



HYDRAULIC HIGH PRESSURE *Back Pressure Regulators*

6100 SERIES

PREMIER INDUSTRIES

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MADE IN THE USA

Minneapolis, MN

DESCRIPTION

The high pressure, hydraulic, Premier 6100 Series are single stage, piston sensed, variable control pressure regulators, rated for inlet and outlet 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

- Inlet/outlet 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.

6100 SERIES

HYDRAULIC HIGH PRESSURE Back Pressure Regulators



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) (stainless steel only)
- **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.

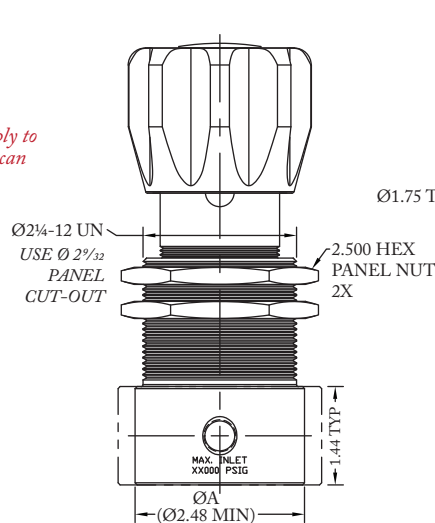
MATERIALS OF CONSTRUCTION

- **BODY & BONNET:**
 - 316 Stainless Steel & 17-4 Stainless Steel
- **WETTED, OTHER:**
 - 316 Stainless Steel
 - 17-4 Stainless Steel
- **SEALS:**
 - Viton-A®
 - BUNA-N
 - EPDM
 - KALREZ® (Contact factory for pricing)
 - AFLAS
 - Nitrile, low temperature
- **VALVE SEAT:**
 - Vespel®
 - PEEK®
 - 316 Stainless Steel (NACE)
 - 17-4 Stainless Steel

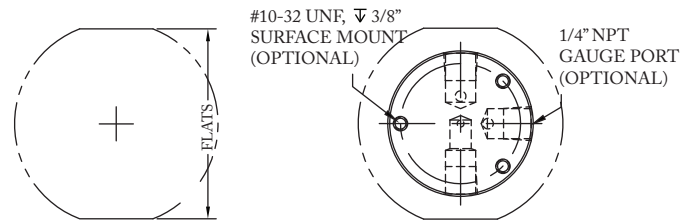
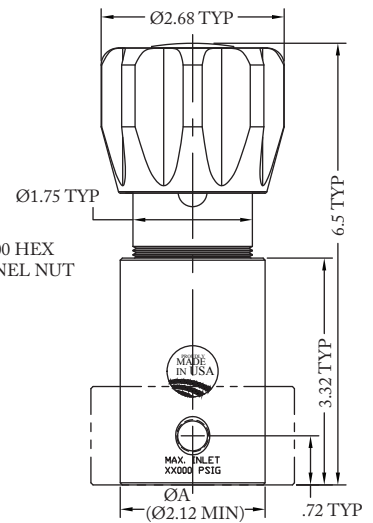
OPTIONS

- 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

PANEL NUT STYLE



PANEL MOUNTING BRACKET STYLE



(Part number: 30-10066 shown above)

PORTING

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

(SAE AS5202 supersedes MS33649**)

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, NPTF	Ø2.98	—



HYDRAULIC HIGH PRESSURE

Back Pressure Regulators



SERIES	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 Body
PN	Panel Nut Style Body <i>(Panel Nuts Included)</i>
3	CONTROL PRESSURE
1	5-500 PSIG <i>(0.34-34.5 Bar)</i>
2	5-800 PSIG <i>(0.34-55.2 Bar)</i>
3	10-1500 PSIG <i>(0.69-103.4 Bar)</i>
4	15-2500 PSIG <i>(1.0-172.4 Bar)</i>
5	25-4000 PSIG <i>(1.7-275.8 Bar)</i>
6	50-6000 PSIG <i>(3.4-413.7 Bar)</i>
7	100-10000 PSIG <i>(6.9-689.5 Bar)</i> <i>(stainless steel only)</i>
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"
<p><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></p>	
7	PORT TYPE IN/OUT
1	NPT
2	SAE J1926
3	SAE AS5202**
4	Medium Pressure
6	NPTF
<p><i>**SAE AS5202 supersedes MS33649</i></p>	

8	VALVE SEAT
0	VESPEL® <i>(6000+ psig inlet)</i>
1	17-4 H900 Stainless Steel
2	316 Stainless Steel <i>(NACE)</i>
3	PEEK®
9 10	O-RING MATERIAL
00	BUNA-N
01	AFLAS®
02	VITON®
05	EPDM
11	KALREZ® <i>(Contact factory for pricing)</i>
12	NITRILE, LO-TEMP
MODIFICATIONS	
<i>Separate multiple mods with a dash</i>	
N	NACE MR0175 option
SM	Surface mount <i>Surface mounting holes: pattern dependant on port type & configuration</i>

*10000 PSIG MAX INLET (Stainless Steel)
6000 PSIG MAX INLET (SAE 360 Brass)
The end user is responsible to ensure adequate fittings are used to connect regulator to plumbing.*

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