

P91W SERIES

Dome Loaded, Mity Mite Replacement
Back Pressure Regulator



The dome loaded Premier P91W Series serves as a replacement for the Mity Mite 91W, and features a new and improved diaphragm seal. The P91W Series dome-loaded, back pressure regulator operates to maintain a constant upstream pressure by sensing the upstream pressure and limiting it through constant throttling. The dome must be charged (externally) from a gas pressure source; two NPT connections are available (1 for dome loading and the second for an optional gauge). The P91W Series features a control pressure range of 100-2000 PSIG (6.89 - 137.9 bar) / 100-3000 PSIG (6.89 - 206.84 bar) for stainless steel models, Gylon® 3522 diaphragm, Cv: 0.38 or 0.17 and can be used to control both gases and liquids as compatible with the materials of construction.

FEATURES

- New and improved PTFE diaphragm seal
- External dome load
- Cv: 0.38 or 0.17
- Machined bar stock body, bonnet and piston eliminates porosity found in castings
- Optional precharge isolation valves available

SOME APPLICATIONS WILL REQUIRE A CUSTOM SOLUTION.
CONTACT PREMIER INDUSTRIES TO REQUEST A MODIFICATION
OR A CUSTOM DESIGN.

SPECIFICATIONS

- **CONTROL PRESSURE RANGE:**
 - 100-2000 PSIG / 6.89 - 137.9 bar
(aluminum body)
 - 100-3000 PSIG / 6.89 - 206.8 bar
(stainless steel or hastelloy body options)
- **FLOW (Cv):** 0.38 or 0.17
- **AMBIENT OPERATING TEMPERATURE RANGE:**
 - -65°F/-54°C to 200°F/93°C (PTFE)

MATERIALS OF CONSTRUCTION

- **BODY OPTIONS:**
 - 2024-T4 Aluminum
 - 316 Stainless Steel
 - Hastelloy
- **BONNET:** 2024-T4 Aluminum
- **DIAPHRAGM:** Gylon® 3522
- **O-RING, NON-WETTED:** Viton®

PORTING

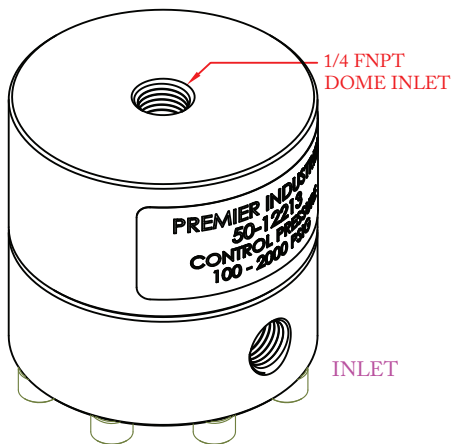
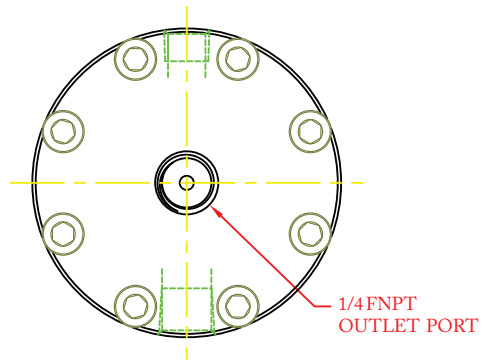
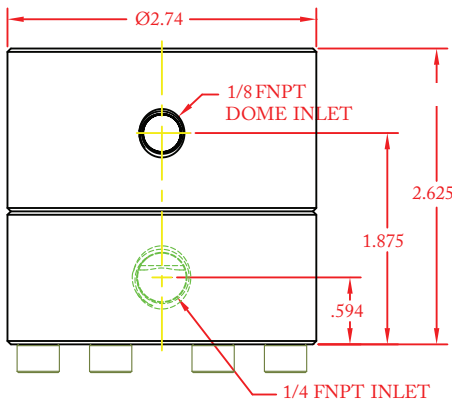
- **INLET PORTING:**
 - 1/4" FNPT
- **OUTLET PORTING:**
 - 1/4" FNPT
- **EXTERNAL DOME LOADING/
GAUGE CONNECTIONS:**
 - 1/4" FNPT and 1/8" FNPT (interchangeable)

OPTIONS

- Precharge isolation valves
- Gauges
- Private label

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Gylon® is a registered trademark of Garlock, Inc.

PART NUMBER: 50-12253



PART #	1	-	2
50-12253		-	

1	BODY MATERIAL (MAX. INLET PRESSURE)
Blank	2024-T4 Aluminum (100-2000 psig / 6.89 - 137.9 bar)
S	316 Stainless Steel (100-3000 psig / 6.89-206.8 bar)
H	Hastelloy (100-3000 psig / 6.89-206.8 bar)
2	Cv RATING
Blank	0.38
1	0.17

Contact factory for material certifications.
Fees may apply.