

## BACK SIDE DIAPHRAGM SEALS, WITH FLANGED CONNECTION

Diaphragm seals are designed to isolate the sensing element of pressure gauges, pressure switches and electronic pressure transmitter from process fluids which may be corrosive, viscous, sedimentous and/or with high temperature. The diaphragm is mechanically clamped between upper housing and intermediate ring. It is leak proof tested to guarantee fill fluid separation from process fluid. Process side are ANSI / UNI / DIN flanged to suit application in pharmaceutical, chemical, petrochemical, water treatment, paper and food industries.

### Constructive and functional characteristics:

**Pressure range:** -1...0/0...40 bar.

**Working temperature:** -45°C...+150°C.

**Accuracy (20°C):** (add to instrument accuracy) ±0,5% for direct mounting, ±1% for capillary mounting.

**Instrument connection:** AISI 316 st.st 1/2" BSP F.

**Diaphragm:** AISI 316 L st. st.

**Filling liquid:** silicone oil type "A".

**Bolts and nuts:** AISI 304 st.st.

**Capillary (remote mounting):** AISI 304 st.st. & 3x1 or AISI 304 st.st covered with AISI 304 st.st armour & (max length 6 mt).

### **Special versions**

**High temperature version** (option E10): 340° C (644°F) with BUNA S gasket and silicone oil type "C".

### **Diaphragm:**

Tantalum,  
Hastelloy B2,  
Hastelloy C276,  
Titanium,  
Monel 400,  
Nickel,  
AISI 316L st.st PTFE coated (max. temperature 150°C / 328°F).

### **Process connection:**

AISI 316L st.st,  
AISI 304 st.st,  
Hastelloy B2,  
Hastelloy C276,  
Monel 400,  
AISI 316 st.st PTFE coated (max. temperature 150°C / 328°F),  
Carbon steel, PTFE coated, with special flange (max. temperature 150°C / 328°F). (see table FLANGE SHAPE AND FINISHING).



### **Filling fluids:**

Special filling fluids are available for special process conditions (see table FILLING FLUIDS)

### **Intermediate ring:**

AISI 316 st.st, AISI 316 st.st PTFE coated.

### **Flushing connection:**

AISI 316 st.st. 1/4" NPTM.

Not available for these flanged connection:  
2", 300-600 ANSI B16.5, PTFE coated process connection.

### **Capillary (remote mounting):**

AISI 304 st.st.

AISI 304 st.st covered with AISI 304 armour Ø6.

AISI 304 st.st covered with AISI 304 st.st armour Ø6, P.V.C coated.

### **Studs, nuts:**

ASTM A 193 B7 studs and ASTM A 194 2H nuts option P15).

### FILLING LIQUIDS

Liquid type	Limit of process temperature
Silicone oil type "A"	-45°C .. +150°C
Silicone oil type "B"	-20°C .. +250°C
Silicone oil type "C"	+20°C .. +340°C
Fluorolube type "E"	-60°C .. +150°C
Fluorolube type "F"	-20°C .. +250°C
Food oil type "G"	-20°C .. +120°C

This publication does not try to establish the bases of a contract and the company keeps the right to modify without previous notice the design and the specifications of the instruments, in accordance with his politics of continued development.

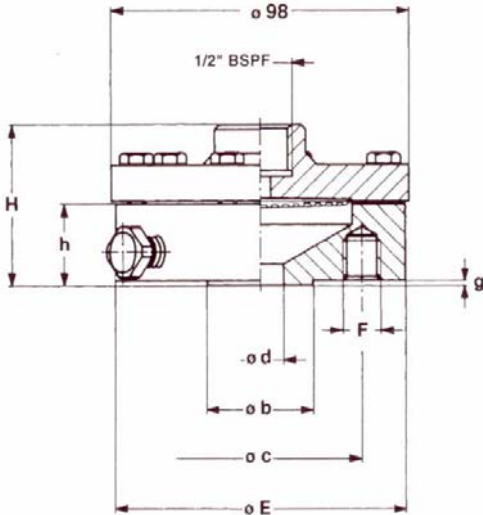
**MEI Manometría e Instrumentación, s.l.**

**Pol. Ind. "El Pla" C/ Comerç, 2-22 nave 13 E-08980 Sant Feliu de Llobregat Barcelona Spain**  
Tf. +34 934 403 939 Fax. +34 934 483 986 www.mei.es e-mail: info@mei.es

# BACK SIDE DIAPHRAGM SEALS, WITH FLANGED CONNECTION

## DIMENSIONS (mm)

### FLANGED CONNECTION AS PER UNI – DIN



DN	PN-bar <sup>(1)</sup>	h	H	E	b	d	g	c	F	N <sub>(2)</sub>	L <sub>(3)</sub>
15	6	34	59	80	40	15	2	55	M10	4	70
15	10 .. 16	27	52	95	45	15	2	65	M12	4	70
15	25 .. 40	27	52	95	45	15	2	65	M12	4	70
20	6	34	59	90	50	20	2	65	M10	4	70
20	10 .. 16	27	52	105	58	20	2	75	M12	4	70
20	25 .. 40	27	52	105	58	20	2	75	M12	4	70
25	6	27	52	100	60	25	2	75	M10	4	70
25	10 .. 16	27	52	115	68	25	2	85	M12	4	70
25	25 .. 40	27	52	115	68	25	2	85	M12	4	70
40	6	27	52	130	80	40	3	100	M12	4	70
40	10 .. 16	27	52	150	88	40	3	110	M16	4	70
40	25 .. 40	27	52	150	88	40	3	110	M16	4	70
50	6	27	52	140	90	50	3	110	M12	4	70
50	10 .. 16	27	52	165	102	50	3	125	M16	4	70
50	25 .. 40	27	52	165	102	50	3	125	M16	4	70

1. Suitable for 150% of flange rating at 20...30°C and 100% of flange rating at 340°C
2. N° threaded holes.
3. Studs length (option P15).

### FLANGED CONNECTION AS PER ANSI

DN	PN-psi <sup>(1)</sup>	h	H	E	b	d	g	c	F	N <sub>(2)</sub>	L <sub>(3)</sub>
1/2"	150	34	59	89	34,9	15	1,6	60,3	1/2" 13UNC	4	85
1/2"	300	27	52	95	34,9	15	1,6	66,7	1/2" 13UNC	4	85
1/2"	600	48,5	73,5	95	34,9	15	6,3	66,7	1/2" 13UNC	4	85
3/4"	150	27	52	98,5	42,9	20	1,6	69,8	1/2" 13UNC	4	85
3/4"	300	38	63	117,5	42,9	20	1,6	82,5	5/8" 11UNC	4	115
3/4"	600	48,5	73,5	117,5	42,9	20	6,3	82,5	5/8" 11UNC	4	115
1"	150	27	52	108	50,8	25	1,6	79,4	1/2" 13UNC	4	89
1"	300	38	63	124	50,8	25	1,6	88,9	5/8" 11UNC	4	115
1"	600	48,5	73,5	124	50,8	25	6,3	88,9	5/8" 11UNC	4	115
1 1/2"	150	27	52	127	73	40	1,6	98,4	1/2" 13UNC	4	89
1 1/2"	300	27	52	155,5	73	40	1,6	114,3	3/4" 10UNC	4	125
1 1/2"	600	48,5	63,5	155,5	73	40	6,3	114,3	3/4" 10UNC	4	125
2"	150	27	52	152,5	92,1	50	1,6	120,6	5/8" 11UNC	4	115
2" <sup>(4)</sup>	300	27	52	165	92,1	50	1,6	127	5/8" 11UNC	8	115
2" <sup>(4)</sup>	600	48,5	63,5	165	92,1	50	6,3	127	5/8" 11UNC	8	115

1. Suitable for 150% of flange rating at 20...30°C and 100% of flange rating at 340°C.
2. N° threaded holes;
3. studs length (option P15)
4. Flushing connection not available

This publication does not try to establish the bases of a contract and the company keeps the right to modify without previous notice the design and the specifications of the instruments, in accordance with his politics of continued development.

**MEI Manometría e Instrumentación, s.l.**

Pol. Ind. "El Pla" C/ Comerç, 2-22 nave 13 E-08980 Sant Feliu de Llobregat Barcelona Spain  
Tf. +34 934 403 939 Fax. +34 934 483 986 www.mei.es e-mail: info@mei.es

**FLANGE SHAPE AND FINISHING**

	Finishing (turning made) Ra max	DIN Form	Finishing (turning made) Ra max	Form ANSI B16.5	Finishing
2225 SM	3,2 µm	2513 V13	63 µm	LM	AARH 125÷250 µin (grooves)
2225 SF	3,2 µm	2513 R13	63 µm	LF	AARH 125÷250 µin (grooves)
2226 DM	3,2 µm	2512 F	40 µm	LT	AARH 125 µin max (turning made)
2226 DF	3,2 µm	2512 N	40 µm	LG	AARH 125 µin max (turning made)
2227 CM	12,5 µm	2512 V	160 µm	ST	AARH 125 µin max (turning made)
2227 CF	12,5 µm	2512 R	160 µm	SG	AARH 125 µin max (turning made)
6078	0,8 µm	2512 L	4 µm	RJ	AARH 63 µin max (turning made)
2229	12,5 µm	2526 A/B	40..160 µm	FF	AARH 125÷250 µin (grooves)
2229 step	12,5 µm	2526 C	40..160 µm	RF	AARH 125÷250 µin (grooves)
		2526 D	40 µm	SM	AARH 125 µin max (turning made)
		2526 E	16 µm	SF	AARH 125 µin max (turning made)
				RF(smooth)	AARH 125 µin max (turning made)
				Stock	AARH 500 µin max (grooves)

	▽▽▽		▽▽		▽		
<b>Ra (µm)</b>	0,8	1,6	3,2	6,3	12,5	25	50
<b>Rz (µm)</b>	3,2	6,3	12,5	25	50	100	200
<b>AARH (µin)</b>	32	63	125	250	500	1000	2000

This publication does not try to establish the bases of a contract and the company keeps the right to modify without previous notice the design and the specifications of the instruments, in accordance with his politics of continued development.