

### SERIES GGMU ULTRA PURE GAUGE GUARD

#### Installation and Filling Instructions

Valve Sizes: 1/2", 3/4", 1", 1 1/2" and 2"

##### Installation Instructions

- A. GGMU gauge guards with gauges already attached: Simply attach the unit to the piping system following the pipe manufacturer's joining procedures. Please note the ends of the GGMU can be separated from the body by unthreading the union nuts. Do not remove the bleed plug on the bottom of the unit.

**Caution:** Do not store/inventory factory filled and assembled GGMU ultra pure gauge guards in below freezing (32°F – 0°C) temperatures that will cause distilled water fill liquid to freeze.

- B. GGMU gauge guards without gauges: The above instructions are also applicable. Customer's gauges or other instruments can be mounted to the gauge guard. Both the gauge guard and instrument must be solidly filled (no air bubbles) with a suitable fill liquid\*\*, otherwise a loss of accuracy will result. See filling instructions below.

*NOTE:* GGMU's without gauges are factory-filled with distilled water.

##### Filling Instructions\*\*

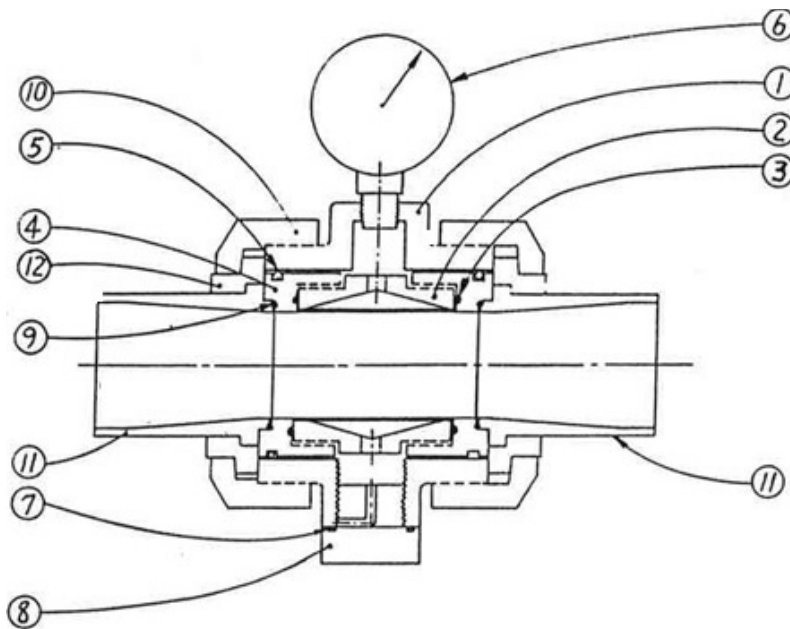
For maximum accuracy, the gauge guard and instrument must be solidly filled with "fill liquid" (no air bubbles). A small air bubble (1/4" dia. or less) should not adversely affect the accuracy of the instrument. The bleed plug is provided to simplify the filling process. Do not attempt to fill the gauge guard while it is installed in the pipeline. Any pressure (even very low pressure) will deflect the sensitive diaphragm and prevent proper filling.

##### Filling Procedure • Step by Step

1. Fill the gauge or instrument with fill liquid and poke a thin wire (where applicable) into the orifice to help any entrapped air bubbles to escape. A syringe with a long needle can be used to add liquid from the bottom of the gauge or instrument hole.
2. Remove the bleed plug and gauge port plug, and let the fill liquid drain.
3. Hold the gauge or instrument upside down so that the fill liquid doesn't drip out. Thread the gauge into the 1/4" NPT guard port. Tighten the 1/4" NPT instrument connection only hand tight. Overtightening will cause breakage of the thermoplastic housing. Teflon tape should be used as a sealant. Wrenches are not required and should not be used.
4. Fill the guard with fill liquid through the bleed plug port until the liquid level is near the top of the threads.
5. Tilt the guard assembly back & forth to help air bubbles to escape. If the liquid level drops, refill to near the top of the threads.
6. Thread the bleed plug into the hole. As it moves downward, excess liquid will escape through the side hole in the bleed plug. Tighten the bleed plug firmly.
7. Install completed assembly into piping system.

\*\*1) Distilled or deionized water is suitable for applications in the ultra pure water industry.

2) Mineral oil is suitable for most other applications. **Caution:** Do not use mineral oil with EPDM seals, use a compatible fill liquid such as glycerin.



### PART NUMBERS

Ref. No.	Qty. Req'd.	Description	Valve Size				
			1/2"	3/4"	1"	1 1/2"	2"
1	1	**	**	**	**	**	**
2	1	Housing Spool	**	**	**	**	**
3	1	Pressure Sensing Spool	**	**	**	**	**
4	2	Retainer Spool	**	**	**	**	**
5	2	Body O-ring	**	**	**	**	**
6	1	Pressure Gauge	See Gauge Chart				
7	1	Bleed Plug O-ring	0021B		0024B		
8	1	Bleed Plug	5174-PP		5178-PP		
9	2	Gasket	5131		5145		
10	2	Union nut	6135-PP		6014-PP		
11	2	GGMU End Conn. Schedule 80 Polypro or PVDF	5203	5207	5185	5227	5228*
11	2	GGMU End Conn. Sanitary End		5263	5264*	5265	5266*
11	2	GGMU End Conn. Metric (PVDF)	5205	5208	5170*	5225*	5226*
11	2	GGMU End Conn. Metric SDR11 Polypro	5205	6689	6690	6691	6692*
12	2	Sleeve	5229-PP		5224		
12	2	Split Sleeve (req'd where marked*)			5282	6097	6382

\*\* not customer serviceable - consult factory for replacement

### GAUGE CHART

Range	Part Number	
	Lower Mount	Center Mount
0 - 15 PSI	P15L	P15C
0 - 30 PSI	P30L	P30C
0 - 60 PSI	P60L	P60C
0 - 100 PSI	P100L	P100C
0 - 200 PSI	P200L	P200C