Diaphragm Gauge Guard Z 700/Z 701



General

Function

The diaphragm-protected gauge guard is used when measuring the pressure of neutral and corrosive media. The manometer is separated from the medium by a PTFE-coated diaphragm. The pressure is transmitted using a buffer fluid. The large area of the diaphragm and the low compressibility of the buffer fluid ensure an accurate display. The large number of possible materials make for a wide range of areas of application.

Special features

- All parts in contact with the medium are made of highly resistant plastics
- The manometer does not come into contact with the medium
- The diaphragm gauge guard is lowmaintenance and can be installed in any position
- The large area of the diaphragm ensures accuracy

Technical data Z 700

Available materials

Gauge guard housing: Diaphragm:

PVC-U, PP PVDF EPDM, EPDM-PTFE-coated

Allowable working temperature PVC -0 to +60 °C

PP $-10 \text{ to + } 80 \,^{\circ}\text{C}$ **PVDF** $-20 \text{ to} + 120 ^{\circ}\text{C}$

Allowable working pressure for connection

PN 10 at 20 °C

Manometer connections

R 1/4" R 1/2"

Connection spigots

- d 25 with manometer connection Rp 1/4"
- d 32 with manometer connection Rp ½"
 selectable with NPT thread

Manometer ranges

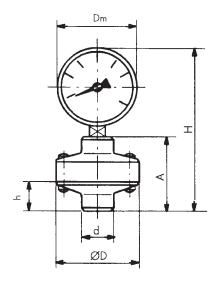
Standard 0-10 bar, with Rp 1/4" Dm 63 mm, with Rp 1/2" Dm 100 mm, others on request

Accuracy

Standard class 2.5

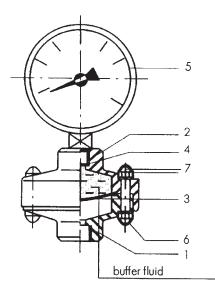
Measuring range

0 - 10 bar 0 - 6 bar



Dimensions and weight

Connection	da	Dm	Н	h	A	ØD	Weight (kg) PVC-U	PP	PVDF
R 1/4"	25	63	129	15	71	72	0.30	0.25	0.32
R 1/2"	32	100	210	22	90	100	0.60	0.54	0.68



Parts

No.	Description	Units	
1	Flange		
2	Upper part	1	
3*	Diaphragm	1	
4	Manometer seal	1	
5	Monometer	1	
6	Hexagonal socket-head cap	12/16	
7	Hexagonal socket-head screw with washer and nut	6/8	

^{*} Parts subject to wear or recommended spare parts

Filling with buffer fluid

- 1. Fill the upper part (2) of the gauge guard Z700 / Z 701, preferably with Glysantin (antifreeze solution) or water up to the bottom of the thread.
- 2. Gently press on the diaphragm from below with a blunt object until no more air bubbles come out.
- Screw in the manometer. If the manometer already displays a pressure reading, some of the buffer fluid must be removed until there is no longer any display.

Installation advice

We recommend installing the gauge guard with a screw fastening and a shut-off device. That ensures that the manometer can be moved into the required position for reading even at a later stage, and can be easily replaced in the event of a fault.

Important

Sealing with a Teflon strip or with hemp can lead to the connection spigots tearing. We recommend fusing or cementing the connection spigots.