

# Diaphragm Seal

Lightweight version,  
male thread, PN 100, optional PN 250

MDM 7210.L

## Standard Version

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

### Construction

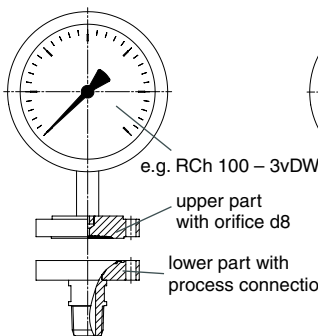
The diaphragm is welded to the upper part. The lower part with process connection and the upper part are connected by 8 screws M6.

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.

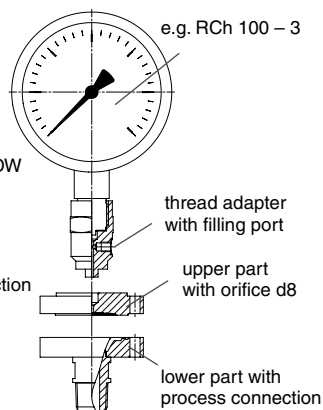
**Model 7210.Lvd8** has an orifice d8 as instrument connection for welding to a pressure gauge with process connection d8x5, e.g. RCh 100 – 3vDW, cooling element or capillary line. Leakage cannot occur at the welded connection of pressure gauge/upper part and the filling port that is not accessible externally.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

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

7210.Lvd8



7210.LvG½



### Upper Part

Stainless steel 316 L

### Instrument Connection

7210.LvG½: G ½ female

7210.Lvd8: orifice d8

### Diaphragm

Stainless steel 316 L welded with the upper part  
Helium leak detection up to  $10^{-9}$  mbar l/s  
Effective diaphragm diameter  $d_M = 32$  mm (1.26")

### Lower Part with Process Connection

Stainless steel 316 L, male thread ½" NPT  
Connection options see page 2

### Nominal Pressure

PN 100

optional PN 250

### 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 optional optional PN 250: high-strength screws made of galvanised steel 12.9

### Sealing

Turned on, metallic

## Minimum Span Pressure Gauges

0 – 1 bar<sup>1)</sup>

For other pressure measuring instruments: upon request

## Temperature Coefficient of the Chemical Seal $t_k$ (mbar/10K)

1.4 mbar / 10K (for silicone oil FA1)

## Special Versions Amongst Others

- Other instrument connections upon request, whereas we do not recommend NPT female threads
- Other material combinations upon request

## Accessory

Capillary line, cooling elements:

see data sheet 7002

Other accessory:

available upon request

## Mounting/Filling/Certificates

Information on mounting and filling, on certificates and reports are available upon request

## Ordering Information Chemical Seals

See page 2

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

<sup>1)</sup> for Bourdon tube pressure gauge RCh/RChG 100 – 3 without limit switch contact assembly



Sales and Export South, West, North

**ARMATURENBAU GmbH**

Manometerstraße 5 • D – 46487 Wesel-Ginderich  
Tel.: +49 2803 9130 – 0 • Fax: +49 2803 1035  
armaturenbau.com • mail@armaturenbau.com

Subsidiary Company, Sales and Export East

**MANOTHERM Beierfeld GmbH**

Am Gewerbepark 9 • D – 08344 Grünhain-Beierfeld  
Tel.: +49 3774 58 – 0 • Fax: +49 3774 58 – 545  
manotherm.com • mail@manotherm.com

**7210.L**  
08/16

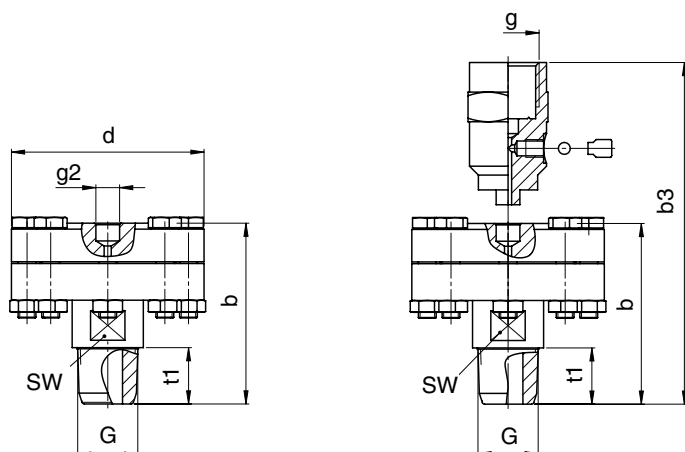
# Ordering Information, Further Options, Dimensional Data and Weights

Basic Models	Diaphragm Seals, PN 100	MDM 7210.Lv
Instrument connection	G ½ female	7210.LvG½
	option: G ¼ female	7210.LvG¼
	orifice d8 for direct welding with measuring instrument, cooling element or capillary line	7210.Lvd8
Nominal pressure	PN 100	PN 100
	optional PN 250: high-strength screws made of galvanised steel 12.9	PN 250
Process connection		
Male thread	standard thread ½" NPT	½" NPT
	options: male thread G ½ B, M20x1.5, G ¼ B others upon request	G ½ B, M20x1,5, G ¼ B

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

## Male Thread Connection

½" NPT



## Dimensional Data (mm/inches) and Weights (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	G ½ ½" BSP	d8	21 0.83	0.84 1.85	0.97 2.14