
	63/100	46	170	26	22	125	88	4
	160	46	170	28	22	125	88	4
	250	46	185	34	26	135	88	4
50	10/40	57	165	20	18	125	102	4
	63	57	180	26	22	135	102	4
	100	57	195	28	26	145	102	4
	160	57	195	30	26	145	102	4
	250	57	200	38	26	150	102	8
80	10/16	88	200	20	18	160	138	8
	25/40	88	200	24	18	160	138	8
	63	88	215	28	22	170	138	8
	100	88	230	32	26	180	138	8
	160	88	230	36	26	180	138	8
	250	88	255	46	30	200	138	8
100	10/16	88	220	20	18	180	158	8
	25/40	88	235	24	22	190	162	8
	63	88	250	30	26	200	162	8
	100	88	265	36	30	210	162	8
	160	88	265	40	30	210	162	8
	250	88	300	54	33	235	162	8



Flange connection according to JIS B2220, RF (Raised Face)								
Size	Class rating	Dimensions in mm						Drill holes
		mb	d	h	D	pcd	wp	
50A	10K	57	155	18	19	120	96	4
	16K	57	155	18	19	120	96	8
	20K	57	155	20	19	120	96	8
80A	10K	88	185	20	19	150	126	8
	16K	88	200	22	23	160	132	8
	20K	88	200	24	23	160	132	8
100A	10K	88	210	20	19	175	151	8
	16K	88	225	24	23	185	160	8
	20K	88	225	26	23	185	160	8