



MITY MITE REPLACEMENT DOME LOADED *Back Pressure Regulators*

P91W SERIES

PREMIER INDUSTRIES

1590 99th Ln NE,
Minneapolis, MN 55449
763-786-4020



MADE IN THE USA

Minneapolis, MN

DESCRIPTION

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, PTFE 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

The dome loaded Premier P91W Series back pressure regulator's design is remarkably flexible.

Contact Premier Industries for a custom dome loaded Premier P91W Series back pressure regulator to meet your exact needs.

D/C: 151910



MITY MITE REPLACEMENT DOME LOADED *Back Pressure Regulators*



SPECIFICATIONS

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

MATERIALS OF CONSTRUCTION

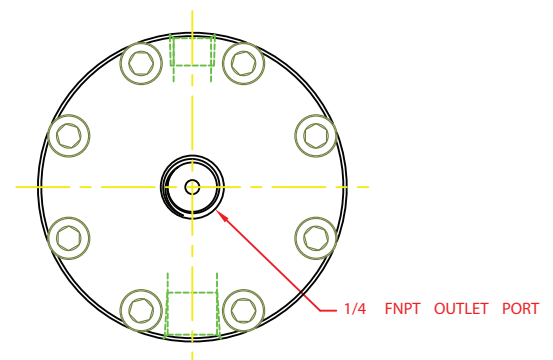
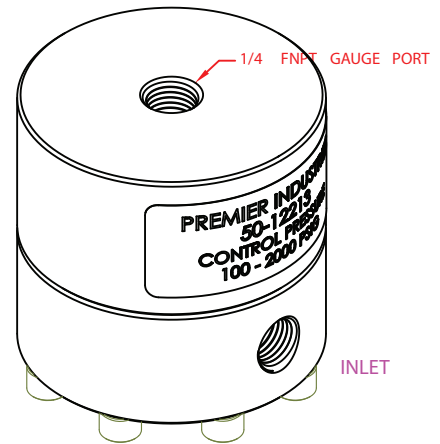
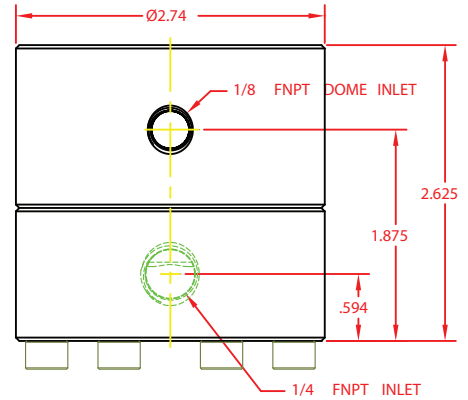
- **BODY:**
 - 2024-T4 Aluminum
 - 316 Stainless Steel
- **BONNET:** 2024-T4 Aluminum
- **DIAPHRAGM:** PTFE
- **O-RING, NON-WETTED:** Viton®

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



(Part number: 50-12253 shown above)



**MITY MITE REPLACEMENT
DOME LOADED**
Back Pressure Regulators



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)
2	Cv RATING
Blank	0.38
1	0.17