

NEW!

Miniature Thermoplastic Diaphragm Seals/Gauge Guards

Protect Your Pressure or Vacuum Instruments
From Clogging, Corrosion and Damage!



FEATURES/ADVANTAGES:

- Diaphragm Seals provide a protective barrier between process fluids and the pressure/vacuum gauge or instruments.
- Increase product reliability and reduce system downtime caused by failure of instruments not protected by seals.
- Exceptionally low unit cost – now makes it feasible to protect even moderately priced instruments.
- Compact size makes these isolators ideal for limited-space installations.
- ±4% accuracy. Will handle most applications.
- Use with gauges, transducers and pressure switches.
- Simple to fill and install.
- Hermetically sealed uni-body construction – molded body avoids possibility of dangerous leaks.
- For use with highly aggressive or ultra-pure liquids.
- Diaphragm safety – If the gauge or instrument fractures or is removed from the guard while the system is pressurized, the diaphragm will automatically seal against leakage to the atmosphere.
- Polypro bodies for excellent chemical compatibility and temperatures up to 185°F (85°C).

MATERIALS OF CONSTRUCTION:

Instrument side (upper housing) is glass-filled polypropylene. System side (lower housing) is natural polypropylene. Diaphragm is available in either Viton® or Buna-N.

DESIGN:

Each GGME Gauge Guard features a durable and flexible diaphragm which serves as a protective barrier between the process fluid and instrument. The internal space on the instrument side of the diaphragm must be solidly filled with a suitable liquid in order to accurately transmit the process pressure to the instrument. Diaphragm Seals are designed for a maximum working pressure of 200 PSI (13.8 bars). Additionally, design of the diaphragm and housing will prevent rupture of the diaphragm in the event of accidental removal of the gauge.

SERIES GGME GAUGE GUARDS

APPLICATIONS:

Compact size and economy price make the GGME ideal for systems requiring large quantities of pressure or vacuum gauges, transducers and other small instruments such as pressure switches.



Gauge Guard

Examples of use include water softening, water conservation, marine applications, spas, swimming pools and more.



Transducer



Pressure Switch

INSTALLATION:

When Series GGME Diaphragm Seals are purchased with a gauge, install the assembly by simply connecting it to the process piping using Teflon® tape or other acceptable pipe sealant to effect a seal. The assembly need only be made hand tight followed by a one-quarter turn more with a strap wrench. Do not overtighten or breakage will result. Do not use pipe wrenches.

When purchased without a gauge, consult Installation Instruction Sheet provided with each GGME Diaphragm Seal.

For filling Diaphragm Seals ordered without a gauge, Plast-O-Matic fill liquid is available in 4 ounce bottles. Plast-O-Matic fill liquid is highly refined temperature stable mineral oil that complies with FDA regulations 121.246, 121.1146 and 121.2589.

OPERATION:

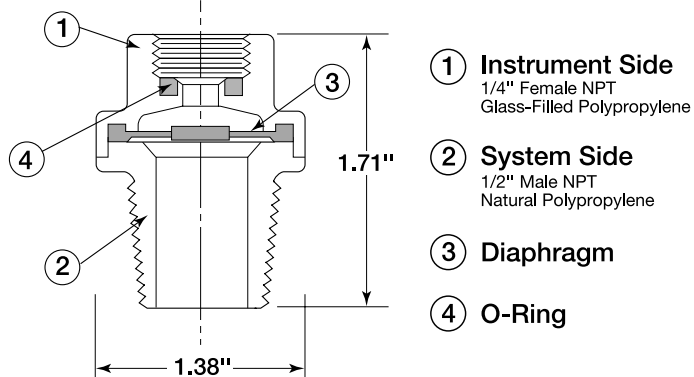
The GGME diaphragm separates the process fluid from the gauge fill liquid and prevents it from entering the instrument. Because the guard diaphragm is a flexible barrier, pressure on the process side against the fill liquid is transmitted to the instrument. Conversely vacuum causes the diaphragm to flex in the opposite direction to create equal vacuum in the fill liquid.

MAXIMUM PRESSURE RATING

TEMPERATURE °F °C	LIQUIDS	GASES
	PSI (Bars)	PSI (Bars)
70-100°F (21-38°C)	200 (13.8)	100 (6.90)
100-185°F (38-85°C)	200 (13.8)	30 (2.07)

Maximum Temperature is 185°F

DIMENSIONS:



- ① Instrument Side
1/4" Female NPT
Glass-Filled Polypropylene
- ② System Side
1/2" Male NPT
Natural Polypropylene
- ③ Diaphragm
- ④ O-Ring

SPECIFICATIONS AND MODEL NUMBERS:

Type of Service	Available Gauge Range PSI (Bars)	System Side Materials	Diaphragm Materials	Gauge Guard Part Number
Pressure or Vacuum	Without Gauge	Natural Polypropylene	Buna-N Viton	GGMEBI-PP GGMEVI-PP
Vacuum	0-30" Hg 0-1.01 VAC	Natural Polypropylene	Buna-N Viton	GGMEB000-PP GGMEV000-PP
Pressure	0-15 PSI (0-1.04 Bars)	Natural Polypropylene	Buna-N Viton	GGMEB015-PP GGMEV015 -PP
Pressure	0-30 PSI (0-2.07 Bars)	Natural Polypropylene	Buna-N Viton	GGMEB030-PP GGMEV030-PP
Pressure	0-60 PSI (0-4.14 Bars)	Natural Polypropylene	Buna-N Viton	GGMEB060-PP GGMEV060-PP
Pressure	0-100 PSI (0-6.90 Bars)	Natural Polypropylene	Buna-N Viton	GGMEB100-PP GGMEV100-PP
Pressure	0-160 PSI (0-11.04 Bars)	Natural Polypropylene	Buna-N Viton	GGMEB160-PP GGMEV160-PP
Pressure	0-200 PSI (0-13.80 Bars)	Natural Polypropylene	Buna-N Viton	GGMEB200-PP GGMEV200-PP

Note: For information on other Plast-O-Matic Gauge Guards refer to Catalog GGM and Catalog GGMU (Ultra-Pure).

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