

6100 SERIES

Hydraulic, High Pressure
Back Pressure Regulator



Premier 6100 Series high pressure, hydraulic, single stage, piston sensed, back pressure regulators are rated for control pressures up to 10000 PSIG (*689.48 bar*) and Cv 0.03, 0.06, 0.14, or 0.20.

They are used to regulate to a broad range of non-corrosive and corrosive media (based on materials of construction) Premier 6100 Series regulators can be supplied with a wide range of inlet and outlet configurations.

FEATURES

- Control pressures up to 10000 PSIG (*689.48 bar*) max
- Cv: 0.03, 0.06, 0.14, or 0.20
- Economical pricing
- Multiple mounting options (*bracket / panel nuts*)
- Machined bar stock body, bonnet and piston eliminates porosity found in castings
- Numerous materials & optional features available.

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

SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
 - 10000 PSIG (689.48 bar)
- **CONTROL PRESSURE RANGES:**
 - 5-500 PSIG (0.34 - 34.5 bar)
 - 5-800 PSIG (0.34 - 55.16 bar)
 - 10-1500 PSIG (0.69 - 103.42 bar)
 - 15-2500 PSIG (1.03 - 172.37 bar)
 - 25-4000 PSIG (1.72 - 275.79 bar)
 - 50-6000 PSIG (3.45 - 413.69 bar)
 - 100-10000 PSIG (6.89 - 689.48 bar)
- **FLOW (Cv):** 0.03, 0.06, 0.14, 0.20
- **AMBIENT OPERATING TEMP:****
 - -15°F/-26°C to 165°F/74°C (BUNA-N)
 - -4°F/-20°C to 165°F/74°C (Viton®)
 - -65°F/-54°C to 165°F/74°C (EPDM)

***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:**
 - 316 Stainless Steel
- **BONNET:**
 - 17-4 Stainless Steel
- **WETTED, OTHER:**
 - 316 Stainless Steel
 - 17-4 Stainless Steel
- **SEAL OPTIONS:**
 - Viton-A®
 - BUNA-N
 - EPDM
 - FFKM (*Contact Premier for pricing*)
 - AFLAS®
 - Nitrile, low temperature
- **VALVE SEAT OPTIONS:**
 - Vespel®
 - PEEK®
 - 316 Stainless Steel (NACE)
 - 17-4 Stainless Steel
- **STANDARD LUBRICANT:**
 - Krytox GPL 206

PORTING

- **INLET/OUTLET OPTIONS:**
 - 1/4 FNPT, SAE J1926, SAE AS5202**, medium pressure
 - 3/8 FNPT, SAE J1926, SAE AS5202**, medium pressure
 - 1/2 FNPT, SAE J1926, SAE AS5202**
 - 9/16 medium pressure
 - 3/4 FNPT SAE J1926, SAE AS5202**, medium pressure

(SAE AS5202 supersedes MS33649**)

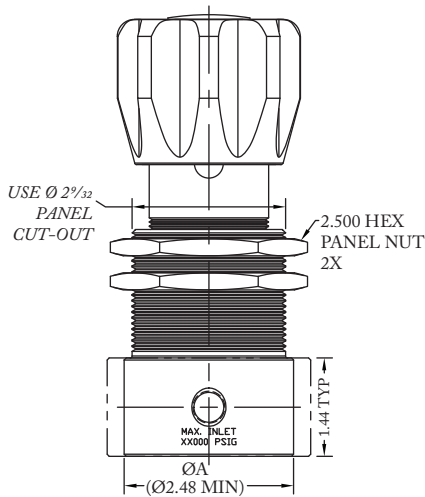
OPTIONS

- Gauges
- Private label
- Panel mounting bracket: P/N: 30-10059 (Ø2.15 panel hole)
- Panel mounting nuts: P/N: 30-10189 (Ø2.28 panel hole)
- Surface mounting holes

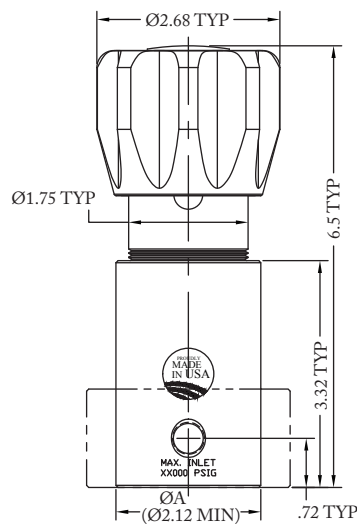
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PART NUMBER: 30-10066

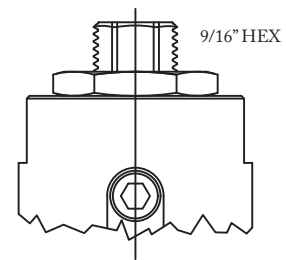
PANEL NUT STYLE



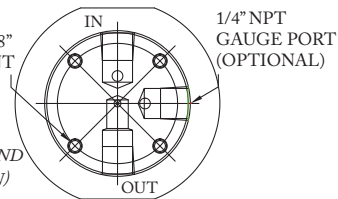
PANEL MOUNTING BRACKET STYLE



TAMPER RESISTANT WRENCH ADJUST (OPTIONAL)



#10-32 UNF, ∇ 3/8"
SURFACE MOUNT
(OPTIONAL,
PATTERN
DEPENDANT
ON PORT TYPE AND
CONFIGURATION)



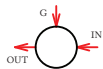
PANEL NUT BODY		
PORT TYPE	ØA	FLATS
NPT, NPTF	Ø2.48	—
1/4" OTHER	Ø2.48	2.36
3/8" M.P.	Ø2.48	2.36
3/8" SAE	Ø2.73	2.58
1/2" SAE	Ø2.98	2.81
9/16" M.P.	Ø2.98	2.81

MOUNTING BRACKET BODY		
PORT TYPE	ØA	FLATS
1/4 & 3/8 NPT, NPTF	Ø2.12	—
1/4" M.P.	Ø2.12	1.98
1/2" NPT, NPTF	Ø2.48	—
1/4" SAE	Ø2.48	2.36
3/8" M.P.	Ø2.48	2.36
3/8" SAE	Ø2.73	2.58
1/2" SAE	Ø2.98	2.81
9/16" M.P.	Ø2.98	2.81
3/4" NPT	Ø2.98	—

PART #:	1	2	-	3	4	5	6	7	-	8	9	10	-	MODS
30-10066			-						-				-	

316 STAINLESS STEEL BODY &
17-4 STAINLESS STEEL BONNET
(STANDARD)

1 2	MOUNTING STYLE
MB	Mounting Bracket Style
PN	Panel Nut Style (Panel Nuts Included)
3	CONTROL PRESSURE
1	5-500 PSIG (0.34-34.5 Bar)
2	5-800 PSIG (0.34-55.2 Bar)
3	10-1500 PSIG (0.69-103.4 Bar)
4	15-2500 PSIG (1.0-172.4 Bar)
5	25-4000 PSIG (1.7-275.8 Bar)
6	50-6000 PSIG (3.4-413.7 Bar)
7	100-10000 PSIG (6.9-689.5 Bar) (stainless steel only)
4	FLOW (Cv)
A	Cv 0.03
0	Cv 0.06
1	Cv 0.14
2	Cv 0.2

5	PORTING CONFIG.
H	
S	
6	PORT SIZE
4	1/4"
6	3/8"
8	1/2"
9	9/16"
T	3/4"
<i>*1/2" PORTS NOT AVAILABLE IN MEDIUM PRESSURE</i> <i>**9/16" PORTS ONLY AVAILABLE IN MEDIUM PRESSURE</i> GAUGE PORTS: 1/4" FNPT	
7	PORT TYPE IN/OUT
1	NPT
2	SAE J1926
3	SAE AS5202**
4	MEDIUM PRESSURE
**SAE AS5202 SUPERSEDES MS33649	

8	VALVE SEAT
0	VESPEL® (6000+ PSIG INLET)
1	17-4 H900 STAINLESS STEEL
2	316 STAINLESS STEEL (NACE)
3	PEEK®
9 10	O-RING MATERIAL
00	BUNA-N
01	AFLAS®
02	VITON®
05	EPDM
11	FFKM (CONTACT PREMIER FOR PRICING)
12	NITRILE, LO-TEMP
MODIFICATIONS	
SEPARATE MULTIPLE MODS WITH A DASH	
AC	KRYTOX 240AC
N	NACE MR0175 COMPATIBLE
HT	HIGH-TEMP
SM	SURFACE MOUNT <i>Surface mounting holes: pattern dependant on port type & configuration</i>
WA	WRENCH ADJUST

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10000 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.