



## HIGH FLOW PISTON SENSED *Pressure Reducing Regulators*



### PREMIER INDUSTRIES

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Minneapolis, MN 55449  
763-786-4020



**MADE IN THE USA**  
*Minneapolis, MN*

### DESCRIPTION

Premier 2800P Series regulators are single stage regulators with a balanced stem for increased outlet pressure stability. These piston sensed, high flow regulators feature inlet pressures up to 3000 PSIG (206.84 bar), and Cv 2.0 or 1.0. Premier 2800P Series regulators are used to regulate to a broad range of corrosive and non-corrosive media (based on materials of construction).

### FEATURES

- Significantly reduced supply pressure effect / increased stability in outlet pressure
- High flow capacity (Cv): 2.0 or 1.0
- Piston sensed
- Non-venting
- Variety of materials available
- Machined bar stock body eliminates porosity found in castings
- Very competitive pricing

# 2800P SERIES

## HIGH FLOW PISTON SENSED Pressure Reducing Regulators

### SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:** 3000 PSIG (206.84 bar)
- **CONTROL PRESSURE RANGES:**
  - 0-120 PSIG (0 - 8.27 bar)
  - 0-125 PSIG (0 - 8.62 bar)
  - 0-150 PSIG (0 - 10.34 bar)
  - 0-250 PSIG (0 - 17.24 bar)
  - 0-350 PSIG (0 - 24.13 bar)
  - 0-500 PSIG (0 - 34.47 bar)
- **FLOW (Cv):** 2.0 (standard) 1.0 optional

### MATERIALS OF CONSTRUCTION

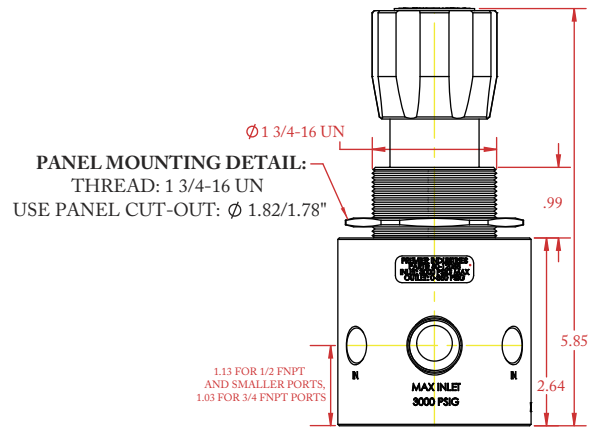
- **BODY:**
  - 6061-T6 Aluminum / Clear Anodized
  - SAE 360 Brass / Nickel Plated
  - 316 Stainless Steel
- **BONNET:**
  - 6061-T6 Aluminum/Nickel Plated (finish to match wetted material finish)
  - 303 Stainless Steel
  - 316 Stainless Steel
- **PISTON:**
  - 303 Stainless Steel
  - 316 Stainless Steel
- **MAIN VALVE SEAT:**
  - PEEK®
  - PCTFE
- **ELASTOMER SEALS:**
  - BUNA-N
  - Viton®
  - EPDM
- **MAIN VALVE PARTS:**
  - 303 stainless steel and 316 stainless steel wetted alloys (used in aluminum and brass body options)
  - 316 stainless steel bonnet & 316 stainless steel wetted alloys (used in 316 stainless steel body option)

### PORTING

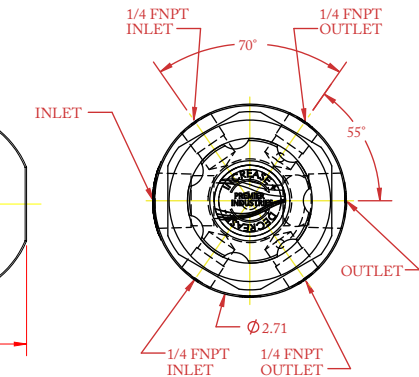
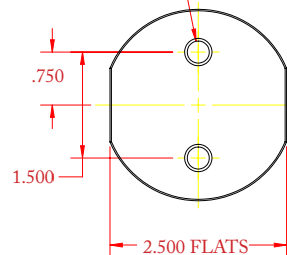
- **INLET/OUTLET OPTIONS:**
  - 1/2" FNPT
  - 3/8" FNPT
  - 3/4" FNPT
- **GAUGES:** 1/4-18 FNPT

### OPTIONS

- Gauges
- Adjustable hand knob, 500 PSIG max outlet (P/N: 50-12230)
- Tamper resistant acorn nut, 500 PSIG max outlet (P/N: 50-12231)
- Relief valve
- Private label
- Panel mounting nuts (1 or 2) P/N 50-11803

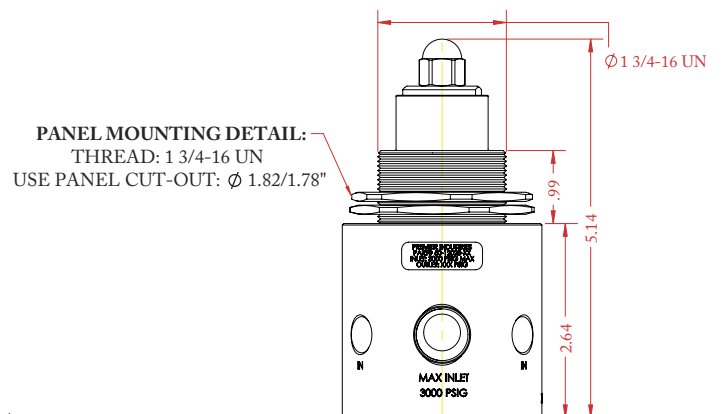


**MOUNTING HOLES**  
 3/8-16 UNC-2B  $\nabla$  .750  
 2X



(Optional surface mounting option shown above)

(P/N: 50-12230 shown above)  
 500 PSIG max outlet



(Part number 50-12231 shown above  
 with tamper resistant acorn nut)  
 500 PSIG max outlet



# HIGH FLOW PISTON SENSED Pressure Reducing Regulators



## STANDARD HAND KNOB

PART #	-	1	2	3	4	5	6	7	8	-	MODS
50-12230	-									-	

1	BODY & BONNET MATERIAL (Wetted Materials)
1	6061-T6 Aluminum, Clear Anodize (303 Stainless Steel & 316 Stainless Steel)
2	SAE 360 Brass, Nickel Plated (303 Stainless Steel & 316 Stainless Steel)
3	316 Stainless Steel, Clean per spec #515 (316 Stainless Steel & Nitronic 60)
2	ELASTOMER SEALS
1	Buna-n
2	Viton®
3	EPDM
3	SEAT MATERIAL
1	PCTFE
2	PEEK®

4	OUTLET PRESSURE
1	0-500 PSIG (0 - 34.47 bar)
2	0-125 PSIG (0 - 8.62 bar)
3	0-120 PSIG (0 - 8.27 bar)
4	0-350 PSIG (0 - 24.13 bar)
5	0-150 PSIG (0 - 10.34 bar)
6	0-250 PSIG (0 - 17.24 bar)
5	GAUGES
1	None
2	Include gauges
<i>Gauges not available on C &amp; F porting configurations, outlet gauge only available on G &amp; I porting configurations.</i>	
6	PANEL MOUNTING NUT
0	None
1	1 mounting nut
2	2 mounting nuts

7	PORTING CONFIGURATION
A	6 port
B	4 port
C	2 port
D	6 port
E	4 port
F	2 port
G	4 port
H	4 port
I	4 port
J	4 port
Z	2 port

8	MOUNTING HOLES
0	None
1	Surface mount
<i>Contact Premier for mounting options</i>	
MODS	
L	Cv 1.0 (Cv 2.0 standard)

PEEK® is a registered trademark of Victrex PLC  
 Viton® is a registered trademark of E.I.duPont de Nemours & Company  
 \*All ports are 1/4" FNPT unless otherwise indicated on the porting configurations.  
 Contact factory for material certifications. Fees may apply.



# HIGH FLOW PISTON SENSED Pressure Reducing Regulators



## PRESET OUTLET / ACORN NUT

PART #	-	1	2	3	4	5	6	7	8	-	MODS
50-12231	-									-	

1	BODY & BONNET MATERIAL (Wetted Materials)
1	6061-T6 Aluminum, Clear Anodize <i>(303 Stainless Steel &amp; 316 Stainless Steel)</i>
2	SAE 360 Brass, Nickel Plated <i>(303 Stainless Steel &amp; 316 Stainless Steel)</i>
3	316 Stainless Steel, Clean per spec #515 <i>(316 Stainless Steel &amp; Nitronic 60)</i>
2	ELASTOMER SEALS
1	Buna-n
2	Viton®
3	EPDM
3	SEAT MATERIAL
1	PCTFE
2	PEEK®

4	OUTLET PRESSURE
1	0-500 PSIG <i>(0 - 34.47 bar)</i>
2	0-125 PSIG <i>(0 - 8.62 bar)</i>
3	0-120 PSIG <i>(0 - 8.27 bar)</i>
4	0-350 PSIG <i>(0 - 24.13 bar)</i>
5	0-150 PSIG <i>(0 - 10.34 bar)</i>
6	0-250 PSIG <i>(0 - 17.24 bar)</i>
5	GAUGES
1	None
2	Include gauges
6	PANEL MOUNTING NUT
0	None
1	1 mounting nut
2	2 mounting nuts

7	PORTING CONFIGURATION
A	<p>1/4 FNPT 1/2 FNPT ← 1/4 FNPT 1/2 FNPT 1/4 FNPT 6 port</p>
B	<p>1/4 FNPT 1/2 FNPT ← 1/4 FNPT 1/2 FNPT 1/4 FNPT 4 port</p>
C	<p>1/2 FNPT ← 1/2 FNPT 2 port</p>
D	<p>1/4 FNPT 3/8 FNPT ← 1/4 FNPT 3/8 FNPT 1/4 FNPT 6 port</p>
E	<p>1/4 FNPT 3/8 FNPT ← 1/4 FNPT 3/8 FNPT 4 port</p>
F	<p>3/8 FNPT ← 3/8 FNPT 2 port</p>
G	<p>1/4 FNPT 3/4 FNPT ← 1/4 FNPT 3/4 FNPT 1/4 FNPT 4 port</p>
H	<p>1/4 FNPT 3/4 FNPT ← 1/4 FNPT 3/4 FNPT 4 port</p>
I	<p>1/4 FNPT 1/2 FNPT ← 1/4 FNPT 1/2 FNPT 1/4 FNPT 4 port</p>
8	MOUNTING HOLES
0	None
<i>Contact Premier for mounting options</i>	

MODS	
XXX	Preset outlet pressure (XXX) <i>E.g. 075 = 75 PSIG</i> <i>**The end user is responsible to specify a preset outlet pressure. If an outlet pressure is not specified, the pressure will be left unset. Never exceed the maximum outlet pressure specified on the part number.</i>
L	Cv 1.0 <i>(Cv 2.0 standard)</i>
<i>Separate multiple modifications with a dash</i> <i>e.g.</i> <i>125 psig preset outlet pressure w/ Cv 1.0 = 125-L</i>	

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