

Diaphragm Seal

Lightweight version, male thread
PN 100, optional PN 250

MDM 7210.L

Information on applications, features, metrological influences such as temperature, level difference, floating time, etc., can be found in model overview 7000. Furthermore, you will find information on other chemical seal versions.

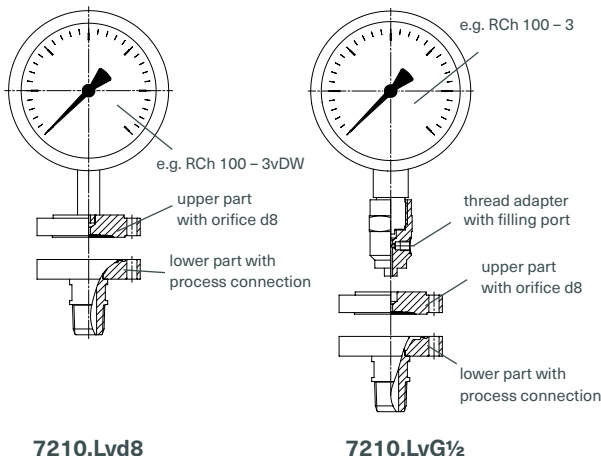
Construction

The diaphragm is welded to the upper part. The lower part with process connection and the upper part are connected by 8 screws M6.

Bourdon tube pressure gauges, pressure switches, pressure transmitters, pressure transducers and other pressure measuring instruments can be equipped with diaphragm seals of this type series.

Model 7210.Lvd8 has an orifice d8 as instrument connection for welding to a pressure gauge with process connection d8x5, e.g. RCh 100 – 3vDW, a cooling element or a capillary line. Leakage cannot occur at the welded connection of pressure gauge / upper part and the filling port that is not accessible externally. The parts can be easily cleaned externally.

Model 7210.LvG½ has a gauge adapter with female thread for direct mounting to measuring instruments with male thread. The screwed connections pressure gauge / chemical seal and the filling port must not be loosened or opened, as otherwise filling fluid leaks and the pressure measuring unit loses its functional capability.



7210.Lvd8

7210.LvG½

Standard Versions

Upper Part

Stainless steel 316L (1.4404)

Instrument Connection

7210.Lvd8 orifice d8
7210.LvG½ G ½ female

Diaphragm

High-Soft Membrane stainless steel 316L (1.4435) welded with the upper part, helium leak detection up to 10^{-9} mbar l/s
Effective diaphragm diameter dM = 32 mm (1.26")

Lower Part with Process Connection

Stainless steel 316L (1.4404), connection male thread ½" NPT

Nominal Pressure

PN 100



Temperature Resistance

Medium temperature max. +250 °C (+482 °F)

Attachment Flange and Screws with Nut

Made of galvanised steel 8.8, 8 screws and nuts M6

Sealing

Turned on, metallic

Minimum Span Pressure Gauges

0 – 1 bar

for Bourdon tube pressure gauge RCh / RChG 100 – 3 without limit switch contact assembly (GSG)

t_k-Value (mbar/10K) (Temperature Coefficient of the Chemical Seal)

1.4 mbar / 10K (for silicone oil FA1)

Options

- Instrument connection G ¼ female
- Nominal pressure PN 250

Special Versions Upon Request

- Other instrument connections, whereas we do not recommend NPT female threads
- Other material combinations (process connection, membrane) than those on page 2
- Other pressure measuring instruments

Accessory

Capillary line, cooling elements see data sheets 7.7002 and 7.7003
Other accessory available upon request

Mounting / Filling / Certificates

Information concerning mounting, filling and on certificates are available upon request.

Ordering Information Chemical Seals

See page 2

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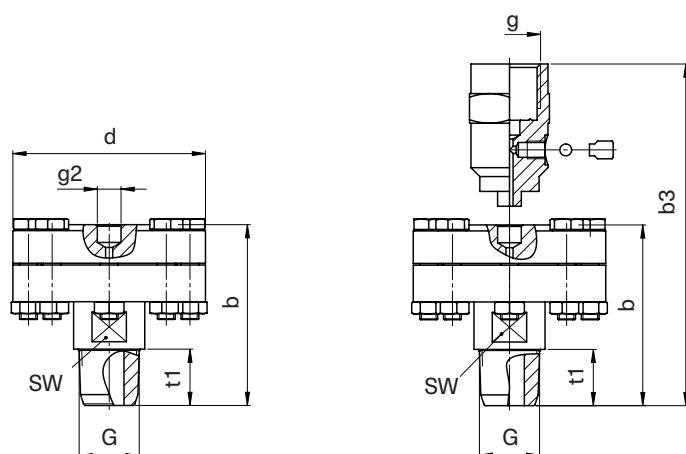
7210.L

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Connection, Dimensional Data and Weight, Ordering Information and Options

Male Thread Connection

½" NPT



Dimensional Data (mm / inch) and Weight (kg / lb)

G	b	b3	t1	d	g	g2	SW	approx. weight	
								vd8x5	vG½
½" NPT	61 2.4	104 4.09	19 0.75	65 2.56	G½	d8	21 0.83	0.84 1.85	0.97 2.14

Ordering Information

Basic Model **Diaphragm Seal** **MDM 7210.L**

The reference temperature is +20 °C (+68 °F).

Please specify if an operating temperature (t_A) deviating from +20 °C (+68 °F) is required (dial inscription $t_A...$)

Instrument connection	orifice d8 for direct welding with measuring instrument (with cooling element or capillary line)		vd8
	standard	G ½ female	vG½
	option	G ¼ female	vG¼
Nominal pressure	standard	PN 100	PN 100
	option	PN 250 high-strength screws made of steel 12.9	PN 250
Process connection male thread	standard	½" NPT	½" NPT
	options	G ½ B	G ½ B
		M 20x1.5	M 20x1.5
		G ¼ B	G ¼ B
		others upon request	

Example **MDM 7210.LvG½, PN 100, ½" NPT**

Special Versions: Please describe your requirements in cleartext!