

D 112

FLANGED PROCESS CONNECTION DIAPHRAGM SEAL INTERNAL DIAPHRAGM – THREADED DESIGN

SERVICE INTENDED

Chemical seal to combine with pressure bourdon tube pressure gauges or transmitters. Suitable for corrosive, contaminated, hot or viscous pressure media in chemical process industry and petrochemical industry.

SPECIAL FEATURES

- Flanged connection per EN / ASME DN 15,20,25, 40,50 resp. NPS ½", ¾", 1", 1 ½", 2"
- Design with internal diaphragm, upper and lower housing threaded.
- Wide variety of materials.

PRESSURE RATING

PN 10...250 (class 150...2500)

SUITABLE PRESSURE RANGES

0...0,6 bar to 0...250 bar

INSTRUMENT CONNECTION

Upper housing forged in one piece only.
Material AISI 316 L
½" BSP -F or NPT - F

PROCESS CONNECTION

Lower housing AISI 316 L
Flanges DN 15,20,25,40,50 following EN 1092-1 sealing face form B1 or NPS ½", ¾", 1", 1 ½", 2" per ASME B16.5, RF 125...250 AA

DIAPHRAGM

AISI 316 L stainless steel
Welded with upper housing
Effective diameter of diaphragm dM 59 mm (1)

SEALING RING

PTFE max. 260 °C

BOLTING

Hexagonal bolts stainless steel

FILLING FLUID

Silicon oil (-60 / + 200 °C)

OPTIONAL EXTRAS

Upper housing:

- Capillary extension,
- Cooling tower for directly mounted gauge when temperature of pressure media >100 °C

Diaphragm (2)

- Hastelloy C276, Monel 400, Nickel, Inconel 600, Tantalum, Titanium
- PTFE foil max. 260 °C ≤ 100 bar
- PFA coating max. 260 °C
- ECTFE (Halar ®) coating max. 150 °C

Sealing ring

- Metal seal form C, Inconel silver plated for max. 400 °C

Lower housing

- Special material lining or coating for wetted parts
- Other flanged connections on inquiry
- Sealing faces per EN 1092-1 form B2 or ASME B16.5 snap ring groove form RJF
- Flushing connection(not with coating)

Fastening part

- Hexagonal bolts high tensile alloy steel, max 400 °C
- Intermediate ring with or without flushing connection (not with lining or coating)

Filling fluid

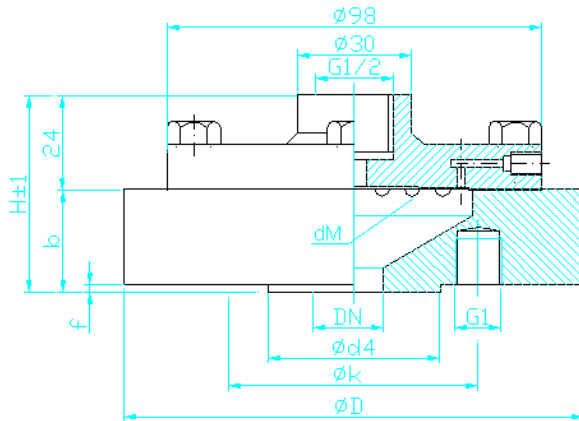
- Silicon oil for high temperature + 400 °C,
- Fluorolube oil, Oil for food industry

- (1) Effective dM (50 or 59 mm) depending on material and PN
- (2) Special material diaphragm welded or not with upper housing depending on material



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PN 10/40 : n° 6 bolts M8 / dM59mm
 PN 63 / 100 : n° 8 bolts M8 / dM59mm
 PN 160/250 : n° 8 bolts M8 / dM50mm

Connection per EN 1092-1 form B1

Connection per ASME B16.5 RF

DN	PN	D	k	d ₄	b	f	H	G1	DN	PN	D	k	d ₄	b	f	H	G1
15	10/40	95	65	45	30	2	51	4 x M12	½"	150	95	60.5	35	30	2	51	4 x 1/2"UNC
15	63/100	105	75	45	30	2	51	4 x M12	½"	300	95	66.5	35	30	2	51	4 x 1/2"UNC
15	160	105	75	45	30	2	51	4 x M12	½"	600	95	66.5	35	35	7	56	4 x 1/2"UNC
15	250	130	90	45	27	2	51	4 x M16	½"	1500	120	82.5	35	40	7	66	4 x 3/4"UNC
20	10/40	105	75	58	30	2	51	4 x M12	¾"	150	100	70	43	30	2	51	4 x 1/2"UNC
25	10/40	115	85	68	27	2	51	4 x M12	¾"	300	120	82.5	43	30	2	51	4 x 5/8"UNC
25	63/100	140	100	65	27	2	51	4 x M16	¾"	600	120	82.5	43	35	7	51	4 x 5/8"UNC
25	160	140	100	65	27	2	51	4 x M16	¾"	1500	130	89	43	40	7	51	4 x 3/4"UNC
25	250	150	105	65	27	2	51	4 x M20	1"	150	110	79.5	51	30	2	51	4 x 1/2"UNC
40	10/40	150	110	88	27	3	52	4 x M16	1"	300	125	89	51	30	2	51	4 x 5/8"UNC
50	10/40	165	125	102	27	3	52	4 x M16	1"	600	125	89	51	35	7	51	4 x 5/8"UNC
									1"	1500	150	101.5	51	40	7	60	4 x 7/8"UNC
									1,5"	150	127	98.5	73	27	2	51	4 x 1/2"UNC
									1,5"	300	155	114.3	73	27	2	51	4 x 3/4"UNC
									2"	150	152	120.7	92	27	2	51	4 x 5/8"UNC
									2"	300	165	127	92	27	2	51	8 x 5/8"UNC

Table dimensions : mm.

ORDERING INFORMATION:

- Model • Process connection (standard, nominal size and pressure rating) • Diaphragm material • Lower housing • Fastening parts and sealing ring • Instrument connection
- Filling fluid • Optional extras required