

3123AL SERIES

Air loaded, High Pressure, 15000 PSIG MAX
Back Pressure Regulators



Premier 3123AL Series air loaded, piston sensed, single stage, high pressure, back pressure regulators are rated for control pressures up to 15000 PSIG (*1034.21 bar*), and Cv 0.06, 0.14, or 0.20.

Premier 3123AL Series regulators are designed for compatibility with electropneumatic controllers, enabling piloted pressure control from an inert gas at low pressures (*100 psig / 6.89 bar max air load*).

Premier 3123AL Series regulators are used to regulate a broad range of non-corrosive and corrosive media (based on materials of construction).

FEATURES

- Compatible with electro-pneumatic controllers
- 15000 PSIG (*1034.21 bar*) MAX
- Cv 0.06, 0.14, or 0.20
- Economical pricing
- Machined bar stock body, bonnet and piston eliminates porosity found in castings

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

SPECIFICATIONS

- **MAX INLET PRESSURE:**
 - REGULATOR:
 - 15000 PSIG / 1034.21 bar (*stainless steel*)
 - AIR ACTUATOR:
 - 100 PSIG (*6.89 bar*)
- **CONTROL PRESSURE RANGES:**
 - 300-15000 PSIG (*20.68 - 1034.21 bar*)
Diameter: 0.312"
Area: 0.0765 in²
*Ratio: 164/1 ***

*** 4.0" diameter diaphragm
Diaphragm area: 12.5664 in²*

- **FLOW (C_v):** 0.06, 0.14, or 0.20
- **OPERATING TEMPERATURE:**
 - -15°F/-26°C to 165°F/74°C (BUNA-N)
 - -4°F/-20°C to 165°F/74°C (Viton®)
 - -65°F/-54°C to 165°F/74°C (EPDM)
 - 0°F/-17°C to 165°F/74°C (KALREZ®)
 - 15°F/-9°C to 165°F/74°C (ALFAS)
 - -50°F/-45°C to 165°F/74°C (Nitrile, Low-temp)

MATERIALS OF CONSTRUCTION

- **BODY OPTIONS:**
 - 316 Stainless Steel
- **HOUSING, AIR ACTUATOR:**
 - 6061-T6 Aluminum, Clear Anodized
- **DIAPHRAGM, AIR ACTUATOR:**
 - Neoprene, nylon reinforced
- **WETTED PARTS, OTHER:**
 - 316 Stainless Steel,
 - 17-4 Stainless Steel
 - PH15-7Mo Stainless Steel
- **O-RING SEALS:**
 - Buna-N
 - Aflas®
 - Viton®
 - EPDM
 - Kalrez® (*Contact factory for pricing*)
 - Nitrile, low-temperature
- **BACK-UP RINGS:** PTFE, PCTFE
- **MAIN VALVE SEAT:**
 - Vespel®
 - 17-4 H900 Stainless Steel
 - 316 Stainless Steel
 - PEEK®

PORTING

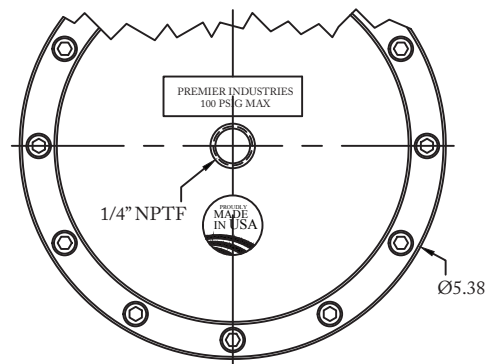
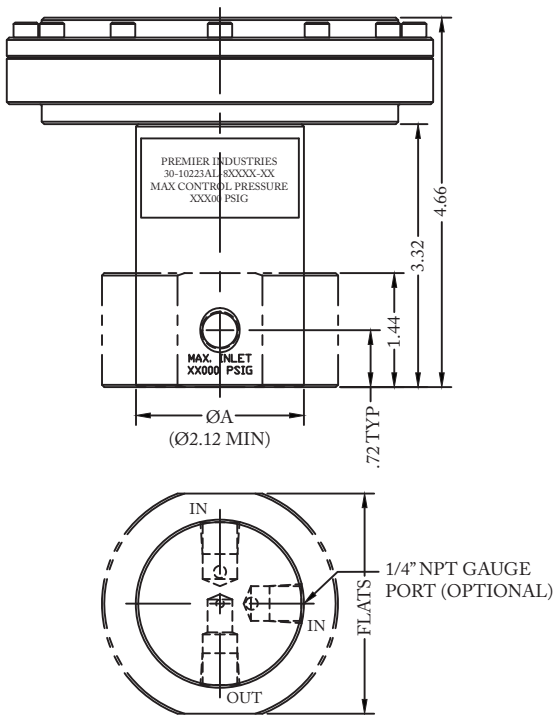
- **INLET PORTING:**
 - 1/4" FNPT, medium pressure, high pressure
 - 3/8" FNPT, medium pressure, high pressure
 - 9/16" medium pressure
- **OUTLET PORTING:**
 - 1/4" FNPT, medium pressure, high pressure
 - 3/8" FNPT, medium pressure, high pressure
 - 9/16" medium pressure

OPTIONS

- Gauges
- Private label
- Panel mounting bracket: *P/N: 30-10059 (Ø2.15 panel hole)*

*Kalrez® & Viton® are registered trademarks of E.I. duPont de Nemours and Company
AFLAS® is a registered trademark of the Asahi Glass Co., Ltd
PEEK® is a registered trademark of Victrex PLC*

PART NUMBER: 30-10223AL



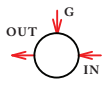
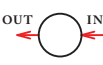
BODY DIMENSIONS

PORT TYPE	ØA	FLATS
1/4 & 3/8 NPT	Ø2.12	—
1/4" M.P.	Ø2.12	1.98
1/4" H.P.	Ø2.12	1.98
3/8" M.P.	Ø2.48	2.36
3/8" H.P.	Ø2.98	2.78
9/16" M.P.	Ø2.98	2.78

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Back Pressure Regulators

PART #:	-	1	2	3	4	5	-	6	7	-	8
30-10223AL	-						-			-	

1	CONTROL PRESSURE
8	300-15000 PSIG <i>Diameter: 0.312"</i> 20.68-1034.21 Bar <i>Area: 0.0765 in²</i> (stainless steel only) <i>Ratio: 1⁶⁴/₁ **</i>
<i>** 4.0" diameter diaphragm Diaphragm area: 12.5664 in²</i>	
2	PORTING CONFIGURATION
H	
S	
3	PORT SIZE
4	1/4"
6	3/8"
9	9/16" (Only available in medium pressure)

4	PORT TYPE
1	FNPT
4	Medium Pressure
5	High Pressure
<i>GAUGE PORTS: 1/4" FNPT</i>	
5	VALVE SEAT
0	Vespel®
1	17-4 H900 Stainless Steel
2	316 Stainless Steel
3	PEEK®

6 7	O-RINGS
00	BUNA-N
01	AFLAS®
02	VITON®
05	EPDM
11	KALREZ® <i>(Contact factory for pricing)</i>
12	Nitrile, Low-temp
8	Cv (FLOW)
A	0.03
0	0.06
1	0.14
2	0.20
MODIFICATIONS	
BLANK	NONE
AS	1/4" SAE AS5202 LOADER PORT
E	1/8" FNPT AIR LOADER PORT
J	1/4" SAE J1926 LOADER PORT
SM	SURFACE MOUNT

15000 PSIG MAX INLET

The end user is responsible to ensure adequate fittings are used to connect regulator to plumbing.

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Contact factory for material certifications. Fees may