



HYDRAULIC HIGH PRESSURE *Back Pressure Regulators*

6100 SERIES

PREMIER INDUSTRIES

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Minneapolis, MN 55449
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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, designed for inlet and outlet pressures up to 10,000 PSIG (689.48 bar).

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: 0.06, 0.14, or 0.20
- Variety of loading methods
- Economical pricing
- Machined bar stock body, bonnet and piston eliminates porosity found in castings
- Numerous materials & optional features available.

*The Premier 6100 Series pressure reducing regulator's design is remarkably flexible.
Contact Premier Industries for a custom 6100 Series regulator to meet your exact needs.*

6100 SERIES

HYDRAULIC HIGH PRESSURE Back Pressure Regulators



SPECIFICATIONS

- **MAXIMUM INLET PRESSURE (stainless steel):** 10000 PSIG (689.48 bar)
- **MAXIMUM INLET PRESSURE (brass):** 6000 PSIG (413.69 bar)
- **CONTROL PRESSURE RANGES:**
 - 0-500 PSIG (0 - 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):** 0.06, 0.14, or 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

PORTING

- **STANDARD INLETS:**
 - 1/4-18 FNPT
- **OPTIONAL INLETS:**
 - 3/8 FNPT w/ optional 1/4 FNPT inlet gauge port
 - 1/2 FNPT w/ optional 1/4 FNPT inlet gauge port
 - 1/4 SAE J1926, SAE AS5202
 - 1/8 SAE J1926, SAE AS5202
- **STANDARD OUTLETS:**
 - 1/4-18 FNPT
- **OPTIONAL OUTLETS:**
 - 3/8 FNPT w/ optional 1/4 FNPT inlet gauge port
 - 1/2 FNPT w/ optional 1/4 FNPT inlet gauge port
 - 1/4 SAE J1926, SAE AS5202
 - 1/8 SAE J1926, SAE AS5202

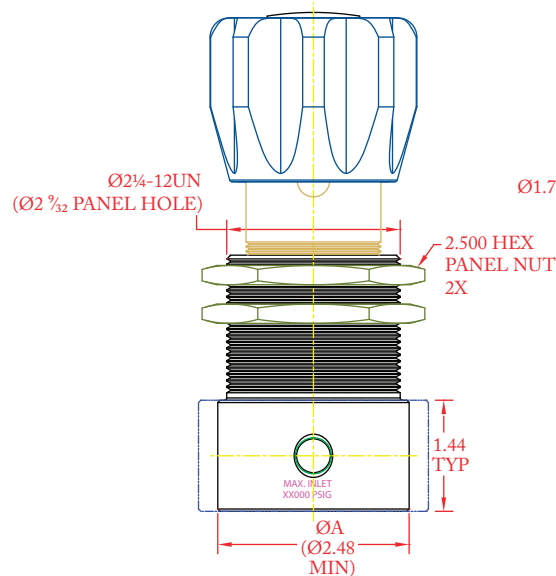
MATERIALS OF CONSTRUCTION

- **BODY:**
 - SAE 360 Brass
 - 316 Stainless Steel
- **BONNET:**
 - SAE 360 Brass
 - 17-4 Stainless Steel
- **WETTED PARTS:**
 - 316 Stainless Steel
 - 17-4 Stainless Steel
 - PH 15-7 Mo Stainless Steel
- **SEALS:**
 - Viton-A®
 - BUNA-N
 - EPDM
 - KALREZ®
 - AFLAS
 - Nitrile, low temperature
- **VALVE SEAT:**
 - 316 Stainless Steel/Vespel®
 - 316 Stainless Steel/PEEK
 - 17-4 Stainless Steel, Hardened

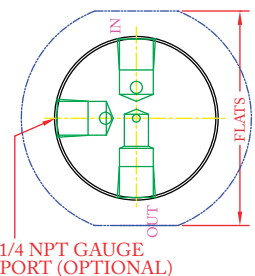
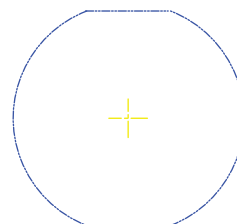
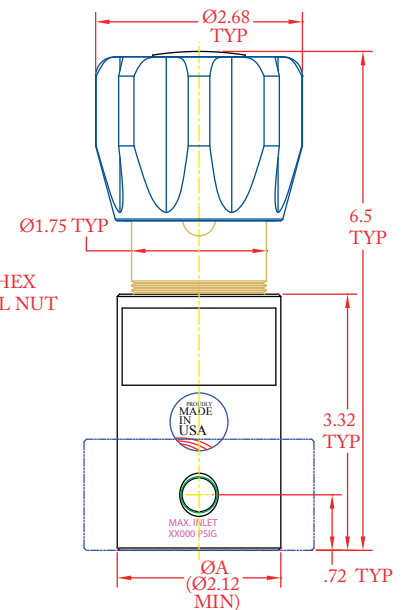
OPTIONS

- Gauges
- CGA fittings
- Private label
- Panel mounting bracket
- Threaded body with panel mounting nuts
- A variety of loading methods
 - Hand
 - Dome
 - Air actuated
 - Air actuated with bias spring

PANEL NUT STYLE



PANEL MOUNTING
BRACKET STYLE



(Part number: 30-10066 shown above)



HYDRAULIC HIGH PRESSURE

Back Pressure Regulators



| SERIES | 1 | 2 | - | 3 | 4 | 5 | 6 | 7 | - | 8 | 9 | 10 | 11 |
|----------|---|---|---|---|---|---|---|---|---|---|---|----|----|
| 30-10066 | | | - | | | | | | - | | | | |

| 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) |
|----------|-----------------|
| 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" |

***1/2" ports not available in medium pressure*
***9/16" ports only available in medium pressure*
Gauge ports: 1/4" FNPT

| 7 | PORT TYPE IN/OUT |
|-----------|--------------------------------------|
| 1 | NPT |
| 2 | SAE J1926 |
| 3 | SAE AS5202 |
| 4 | Medium Pressure |
| 6 | NPTF |
| 8 | VALVE SEAT |
| 0 | VESPEL® <i>(6000+ psig inlet)</i> |
| 1 | 17-4 H900 Stainless Steel |
| 2 | 316 Stainless Steel <i>(NACE)</i> |
| 9 10 | O-RING MATERIAL |
| 00 | BUNA-N |
| 01 | AFLAS® |
| 02 | VITON® |
| 05 | EPDM |
| 11 | KALREZ® |
| 12 | NITRILE, LO-TEMP |
| 11 | OPTIONS |
| N | NACE MR0175 option |

10000 PSIG MAX INLET

The end user is responsible to ensure adequate fittings are used to connect regulator to plumbing.

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