

Diaphragm Seals - Type 73../7887 -
Aseptic-/Sterile Connection - Hygienic Process Conditions



- **FLUSH WELDED DIAPHRAGM OF STAINLESS STEEL 1.4435 (316L)**
- SPECIAL MATERIALS ON REQUEST -
- **ASEPTIC-/STERILE CONNECTION FOR O-RING SEALING**
- **RESIDUES-FREE CLEANING OF MEASURING POINT, CIP- AND SIP-COMPATIBLE**
- **MOUNTING TO MANOMETER AND PRESSURE TRANSMITTER**
- **FOR FOOD AND BEVERAGE INDUSTRY, BIOTECHNOLOGY, PHARMACY**
- **MODEL 7887 FOR MODULAR CONNECTION SYSTEM**

EXAMPLE OF OPERATION:
 Type 7887

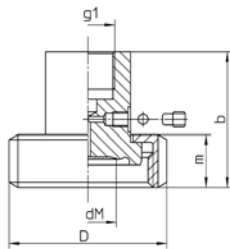
TECHNICAL DATA



<u>General information</u>	
Process connection	With union nut, stainless steel 1.4301 polished: Type 7310.1: DIN 11 864 -1, DN 25...80 Type 7311: DIN 11 851, aseptic screw connection (acc. Südmo) Type 7312: Naue sterile screw connection DN 40...80 Type 7313: Varivent® DN 50, 68 Type 7316: Guth- (or LKM-) aseptic screw connection, DN 40...80 Type 7317: Neumo sterile screw connection for DIN-tubes, DN 40...80 Type 7317.1: Neumo sterile screw connection for ISO-tubes, DN 40 ...50 Type 7319: APV-Inline sleeve, DN 50 Type 7340.5: Neumo Clamp sterile connection for DIN-tubes DN 40...80 Type 7340.9: Neumo Clamp sterile connection for ISO-tubes DN 40...80 Type 7887: Modular system VARIMESS, with loose pressure screw, EHEDG
Basic body	stainless steel 1.4435 (316L)
Separating diaphragm	stainless steel 1.4435 (316L), welded, other materials on request
Nominal pressure	PN 10 to PN 40, dependent on model Pressure stage of process connection pieces are to consider!
Minimum pressure range	dependent on model and mounted instruments type, see table
Instrument connection	standard: G ½ DIN EN 837-1; optional: directly welded
Filling liquid	standard: Paraffin oil, with FDA approval, others filling liquid on request
Max. cleaning temperature	+ 150 °C (+302° F), ((for the complete pressure measuring system with pressure gauge NCS 100 (4") mounted, other versions on request)
<u>Options</u>	
Separating Diaphragm	stainless steel 1.4435 (316L), electropolished
Anbauarten (mounting form) of measuring instruments	- via cooling element - via capillary line (please specify the length by ordering)
Certificate	Material certificate 3.1, EN 10204 for medium contacted parts EHEDG-certificate for approved versions
<u>Accessories/ mounting parts</u>	
	process connection pieces, sealing etc. please order separately

DIMENSIONAL DRAWINGS

Diaphragm seals with union nut or hexagon union nut:



Dimensions (mm/inches) and Weight (kg/lb), Minimum Pressure Ranges (MPR) for Manometer NCS 100 (4")¹⁾

Model	DN	PN bar/psi	D	dM	b	m	g1	MPR ¹⁾	Weight (approx.)
MDM 7310.1 DIN 11 864-1	25	40 580	63	21	54	21	G ½ ½" BSP	0 – 4 bar	0,50
			2.48	.83	2.13			0 – 60 psi	1.10
	32		70	28				0 – 1 bar	0,65
		2.76	1.10		0 – 15 psi	1.43			
	40		78	34	53			0,73	
			3.07	1.34	2.09			1.61	
	50	25	92	45	48	22		1,10	
		360	3.62	1.77	1.89	.87		2.43	

Dimensions for nominal sizes up to DN 80 on request

Fig. A

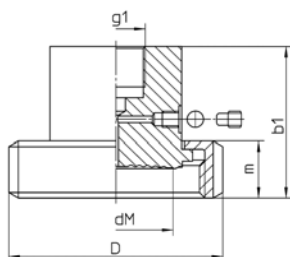
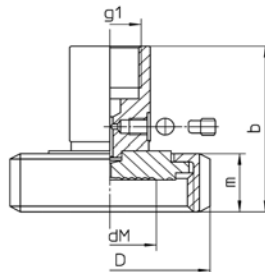


Fig. B



Dimensions (mm/inches) and Weight (kg/lb), Minimum Pressure Ranges (MPR) for Manometer NCS 100 (4")¹⁾

Model	DN	PN bar/psi	D	dM	b	m	g1	MPR	Weight (approx.)
MDM 7311 DIN 11 851 Südmo ²⁾ (Fig. A)	25	40 600	63	26	57	21	G ½ ½" BSP	0 - 2,5 bar	0,50
			2.48	1.02				0 – 30 psi	1.10
	32		70	28				0,65	
		2.76	1.10	1.43					
	40		78	34		0 - 1 bar		0,85	
			3.07	1.34		0 – 15 psi		1.87	
	50	25	92	38				1,40	
		300	3.62	1.50		3.09			
MDM 7312 Naue (Fig. A)	40	10	63	30	58	22		0 - 2,5 bar	0,65
		160	2.48	1.18	2.28	.87		0 – 30 psi	1.43
MDM 7316 Guth (Fig. A)	40	40	78	38	56			0,73	
		600	3.07	1.50	2.20			1.61	
MDM 7317 Neumo/BioConnect® for DIN tubes (Fig. B)	40	10 160	70	34	58,5	21	G ½ ½" BSP	0 - 1 bar	0,55
			2.76	1.34					1.21
	50		82	45					0,65
			3.23	1.77				2.30	1.43
MDM 7317.1 Neumo/BioConnect® for ISO tubes (Fig. B)	40		70	38					0,58
			2.76	1.50					1.28
	50		82	48					0,68
			3.23	1.89					1.50

1) also valid for corresponding vacuum and vacuum/pressure compound ranges. Data for other pressure measuring instruments on request.

2) Südmo standard W 500 D; optionally W 200 D or W 100 D available.
 When ordering, please quote exactly which Südmo version is required!

Dimensions for MDM 7311 to 7317 with nominal sizes up to DN 80 on request

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Diaphragm Seals with flange connection:

APV/BioControl[®]:

Fig. C

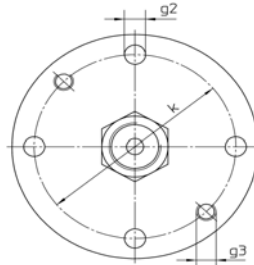
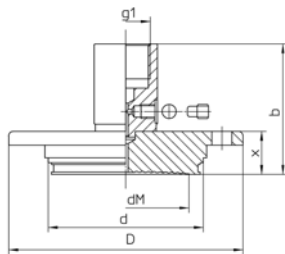
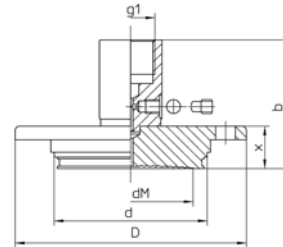


Fig. D

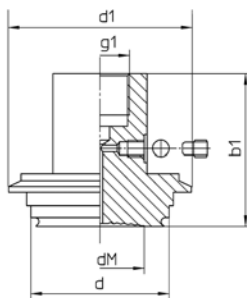


Dimensions (mm/inches) and Weight (kg/lb), Minimum Pressure Ranges (MPR) for Manometer NCS 100 (4")¹⁾

Model	DN	PN bar/psi	D	dM	d	b	g1	g2	g3	k	x	MPR	Weight (approx.)	
MDM 7319 APV In-line (Fig. C)	50	10	100	52	66,2	56	G ½	4 x ø 8,6 .34	2 x M8	82	18,5	0 - 1 bar	0,80	
		150	2.05	2.61	2.2	3.23				.73	0 - 15 psi	1.76		
MDM 7391 Neumo/BioControl[®] (Fig. D)	25	16 230	64	21	30,5	57,5	½" BSP	7	-	50	20	0 - 4 bar	0,40	
	50		2.52	.83	1.2	2.26				.28	.79	0 - 60 psi	.88	
	65		90	45	50	64,5				9	70	27	0 - 1 bar	0,61
			3.54	1.77	1.97					.35	2.76	1.06		1.34
80	120	58	68	2.54	11	95	37	0 - 15 psi	0,98					
4.72	2.28	2.68	.43	3.74	1.46	1,54								
			140	72	87,5	74,5				115	37		1,54	
			5.51	2.83	3.44	2.93				4.53	1.46		3.40	

Diaphragm Seals with clamp connection:

Varivent[®] for Varinline[®]- Access Unit



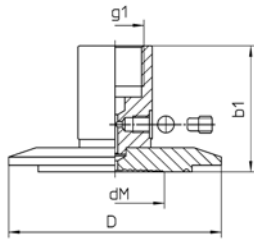
Dimensions (mm/inches) and Weight (kg/lb), Minimum Pressure Ranges (MPR) for Manometer NCS 100 (4")¹⁾

Model	DN	Suitable for Tube ø	PN bar/psi	d	d1	dM	b1	g1	MPR	Weight (approx.)
MDM 7313 Varivent[®]	50	Ø 25 and 32 mm Ø .98 and Ø 1.26	25 360	50 1.97	66 2.6	30 1.18	55 2.17	G ½ ½" BSP	0 - 2,5 bar	0,56
									0 - 30 psi	1.23
	68	Ø 40 up to 125 mm Ø 1.57 up to Ø 4.92	16 230	68 2.68	84 3.31	46 1.81			0 - 1 bar	0,82
									0 - 15 psi	1.81

¹⁾ also valid for corresponding vacuum and vacuum/pressure compound ranges. Data for other pressure measuring instruments on request

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BioConnect®



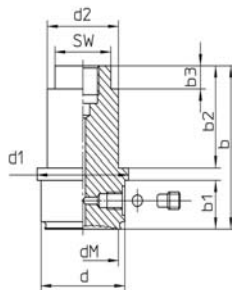
Dimensions (mm/inches) and Weight (kg/lb), Minimum Pressure Ranges (MPR) for Manometer NCS 100 (4")¹⁾

Model	DN	PN bar/psi	D	dM	b1	g1	MPR	Weight (approx.)
MDM 7340.5 Neumo/BioConnect® for DIN tubes	40	16 230	64	34	46,5	G ½ ½" BSP	0 – 1 bar 0 – 15 psi	0,27 .60
	50		77,4	45				0,36 .79
MDM 7340.9 Neumo/BioConnect® for ISO tubes	40		64	38				0,30 .66
	50		77,4	46				0,39 .86
			3.05	1.81				

Dimensions for nominal sizes up to DN 80 on request

¹⁾ also valid for corresponding vacuum and vacuum/pressure compound ranges. Data for other pressure measuring instruments on request

Diaphragm seals with VARIMESS-connection for modular connections concept, EHEDG:



Dimensions (mm/inches):

Model	DN	b	b1	b2	b3	d	d1	d2	dM	SW
MDM 7887 with loose pressure screw	63	56	16,8	35	8	33	36	28	28	22
		2.20	0.66	1.38	0.31	1.30	1.42	1.10	1.10	.87

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

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