

Chemical seal

Sterile Process Connection, Diaphragm Seals for Food, Biochemical and Pharmaceutical Industry Threaded Coupling Model DD1218 ... DD1221



Applications

- Food and beverage industry
- For dairies, dairy-products, breweries

Special Features

- For cleaning easy to open
- Quick measuring point cleaning without residues
- Suitable for SIP and CIP
- 3A certified and FDA conformity
- Flush welded diaphragm



Diaphragm Seal, Model DD1218 with Union Nut

Description

Process connection

Thread with union nut

- Model DD1218: threaded coupling DIN 11 851
 - Model DD1219: threaded coupling SMS standard
 - Model DD1220: threaded coupling IDF standard
 - Model DD1221: threaded coupling APV-RJT standard
- Nominal sizes (DN) see dimensions overleaf

Pressure rating

see PN in dimensional tables from page 3

Suitable pressure ranges

0 ... 1 bar to 0 ... 25 resp. 40 bar

Material of wetted parts

Stainless steel 1.4435 (316L)

Instrument connection

Gauges directly welded, transmitter with adaptor screwed

Fill fluid

KN 7 Glycerine, food compatible, FDA approved, according to standard US Pharmacopoeia XXIV and European Pharmacopoeia (1998)



Diaphragm Seal with Union Nut according to standards SMS, IDF and APV-RJT

Optional extras

Process connection

- Male thread
- Other nominal sizes (DN) and connections as per Südmo, BBS and further hygienic process connections on inquiry

Pressure rating

- Higher pressure ratings on inquiry

Material of wetted parts

- Stainless steel 1.4435 electropolished
- Special materials on inquiry

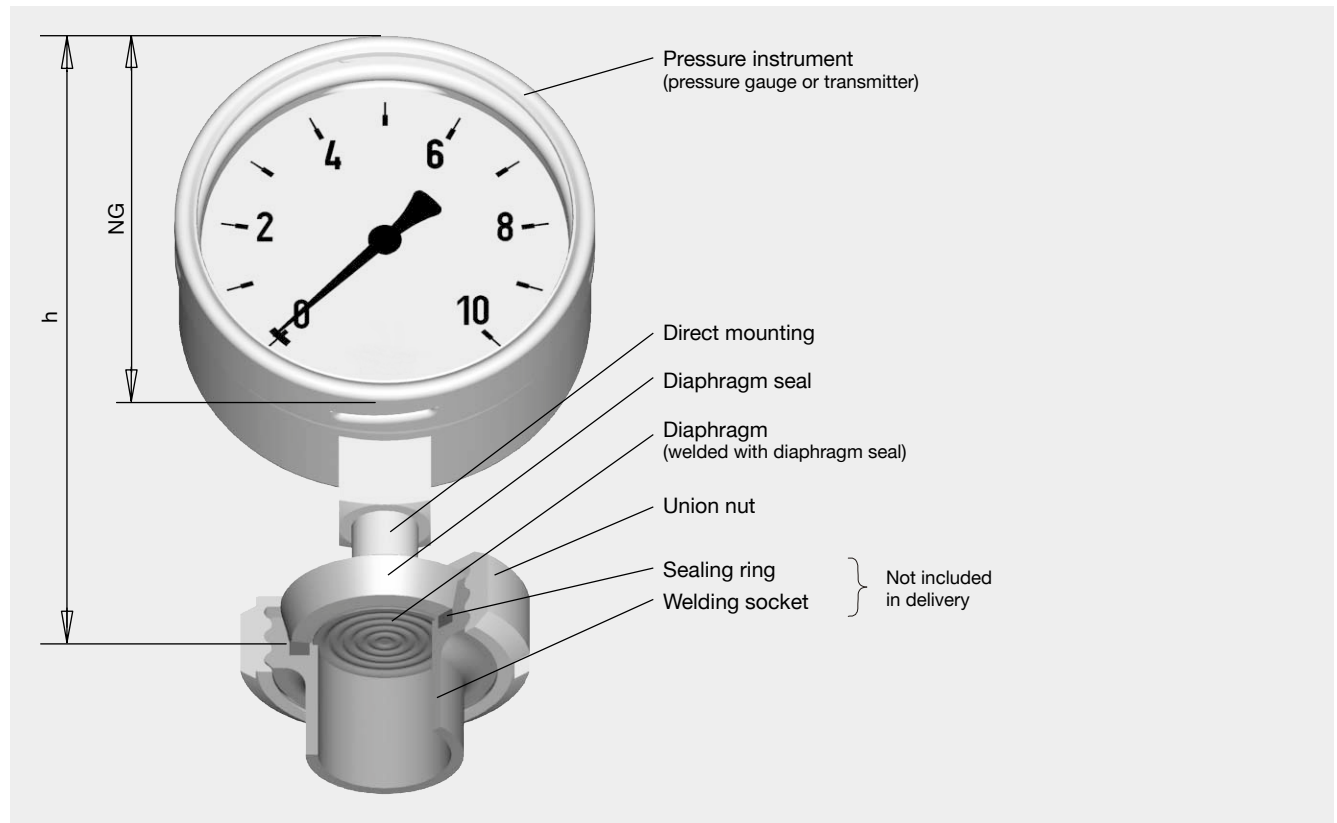
Pressure instrument assembly

- Assembly via cooling tower
- Assembly via capillary, when ordering please specify: length of capillary

Fill fluid

- KN 62 Liquid Paraffin (medical white oil), pharmaceutical, FDA approved,
- KN 12 Glycerine/water, FDA approved

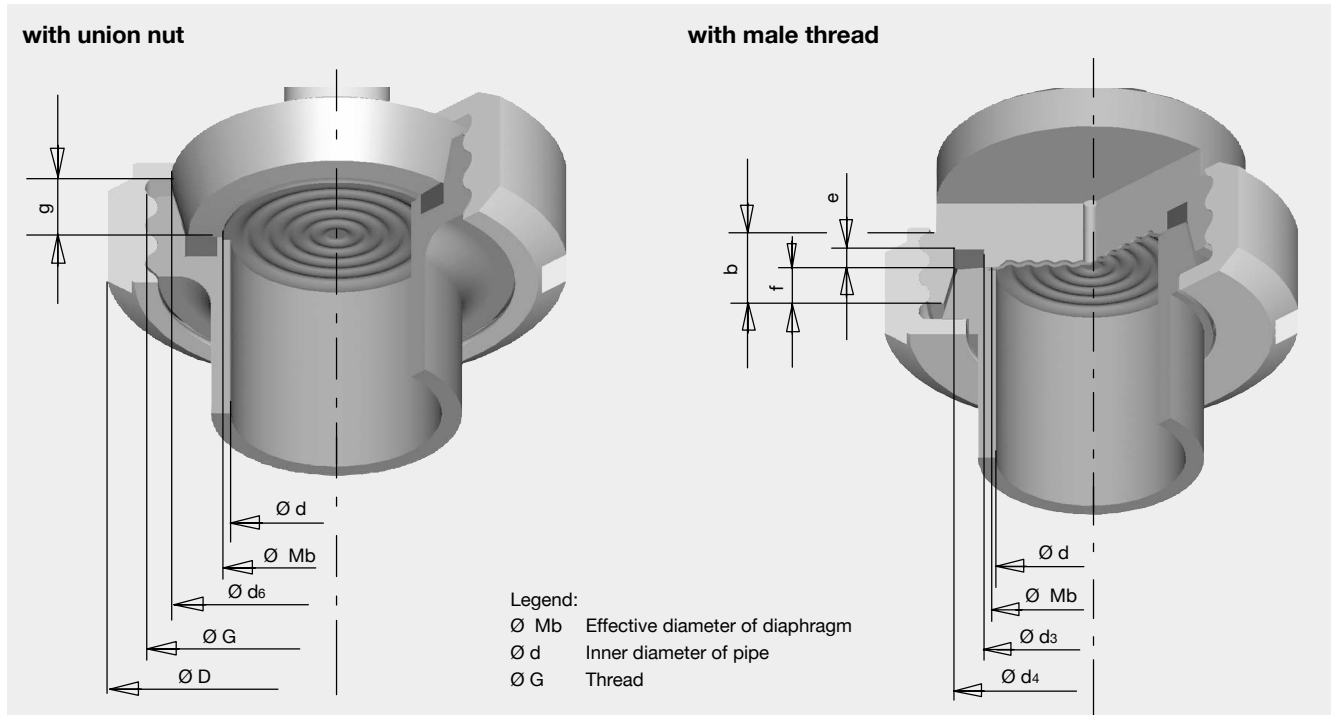
Installation example for a diaphragm seal model DD1218 with union nut with direct mounted pressure gauge to a tube fitting with a corresponding male-thread



Pressure gauge Nominal size	Dimensions in mm Installation height h
NS 63	approx. 105
NS 100	approx. 156

The installation height is also valid for models DD1219, DD1220 and DD1221

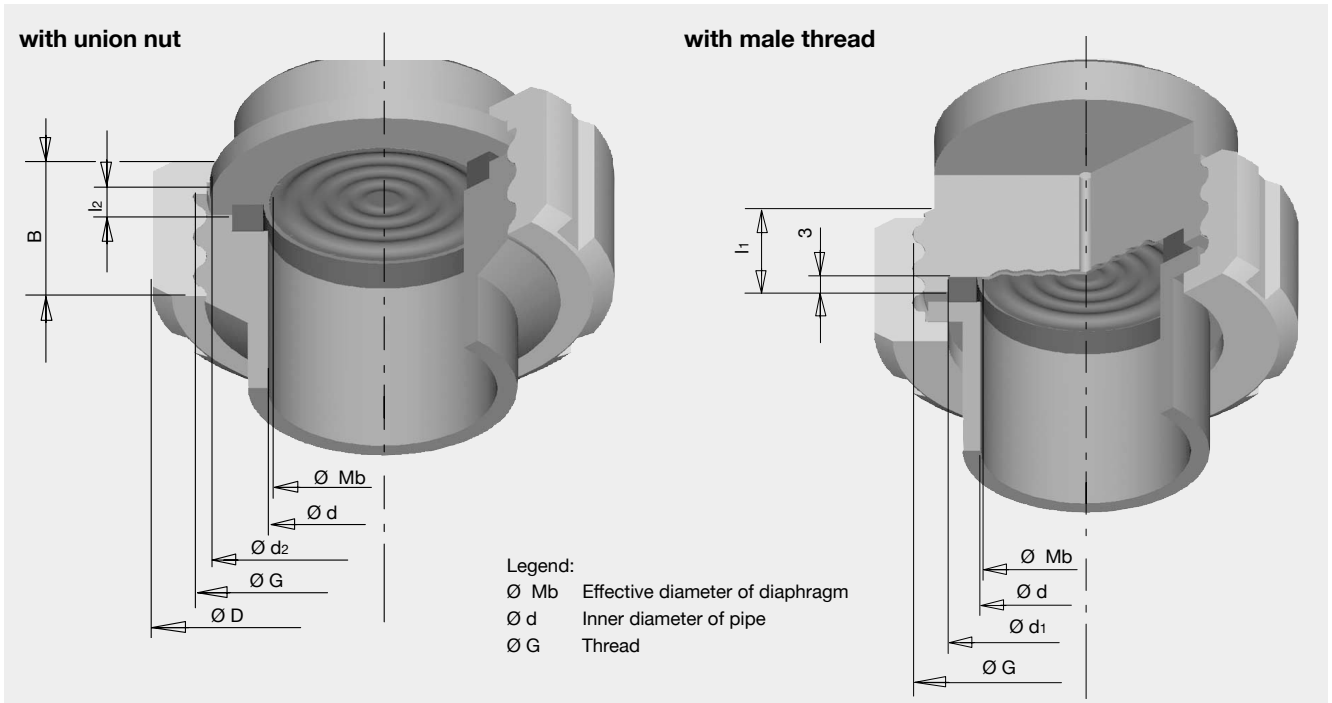
Model DD1218 thread DIN 11851



DN	For pipe Outside Ø x thickness	PN	Dimensions in mm											Weight in kg
			G	b	d	Mb	D	d ₃	d ₄	d ₆	e	f	g	
20	23 x 1.5	40	Rd 44 x 1/6	14	20	22	54	23	32.8	36,5	3	6	8	0.4
25	29 x 1.5	40	Rd 52 x 1/6	14	26	25	63	30	39.8	44	3.5	7	10	0.4
32	35 x 1.5	40	Rd 58 x 1/6	14	32	32	70	36	45.8	50	3.5	7	10	0.5
40	41 x 1.5	40	Rd 65 x 1/6	14	38	40	78	42	51.8	56	3.5	7	10	0.75
50	53 x 1.5	25	Rd 78 x 1/6	14	50	52	92	54	63.8	68,5	3.5	7	11	0.8
80	85 x 2	25	Rd 110 x 1/4	20	81	71	127	85	94.8	100	3.5	8	12	1.25

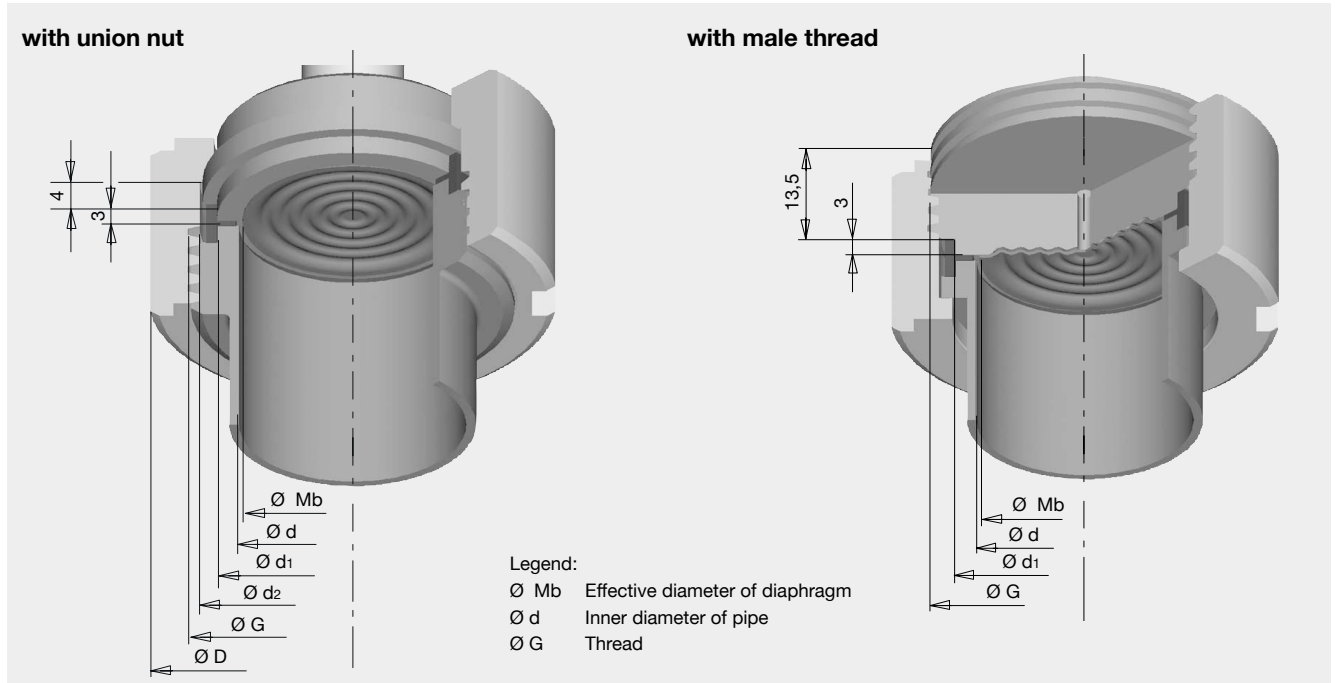
The measuring instruments with model DD1218 can also be used for tubes acc. to DIN 11850 column 1 ... 3.

Model DD1219 thread SMS

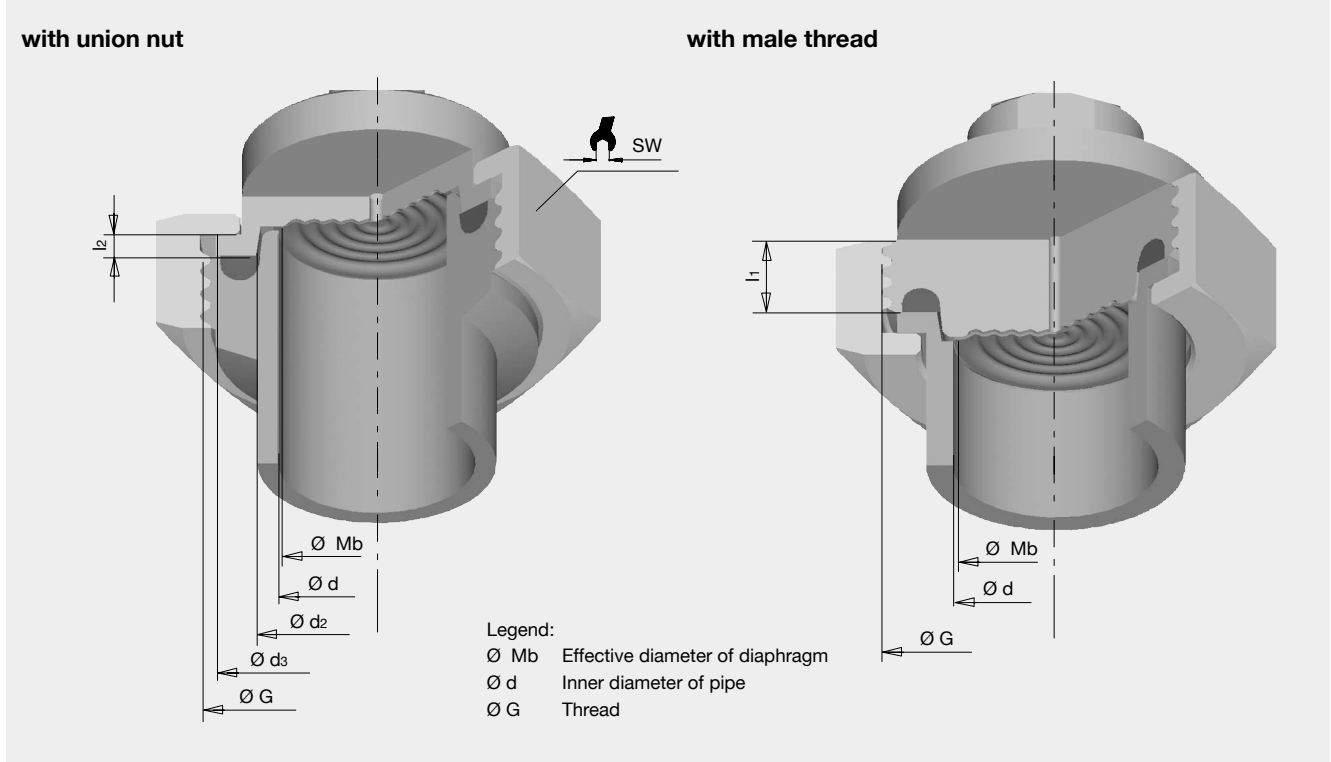


DN	For pipe Outside Ø x thickness	PN	Dimensions in mm									Weight in kg
			G	d	Mb	d ₁	d ₂	D	B	l ₁	l ₂	
1½"	38 x 1.2	40	Rd 60 x 1/6	35.6	35	48	55	74	25	15	4	0.8
2"	51 x 1.2	40	Rd 70 x 1/6	48.6	45	61	65	84	26	15	4	1.0

Model DD1220 thread IDF



DN	For pipe Outside Ø x thickness	PN	Dimensions in mm						Weight in kg
			G	d	Mb	D	d ₁	d ₂	
1½"	38,6 x 1.5	40	1½" IDF	35.6	32	64	42.7	47	0.7
2"	51,6 x 1.5	40	2" IDF	48.6	45	79	56.2	60.5	0.9



DN	For pipe Outside Ø x thickness	PN	Dimensions in mm							Weight in kg		
			G	d	Mb	d ₂	d ₃	D	l ₁	l ₂	SW	
1½"	38.1 x 1.6	40	2 5/16 x 8"	34.9	32	40.5	54	25	14.3	2.4 ... 4	65	0.9
2"	50.8 x 1.6	40	2 7/8 x 6"	47.6	40	53.2	66.7	84	14.3	2.4 ... 4	80	1.1

We have all rights reserved for this document
wir uns ihrer dieses unterlogo alle Rechte vor © DMASS GmbH

D-LK-09E-001

Possible combinations

Bourdon tube pressure gauges

Diaphragm seal Model DD1218, DD1219, DD1220 or DD1221 can be combined with a pressure gauge with bourdon tube if the following application conditions are taken into account:

- Pressure gauge directly combined with diaphragm seal
- Temperature range
 - process: +10 ... +150 °C
 - ambient: +10 ... +40 °C

Choice	Model	Process connection with nominal sizes (DN)		
		20 ... 32 (1½")	40 ... 50 (2")	80 (3") ...
Pressure gauge		MBS	MBS	MBS
Lowest measuring range		0 ... 4 bar -1 ... 3 bar	0 ... 2 bar -1 ... 3 bar	0 ... 0.6 bar -1 ... 1.5 bar
Overpressure safety (optional)		-	2 x full scale value	2 x full scale value
Inductive alarm sensors (optional), suitable in zone 1 and zone 2 (Model DD31)		-	possible	possible

Pressure transmitters

Diaphragm seal Model DD1218, DD1219, DD1220 or DD1221 can be combined with a pressure transmitter of standard version EDS series or intelligent version DEI series if the following application conditions are taken into account:

- Pressure transmitter directly combined with diaphragm seal
- Temperature range
 - process: +10 ... +150 °C
 - ambient: +10 ... +40 °C

Choice	Process connection with nominal sizes (DN)		
	20 ... 25 (1")	32 (1½") ... 50 (2")	80 (3") ...
Lowest measuring range	0 ... 2.5 bar	0 ... 1 bar	0 ... 400 mbar

Further gauge variants and lower pressure ranges can be supplied after technical verification and clarification by DMASS.

Ordering information

Model / Process connection (with union nut or male thread) / Nominal sizes (DN) / Material of wetted parts / Assembly, if necessary length of capillary / Fill fluid / Pressure gauge model / Process conditions as per questionnaire / Optional extras resp. special version required

Modifications may take place and materials specified may be replaced by others without prior notice. Specifications and dimensions given in this leaflet represent the state of engineering at the time of printing.