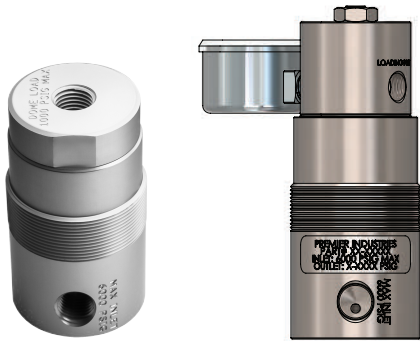


3500AL SERIES

Air Loaded, High Pressure, Pneumatic
Pressure Reducing Regulators



*Non-venting model
with bias spring*

Premier 3500AL Series air loaded, pressure reducing regulators are your affordable and compact solution for high pressure, pneumatic applications. These rugged, piston sensed regulators are rated for 6000 PSIG (413.69 bar) and C_v : 0.06 or 0.2. With three available load ratios, 2:1, 3:1, and 4:1, and an optional bias spring, a vast range of outlet pressures can be controlled (*maximum outlet pressure of 3670 PSIG / 53.04 bar with a 4:1 ratio + bias spring*). Premier 3500AL regulators feature captured venting to safely pipe away expelled media. With a variety of construction material options, load ratios, porting configurations, and mounting options, you can be confident the Premier 3500AL Series air loaded, pressure reducing regulator will integrate seamlessly into your pneumatic application.

FEATURES

- Compatible with electro-pneumatic controllers & manual pilot regulators
- 6000 PSIG / 413.69 bar max inlet
- Three load ratios: 2:1, 3:1, and 4:1 (Outlet:Loader)
- Captured venting standard
- Optional non-venting design with bias spring (*4X air load + 0-150 PSIG bias*)
- C_v 0.06 or 0.2
- Compact design
- Machined bar stock body and piston eliminates porosity found in castings
- Bottom mount (*standard*)
- Optional panel mounting
- Two or four port designs available

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

SPECIFICATIONS

- **MAX INLET PRESSURE:**
 - 6000 PSIG (413.69 bar)
- **MAX LOADING PRESSURE:**
 - 1000 PSIG (68.95 bar)
- **OUTLET:LOADER PRESSURE RATIO:**
 - 2:1**
 - 3:1**
 - 4:1**
 - 4:1 + 0-150 PSIG bias**

** Approximately 2 psig additional dome load per 100 psi inlet pressure to maintain outlet/loader ratio on Cv 0.2 design. Approximately 1.5 psig additional dome load per 100 psi inlet pressure to maintain outlet/loader ratio on Cv 0.06 design.

- **Cv:** 0.06 or 0.2
- **LEAK RATE:** Bubble tight N₂

MATERIALS OF CONSTRUCTION

- **BODY OPTIONS:**
 - 6061-T6 Aluminum, Clear Anodized (standard)
 - 316 Stainless Steel
 - Monel® 400
- **OTHER WETTED COMPONENTS:**
 - 316 Stainless Steel, 316 Stainless Steel body option
 - Monel, Monel body option
 - 300 Series Stainless Steel & 17-4 Stainless Steel
All other body options
- **MAIN VALVE SEAT OPTIONS:**
 - PEEK®
 - PCTFE
 - Vespel®
- **O-RING SEAL /BACKUP-RNG OPTIONS:**
 - Nitrile
 - Viton®
 - EPDM
 - Neoprene
- **MAIN VALVE FILTER:**
 - 15 micron, 316 Stainless Steel
- **PANEL MOUNTING NUTS (OPTIONAL):**
 - 6061-T6 Aluminum, Nickel Plated
- **STANDARD LUBRICANT:**
 - Krytox® GPL 206

PORTING

- **STANDARD INLETS:** 1/4" FNPT
- **STANDARD OUTLETS:** 1/4" FNPT
- **LOADING PORT:** 1/4" FNPT, (1/8-27 FNPT w/ bias)
- **VENT PORT:** 1/4" FNPT
- **GAUGE PORTS:** 1/8" FNPT

OPTIONS

- Gauges
- Private label
- Panel mounting nuts (X2 required)
(Order Separately: P/N 50-11803)
- Optional non-venting design with bias spring
(4X air load + 0-150 PSIG bias)
- For custom materials of construction
(monel®, hastelloy® etc.) please contact factory.

PEEK is a registered trademark of Victrex PLC.

Hastelloy is a registered trademark of Haynes International, Inc.

Vespel and Viton are registered trademarks of E.I.duPont de Nemours and Company.

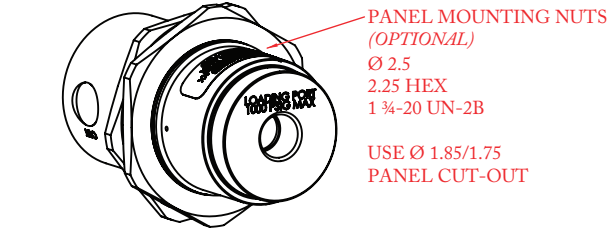
Monel is a registered trademark of Special Metals Corporation.

Krytox® is a registered trademark of The Chemours Company FC, LLC.

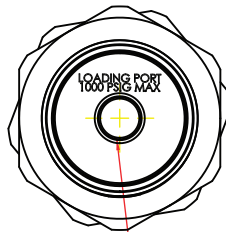
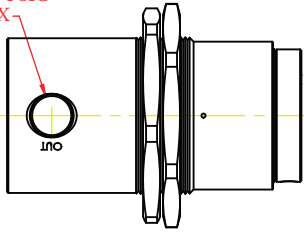
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**Air Loaded, High Pressure, Pneumatic
Pressure Reducing Regulators**

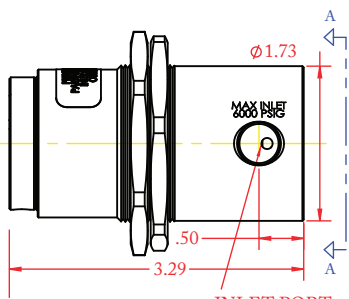
PART NUMBER 50-12306
STANDARD DESIGN



OUTLET PORT
1/4-18 FNPT
1000 PSIG
MAX

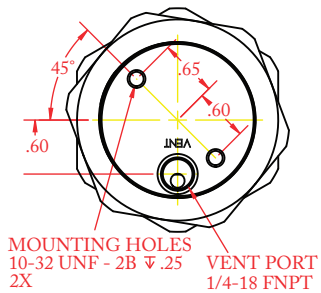


LOADING PORT
1/4-18 FNPT



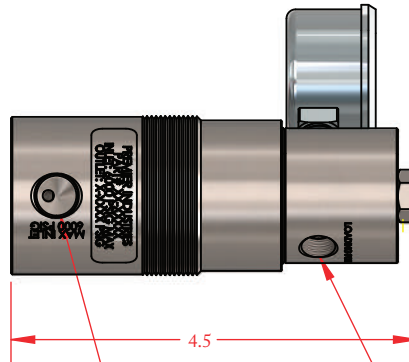
INLET PORT
1/4-18 FNPT
6000 PSIG MAX

VIEW A-A



PART NUMBER 50-12398

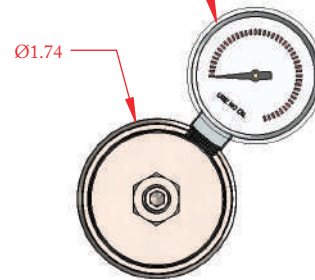
NON-VENTING DESIGN W/ BIAS SPRING SHOWN BELOW



INLET
1/4-18 FNPT
6000 PSIG MAX

LOADING PORT
1/8-27 FNPT
1000 PSIG MAX RATED,
LIMIT LOADER PRESSURE
TO GAUGE MAXIMUM.
RANDOM ORIENTATION

LOADING PRESSURE GAUGE,
Ø1.50, RANDOM ORIENTATION



3500AL SERIES

Air Loaded, High Pressure, Pneumatic
Pressure Reducing Regulators

PART #:	-	1	2	-	3	4	5	-	6	7
50-12306	-			-				-		

1	BODY MATERIALS & FINISH
1	6061-T6 Aluminum Clear Anodize
3	316 Stainless Steel Clean per spec #515
5	Monel® 400
2	PORTING
1	2 port
2	4 port
3	O-RING MATERIAL
1	Nitrile
2	Viton®
3	EPDM
4	Neoprene

4	SEAT MATERIAL
1	PEEK®
2	PCTFE
3	Vespel®
5	FLOW (Cv)
1	0.06
2	0.2
6	GAUGES
1	None
2	Include gauges (4 port only)

PEEK® is a registered trademark of Victrex PLC
Vespel® and Viton® are registered trademarks of E.I. duPont de Nemours and Company
For custom materials of construction (monel®, hastelloy® etc.) please contact factory.

7	LOADER RATIO
2	2:1** (2000 psig max outlet)
3	3:1** (3000 psig max outlet)
4	4:1** (4000 psig max outlet)
<p><i>** Approximately 2 psig additional dome load per 100 psi inlet pressure to maintain outlet/loader ratio on Cv 0.2 design. Approximately 1.5 psig additional dome load per 100 psi inlet pressure to maintain outlet/loader ratio on Cv 0.06 design.</i></p>	
MODIFICATIONS	
BLANK	NONE
AC	Krytox 240AC lubricant

Contact factory for material certifications. Fees may apply.

Monel is a registered trademark of Special Metals Corporation.