

# O2 3123 SERIES

High Pressure, 15K, Pneumatic  
Back pressure regulators



High pressure Premier O2 3123 Series back pressure regulators are single stage, piston sensed, variable control pressure regulators, rated for inlet pressures up to 15000 PSIG (1034.21 bar) with a control pressure range of 300-15000 PSIG (20.68 - 1034.21 bar). The 3123 Series regulator features a low-torque hand knob for smooth adjustments.

## FEATURES

- Rated for pressures up to 15000 PSIG (1034.21 bar)
- Designed for use with oxygen
- Flow (Cv): 0.03, 0.06, 0.14, or 0.20
- Low torque ball bearing hand knob
- 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:**
  - 15000 PSIG (1034.21 bar)
- **CONTROL PRESSURE RANGE:**
  - 300-15000 PSIG (20.68 - 1034.21 bar)
- **FLOW (Cv):** 0.03, 0.06, 0.14, or 0.20
- **OPERATING TEMPERATURE:**
  - -4°F/-20°C to 165°F/74°C (VITON®)

## MATERIALS OF CONSTRUCTION

- **BODY:**
  - Monel® 400
- **BONNET (NON-WETTED):**
  - 17-4 Stainless Steel
- **WETTED PARTS, OTHER:**
  - Monel
- **O-RING OPTIONS:**
  - Viton®
  - FFKM (*Contact factory for pricing*)
- **BACK-UP RINGS:** PTFE and PCTFE
- **VALVE SEAT:**
  - Vespel® SP-21
- **STANDARD LUBRICANT:**
  - Krytox® GPL 206

## PORTING

- **INLET/OUTLET PORTING OPTIONS:**
  - 1/4", 3/8" FNPT
  - 1/4", 3/8", 9/16" Medium pressure
  - 1/4", 3/8" High pressure

## OPTIONAL ITEMS

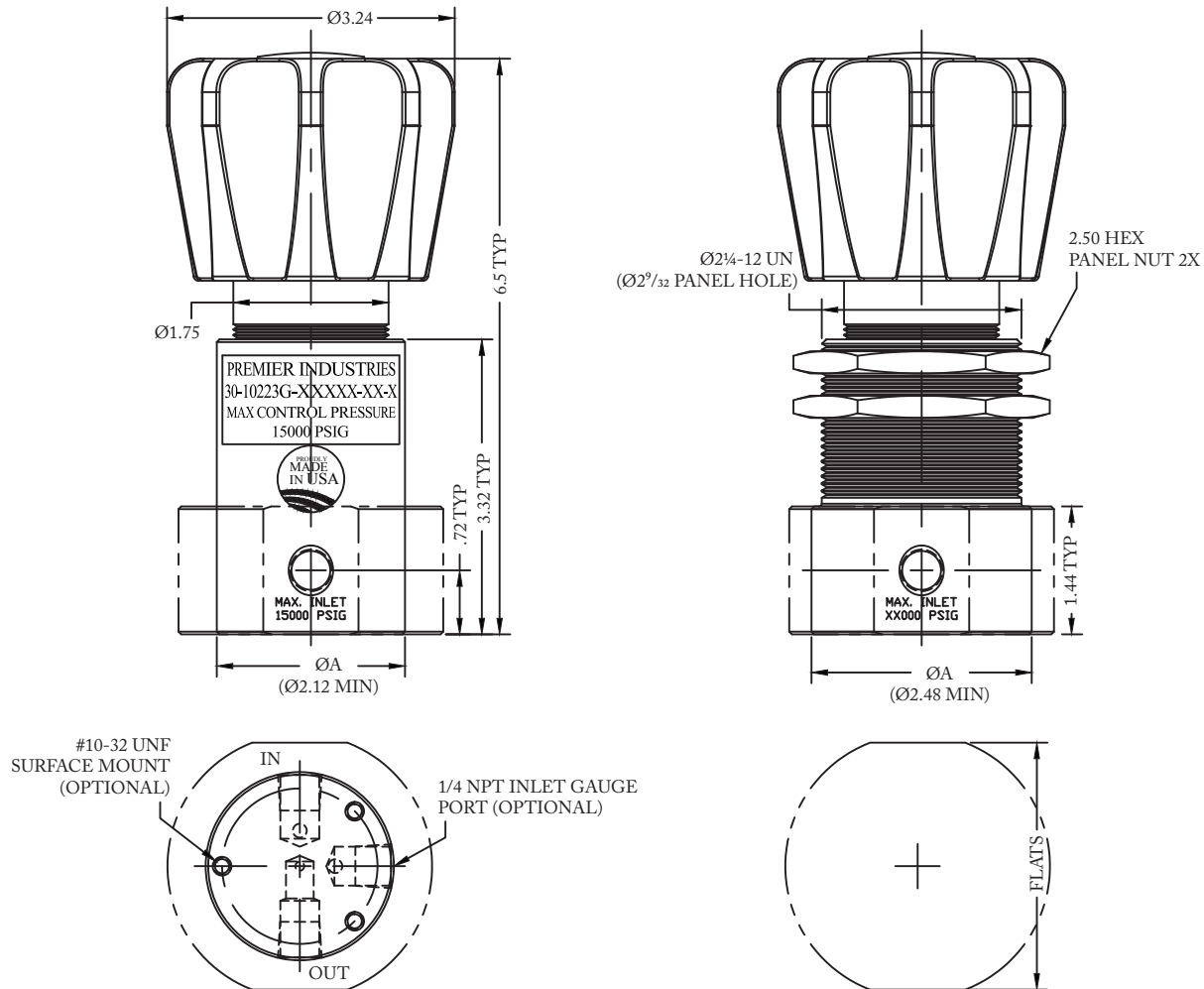
- Inlet gauge
- Private label
- Panel mounting bracket: *P/N: 30-10059*  
(Ø2.15 panel hole)

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*Monel® is a registered trademark of Special Metals Corporation*

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

PART NUMBER: Oy30-10223



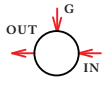
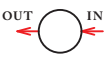
PANEL NUT BODY		
PORT TYPE	ØA	FLATS
NPT, NPTF	Ø2.48	—
1/4" M.P. & H.P.	Ø2.48	2.36
3/8" M.P.	Ø2.48	2.36
3/8" H.P.	Ø2.98	2.81
9/16" M.P.	Ø2.98	2.81

MOUNTING BRACKET BODY		
PORT TYPE	ØA	FLATS
1/4 & 3/8 NPT	Ø2.12	—
1/4" M.P. & H.P.	Ø2.12	1.98
3/8" M.P.	Ø2.48	2.36
3/8" H.P.	Ø2.98	2.81
9/16" M.P.	Ø2.98	2.81

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PART #:	-	1	2	3	4	-	5 6	-	MODS
Oy30-10223	-					-		-	

1	C <sub>v</sub> RATING
A	0.03 C <sub>v</sub>
0	0.06 C <sub>v</sub>
1	0.14 C <sub>v</sub>
2	0.20 C <sub>v</sub>
2	PORTING CONFIGURATION
H	
S	
3	PORT SIZE
4	1/4"
6	3/8"
9	9/16" <i>(ONLY AVAILABLE IN MEDIUM PRESSURE)</i>

4	PORT TYPE
1	FNPT
4	MEDIUM PRESSURE
5	HIGH PRESSURE
<i>OPTIONAL GAUGE PORT: 1/4" FNPT</i>	
5 6	O-RINGS
02	VITON®
01	FFKM

MODIFICATIONS	
BLANK	NONE
AC	KRYTOX 240AC
PN	PANEL NUT STYLE BODY (PANEL NUTS INCLUDED)
SM	SURFACE MOUNT

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**15000 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.*