



TWO STAGE DIAPHRAGM SENSED *Pressure Reducing Regulators*

4500 SERIES

PREMIER INDUSTRIES

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Minneapolis, MN 55449
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MADE IN THE USA

Minneapolis, MN

DESCRIPTION

Premier 4500 Series regulators share the same features as Premier 2500 Series regulators, except, the 4500 Series regulators two stage design offers more precise outlet pressure control and a significantly decreased supply pressure effect (*decaying inlet characteristic*). These diaphragm sensed regulators control inlet pressures up to 3000 PSIG (206.84 bar); they are available with a flow capacity of Cv 0.08 or 0.2, and either a stainless steel or neoprene diaphragm. Premier 4500 Series regulators are available in 316 stainless steel, brass, nickel plated brass, and aluminum.

Typical applications include: cylinder bottle applications, gas and liquid chromatography, high purity carrier gases, zero, span, and calibration gases, lecture bottle applications, research and development labs, low flow purge systems, and industrial controls.

FEATURES

- Very competitive pricing
- Compact versions available with body diameter of 1.5 in. x 5.5 in. long
- Machined bar stock body eliminates porosity found in castings
- Reduced particle contamination with 15 micron valve cartridge filter
- Stable set pressures as cylinder pressure is reduced
- Interstage relief valve
- Stainless diaphragm option minimizes inboard diffusion of air into regulator
- Captured bonnet vent (*standard*)

*The Premier 4500 Series pressure reducing regulator's design is remarkably flexible.
Contact Premier Industries for a custom 4500 Series regulator to meet your exact needs.*

4500 SERIES

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SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:** 3000 PSIG (206.84 bar)
- **CONTROL PRESSURE RANGES:**
 - 0-10 PSIG (0 - 0.69 bar)
 - 0-25 PSIG (0 - 1.72 bar)
 - 0-30 PSIG (0 - 2.07 bar)
 - 0-50 PSIG (0 - 3.45 bar)
 - 0-100 PSIG (0 - 6.89 bar)
 - 0-250 PSIG (0 - 17.24 bar)
- **FLOW (Cv):** 0.08, or 0.2

MATERIALS OF CONSTRUCTION

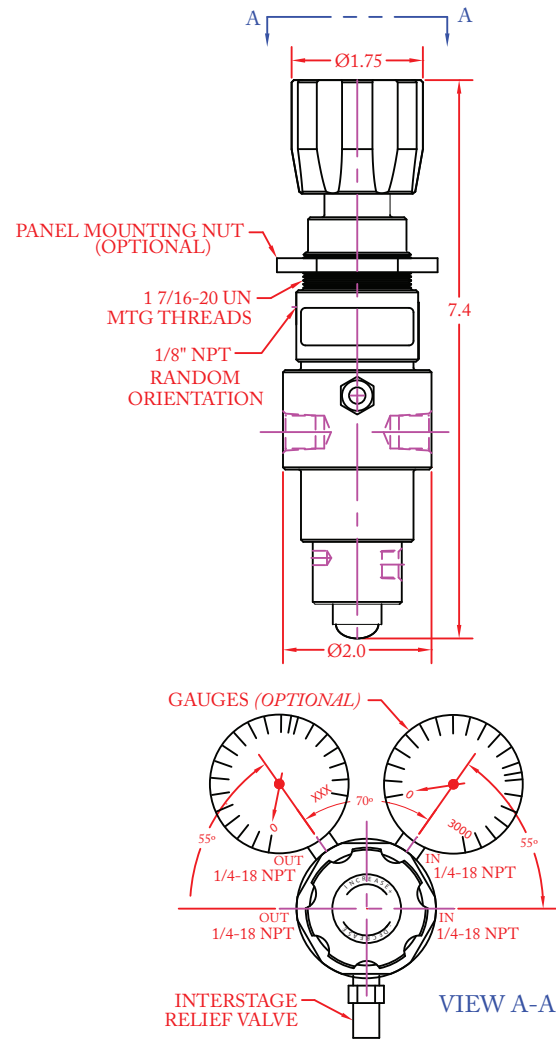
- **BODY OPTIONS:**
 - SAE 360 Brass, Bright Dip
 - SAE 360 Brass, Electroless Nickel Plated
 - 316 Stainless Steel
 - 6061-T6 Aluminum, Clear Anodized
- **BONNET OPTIONS:**
 - SAE 360 Brass, Bright Dip
 - SAE 360 Brass, Electroless Nickel Plated
 - 303 Stainless Steel
 - 6061-T6 Aluminum, Clear Anodized
- **DIAPHRAGM OPTIONS:**
 - 316 Stainless Steel
- **STAINLESS DIAPHRAGM SEAL:** PTFE
- **MAIN VALVE SEAL:** PTFE
- **VALVE SEAT:** PTFE
- **FIRST STAGE RELIEF VALVE SEAL:** PTFE

PORTING

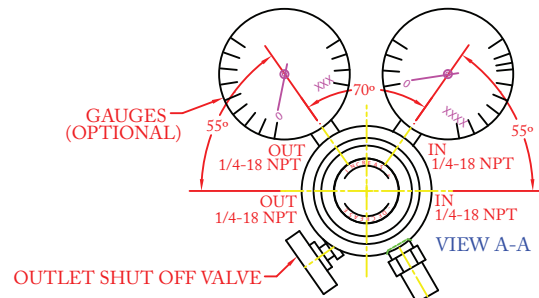
- **INLET PORTING OPTIONS:**
 - 1/8" FNPT
 - 1/4" FNPT
 - All CGA Connections Available:
 - CGA 165, 180, 320, 350, 510, 540, 580, etc.
- **OUTLET PORTING OPTIONS:**
 - 1/8" FNPT
 - 1/4" FNPT

OPTIONS

- Gauges
- Piston sensed first stage
- Hand knob styles
- Panel mounting bonnet & nut(s)
- Outlet shut off valve
- Private labeling
- Anodized colors for aluminum bodies & bonnets



VIEW FOR OPTIONAL INTERNAL OUTLET SHUT OFF VALVE



(Part number: 50-11494 shown in drawings above)








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PART #	-	1	2	3	4	5	6	7	8
50-11494	-								

1	BODY + BONNET MATERIAL & FINISH
2	316 Stainless Steel, cleaned per spec #515 <i>SAE 360 Brass, Nickel plated</i>
3	6061-T6 Aluminum, clear anodized <i>6061-T6 Aluminum, clear anodized</i>
5	SAE 360 Brass, nickel plated <i>SAE 360 Brass, nickel plated</i>
8	SAE 360 Brass, bright dip <i>SAE 360 Brass, bright dip</i>
9	316 Stainless Steel, cleaned per spec #515 <i>303 Stainless Steel cleaned per spec #515</i>
2	OUTLET PRESSURE <i>(outlet gauge range, if supplied)</i>
0	0 - 10 PSIG / 0 - 0.69 bar <i>(per application)</i>
1	0 - 25 PSIG / 0 - 1.72 bar <i>(0-30 PSIG gauge)</i>
2	0 - 50 PSIG / 0 - 3.45 bar <i>(0-60 PSIG gauge)</i>
3	0 - 100 PSIG / 0 - 6.89 bar <i>(0-160 PSIG gauge)</i>
4	0 - 250 PSIG / 0 - 17.24 bar <i>(0-400 PSIG gauge)</i>
5	0 - 30 PSIG / 0 - 2.07 bar

3	GAUGES <i>(optional)</i>
Blank	no gauges <i>(standard)</i>
A	2" diameter, inlet only, stainless steel wetted gauges
B	2" diameter, outlet only, brass wetted gauges
C	2" diameter, inlet & outlet, stainless steel wetted gauges
F	2" diameter, inlet & outlet, brass wetted gauges
J	2" diameter, inlet & outlet, brass wetted/ chrome plated gauges
4	PANEL MOUNTING NUT <i>(optional)</i>
5	Mounting nut
8	No nut <i>(standard)</i>
5	PORTING OPTIONS
C	 <i>(Standard, 1/4" inlet, 1/4" outlet)</i>
D	
I	
N	
O	

6	INTERNAL OUTLET SHUT OFF VALVE <i>(optional)</i>
Blank	None <i>(standard)</i>
S	Internal outlet shut off valve
7	PORT SIZE
Blank	1/4" ports <i>(standard)</i>
8	1/8" ports
8	MAIN VALVE Cv
Blank	Cv 0.08 <i>(standard)</i>
Y	Cv 0.20 w/o filter <i>(hydraulic service)</i>
Z	Cv 0.20