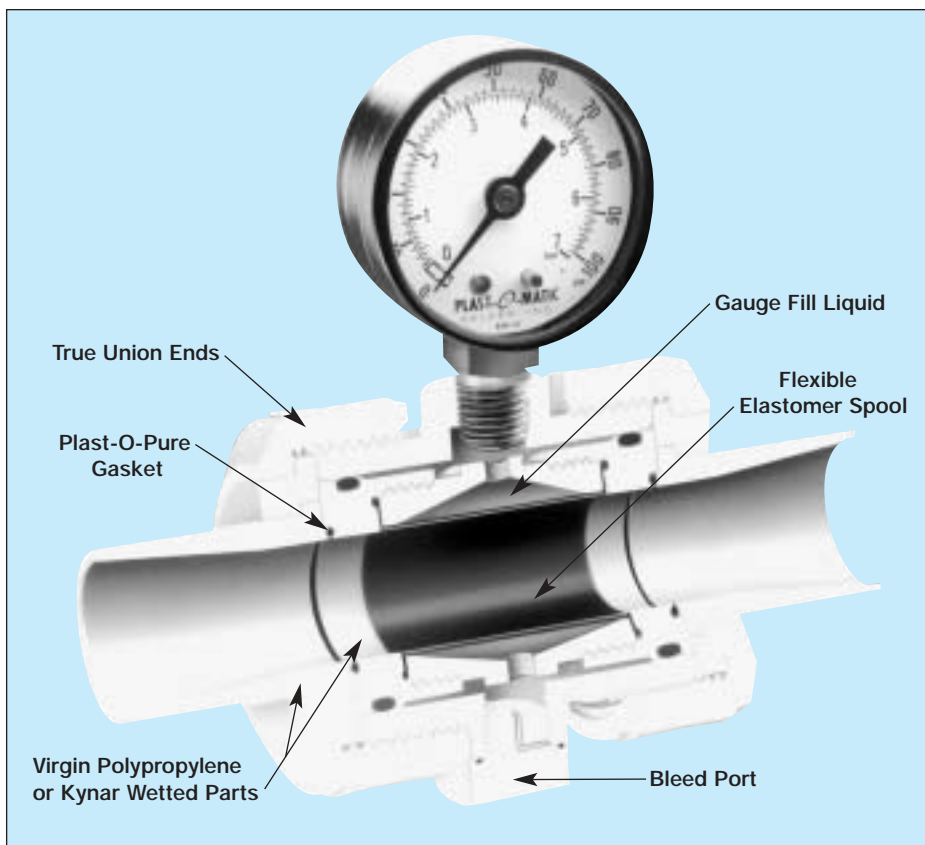


Technological Breakthrough for Ultra-Pure Liquid and Deionized Water Systems

Series "GGMU" Ultra-Pure Gauge Guard

Eliminates "Dead Leg"!

Unique In-line gauge guard developed specifically to meet the demanding high purity standards required in ultra-pure D.I. water systems and other ultra-pure liquids.



Features:

- Non-contaminating, non-pigmented virgin Polypropylene or Kynar® (PVDF) material.
- PVC also available, if desired.
- In-line design eliminates "dead-leg" that can harbor bacterial growth and other contamination.
- True union ends enable easy installation and removal.
- Flexible elastomer spool assures accurate readings for pressure or vacuum.
- Bleed port assures trouble-free filling.
- Unique Plast-O-Pure® gasket assures crevice-free sealing of the end connectors.
- Food grade elastomers available on request.
- Various piping connectors are available to adapt to most connection systems existing in the marketplace.

Application:

The Series GGMU gauge guards are designed for ultra-pure liquid systems and specifically to eliminate piping "dead-leg" that can harbor bacterial growth or other contamination. This is in addition to their basic function of keeping system liquid from coming in contact with a pressure (vacuum) gauge or other pressure instrument while still maintaining the accuracy of the gauge or instrument.

Materials of Construction:

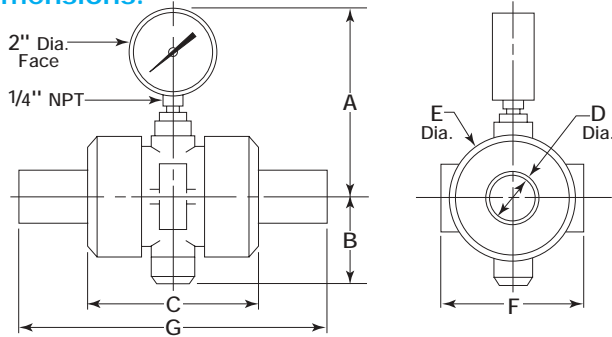
Gauge guard body and external parts are unpigmented virgin polypropylene. Internal wetted parts and end connectors are either virgin polypropylene or Kynar® (PVDF), PVC also available if desired, depending upon the material of the piping system. Elastomers are available in Viton® or EPDM.

SERIES GGMU – ULTRA PURE GAUGE GUARD

Design and Operation:

Series GGMU utilizes a flexible elastomer spool which separates process liquid from gauge or instrument fill liquid. This spool accurately transmits pressure or vacuum from the process liquid to instrument fill liquid which in turn registers on the gauge. A bleed plug enables gauge guard to be totally filled with liquid, thereby eliminating air bubbles which would decrease accuracy of pressure reading. All sealing points of spool and end connectors are sanitary style to eliminate the possibility of any small wetted cavities within the assembly.

Dimensions:



Note: 1/4" NPT instrument connection is standard on all Ultra-Pure gauge guards. For other size requirements consult factory.



GGMU above, shown with Schedule 80 male spigot ends for fusion (Code C3 below) and standard 2" gauge.

Specifications and Model Numbers:

There is a two step process to determine the complete Model No. of an Ultra-Pure gauge guard with the proper end connectors. The model number always begins with GGMU. The following charts will list the choices.

GAUGE GUARD DIMENSIONS						
Size	A	B	C	D	E	F
	in.	mm	in.	mm	in.	mm
1/2"						
3/4"	3.95	100	1.87	47	3.83	97
1"					0.85	22
					2.77	70
					3.20	81
1 1/2"	4.76	121	2.64	67	4.64	118
2"					1.48	38
					4.02	102
					4.05	103

End Connectors:

The overall "G" dimension will vary according to which end connectors are selected. Three standard end connectors are available; one for metric piping, one for Schedule 80 piping, and one for sanitary piping to meet requirements of the major piping systems in the marketplace. End connectors can also be made to custom lengths if required. Each GGMU must be ordered with specific end connectors. Standard 2" Plast-O-Matic gauge included with all gauge guard/end connector models except Model 001. Refer to the chart marked "Second Step - End Connectors".

"G" DIMENSION						
Size	ASAHI & GF (Metric)		GSR (Sloane) Enfield (Sch 80)		Sani-Tech (Sanitary)	
	Code 1, 2 & 5		Code 3		Code 4	
	inches	mm	inches	mm	inches	mm
1/2"	6.75	171	7.05	179	"Mini Size"	
3/4"	6.88	175	6.85	174	8.00	203
1"	6.69	170	6.69	170	7.50	191
1 1/2"	8.50	216	9.25	235	8.15	207
2"	8.50	216	9.25	235	8.43	214

FIRST STEP – GAUGE GUARD ONLY

Basic Model #	Seal Material	Available Gauges Code Range	Thermoplastic Material of Wetted Parts
GGMU	V = Viton	001*	No Gauge
		000	0-30" Hg (vacuum)
		015	0-15 PSI
		030	0-30 PSI
		060	0-60 PSI
	EP = EPDM	100	0-100 PSI
		160	0-160 PSI
		200	0-200 PSI
		PP = Polypropylene	
		PF = Kynar (PVDF)	
PV = Polyvinyl Chloride (PVC)			

*Instructions for filling gauge guard included with GGMU. Fill liquid not included

Example: An Ultra-pure gauge guard with Viton seals, 0-100 gauge, and Kynar (PVDF) wetted parts is Model No. GGMUV100-PF, but this is not the complete number. Proceed to Second Step.

SECOND STEP – END CONNECTORS

System Piping Code		System Source Code	
Code	Nominal Pipe Size	Code	Manufacturer
A	1/2" (20 mm)	1	Asahi (Metric)
B	3/4" (25 mm)	2	GF (Metric)
C	1" (32 mm)	3	IPS
D	1 1/2" (50 mm)	4	Sani-Tech
E	2" (63 mm)	5	GF-BCF (Metric)

Example: The nominal pipe size is 1" and the manufacturer of the piping system is Sani-Tech. The Code numbers are C4. The model number from the first step must be followed by these code number. Final Model Number GGMUV100-PF-C4