



HIGH PRESSURE HIGH FLOW *Pressure Reducing Regulators*



PREMIER INDUSTRIES

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Minneapolis, MN 55449
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MADE IN THE USA

Minneapolis, MN

DESCRIPTION

Premier 3016 Series regulators are high pressure high flow, piston sensed, pressure reducing regulators rated for inlet pressures up to 10000 psig / 689.5 bar (*dependent upon configuration*), and (Cv) 1.0 or 2.0. Premier 3016 series regulators feature a balanced stem design for increased outlet pressure stability.

Premier 3016 Series regulators are available in a variety of materials for seamless integration into your desired application. Common applications include: commercial diving, and high pressure tube trailers.

FEATURES

- Self-venting and captured venting models available (*non-venting modification also available*)
- Balanced stem for increased outlet pressure stability
- High flow capacity (Cv): 1.0 or 2.0
- Piston sensed
- Great sensitivity
- Optional gauge ports
- Machined bar stock body eliminates porosity found in castings

*The Premier 3016 Series pressure reducing regulator's design is remarkably flexible.
Contact Premier Industries for a custom 3016 Series regulator to meet your exact needs.*

D/C: 200705

3016 SERIES

HIGH PRESSURE HIGH FLOW Pressure Reducing Regulators



SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
 - 17-4 STAINLESS STEEL BODY: 10000 PSIG (689.5 bar)
 - 316 STAINLESS STEEL BODY:
 - Cv 2.0, 6000 PSIG / 413.7 Bar
 - Cv 1.0, 10000 PSIG / 689.5 Bar
 - BRASS BODY:
 - Cv 2.0, 4000 PSIG / 275.8 bar
 - Cv 1.0, 6000 PSIG / 413.7 bar
 - MONEL BODY: 6000 PSIG / 413.7 bar
- **CONTROL PRESSURE RANGES:**
 - 0-300 PSIG (0-20.7 bar)
 - 0-500 PSIG (0-34.5 bar)
 - 0-1000 PSIG (0-68.9 bar)
 - 10-1500 PSIG (0.7-103.4 bar)
 - 15-2500 PSIG (1.0-172.4 bar)
 - 25-4000 PSIG (1.7-275.8 bar)
 - 50-6000 PSIG (3.5-413.7 bar)
 - 100-10000 PSIG (6.9-413.7 bar)
- **FLOW (Cv):** 1.0 or 2.0
- **OPERATING TEMPERATURE:****
 - -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 available

MATERIALS OF CONSTRUCTION

- **BODY OPTIONS:**
 - 17-4 Stainless Steel
 - 316 Stainless Steel
 - SAE 360 Brass
 - Monel 400
- **MAIN VALVE STEM:** 17-4 Stainless Steel (hardened)
- **MAIN VALVE SEAT:** Vespel®
- **VENT VALVE SEAT:** PCTFE
- **BACK-UP RINGS:** PTFE
- **O-RING MATERIAL OPTIONS:**
 - BUNA-N
 - AFLAS®
 - Viton®
 - EPDM
 - Nitrile, low-temp
 - Kalrez® (contact factory for pricing)
- **OTHER WETTED PARTS:** 316 Stainless Steel, 17-4 Stainless Steel

PORTING

- **INLET & OUTLET OPTIONS:**
 - 1/4" FNPT, SAE J1926, SAE AS5202**
 - 3/8" FNPT, SAE J1926, SAE AS5202**
 - 1/2" FNPT, SAE J1926, SAE AS5202
 - 3/4" FNPT, SAE J1926, SAE AS5202

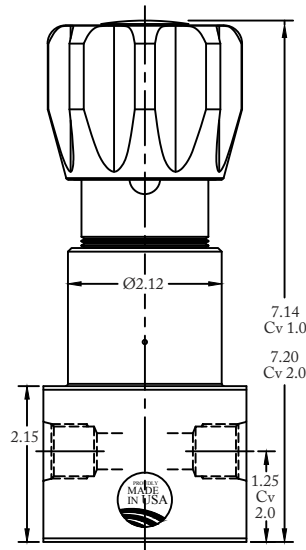
**Not recommended for Cv 2.0

- **GAUGE PORTS:** 1/4" FNPT

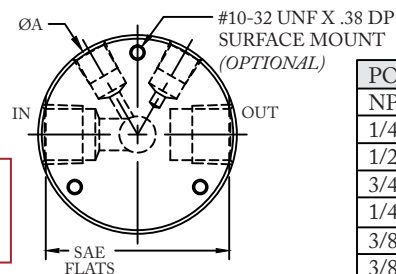
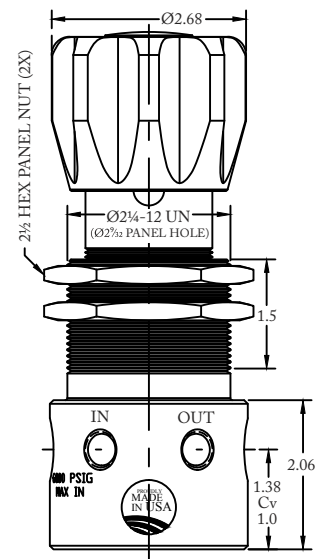
OPTIONS

- Captured venting, Cv 1.0, 10000 PSIG MAX (P/N: 30-10225)
- Captured venting, Cv 2.0, 6000 PSIG MAX, 3/4" port option, & surface mount, no bracket/panel nuts (P/N: 30-10228)
- Panel mounting bracket: P/N: 30-10059 (Ø2.15 panel hole)
- Panel mounting nuts: P/N: 30-10189 (Ø2.28 panel hole)
- Non-venting option

PANEL MOUNTING BRACKET STYLE



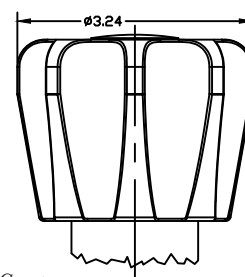
PANEL NUT STYLE



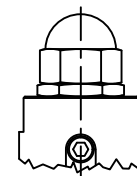
PORT TYPE	ØA	FLATS
NPT	Ø2.73	—
1/4" J1926	Ø2.73	2.52
1/2" NPT Cv 2.0	Ø2.98	—
3/4" NPT Cv 2.0	Ø2.98	—
1/4" AS5202	Ø2.98	2.80
3/8" & 1/2" J1926	Ø2.98	2.80
3/8" & 1/2" AS5202	Ø3.23	3.05

(Part number 30-10216 shown above)

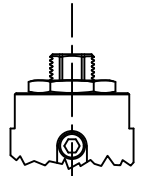
BALL-BEARING HAND KNOB (Optional)



TAMPER RESISTANT ACORN NUT OR WRENCH ADJUST (Optional)



ACORN NUT



WRENCH ADJUST
(P/N: 30-10225)



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SELF VENTING

PART #	1	2	-	3	4	5	6	7	-	8	9	-	10	-	MODS
30-10216			-						-			-		-	

1 2	MOUNTING STYLE
MB	Mounting bracket style body
PN	Panel nut style body <i>(Panel nuts included)</i>
3	BODY/BONNET MATERIALS <i>(MAX. INLET PRESSURE)</i>
1	SAE 360 brass body & bonnet <i>(Cv 2.0, 4000 PSIG / 275.8 Bar)</i> <i>(Cv 1.0, 6000 PSIG / 413.7 Bar)</i>
2	316 stainless steel body, 17-4 stainless steel bonnet <i>(Cv 2.0, 6000 PSIG / 413.7 Bar)</i> <i>(Cv 1.0, 10000 PSIG / 689.5 Bar)</i>
4	Monel 400® body, Stainless steel bonnet <i>(6000 PSIG / 413.7 Bar)</i>
5	17-4 Stainless Steel body & bonnet <i>(10000 PSIG / 689.5 Bar)</i>
4	OUTLET PRESSURE
0	0-300 PSIG <i>(0-20.7 Bar)</i>
1	0-500 PSIG <i>(0-34.5 Bar)</i>
2	0-1000 PSIG <i>(0-68.9 Bar)</i>
3	10-1500 PSIG <i>(0.7-103.4 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>(3.5-413.7 Bar)</i>
7	100-10000 PSIG <i>(6.9-413.7 Bar)</i>

5	PORTING CONFIG <i>(gauges optional, sold separately)</i>
A	
L	
C	
S	
6	PORT SIZE <i>(Inlet/outlet)</i>
4	1/4"***
6	3/8"***
8	1/2"
T	3/4"
<i>**Not recommended for Cv 2.0 Gauge ports 1/4" FNPT</i>	
7	PORT TYPE <i>(Inlet/outlet)</i>
1	FNPT
2	SAE J1926
3	SAE AS5202

8 9	O-RING MATERIAL
00	BUNA-N
01	AFLAS®
02	VITON®
05	EPDM
11	KALREZ® <i>(contact factory for pricing)</i>
12	NITRILE, LO-TEMP
10	Cv (FLOW)
1	Cv 1.0
2	Cv 2.0
MODIFICATIONS <i>Separate multiple mods with a dash</i>	
Blank	None
ANT	Acorn nut
BBL	Ball-bearing loader
PTU	Port type uniform
NV	Non-venting
SM	Surface mount

10000 PSIG MAX INLET (17-4 stainless steel, 316 Stainless Steel Cv 1.0) 6000 PSIG MAX INLET (316 Stainless Steel Cv 2.0/Monel/Brass Cv 1.0) 4000 PSIG MAX (brass, Cv 2.0)
The end user is responsible to ensure adequate fittings are used to connect regulator to plumbing.

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AFLAS® is a registered trademark of the Asahi Glass Co., Ltd. Monel is a registered trademark of Specialty Metals Corporation.
Contact factory for material certifications. Fees may apply.



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CAPTURED VENTING, Cv 1.0

PART #	1	2	-	3	4	5	6	-	7	8	-	MODS
30-10225			-					-			-	

1 2	MOUNTING STYLE
MB	Mounting bracket style body
PN	Panel nut style body (Panel nuts included)
3	OUTLET PRESSURE
C	150 PSIG (10.3 Bar)
0	300 PSIG (20.7 Bar)
1	500 PSIG (34.5 Bar)
2	1000 PSIG (68.9 Bar)
3	1500 PSIG (103.4 Bar)
4	2500 PSIG (172.4 Bar)
5	4000 PSIG (275.8 Bar)
6	6000 PSIG (413.7 Bar)
7	10000 PSIG (689.5 Bar)

4	PORTING CONFIG.
A	
C	
D	
L	
S	
5	PORT SIZE (Inlet/outlet)
6	3/8"
8	1/2"
<i>Gauge ports 1/4" FNPT</i>	
6	PORT TYPE (Inlet/outlet)
N	FNPT
J	SAE J1926
A	SAE AS5202 (MS33649**)

7 8	O-RINGS
00	BUNA-N
01	AFLAS®
02	VITON®
05	EPDM
11	KALREZ® <i>(contact factory for pricing)</i>
MODIFICATIONS <i>Separate multiple mods with a dash</i>	
Blank	None
ANT	Acorn nut
BBL	Ball-bearing loader
HYD	Hydrogen (H2) Service)
WA	Wrench adjust

**SAE AS5202 supersedes MS33649

10000 PSIG MAX INLET

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CAPTURED VENTING, C_v 2.0

PART #	-	1	2	3	4	-	5 6	-	MODS
30-10228	-					-		-	

NOTE: this design is not available with panel mounting nuts or a panel mounting bracket. It does have a surface mounting option (see modifications).

1	OUTLET PRESSURE
0	300 PSIG (20.7 Bar)
1	500 PSIG (34.5 Bar)
2	1000 PSIG (68.9 Bar)
3	1500 PSIG (103.4 Bar)
4	2500 PSIG (172.4 Bar)
5	4000 PSIG (275.8 Bar)
6	6000 PSIG (413.7 Bar)
2	PORTING CONFIG <i>(gauges optional, sold separately)</i>
A	
L	
C	
S	

3	PORT SIZE <i>(Inlet/outlet)</i>
8	1/2"
T	3/4"
4	PORT TYPE <i>(Inlet/outlet)</i>
1	FNPT
2	SAE J1926
3	SAE AS5202
5 6	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>	
Blank	None
ANT	Acorn nut
BBL	Ball-bearing loader
PTU	Port type uniform
B	Brass
SM	Surface mount

6000 PSIG MAX INLET

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