

6023AL SERIES

Air Loaded, High Pressure, Hydraulic, 15000 PSIG
Pressure Reducing Regulators



Premier 6023AL Series high pressure, hydraulic, air loaded pressure reducing regulators are single stage, piston sensed, pressure reducing regulators rated for inlet and outlet pressures up to 15000 PSIG (1034.21 bar) and Cv 0.06, 0.12, or 0.20.

Premier 6023AL Series regulators are designed for compatibility with electro-pneumatic controllers, enabling piloted pressure control from an inert gas at low pressures (100 psig / 6.89 bar max air load).

Premier 6023AL Series regulators are used to regulate a broad range of non-corrosive and corrosive media (based on materials of construction). Captured venting is standard.

FEATURES

- Compatible with electro-pneumatic controllers
- 15000 PSIG (*1034.21 bar*) max
- Captured venting
- Cv 0.06, 0.12, 0.20
- Numerous optional features
- 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:**
 - 10-1500 PSIG (*0.69 – 103.42 bar*)
 - Diameter: 1.000"*
 - Area: 0.7854 in²*
 - Ratio: 16/1 ***
 - 15-2500 PSIG (*1.03 – 172.37 bar*)
 - Diameter: 0.750"*
 - Area: 0.4418 in²*
 - Ratio: 28/1 ***
 - 50-6000 PSIG (*3.45 – 413.69 bar*)
 - Diameter: 0.500"*
 - Area: 0.1964 in²*
 - Ratio: 64/1 ***
 - 100-10000 PSIG (*6.89 – 689.5 bar*)
 - Diameter: 0.375"*
 - Area: 0.1104 in²*
 - Ratio: 114/1 ***
 - 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 (Cv):** 0.06, 0.12, 0.20
- **VENT VALVE Cv:** 0.06
- **OPERATING TEMPERATURE:**
 - -15°F/-26°C to 212°F/100°C (BUNA-N)
 - -4°F/-20°C to 212°F/100°C (VITON®)
 - -65°F/-54°C to 212°F/100°C (EPDM)
 - 15°F/-9°C to 212°F/100°C (AFLAS)

*Vespel® and Viton® are registered trademarks of E.I. duPont de Nemours and Company
AFLAS® is a registered trademark of the Asahi Glass Co., Ltd
Krytox® is a registered trademark of e Chemours Company FC, LLC.*

Contact factory for material certifications. Fees may apply.

MATERIALS OF CONSTRUCTION

- **BODY:**
 - 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
- **O-RING MATERIAL:**
 - Buna-N
 - AFLAS®
 - Viton-A®
 - EPDM
 - Polyurethane
 - FFKM (*Contact Premier for pricing*)
- **BACK-UP RINGS:** PTFE, PCTFE
- **MAIN VALVE SEAT/VENT VALVE SEAT OPTIONS:**
 - 316 Stainless Steel (*standard*)
 - Vespel®
- **MAIN/VENT VALVE STEM:**
 - 17-4 Stainless Steel, hardened
- **STANDARD LUBRICANT:**
 - Krytox® GPL 206

PORTING

- **INLET/OUTLET PORTING OPTIONS:**
 - 1/4", 3/8" FNPT (*standard*)
 - 1/4", 3/8", 9/16" Medium Pressure
 - 1/4", 3/8" High Pressure
- **VENT PORT:** 1/4" inlet/outlet port type
- **LOAD PORT:**
 - 1/4" FNPT (*standard*)
 - 1/4" SAE AS5202
 - 1/4" SAE J1926
 - 1/8" FNPT

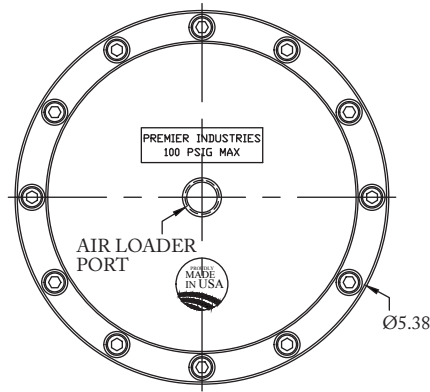
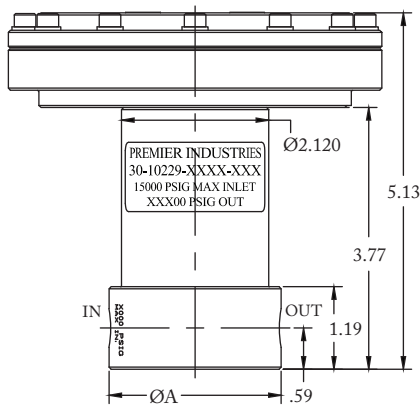
OPTIONS

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

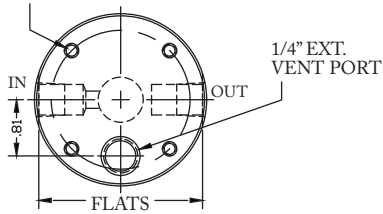
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PART NUMBER: 30-10229



#10-32 UNF X .38 DP
SURFACE MOUNT
(OPTIONAL)



Surface mounting holes:
*Pattern dependent on
port size, type, and
configuration.*

PORT TYPE	ØA	FLATS
NPT	Ø2.48	—
1/4" OTHER	Ø2.48	2.36
3/8" M.P.	Ø2.98	2.81
1/2" H.P.	Ø3.23	2.98
9/16" M.P.	Ø3.23	2.98

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PART #	-	1	2	3	4	-	5 6	7	-	MODS
30-10229	-					-			-	







1	OUTLET PRESSURE	
3	10-1500 PSIG 0.69-103.4 Bar	Diameter: 1.000" Area: 0.7854 in ² Ratio: 16/1 **
4	15-2500 PSIG 1.0-172.4 Bar	Diameter: 0.750" Area: 0.4418 in ² Ratio: 28/1 **
6	50-6000 PSIG 3.4-413.7 Bar	Diameter: 0.500" Area: 0.1964 in ² Ratio: 64/1 **
7	100-10000 PSIG 6.9-689.5 Bar (stainless steel only)	Diameter: 0.375" Area: 0.1104 in ² Ratio: 114/1 **
8	300-15000 PSIG 20.68-1034.21 Bar (stainless steel only)	Diameter: 0.312" Area: 0.0765 in ² Ratio: 164/1 **
** 4.0" DIAMETER DIAPHRAGM DIAPHRAGM AREA: 12.5664 IN²		

15000 PSIG MAX INLET

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

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AFLAS[®] is a registered trademark of the Asabi Glass Co., Ltd

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Fees may apply.

2	PORTING CONFIGURATION
A	
C	
D	
E	
L	
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
VENT PORT: 1/4" inlet/outlet port type GAUGE PORTS: 1/4" FNPT	

5 6	O-RINGS
00	BUNA-N
01	AFLAS [®]
02	VITON-A [®]
05	EPDM
08	POLYURETHANE
11	FFKM (contact Premier for pricing)
7	Cv MAIN VALVE (Valve seat material)
0	Cv 0.06 (VESPEL [®])
1	Cv 0.12 (VESPEL [®])
2	Cv 0.20 (Vespe [®] SCP-5000)
5	Cv 0.06 (316 STAINLESS STEEL)
6	Cv 0.12 (316 STAINLESS STEEL)
7	Cv 0.20 (316 STAINLESS STEEL)
MODIFICATIONS	
Separate multiple mods with a dash	
BLANK	NONE
AC	KRYTOX [®] 240AC
AS	1/4" SAE AS5202 LOADER PORT
E	1/8" NPT AIR LOADER PORT
J	1/4" SAE J1926 LOADERPORT
MK	H2O SERVICE W/ RESISTANT GREASE
SM	SURFACE MOUNT