

# 3000AL SERIES

**Air Loaded, High Pressure**  
Pressure Reducing Regulators



Premier 3000AL Series air-loaded, piston-sensed, single-stage pressure-reducing regulators are rated for inlet and outlet pressures up to 10000 PSIG (689.5 BAR), with Cv values of 0.06, 0.12, 0.20, and 0.30.

An integral 20 µm stainless steel valve cartridge filter supports reliable operation by reducing particulate contamination and extends service intervals, while also simplifying maintenance. The air-loaded, piston-sensed design supports stable outlet pressure control under varying inlet conditions and flow rates. Suitable for non-corrosive and corrosive media, subject to materials of construction.

## FEATURES

- 20 micron sintered 316 stainless steel inlet filter
- Compatible with electro pneumatic controllers
- Standard captured venting, with optional non-venting configuration.
- Very competitive pricing
- Machined bar stock body, bonnet and piston eliminates porosity found in castings
- Numerous optional features are available.

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

## SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
  - REGULATOR:
    - 10000 PSIG/689.5 BAR (*STAINLESS STEEL*)
    - 6000 PSIG/413.69 BAR (*BRASS*)
  - AIR ACTUATOR: 100 PSIG (*6.89 BAR*)
- **OUTLET PRESSURE RANGES:**
  - 6-600 psig (*0.41-41.37 bar*)  
P/N 30-11070  
*Diameter: 1.50"*  
*Area: 1.77 in<sup>2</sup>*  
*Ratio: 7/1 \*\**
  - 10-1500 PSIG (*0.69 - 103.42 bar*)  
P/N 30-10219G  
*Diameter: 1.000"*  
*Area: 0.7854 in<sup>2</sup>*  
*Ratio: 16/1 \*\**
  - 15-2500 PSIG (*1.03 - 172.37 bar*)  
P/N 30-10219G  
*Diameter: 0.750"*  
*Area: 0.4418 in<sup>2</sup>*  
*Ratio: 28/1 \*\**
  - 25-3000 psig (*1.7 - 206.8 bar*)  
P/N 30-10219G  
*Diameter: 0.684"*  
*Area: 0.3675 in<sup>2</sup>*  
*Ratio: 34/1 \*\**
  - 50-6000 PSIG (*3.45 - 413.69 bar*)  
P/N 30-10219G  
*Diameter: 0.500"*  
*Area: 0.1964 in<sup>2</sup>*  
*Ratio: 64/1 \*\**
  - 100-10000 PSIG (*6.89 - 689.5 bar*)  
P/N 30-10219G  
*Diameter: 0.375"*  
*Area: 0.1104 in<sup>2</sup>*  
*Ratio: 114/1 \*\**

**\*\* 4.0" diameter diaphragm**  
*Diaphragm area: 12.5664 in<sup>2</sup>*

- **FLOW (Cv):** 0.06, 0.12, 0.20, 0.30
- **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 are available, Above temperature ranges will apply to the majority of media for which the material is recommended. Temperature ranges can vary with some media, ALWAYS TEST UNDER SERVICE CONDITIONS.*

## MATERIALS OF CONSTRUCTION

- **BODY:** SAE 360 brass or 316 Stainless Steel
- **BONNET:** (*non-wetted*) 303 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:** Vespel®
- **VENT VALVE SEAT:** Vespel®
- **ELASTOMER SEALS:**
  - BUNA-N
  - AFLAS®
  - Viton-A®
  - EPDM
  - Polyurethane
  - FFKM (*Contact Premier for pricing*)
  - Low-temp Nitrile (P/N 30-10219G)
- **OTHER WETTED PARTS:**
  - 316 Stainless Steel
  - 17-4 Stainless Steel

## PORTING

- **INLET/OUTLET PORT OPTIONS**
  - See selection tables on page 4 and 5
- **AIR ACTUATOR PORT OPTIONS:**
  - See selection tables on page 4 and 5
- **VENT:** 1/4" (inlet/outlet port type)

## OPTIONAL ITEMS

- Panel mounting bracket:
  - **P/N: 30-10219G:**
    - 30-10059 bracket ( $\varnothing$ 2.15 panel cut-out)
  - **P/N: 30-11070:**
    - 30-10500 bracket ( $\varnothing$ 2.56 panel cut-out)
- Private label
- Non-venting

*Vespel® and Viton-A® are registered trademarks of E.I. duPont de Nemours and Company*

*Krytox® is a registered trademark of The Chemours Company FC, LLC.*

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

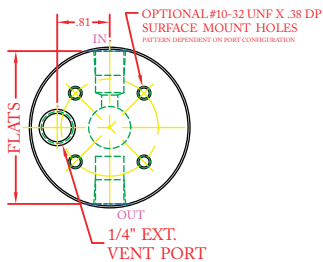
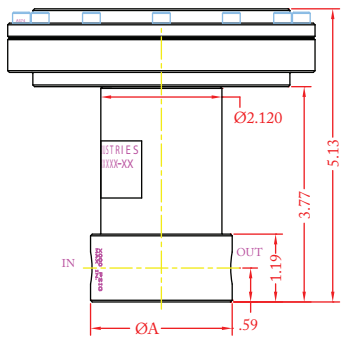
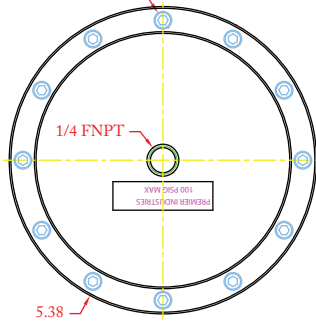
*Contact factory for material certifications. Fees may apply.*

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Air Loaded, High Pressure  
Pressure Reducing Regulators

**PART NUMBER: 30-10219G**

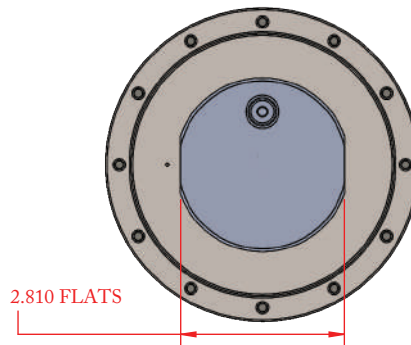
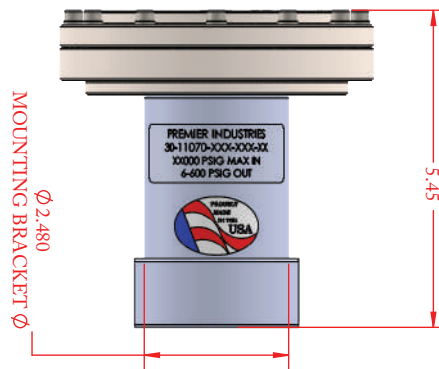
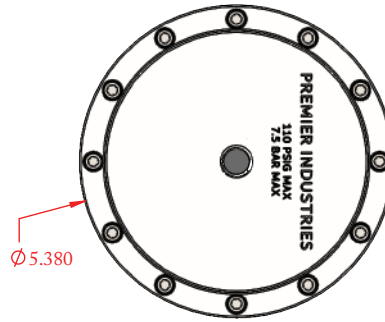
#10-32 UNF-3A X 3/4"  
SHCS ASTM A574 12X



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' configuration bodies require a larger ØA

**PART NUMBER: 30-11070**



SERIES	1	-	2	3	4	5	6	-	7 8	-	MODS
30-10219G		-						-		-	

1	BODY MATERIALS (MAX. INLET PRESSURE)	
<b>B</b>	SAE 360 BRASS (6000 PSIG / 413.7 BAR)	
<b>BLANK</b>	316 STAINLESS STEEL (10000 PSIG / 689.5 BAR)	
2	OUTLET PRESSURE	
<b>3</b>	10-1500 PSIG (0.69-103.4 BAR)	DIAMETER: 1.000" AREA: 0.7854 IN <sup>2</sup> RATIO: 16/1 *
<b>4</b>	15-2500 PSIG (1.0-172.4 BAR)	DIAMETER: 0.750" AREA: 0.4418 IN <sup>2</sup> RATIO: 28/1 *
<b>6</b>	50-6000 PSIG (3.4-413.7 BAR)	DIAMETER: 0.500" AREA: 0.1964 IN <sup>2</sup> RATIO: 64/1 *
<b>7</b>	100-10000 PSIG (6.9-689.5 BAR) (STAINLESS STEEL ONLY)	DIAMETER: 0.375" AREA: 0.1104 IN <sup>2</sup> RATIO: 114/1 *
<b>8</b>	25-3000 PSIG (1.7-206.8 BAR)	DIAMETER: 0.684" AREA: 0.3675 IN <sup>2</sup> RATIO: 34/1 *
* 4.0" DIAMETER DIAPHRAGM DIAPHRAGM AREA: 12.5664 IN <sup>2</sup>		
3	FLOW (Cv) SEAT MATERIAL	
<b>0</b>	Cv 0.06	VESPEL SP-1
<b>1</b>	Cv 0.12	VESPEL SP-1
<b>2</b>	Cv 0.20	VESPEL SCP-5000
<b>3</b>	Cv 0.30	VESPEL SCP-5000
VENT VALVE: Cv 0.06		

4	PORTING CONFIG.
<b>A</b>	
<b>C</b>	
<b>D</b>	
<b>K</b>	
<b>L</b>	
<b>S</b>	
5	PORT SIZE (INLET/OUTLET)
<b>4</b>	1/4"
<b>6</b>	3/8"
<b>8</b>	1/2"***
<b>9</b>	9/16"***
<b>T</b>	3/4
<b>W</b>	1"
**1/2" PORTS NOT AVAILABLE IN MEDIUM PRESSURE OR HIGH PRESSURE	
***9/16" PORTS ONLY AVAILABLE IN MEDIUM PRESSURE	
GAUGE PORTS: 1/4" FNPT VENT PORT: 1/4" INLET/OUTLET PORT TYPE	
6	PORT TYPE (INLET/OUTLET/VENT)
<b>1</b>	FNPT
<b>2</b>	SAE J1926
<b>3</b>	SAE AS5202
<b>4</b>	MEDIUM PRESSURE
<b>5</b>	HIGH PRESSURE

7 8	O-RINGS
<b>00</b>	BUNA-N
<b>01</b>	AFLAS®
<b>02</b>	VITON-A®
<b>05</b>	EPDM
<b>08</b>	POLYURETHANE
<b>11</b>	FFKM <i>CONTACT PREMIER FOR PRICING</i>
<b>12</b>	LOW-TEMP NITRILE
MODIFICATIONS SEPARATE MULTIPLE MODS WITH A DASH	
<b>BLANK</b>	NONE
<b>AC</b>	KRYTOX 240AC
<b>AS</b>	1/4" SAE AS5202 LOADER PORT
<b>C6</b>	615 CLEAN (WETTED)
<b>E</b>	1/8" NPT AIR LOADER PORT
<b>J</b>	1/4" SAE J1926 LOADER PORT
<b>N</b>	NACE MR0175 COMPATIBLE
<b>PTU</b>	PORT TYPE UNIFORM
<b>NV</b>	NON-VENTING
<b>SP1</b>	VESPEL SP-1 SEAT (>0.12 CV)
<b>SM</b>	SURFACE MOUNT
<b>VP</b>	VESPEL SP-21 SEATS

10000 PSIG MAX INLET (STAINLESS STEEL)  
6000 PSIG MAX INLET (BRASS)  
THE END USER IS RESPONSIBLE TO ENSURE  
ADEQUATE FITTINGS ARE USED TO CONNECT  
REGULATOR TO PLUMBING.

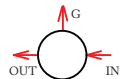
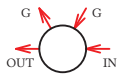
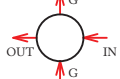
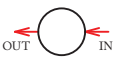
CONTACT FACTORY FOR MATERIAL  
CERTIFICATIONS. FEES MAY APPLY

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30-11070	-				-				-		-	

1	BODY MATERIALS (MAX. INLET PRESSURE)	
1	SAE 360 Brass (6000 psig / 413.7 bar)	
2	316 Stainless Steel (10000 psig / 689.5 bar)	
2	OUTLET PRESSURE	
3	6-600 psig (0.41-41.37 bar)	Diameter: 1.50" Area: 1.77 in <sup>2</sup> Ratio: 7/1 *
* 4.0" diameter diaphragm DIAPHRAGM AREA: 12.5664 in <sup>2</sup>		
3	FLOW (Cv)	
0	Cv 0.06	
1	Cv 0.12	
2	Cv 0.20	
3	Cv 0.30	
VENT VALVE: Cv 0.06		

4	PORTING CONFIG.
A	
C	
L	
S	
5	PORT SIZE (inlet/outlet)
4	1/4"
6	3/8"
8	1/2" <sup>**</sup>
9	9/16" <sup>***</sup>
**1/2" ports not available in medium pressure or high pressure ***9/16" ports only available in medium pressure	
GAUGE PORTS: 1/4" FNPT VENT PORT: 1/4" inlet/outlet port type	

6	PORT TYPE (inlet/outlet/vent)
1	FNPT
2	SAE J1926
3	SAE AS5202
4	MEDIUM PRESSURE
5	HIGH PRESSURE
7 8	O-RINGS
00	BUNA-N
01	AFLAS®
02	VITON-A®
05	EPDM
08	POLYURETHANE
11	FFKM <i>CONTACT PREMIER FOR PRICING</i>
MODIFICATIONS <i>SEPARATE MULTIPLE MODS WITH A DASH</i>	
BLANK	NONE
AC	KRYTOX® 240AC
AS	1/4" SAE AS5202 LOADER PORT
NV	NON-VENTING

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AFLAS® is a registered trademark of the Asahi Glass Co., Ltd.  
Krytox® is a registered trademark of The Chemours Company FC, LLC.

10000 PSIG MAX INLET (Stainless Steel)  
6000 PSIG MAX INLET (Brass)  
The end user is responsible to ensure adequate fittings are used to connect regulator to plumbing.

Contact factory for material certifications.  
Fees may apply.