

2100 SERIES

Compact, Diaphragm Sensed
Back Pressure Regulators



Premier 2100 Series Back Pressure Regulators are precision, diaphragm-sensed regulators designed for highly repeatable pressure control in industrial, laboratory, and R&D applications. The series provides relief pressures up to 500 PSIG (34.5 BAR) and features Elgiloy® and stainless steel diaphragms for reliable performance. Available in a variety of materials, the Premier 2100 Series is suitable for regulating a broad range of process media.

FEATURES

- Max relief pressure: 500 PSIG (34.5 BAR)
- Elgiloy® or stainless diaphragm
- Cv: 0.14, or 0.2
- Optional metal to metal seal ensures gas purity and integrity
- Very competitive pricing
- Machined bar stock body, and bonnet eliminates porosity found in castings
- Models are available for both corrosive and non-corrosive service
- Numerous optional features available

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

SPECIFICATIONS

- **MAXIMUM CONTROL PRESSURE:**
 - 500 PSIG (34.5 bar)
- **FLOW (Cv):** 0.14, or 0.2

MATERIALS OF CONSTRUCTION

- **BODY OPTIONS:**
 - 316 Stainless Steel
 - 303 Stainless Steel
 - SAE 360 Brass
 - Duplex 2205
- **BONNET OPTIONS:**
 - 303 Stainless Steel
 - 2024 Aluminum
- **DIAPHRAGM:**
 - Elgiloy® (P/N: 50-11998, 50-11998A)
 - 316 Stainless Steel (P/N: 50-11187)
- **DIAPHRAGM SEAL :**
 - PTFE
- **VALVE SEAT:**
 - PFA
- **O-RING OPTIONS:**
 - Viton®
 - BUNA-N
 - EPDM
 - PTFE

PORTING

- **STANDARD INLET:**
 - 1/4" FNPT
- **OPTIONAL INLETS:**
 - 1/4" SAE AS5202 (P/N: 50-11998A)
 - 1/8" FNPT (P/N: 50-11187)
- **STANDARD OUTLET:**
 - 1/4" FNPT
- **OPTIONAL OUTLETS:**
 - 1/4" SAE AS5202 (See P/N: 50-11998A)
 - 1/8" FNPT (P/N: 50-11187)
- **OPTIONAL INLET GAUGE PORT:**
 - 1/8" FNPT

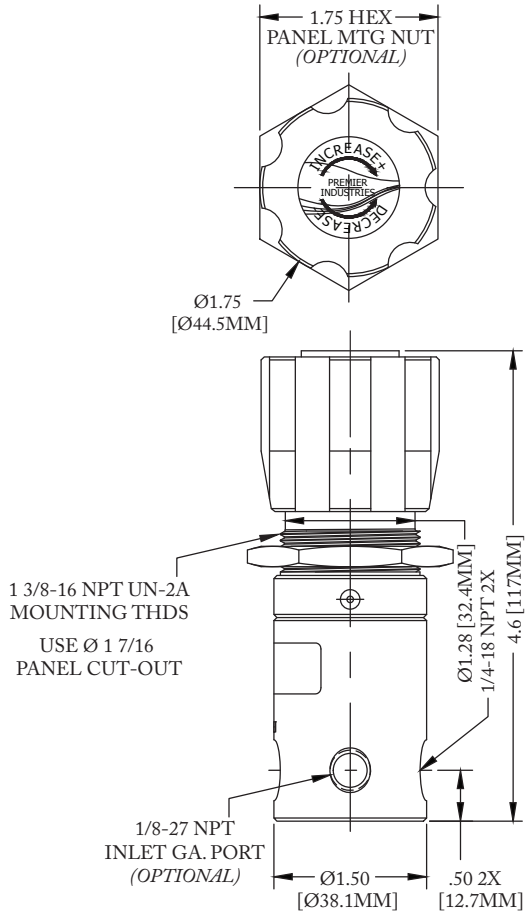
OPTIONS

- Gauges
- Tamper resistant acorn nut
- Panel mounting nut (P/N: 50-11305)
- Private Label

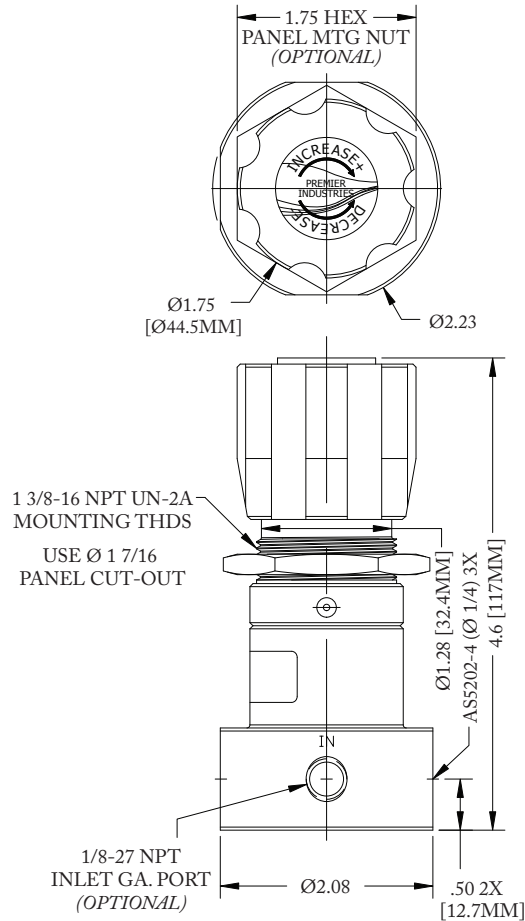
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Elgiloy® is a registered trademark of Elgiloy Specialty Metals Division, Combined Metals of Chicago L.L.C.

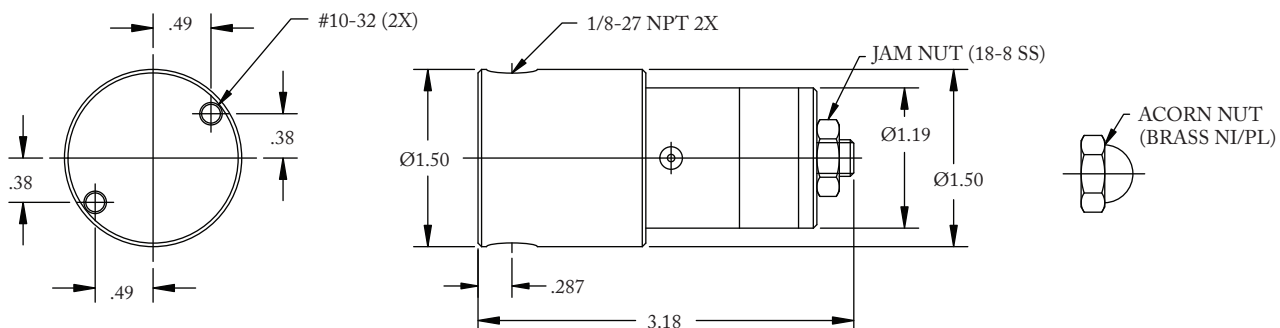
PART NUMBER: 50-11998
STANDARD DESIGN,
1/4" FNPT INLET/OUTLET PORTS



PART NUMBER: 50-11998A
1/4" SAE AS5202 INLET/OUTLET PORTS



PART NUMBER: 50-11998A
1/8" FNPT INLET/OUTLET PORTS



PART #	-	1	2	3	-	4 5	-	6 7	-	MODS
50-11998	-				-		-		-	

1/4" FNPT INLET /
OUTLET PORTS

1	BODY/BONNET MATERIALS (MAX. INLET PRESSURE)
B	SAE 360 BRASS (BODY) 2024 ALUMINUM (BONNET)
0	316 STAINLESS STEEL (BODY) 303 STAINLESS STEEL (BONNET)
1	303 STAINLESS STEEL (BODY & BONNET)
2	DUPLEX 2205 (BODY) 303 STAINLESS STEEL (BONNET)
2	MAX CONTROL PRESSURE
B	25 PSIG / 1.72 BAR
A	50 PSIG / 3.45 BAR
1	100 PSIG / 6.89 BAR
2	250 PSIG / 17.24 BAR
3	300 PSIG / 20.68 BAR
5	500 PSIG / 34.47 BAR
3	FLOW (Cv)
1	Cv 0.14
2	Cv 0.2

4 5	O-RING SEALS
00	BUNA-N
02	VITON®
03	PTFE
05	EPDM
6 7	INLET GAUGE PORT (1/8" FNPT, OPTIONAL)
BLANK	NONE
PN	PORT ONLY, NO GAUGE
PO	PORT WITH 60 PSI GAUGE
P1	PORT WITH 100 PSI GAUGE
P2	PORT WITH 200 PSI GAUGE
P6	PORT WITH 600 PSI GAUGE

MODIFICATIONS	
BLANK	NONE
J	JAMB NUT (NO KNOB)
N	PANEL MOUNTING NUT

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Contact factory for material certifications.
Fees may apply.

PART #	-	1	2	3	-	4	5	-	6	7	-	MODS
50-11998A	-				-			-			-	

1/4" SAE AS5202
INLET / OUTLET PORTS

1	BODY/BONNET MATERIALS (MAX. INLET PRESSURE)
B	SAE 360 BRASS (BODY) 2024 ALUMINUM (BONNET)
0	316 STAINLESS STEEL (BODY) 303 STAINLESS STEEL (BONNET)
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BLANK	NONE
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Back Pressure Regulators

PART #	-	1	2	3
50-11187	-			

1/8" FNPT INLET / OUTLET PORTS
PRESET RELIEF PRESSURE: 0-500 PSIG
VITON O-RINGS

1	BODY MATERIAL
0	316 STAINLESS STEEL
1	303 STAINLESS STEEL
2	SAE 360 BRASS
2	FLOW (Cv)
1	Cv 0.14
2	Cv 0.2
3	NUT
0	JAM NUT
1	ACORN NUT

CONTACT FACTORY FOR
MATERIAL CERTIFICATIONS.
FEES MAY APPLY.