

# Diaphragm Seals - Type 75.. -

Flange-design per DIN or ASME - for general applications



EXAMPLE OF OPERATION:  
Type 7510

- FLUSH WELDED DIAPHRAGM OF STAINLESS STEEL 1.4435 (316L)
- FOR AGGRESSIVE, CONTAMINATED OR HOT MEDIA SUITED
- FLANGE CONNECTION PER DIN OR ASME
- MOUNTING TO MANOMETER AND PRESSURE TRANSMITTER

## TECHNICAL DATA

<u>General information</u>	
Process connection	<b>Type 7510:</b> DIN flange connection DN 25, 50, 80 or 100 - raised face DIN EN 1092-1 form B1, PN 16 or PN 40 - raised face DIN EN 1092-1 form B2, PN 63 or PN100 - raised face DIN 2526 form D, PN 160 ... PN 400, see tables <b>Type 7511:</b> DIN flange connection DN 15, 20, or 25 <b>Type 7515:</b> DIN flange connection DN 50, 80, or 100 <b>Type 7520:</b> ASME flange connection DN 2", 3", or 4" <b>Type 7521:</b> ASME flange connection DN ½", 3/4" or 1" <b>Type 7525:</b> ASME- flange connection 2", 3" or 4"
Basic body	stainless steel 1.4571
Separating diaphragm	stainless steel 1.4435 (316L), flush welded, other materials on request
Nominal pressure	dependent on model (see tables)
Minimum pressure range	0.6 bar resp. 1 bar to 400 bar, and 10 psi to 6,000 psi
Instrument connection	standard: G ½ acc. DIN EN 837-1, 1.4571
Filling liquid	standard: silicone oil, others filling liquid on request
Reference temperature	+ 20 °C (+ 68 °F)
<u>Optionen</u>	
Separating diaphragm	stainless steel 1.4435 (316L), electropolished - tantalum, hastelloy B2, titanium, on request - protection foil for diaphragm and raised face on request
Installation	- via cooling element - via capillary line (please specify the length by ordering)
Certificates	material certificate 3.1, EN 10204 for medium contacted parts

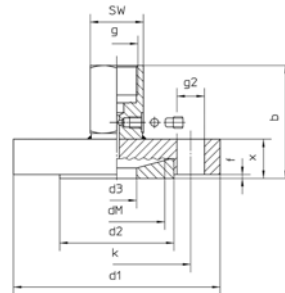
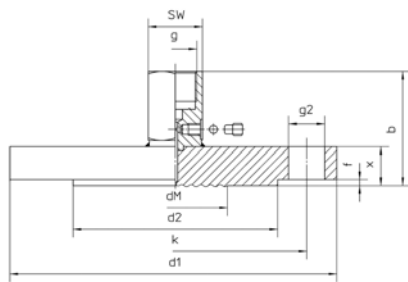
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## DIMENSIONAL DRAWINGS

### Diaphragm Seals Type 75..:

<b>MDM 7510</b>	Flange acc. to DIN EN 1092-1 Form B1	DN 25, 50, 80, 100	PN 16, PN 40
	Flange acc. to DIN EN 1092-1 Form B2	DN 25, 50, 80, 100	PN 63, PN 10
	Flange acc. to DIN EN 2526 Form D	DN 25, 50, 80, 100	PN 160 - 400
<b>MDM 7511</b>	Flange similar to DIN EN 1092-1 Form B1	DN 15, 20, 25	PN 40



Dimensions (mm/inches) and Weight (kg/lb), Minimum Pressure Ranges

Model MDM	DN	PN bar/psi	b±2	d1	d2	d3	dM	f	g	g2	k	x	Minimum Pressure Ranges <sup>1)</sup>	SW	Weight (approx.)
7511	15	40 600	62.5 2.46	95 3.74	45 1.77	15 .59	38 1.50	2 .08	G ½ ½" BSP	4 x Ø 14 .55	65 2.56	25 .98	0 - 1.6 bar 30 psi	27 1.06	1.35 3.00
	20		64.5 2.54	105 4.13	58 2.28	20 .79	52 2.05	2.5 .10			75 2.95	27 1.06	0 - 1 bar 15 psi		1.75 3.90
	25		55.5 2.19	115 4.53	68 2.68	25 .98	59 2.32	3 .12			85 3.35	18 .71	0 - 6 bar 100 psi		2.05 4.50
7510	50	63 920	57.5 2.26	165 6.5	102 4.02	52 2.05	3.5 .14	3 .12	G ½ ½" BSP	4 x Ø 18 .71	125 4.92	20 .79	0 - 1 bar 15 psi	27 1.06	3.00 6.60
			4 x Ø 22 .87	135 5.31						26 1.02	4.60 10.10				
			4 x Ø 26 1.02	145 5.71						28 1.10	5.70 12.60				
	80	100 1,450 2,300	67.5 2.66	195 7.68	138 5.43	80 3.15	3 .12	3 .12	G ½ ½" BSP	8 x Ø 26 1.02	150 5.91	38 1.50	0 - .6 bar 10 psi	27 1.06	6.15 13.60
				8 x Ø 26 1.02						160 6.30	42 1.65	7.70 17.00			
				8 x Ø 30 1.18						180 7.09	52 2.05	9.50 20.90			
				8 x Ø 18 .71						160 6.30	20 .79	14.70 32.40			
	100	160 2,300	73.5 2.89	215 8.46	138 5.43	80 3.15	3 .12	3 .12	G ½ ½" BSP	8 x Ø 22 .87	170 6.69	28 1.10	0 - .6 bar 10 psi	27 1.06	6.95 15.30
				8 x Ø 26 1.02						180 7.09	32 1.26	8.85 19.50			
				8 x Ø 30 1.18						200 7.87	36 1.42	10.05 22.20			
8 x Ø 18 .71				180 7.09						24 .95	15.70 34.60				
100	230 600	57.5 2.26	220 8.66	158 6.22	80 3.15	4 .16	4 .16	G ½ ½" BSP	8 x Ø 18 .71	180 7.09	20 .79	0 - .6 bar 10 psi	27 1.06	4.75 10.50	
			8 x Ø 22 .87						190 7.48	24 .95	6.65 14.70				

<sup>1)</sup> Valid for pressure gauge NCS 100 (4"); also valid corresponding vacuum and vacuum/pressure compound ranges.  
Data for other pressure measuring instruments on request.

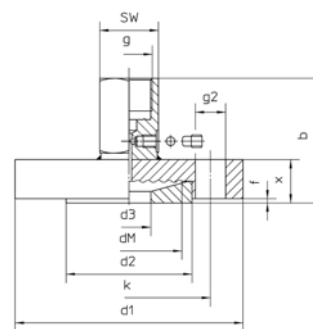
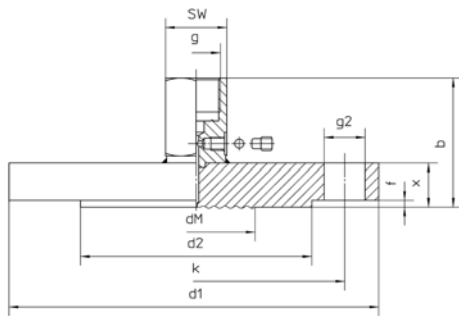
# Diaphragm Seals - Type 75.. -

## Flange-design per DIN or ASME - for general applications

**MDM 7520** Flange acc. to ASME B 16.5  
**MDM 7521** Flange acc. to ASME B 16.5

2", 3", 4"  
 ½", ¾", 1"

PN 150 - 2500 lb/sq. in.  
 PN 150 lb/sq. in.



Dimensions (mm/inches) and Weight (kg/lb), Minimum Pressure Ranges

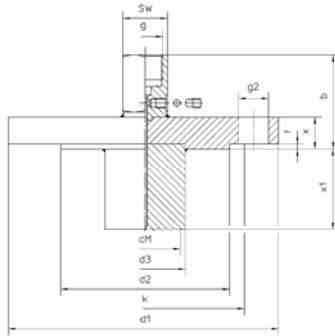
Model MDM	DN	PN	b±2	d1	d2	d3	dM	f	g	g2	k	x	Minimum Pressure Ranges <sup>1)</sup>	SW	Weight (approx.)	
7521	½"	150	58.1 2.29	89 3.50	35.1 1.38	16 .63	26 1.02	1.6 0.06	G ½ ½" BSP	4 x Ø 16 .63	60.5 2.38	20.6 .81	0 - 6 bar 100 psi	27 1.06	1.15 2.50	
			60.1 2.37	99 3.90	42.9 1.69	20 .79	34 1.34				69.9 2.75	22.6 .89	0 - 2.5 bar 30 psi		1.25 2.80	
	61.1 2.41		108 4.25	50.8 2	26 1.02	38 1.50	79.2 3.12				23.6 .93	0 - 1.6 bar 30 psi	1.75 3.90			
	57 2.24		152 5.98	91.9 3.62	52 2.05	6.4 .25	4 x Ø 20 .79				120.7 4.75	19.5 0.77	0 - 1 bar 15 psi		2.60 5.70	
	60 2.36		165 6.50				8 x Ø 20 .79				127 5	22.5 .89			3.40 7.50	
	69.5 2.74		6.50				32 1.26				4.30 9.50					
82 3.22	216 8.50	8 x Ø 26 1.02	163.1 6.42				44.5 1.75	10.30 22.70								
95 3.74	235 9.25	8 x Ø 29 1.14	171.5 6.75				57.5 2.26	15.80 34.80								
7520	2"	150	61.5 2.42	191 7.52	127 5.00	—	80 3.15	1.6 .06	G ½ ½" BSP	4 x Ø 20 .79	152.4 6	24 .95	0 - .6 bar 10 psi	27 1.06	5.10 11.20	
			66 2.60	210 8.27							8 x Ø 23 .91	168.1 6.62			28.5 1.12	7.00 15.40
			76 2.99	8.27							38.5 1.52	8.60 19.00				
			82 3.23	241 9.49							8 x Ø 26 1.02	190.5 7.50			44.5 1.75	13.30 29.30
			92 3.62	267 10.51							8 x Ø 32 1.26	203.2 8			54.5 2.15	19.30 42.50
			110.5 4.35	305 12.01							8 x Ø 36 1.42	228.6 9			73 2.87	35.00 77.20
	3"	300	150	61.5 2.42	229 9.02	157.2 6.19	—	1.6 .06	G ½ ½" BSP	8 x Ø 20 .79	190.5 7.50	24 .94	0 - .6 bar 10 psi	27 1.06	7.20 15.90	
				69.5 2.74	254 10						8 x Ø 23 .91	200.2 7.88			32 1.26	11.70 25.80
				79 3.11	10						41.5 1.63	13.90 30.60				
				82 3.23	273 10.75						8 x Ø 26 1.02	215.9 8.50			44.5 1.75	17.50 38.60
				88.5 3.48	292 11.50						8 x Ø 32 1.26	234.9 9.25			51 2.01	27.10 59.70
				900	88.5 3.48						292 11.50	8 x Ø 32 1.26			234.9 9.25	51 2.01

<sup>1)</sup> Valid for pressure gauge NCS 100 (4"); also valid corresponding vacuum and vacuum/pressure compound ranges.  
 Data for other pressure measuring instruments on request.

# Diaphragm Seals - Type 75.. -

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**MDM 7515** Flange acc. to DIN EN 1092-1 Form B1 DN 50, 80, 100 PN 16, PN 40 Extension tube  
**MDM 7525** Flange acc. to ASME B 16.5 2", 3", 4" PN 150, PN 300 lb/sq. in Extension tube



Dimensions (mm/inches) and Weight (kg/lb), Minimum Pressure Ranges

Model MDM	DN	PN bar/psi	b±2	d1	d2	d3	dM	f	g	g2	k	x	x1	Minimum Pressure Ranges <sup>1)</sup>	SW	Weight (approx.)		
7515	50	40 600	57.5 2.26	165 6.50	102 4.02	48.3 1.90	45 1.77	3 .12	G ½" BSP	4 x Ø 18 (.71)	125 4.92	20 .79	50 / 1.97	0 - 1 bar 15 psi	27	3.44 / 7.60		
													100 / 3.94			3.76 / 8.30		
													150 / 5.91			4.07 / 9.00		
													200 / 7.87			4.37 / 9.60		
	80	16 230	61.5 2.42	200 7.87	138 5.43	76 2.99	72 2.83	3.5 .14		160 6.30	50 / 1.97	8 x Ø 18 (.71)	24 0.94	20 .79	100 / 3.94	0 - .6 bar 10 psi	1.06	5.81 / 12.80
											150 / 5.91				6.37 / 14.00			
											200 / 7.87				6.92 / 15.30			
											50 / 1.97				6.15 / 13.60			
		40 600	57.5 2.26	220 8.66	158 6.22	94 3.70	90 3.54	4 .16		180 7.09	100 / 3.94	8 x Ø 22 (.87)	24 .94	20 .79	150 / 5.91	0 - .6 bar 10 psi	1.06	7.27 / 16.00
											200 / 7.87				7.82 / 17.20			
											50 / 1.97				6.25 / 13.80			
											100 / 3.94				7.50 / 16.50			
7525	2"	300	60 2.36	165 6.50	91.9 3.62	48.3 1.90	45 1.77	1.6 .06	G ½" BSP	8 x Ø 20 (.79)	127 5.00	22.5 .89	50 / 1.97	0 - 1 bar 15 psi	27	3.84 / 8.50		
													100 / 3.94			4.16 / 9.20		
													150 / 5.91			4.47 / 9.90		
													200 / 7.87			4.77 / 10.50		
	3"	150	61.5 2.42	191 7.52	127 5	76 2.99	72 2.83	1.6 .06		152.4 6	50 / 1.97	4 x Ø 20 (.79)	24 .94	20 .79	100 / 3.94	0 - .6 bar 10 psi	1.06	6.01 / 13.30
											150 / 5.91				6.56 / 14.50			
											200 / 7.87				7.12 / 15.70			
											50 / 1.97				7.67 / 16.90			
		300	66 2.60	210 8.27	168.1 6.62	28.5 1.12	100 / 3.94	150 / 5.91		200 / 7.87	8 x Ø 23 (.91)	168.1 6.62	28.5 1.12	200 / 7.87	200 / 7.87	0 - .6 bar 10 psi	1.06	8.46 / 18.70
																		9.02 / 19.90
																		9.57 / 21.10
																		8.63 / 19.00
4"	150	61.5 2.42	229 9.01	157.2 6.19	94 3.70	80 3.15	1.6 .06	190.5 7.5	50 / 1.97	8 x Ø 20 (.79)	24 .95	20 .79	100 / 3.94	0 - .6 bar 10 psi	1.06	9.90 / 21.80		
									150 / 5.91				11.15 / 24.60					
									200 / 7.87				12.40 / 27.30					
									50 / 1.97				13.13 / 28.90					
	300	69.5 2.74	254 10	200.2 7.88	32 1.26	100 / 3.94	150 / 5.91	200 / 7.87	8 x Ø 23 (.91)	200.2 7.88	32 1.26	200 / 7.87	200 / 7.87	0 - .6 bar 10 psi	1.06	14.40 / 31.70		
																15.65 / 34.50		
																16.91 / 37.30		

<sup>1)</sup> Valid for pressure gauge NCS 100 (4"); also valid corresponding vacuum and vacuum/pressure compound ranges.  
 Data for other pressure measuring instruments on request

Our products are constantly in further development, therefore subjects to modifications.

PD-DM-75...-D-e-08-1/4