



AIR LOADED HIGH PRESSURE, HIGH FLOW *Pressure Reducing Regulators*



PREMIER INDUSTRIES

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MADE IN THE USA

Minneapolis, MN

DESCRIPTION

Premier 3016AL Series regulators are high pressure, high flow, piston sensed, pressure reducing regulators rated for Cv 1.0 or 2.0. This regulator features an air loader with a max inlet pressure of 100 PSIG / 6.89 bar and a balanced stem for increased outlet pressure stability.

The 3016AL regulator's captured venting allows potentially hazardous media to be safely piped away.

FEATURES

- Captured venting
- High flow capacity (Cv): 1.0 or Cv 2.0
- Balanced stem for increased outlet pressure stability
- 316 stainless steel construction
- Compatible with electro-pneumatic controllers
- Max inlet pressure: 10000 PSIG (689.5 bar), Cv 1.0
6000 PSIG (413.7 bar), Cv 2.0
- Machined bar stock body eliminates porosity found in castings



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SPECIFICATIONS

- MAXIMUM INLET PRESSURE:**
 - REGULATOR:**
 - 10000 PSIG (689.5 bar), Cv 1.0 (P/N: 30-10220)
 - 6000 PSIG (413.7 bar), Cv 2.0 (P/N: 30-10227)
 - 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) *Cv 1.0 only*
 - Diameter: 0.375"
 - Area: 0.1104 in²
 - Ratio: 11⁴/₁ **

** 4.0" diameter diaphragm
Diaphragm area: 12.5664 in²

- FLOW (Cv):**
 - MAIN VALVE:** 1.0 (P/N: 30-10220), 2.0 (P/N: 30-10227)
 - VENT VALVE:** 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)*
 - 65°F/-54°C to 212°F/100°C (EPDM)

**lower temperature compounds available upon request*

MATERIALS OF CONSTRUCTION

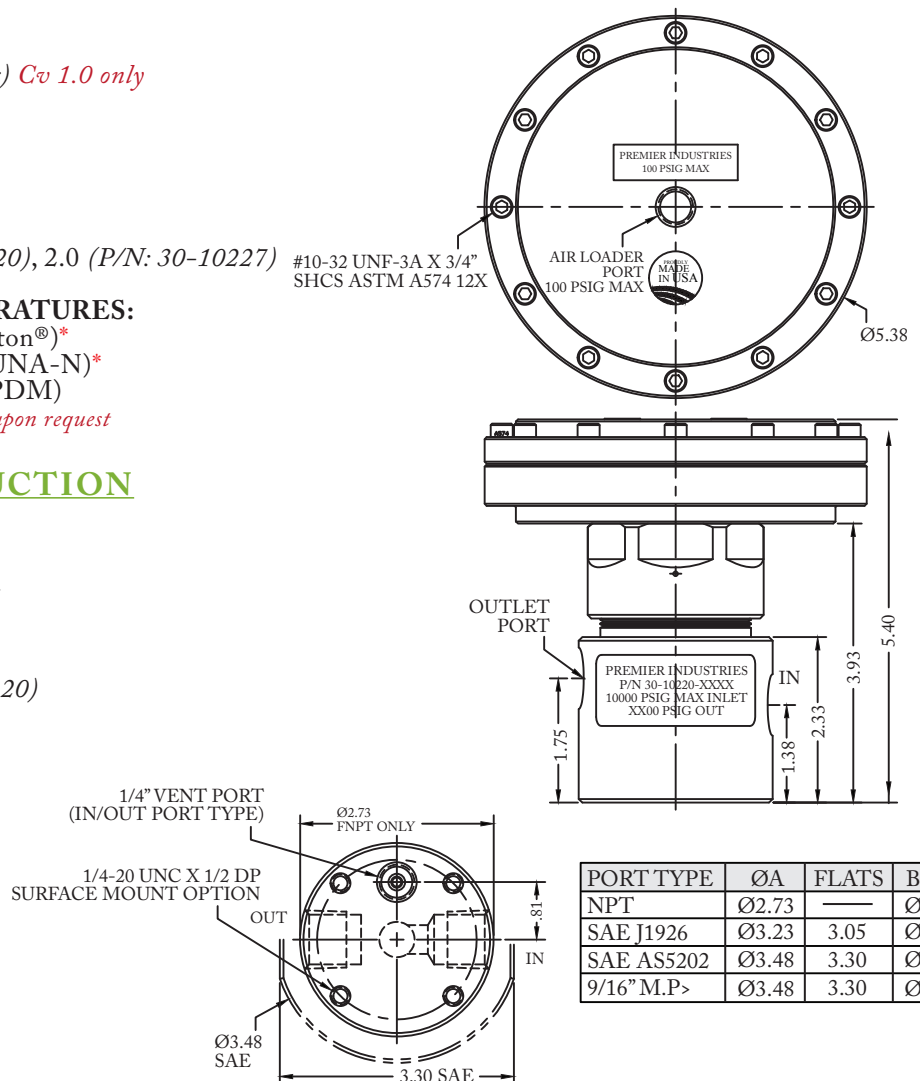
- BODY:** 316 Stainless Steel
- HOUSING, AIR ACTUATOR :**
 - 6061-T6 Aluminum/clear anodized
- DIAPHRAGM, AIR ACTUATOR :**
 - Neoprene, nylon fabric-reinforced
- MAIN VALVE SEAT:**
 - Vespel SP-1®, Cv 1.0 (P/N: 30-10220)
 - PCTFE, Cv 2.0 (P/N:30-10227)
- VENT VALVE SEAT:** Vespel SP-1®
- ELASTOMER SEALS:**
 - BUNA-N
 - AFLAS®
 - Viton®
 - EPDM
 - Kalrez® (*contact factory for pricing*)
- BACK-UP RING OPTIONS:**
 - PTFE
 - PCTFE
- OTHER WETTED PARTS:**
 - 316 Stainless Steel
 - 17-4 Stainless Steel

PORTING

- INLET/OUTLET:**
 - 1/2" NPT, SAE AS5202**, SAE J1926
 - 9/16" MEDIUM PRESSURE
- AIR ACTUATOR:**
 - 1/4" FNPT (*standard*)
 - 1/4" SAE AS5202
 - 1/8" FNPT
 - 1/4" SAE J1926
- VENT:** 1/4" (*inlet/outlet port type*)
- GAUGE PORTS:** 1/4" FNPT

OPTIONS

- Private Label



PORT TYPE	ØA	FLATS	B.C.
NPT	Ø2.73	—	Ø2.25
SAE J1926	Ø3.23	3.05	Ø2.63
SAE AS5202	Ø3.48	3.30	Ø2.75
9/16" M.P>	Ø3.48	3.30	Ø2.75

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

**SAE AS5202 supersedes MS33649 see part numbers for more porting options



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Cv 1.0 MODEL

PART #	-	1	2	3	4	-	5 6	-	MODS
30-10220	-					-		-	

1	OUTLET PRESSURE
3	10-1500 PSIG (0.69 - 103.42 bar) <i>Diameter: 1.000"</i> <i>Area: 0.7854 in²</i> <i>Ratio: 16/1 **</i>
4	15-2500 PSIG (1.03 - 172.37 bar) <i>Diameter: 0.750"</i> <i>Area: 0.4418 in²</i> <i>Ratio: 28/1 **</i>
6	50-6000 PSIG (3.45 - 413.69 bar) <i>Diameter: 0.500"</i> <i>Area: 0.1964 in²</i> <i>Ratio: 64/1 **</i>
7	100-10000 PSIG (6.89 - 689.5 bar) <i>Diameter: 0.375"</i> <i>Area: 0.1104 in²</i> <i>Ratio: 114/1 **</i>
<i>** 4.0" diameter diaphragm Diaphragm area: 12.5664 in²</i>	

2	PORTING CONFIGURATIONS
A	
C	
L	
S	
3	PORT SIZE
6	3/8"*
8	1/2"*
9	9/16"**
<i>*3/8" & 1/2" ports not available in medium pressure **9/16" ports only available in medium pressure</i>	
4	PORT TYPE
N	NPT
A	SAE AS5202**
J	SAE J1926
M	MEDIUM PRESSURE
<i>**SAE AS5202 supersedes MS33649</i>	

5 6	O-RINGS
00	BUNA-N
01	AFLAS®
02	VITON-A®
05	EPDM
11	KALREZ® <i>(contact factory for pricing)</i>
MODIFICATIONS	
<i>Separate multiple mods with a dash</i>	
Blank	None
AS	1/4 SAE AS5202 loader port
E	1/8 NPT air loader port
J	1/4 SAE J1926 loader port
PTU	Port type uniform
SM	Surface mount

10000 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 apply.



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Cv 2.0 MODEL

PART #	-	1	2	3	4	-	5 6	-	MODS
30-10227	-					-		-	

1	OUTLET PRESSURE
3	10-1500 PSIG (0.69 - 103.42 bar) <i>Diameter: 1.000"</i> <i>Area: 0.7854 in²</i> <i>Ratio: 1⁶/₁ **</i>
4	15-2500 PSIG (1.03 - 172.37 bar) <i>Diameter: 0.750"</i> <i>Area: 0.4418 in²</i> <i>Ratio: 2⁸/₁ **</i>
6	50-6000 PSIG (3.45 - 413.69 bar) <i>Diameter: 0.500"</i> <i>Area: 0.1964 in²</i> <i>Ratio: 6⁴/₁ **</i>
<i>** 4.0" diameter diaphragm</i> <i>Diaphragm area: 12.5664 in²</i>	
2	PORTING CONFIGURATIONS
A	
C	
L	
S	

3	PORT SIZE
8	1/2"
9	9/16"
T	3/4"
W	1"
<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>	
4	PORT TYPE (IN/OUT/VENT)
N	NPT
J	SAE J1926
A	SAE AS5202**
M	MEDIUM PRESSURE
<i>**SAE AS5202 supersedes MS33649</i>	

5 6	O-RING MATERIAL
00	BUNA-N
01	AFLAS®
02	VITON-A®
05	EPDM
11	KALREZ® <i>(contact factory for pricing)</i>
MODIFICATIONS <i>Separate multiple mods with a dash</i>	
Blank	None
AS	1/4 SAE AS5202 loader port
E	1/8 NPT air loader port
J	1/4 SAE J1926 loader port
PTU	Port type uniform
SM	Surface mount

6000 PSIG MAX INLET

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