Gauge Guard Z500/501

The GF Gauge Guard Type Z500/ Z501 is designed to measure pressure of neutral and aggressive media. The pressure gauge is separated from the medium by a TFM coated EPDM backing diaphragm. Pressure from the pipe/medium side will be transmitted by a buffer fluid.

The large diaphragm surface and the incompressibility of the buffer fluid allow a high accurate pressure transmission. The wide range of connections and possible materials.

Features

- **All medium wetted parts are made of highly resistant plastic**
- **No direct contact from pressure gauge to medium**
- **Gauge guard maintenance-free**
- **Independent installation position**
- **Large surface diaphragm provides high accuracy**
- **The unique coupling nut design impedes any torsion on the diaphragm that guarantees a high precision pressure transmission**
- **The new design assures a uniform sealing pressure on the diaphragm**
- **Various pipe connection options are available by just a change of the base part**

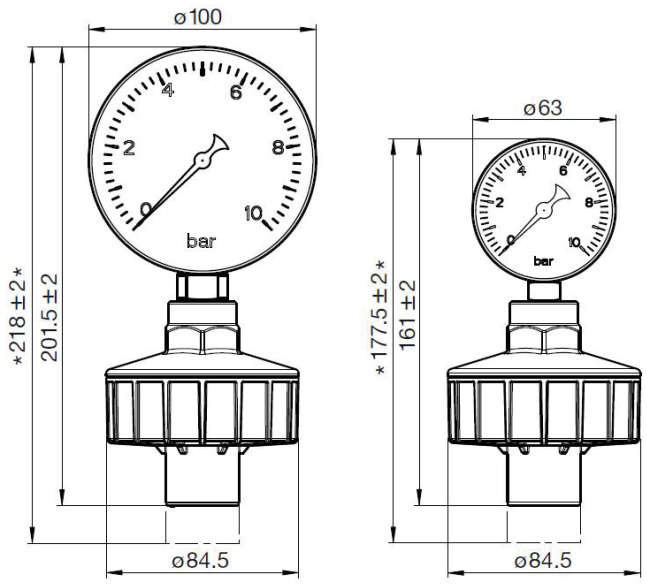
Applications

- **Chemical Processing Industry**
- **Water Treatment**
- **Energy**
- **Marine**

Specifications

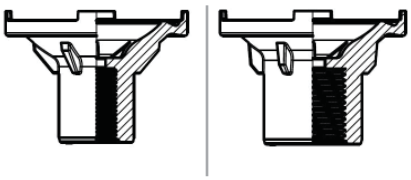
Pressure Rating	
PN	10 @ 20 °C
	150 psi @ 68 °F
Materials Gauge Guard	
Upper Part & Union	PP GF30
Lower Part	PVC-U, PP-H, PVDF
Diaphragm	EPDM/TFM
Buffer-fluid	Glysantine (DI water on request)
Interfaces Gauge Guard	
Pressure Gauge Connection	G1/4" for d25
	G1/2" for d32
Pipe Connection	Depending on material welding or cementing spigot for socket connection with female inner thread
	d25 with G1/4" inner thread
	d32 with G1/2" inner thread
	Butt fusion spigot or cementing spigot on request
Pressure Gauge	
Pressure Range	0-10 bar (0-150 psi)
	0-6 bar (0-90 psi)
Pressure Gauge Material	Plastic housing with brass connector
	CrNi housing with CrNi connector
Gauge Threads and Size	R1/4" d63 mm
	R1/2" d100 mm

Dimensions



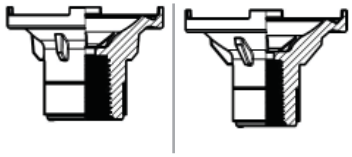
Connections

Threaded female Connections (Standard)

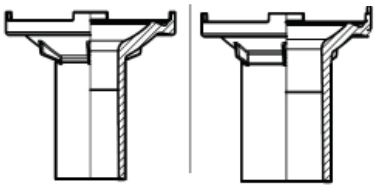


G1/2"	G1/4"
PP	PP
PVC	PVD
PVDF	PVDF

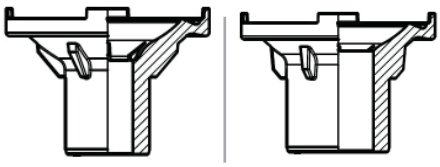
Threaded female Connections and Spigots (Optional)



NPT 1/2"	NPT 1/4"
PP	PP
PVC	PVC
PVDF	PVDF

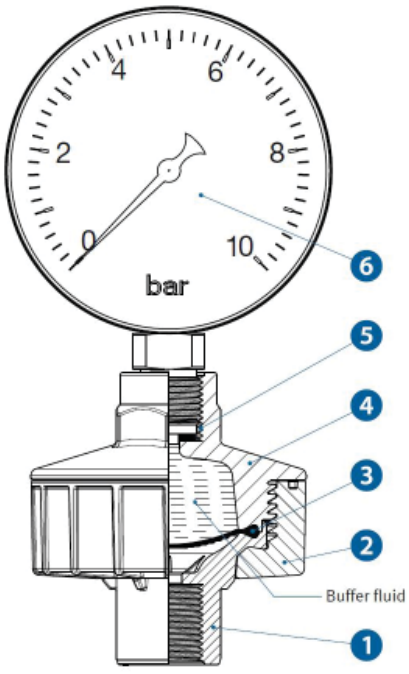


d25	d32
PP	PP
PVDF	PVDF



d25	d32
PVC	PVC

Assembly and Handling



Item	Description
1	Lower part (PP, PVC and PVDF)
2	Union nut
3	Diaphragm EPDM/TFM
4	Upper Part (PP GF)
5	Pressure Gauge Seal
6	Pressure Gauge

Filling the buffer fluid

- Upper body (Item 4) of the gauge guard Z500/ Z501-fill preferably with Glysantine, or distilled water up to the lower edge of the threaded socket.
- Move smoothly (up and down) the diaphragm from below using a blunt object until no more air bubbles appear
- Screw in the pressure gauge
- If the pressure gauge already displays a pressure, some buffer fluid has to be removed until there is no pressure showing anymore

Installation instructions

We recommend installing the gauge guard in a vertical position with a previous screwed connection and an isolating device. This ensures that the pressure gauge can be brought into the desired reading position and allows for easy replacement if needed.

Ordering Information

Type	GF Code	Pipe con. OD	Pipe Thread	Manometer con.	Material	Pressure Range	Manometer Mat.
Z501	199 042 000	d25	G1/4"	G 1/4"	PVC	No gauge	-
Z501	199 042 001	d32	G1/2"	G 1/2"	PVC	No gauge	-
Z501	199 042 100	d25	G1/4"	G 1/4"	PP-H	No gauge	-
Z501	199 042 101	d32	G1/2"	G 1/2"	PP-H	No gauge	-
Z501	199 042 200	d25	G1/4"	G 1/4"	PVDF	No gauge	-
Z501	199 042 201	d32	G1/2"	G 1/2"	PVDF	No gauge	-
Z500	199 042 010	d25	G1/4"	G 1/4"	PVC	0 - 10 bar	Brass
Z500	199 042 011	d32	G1/2"	G 1/2"	PVC	0 - 10 bar	Brass
Z500	199 042 030	d25	G1/4"	G 1/4"	PVC	0 - 6 bar	Brass
Z500	199 042 031	d32	G1/2"	G 1/2"	PVC	0 - 6 bar	Brass
Z500	199 042 020	d25	G1/4"	G 1/4"	PVC	0 - 10 bar	Stainless steel
Z500	199 042 040	d25	G1/2"	G 1/4"	PVC	0 - 6 bar	Stainless steel
Z500	199 042 110	d25	G1/4"	G 1/4"	PP-H	0 - 10 bar	Brass
Z500	199 042 111	d32	G1/2"	G 1/2"	PP-H	0 - 10 bar	Brass
Z500	199 042 130	d25	G1/4"	G 1/4"	PP-H	0 - 6 bar	Brass
Z500	199 042 131	d32	G1/2"	G 1/2"	PP-H	0 - 6 bar	Brass
Z500	199 042 120	d25	G1/4"	G 1/4"	PP-H	0 - 10 bar	Stainless steel
Z500	199 042 140	d25	G1/2"	G 1/4"	PP-H	0 - 6 bar	Stainless steel
Z500	199 042 210	d25	G1/4"	G 1/4"	PVDF	0 - 10 bar	Brass
Z500	199 042 211	d32	G1/2"	G 1/2"	PVDF	0 - 10 bar	Brass
Z500	199 042 230	d25	G1/4"	G 1/4"	PVDF	0 - 6 bar	Brass
Z500	199 042 231	d32	G1/2"	G 1/2"	PVDF	0 - 6 bar	Brass
Z500	199 042 220	d25	G1/4"	G 1/4"	PVDF	0 - 10 bar	Stainless steel
Z500	199 042 240	d25	G1/2"	G 1/4"	PVDF	0 - 6 bar	Stainless steel