

O2 3000AL SERIES

Air Loaded, High Pressure, Oxygen
Pressure Reducing Regulators



O2 Premier 3000AL Series air loaded, piston sensed, single stage, high pressure, pressure reducing regulators are rated for inlet pressures up to 6000 PSIG (*413.69 bar*) and Cv 0.04, 0.06, 0.12, 0.20, or 0.30.

O2 3000AL Series regulators are designed for use in Oxygen applications; they are available with a wide range of inlet and outlet configurations. Captured venting is standard.

FEATURES

- 20 micron sintered bronze inlet filter
- Compatible with electro pneumatic controllers
- Captured venting
- 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.

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SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
 - REGULATOR: 6000 PSIG* (413.69 bar)
**dependent upon configuration*
 - AIR ACTUATOR: 110 PSIG (7.5 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 **
- ** 4.0" diameter diaphragm
Diaphragm area: 12.5664 in²*
- **FLOW (C_v):**
 - 0.04 (6000 PSIG MAX, PCTFE SEAT)
 - 0.06 (6000 PSIG MAX, PCTFE SEAT)
 - 0.12 (6000 PSIG MAX, PCTFE SEAT)
 - 0.20 (4000 PSIG MAX, PCTFE SEAT)
 - 0.30 (4000 PSIG MAX, PCTFE SEAT)
 - 0.20 (6000 PSIG MAX, VESPEL SP-21 SEAT)
 - 0.30 (6000 PSIG MAX, VESPEL SP-21 SEAT)
 - **VENT VALVE (C_v):** 0.06
 - **AMBIENT OPERATING TEMPERATURES:**
 - -4°F/-20°C to 212°F/100°C (Viton®)

MATERIALS OF CONSTRUCTION

- **BODY & BONNET:** SAE 360 Brass
- **HOUSING, AIR ACTUATOR:**
 - 6061-T6 Aluminum/Clear Anodized
- **DIAPHRAGM, AIR ACTUATOR:**
 - Neoprene, Nylon Fabric-Reinforced
- **OTHER AIR ACTUATOR COMPONENTS:**
 - 303 Stainless Steel & Steel
- **MAIN VALVE:** Monel® 400 & K-500
- **MAIN VALVE SEAT:** PCTFE or Vespel® SP-21
- **ELASTOMER SEALS:**
- **VENT VALVE SEAT:** Vespel® SP-21
- **ELASTOMER SEALS:**
 - Viton-A®
 - FFKM (*Contact factory for pricing*)
- **BACK-UP RINGS:**
 - PTFE & PCTFE
- **OTHER WETTED PARTS:**
 - Monel®
 - SAE 360 Brass
- **ALL WETTED COMPONENTS:**
 - Cleaned per spec 615

PORTING

- **INLET/OUTLET PORT OPTIONS**
 - 1/4", 3/8", 1/2" FNPT
 - 1/4", 3/8", 1/2" SAE J1926
 - 1/4", 3/8", 1/2" SAE AS5202
- **AIR ACTUATOR PORT OPTIONS:**
 - 1/4" FNPT (Standard)
 - 1/8" FNPT
 - 1/4" SAE AS5202
 - 1/4" SAE J1926
- **VENT:** 1/4" NPT

OPTIONAL ITEMS

- Non-venting design
- Panel mounting bracket: P/N: 30-10059 (Ø2.15 panel hole)
- Private label

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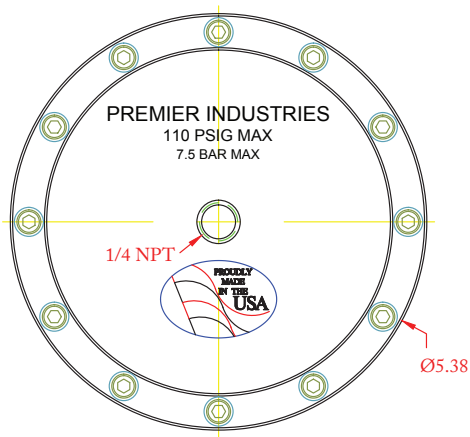
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Contact factory for material certifications. Fees may apply.

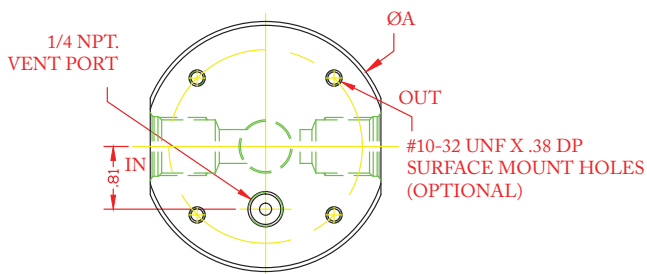
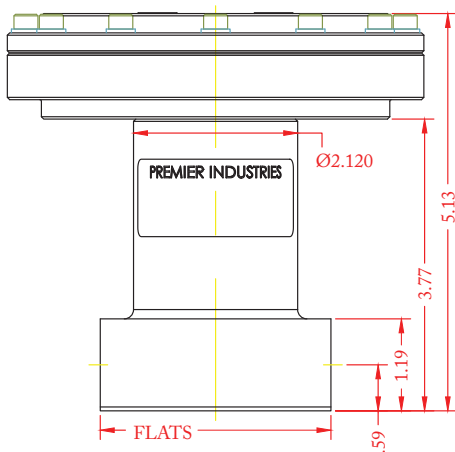
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PART NUMBER: Oy30-10219



REGULATOR BODY TABLE		
PORT SIZE & TYPE	ØA	FLATS
NPT	Ø2.98	—
1/4" & 3/8" SAE	Ø2.98	2.81
1/2" SAE	Ø3.23	2.98
<i>3/8" & larger 'L' configuration bodies require a larger ØA</i>		

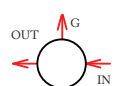
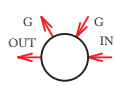
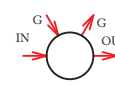
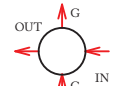
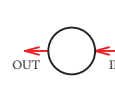


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SERIES	-	1	2	3	4	5	-	6 7	-	MODS
Oy30-10219	-						-		-	

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 *
<i>* 4.0" DLAMETER DIAPHRAGM DLAPHRAGM AREA: 12.5664 IN²</i>		
2	FLOW (Cv)	
A	Cv 0.04 (6000 PSIG MAX, PCTFE SEAT)	
0	Cv 0.06 (6000 PSIG MAX, PCTFE SEAT)	
1	Cv 0.12 (6000 PSIG MAX, PCTFE SEAT)	
2	Cv 0.2 (4000 PSIG MAX, PCTFE SEAT)	
3	Cv 0.3 (4000 PSIG MAX, PCTFE SEAT)	
6	Cv 0.2 (6000 PSIG MAX, VESPEL SP-21 SEAT)	
7	Cv 0.3 (6000 PSIG MAX, VESPEL SP-21 SEAT)	
<i>VENT VALVE: Cv 0.06</i>		

3	PORTING CONFIG.
A	
C	
D	
L	
S	
4	PORT SIZE (INLET/OUTLET)
4	1/4"
6	3/8"
8	1/2"***
GAUGE PORTS: 1/4" FNPT UNLESS PORT TYPE UNIFORM MODIFIER IS SPECIFIED	
VENT PORT: 1/4" FNPT UNLESS PORT TYPE UNIFORM MODIFIER IS SPECIFIED	

5	PORT TYPE (INLET/OUTLET/VENT)
1	FNPT
2	SAE J1926
3	SAE AS5202
6 7	O-RINGS
02	VITON-A®
11	FFKM (CONTACT FACTORY FOR PRICING)
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 LOADER PORT
NV	NON-VENTING
PTU	PORT TYPE UNIFORM
SM	SURFACE MOUNT

6000 PSIG MAX INLET
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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