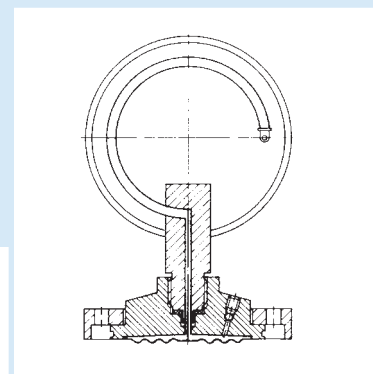
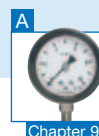


# Diaphragm seal MD 81

## Tubus flange version



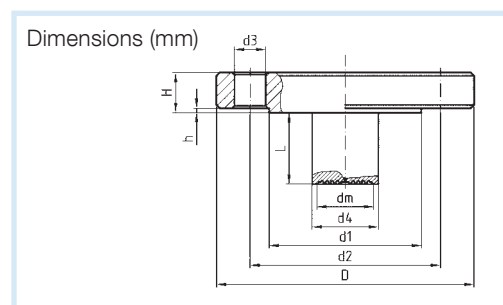
- For tanks with thick walls
- For higher block flanges and increased insulation
- Connection as per DIN or ASME
- Tubus length can be adapted as required



**Application** For use with Bourdon tube pressure gauges, pressure transducers or pressure switches. For corrosive, highly viscous, polluted, crystallising or hot media. Ideal for insulated or thick-walled tanks. Specially designed for use in the chemical and petrochemical industries, in refineries or power plant engineering.

### Technical specifications

**Process connection**  
Stainless steel 316 L,  
Flange connection as per EN 1092-1 type B 1  
DN 50 to 100 or ASME B 16.5 DN 1" to 3"  
Tubus lengths 50, 100, 150 mm



### Diaphragm/sealing surface

Stainless steel 316 L, welded

### Instrument connection

Stainless steel 316 L, welded connection

### Pressure transmission liquid

Paraffin oil (FM 09), FDA-listed

### Pressure ranges

See price list section

### Nominal pressure

PN 40  
Class 150

Flange connection as per EN 1092-1 type B 1

DN	PN	D	d1	d2	d3	d4	H	h	dm	L
50	40	165	102	125	4x18	48	20	3	48	50, 100, 150
80	40	200	138	160	8x18	76	24	3	75	
100	40	235	162	190	8x22	94	24	3	93	

Flange connection as per ASME B 16.5

DN	CL	D	d1	d2	d3	d4	H	h	dm	L
1"	150	108	51	79.5	4x16	25	14.5	1.5	27	50, 100, 150
2"	150	152	92	121	4x19	48	19	1.5	48	
3"	150	190	127	152	4x19	76	24	1.5	75	

### Options Process connection

- Other tubus lengths
- Special materials/coatings
- Other sealing surfaces

### Diaphragm

- Special materials: Hastelloy, Monel, nickel, Inconel, Incoloy, platinum, titanium, tantalum, zirconium, other chrome-nickel-steel alloys
- Coatings/linings:  
PFA (up to 200 °C), ECTFE (up to 150 °C)

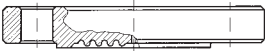

- PTFE (up to 150 °C, up to 100 bar)  
Silver (up to 150 °C), gold (up to 200 °C)

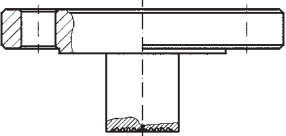
### Miscellaneous

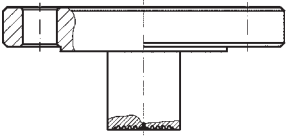
- Adapter for instrument connection G1/4B/G1/2B
- Capillary tube (back or bottom)
- Cooling element (> 100 °C)
- Other filling liquids
- Customer-specific flanges
- Other nominal diameters

# Diaphragm seals MD 80/81

DG: M

		MD 80 flange version, flange connection as per EN 1092-1 type B 1						Part no.	Price €
		Nominal diameter DN	Nominal pressure PN	Minimum range* (in bar) at nominal size					
				63	100	160	DMU		
		25	40	4	4	4	0.6	31333W	
		40	40	4	4	4	0.6	31336W	
		50	40	0.6	0.6	0.6	0.6	31339W	
		80	40	0.6	0.6	0.6	0.6	31385W	
		100	40	0.6	0.6	0.6	0.6	31388W	
				MD 80 flange version, flange connection as per ASME B 16.5					
Nominal diameter DN	Nominal pressure PN			Minimum range* (in bar) at nominal size					
				63	100	160	DMU		
1"	150			4	4	4	1	31393W	
	300			4	4	4	1	31394W	
1½"	150			4	4	4	1	31396W	
	300			4	4	4	1	31397W	
2"	150			0.6	0.6	0.6	0.6	31399W	
	300			0.6	0.6	0.6	0.6	31400W	
3"	150			0.6	0.6	0.6	0.6	31402W	
	300			0.6	0.6	0.6	0.6	31403W	
4"	150			0.6	0.6	0.6	0.6	31405W	
	300			0.6	0.6	0.6	0.6	31406W	

		MD 81 tubus flange version, tubus length 50 mm, flange connection as per EN 1092-1 type B 1						Part no.	Price €
		Nominal diameter DN	Nominal pressure PN	Minimum range* (in bar) at nominal size					
				63	100	160	DMU		
		50	40	1	2.5	---	1	31917W	
		80	40	0.6	0.6	1	1	31921W	
		100	40	0.6	0.6	1	1	31924W	

		MD 81 tubus flange version, tubus length 50 mm, flange connection as per ASME B 16.5						Part no.	Price €
		Nominal diameter DN	Nominal pressure PN	Minimum range* (in bar) at nominal size					
				63	100	160	DMU		
		1"	150	4	4	---	1	31938W	
		2"	150	1	2.5	---	1	31929W	
		3"	150	0.6	0.6	1	1	31931W	

Extra charges €			
	Nominal diameter DN		
Tubus length	50/2"	80/3"	100
100 mm			
150 mm			

\* Valid for standard pressure transmission liquid with direct mounting (without capillary tube) at a room temperature and temperature of the medium of 20 °C.



See page 420/424 for extra charges for options, mounting and accessories.

# Extra charges for diaphragm seals MD 80/81

DG: M

Type of sealing surface		MD 80	MD 81
		Extra charges €	Extra charges €
Groove, type D EN 1092-1 (for stainless steel)			
Tongue, type C EN 1092-1 (for stainless steel)			
Groove, type RJF ASME B 16.5			
<b>Capillary connection</b>			
Capillary connection back			
Capillary connection bottom			
Special materials for wetted parts*	Nominal diameter		
Hastelloy C276	DN 25		
	DN 40		
	DN 50		
	DN 80		
	DN 100		
Tantalum	DN 25		
	DN 40		
	DN 50		
	DN 80		
	DN 100		
Monel 400, nickel, Inconel, platinum, titanium			
<b>Coatings*</b>			
PFA (up to 200 °C)	DN 25		
	DN 40		
	DN 50		
	DN 80		
	DN 100		
ECTFE (up to 150 °C)	DN 25		
	DN 40		
	DN 50		
	DN 80		
	DN 100		
PTFE, silver, gold	All nominal diameters		

\* Please enquire for special materials for groove or tongue version.