

6000AL SERIES

Air Loaded, High Pressure, Hydraulic
Pressure Reducing Regulators



Premier 6000AL Series regulators are high pressure, hydraulic, piston sensed, pressure reducing regulators with a flow capacity (Cv) of 0.06, 0.12, 0.20, or 0.30 and outlet pressures up to 10000 PSIG (689.5 bar). This regulator features an air loader with a max inlet pressure of 100 PSIG / 6.89 bar (regulator 10000 PSIG (689.5 bar) max inlet).

The 6000AL regulator's captured venting allows potentially hazardous media to be safely piped away.

FEATURES

- Captured venting (*non-venting mod. available*)
- Flow capacity (Cv): 0.06, 0.12, 0.20, or 0.30
- Piston sensed
- Compatible with electro-pneumatic controllers
- Machined bar stock body eliminates porosity found in castings

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

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SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
 - REGULATOR: 10000 PSIG (689.5 bar)
 - AIR ACTUATOR: 100 PSIG (6.89 bar)
- **OUTLET 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 **
 - 25-3000 psig (1.7 – 206.8 bar)
 - Diameter: 0.684"
 - Area: 0.3675 in²
 - Ratio: 3⁴/₁ **
 - 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 **

** 4.0" diameter diaphragm
Diaphragm area: 12.5664 in²

- **FLOW (Cv):** 0.06, 0.12, 0.20, or 0.30
- **VENT VALVE (Cv):** 0.06
- **AMBIENT OPERATING TEMPERATURES:**
 - -4°F/-20°C to 212°F/100°C (Viton®)*
 - -15°F/-26°C to 212°F/100°C (BUNA-N)*

*lower temperature compounds available upon request

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AFLAS® is a registered trademark of the Asahi Glass Co., Ltd.

Elgiloy® is a registered trademark of Elgiloy Specialty Metals Division

Krytox® is a registered trademark of The 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 fabric-reinforced
- **MAIN VALVE STEM:** 17-4 Stainless Steel (*hardened*)
- **MAIN VALVE SEAT OPTIONS:**
 - 17-4 Stainless Steel, hardened (*standard*)
 - Vespel® SP-1
- **VENT VALVE SEAT OPTIONS:**
 - 17-4 Stainless Steel (*standard*)
 - Vespel® SP-1
- **BACK-UP RINGS:** PTFE & PCTFE
- **ELASTOMER SEAL OPTIONS:**
 - BUNA-N
 - AFLAS®
 - Viton®
 - EPDM
 - Polyurethane
 - FFKM (*Contact factory for pricing*)
- **WETTED PARTS:**
 - 316 Stainless Steel
 - 17-4 Stainless Steel
- **STANDARD LUBRICANT:**
 - Krytox® GPL 206

PORTING

- **INLET/OUTLET:**
 - 1/4", 3/8", 1/2" FNPT
 - 1/4", 3/8", 1/2" SAE J1926
 - 1/4", 3/8", 1/2" SAE AS5202 (MS33649**)
 - 1/4", 3/8", 9/16" Medium Pressure
 - 1/4", 3/8", High Pressure
- **AIR ACTUATOR PORT OPTIONS:**
 - 1/8" FNPT
 - 1/4" SAE AS5202
 - 1/4" SAE J19262
- **VENT:** 1/4" (*inlet/outlet port type*)

**SAE AS5202 supersedes MS33649

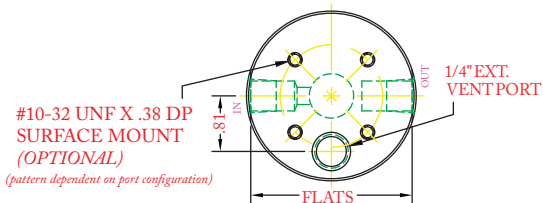
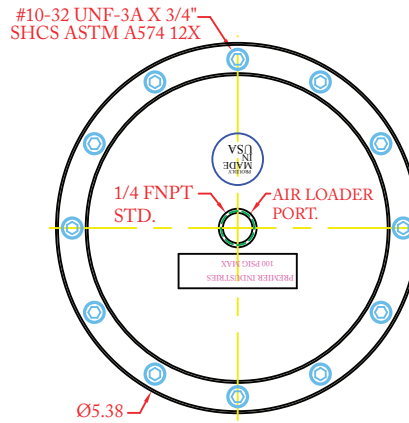
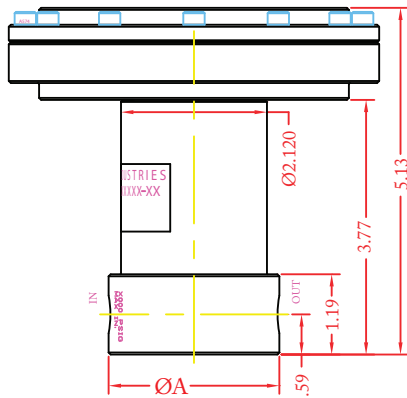
OPTIONS

- Private Label
- Panel mounting bracket: P/N: 30-10059 (Ø2.15 panel hole)
- Surface mounting holes
- NACE MR0175 compatible design
(*all wetted 316 Stainless Steel & Elgiloy®*)
- Non-venting modification

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PART NUMBER: 30-10219



PORT TYPE	ØA	FLATS
NPT	Ø2.48	—
1/4" J1926, M.P., H.P.	Ø2.48	2.36
1/4" AS5202	Ø2.98	2.81
3/8" SAE, M.P., H.P.	Ø2.98	2.81
1/2" SAE	Ø3.23	2.98
9/16" M.P.	Ø3.23	2.98

3/8" & larger 'L' porting configurations require a larger ØA

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PART #	-	1	2	3	4	5	-	6	7	MODS
30-10219	-						-			

1	OUTLET PRESSURE	<i>* 4.0" diameter diaphragm Diaphragm area: 12.5664 in²</i>
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	25-3000 psig (1.7-206.8 bar)	Diameter: 0.684" Area: 0.3675 in ² Ratio: ³⁴ / ₁ *
2	MAIN VALVE Cv	
0	Cv 0.06	
1	Cv 0.12	
2	Cv 0.20	
3	Cv 0.30	
<i>VENT VALVE CV: 0.06</i>		
3	PORTING CONFIG.	
A		
L**		
C		
S		
** L PORTING CONFIGURATIONS WITH 3/8" PORTS AND LARGER REQUIRE A LARGER BODY DIAMETER		

4	PORT SIZE
4	1/4"
6	3/8"
8	1/2"***
9	9/16"****
<i>***1/2" PORTS NOT AVAILABLE IN MEDIUM PRESSURE</i>	
<i>****9/16" PORTS ONLY AVAILABLE IN MEDIUM PRESSURE</i>	
<i>GAUGE PORTS: 1/4" FNPT</i>	
<i>VENT PORT: 1/4" INLET/OUTLET PORT TYPE</i>	
5	PORT TYPE IN/OUT/VENT
1	NPT
2	SAE J1926
3	SAE AS5202 (MS33649**)
4	MEDIUM PRESSURE
5	HIGH PRESSURE
<i>**SAE AS5202 supersedes MS33649</i>	

6 7	O-RING MATERIAL
00	BUNA-N
01	AFLAS®
02	VITON®
05	EPDM
08	POLYURETHANE
11	FFKM <i>(Contact factory for pricing)</i>
MODIFICATIONS <i>(Separate multiple mods with a dash)</i>	
BLANK	None
AC	KRYTOX 240AC
AS	1/4" SAE AS5202 LOADER PORT
E	1/8" NPT AIR LOADER PORT
J	1/4" SAE J1926 LOADER PORT
N	NACE MR0175 COMPATIBLE
NV	NON-VENTING
SM	SURFACE MOUNT
SP1	VESPEL SP-1 SEAT
W	WATER

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10000 PSIG MAX INLET:

STAINLESS STEEL

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

Contact factory for material certifications. Fees may apply.