

3016 SERIES

High Pressure, High Flow
Pressure Reducing Regulators



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

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

SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
 - 10000 PSIG / 689.5 bar*
**dependent on material and configuration, see part numbers on pgs 4, 5, and 6.*
- **CONTROL PRESSURE RANGES:**
 - 0-300 PSIG (0-20.7 bar)
 - 0-500 PSIG (0-34.5 bar)
 - 10-1000 PSIG (0.7-68.9 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) **
*** (P/N 30 10216 and 30-10225 only)*
- **FLOW (C_v):** 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 upon request*

PORTING

- **INLET & OUTLET OPTIONS:**
 - See part numbers on pgs 4, 5, and 6
- **GAUGE PORTS:** 1/4" FNPT

MATERIALS OF CONSTRUCTION

- **BODY OPTIONS:**
 - 316 Stainless Steel (Standard)
 - 17-4 Stainless Steel (P/N: 30-10216 only)
 - SAE 360 Brass (P/N: 30-10216 & 30-10228 only)
 - Monel 400 (P/N: 30-10216 only)
 - 6061 T-6 Aluminum (P/N: 30-10216 only)
- **MAIN VALVE STEM:**
 - 17-4 Stainless Steel (hardened)
- **MAIN VALVE SEAT:**
 - P/N: 30-10216: Vespel® SP-1
 - P/N: 30-10225: Vespel® SP-1
 - P/N: 30-10228: PCTFE
- **VENT VALVE SEAT:**
 - P/N: 30-10216: PCTFE
 - P/N: 30-10225: Vespel® SP-1
 - P/N: 30-10228: Vespel® SP-1
- **BACK-UP RINGS:**
 - P/N: 30-10216: PTFE
 - P/N: 30-10225: PTFE or PTCFE
 - P/N: 30-10228: PTFE or PTCFE
- **O-RING MATERIAL OPTIONS:**
 - BUNA-N
 - AFLAS®
 - Viton®
 - EPDM
 - Nitrile, low-temp (*not available for P/N 30-10225*)
 - FFKM (*contact Premier for pricing*)
- **OTHER WETTED PARTS:**
 - 316 Stainless Steel
 - 17-4 Stainless Steel
- **STANDARD LUBRICANT:**
 - Krytox® GPL 206

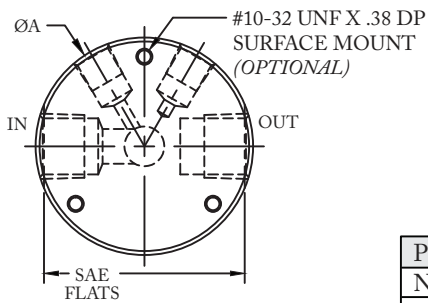
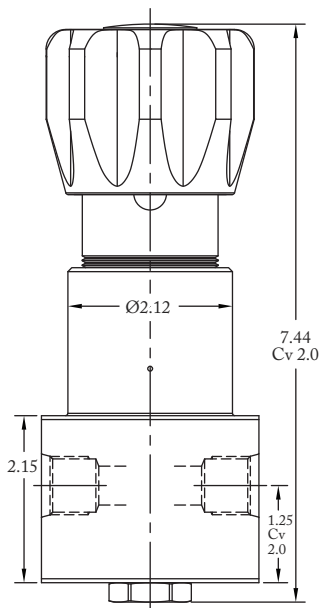
OPTIONS

- 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

Contact factory for material certifications. Fees may apply.
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E.I. duPont de Nemours & Company.
Krytox® is a registered trademark of e Chemours Company FC, LLC.
AFLAS® is a registered trademark of the Asahi Glass Co., Ltd.

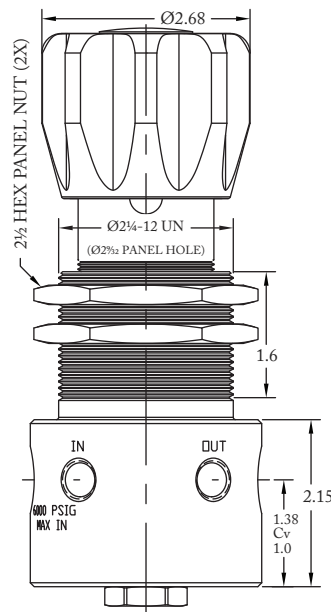
PART NUMBER: 30-10216

PANEL MOUNTING

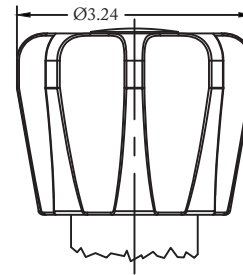


*Surface mounting holes
Pattern dependent on
port size, type, and
configuration*

PANEL NUT STYLE



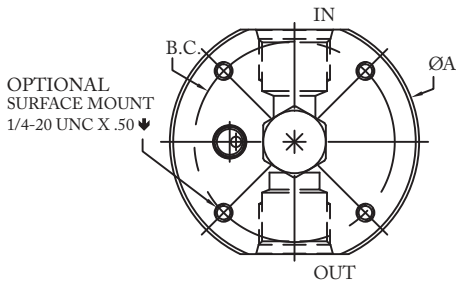
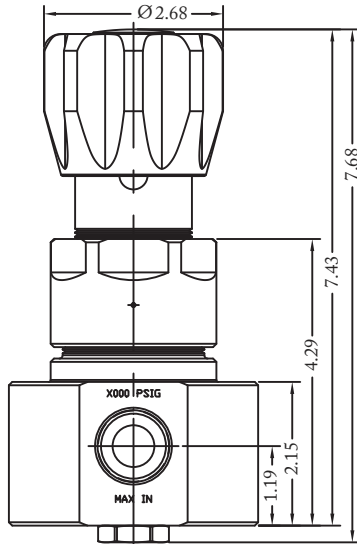
**BALL-BEARING
HAND KNOB
(Optional)**



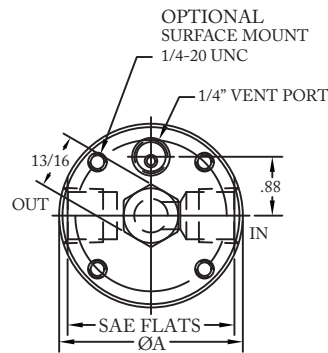
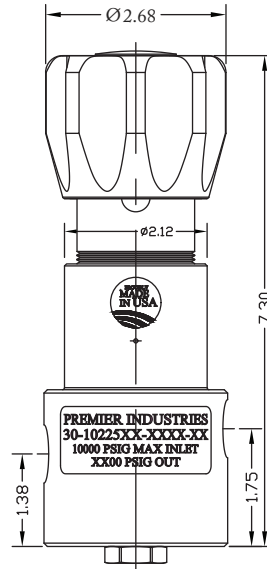
**TAMPER RESISTANT
ACORN NUT
(Optional)**



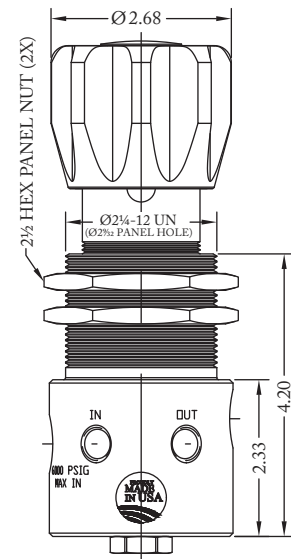
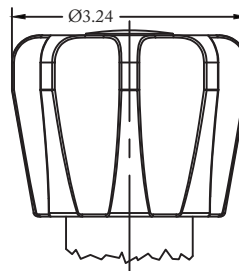
PORT TYPE	ØA	FLATS
NPT	Ø2.98	—
1/4" AS5202	Ø2.98	2.80
3/8" & 1/2" J1926	Ø2.98	2.80
3/8" & 1/2" AS5202	Ø3.23	3.05
3/4" J1926	Ø3.73	3.36
3/4" AS5202	Ø3.98	3.72

PART NUMBER: 30-10228


PORT TYPE	ØA	FLATS	B.C.
NPT	Ø2.98	—	Ø2.50
1/2" SAE	Ø3.23	3.05	Ø2.63
3/4" J1926	Ø3.73	3.36	Ø3.00
3/4" AS5202	Ø3.98	3.72	Ø3.00

PART NUMBER: 30-10225


**BALL-BEARING
HAND KNOB**
(Optional)

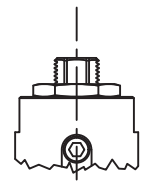


PORT TYPE	ØA	FLATS
NPT	Ø2.73	—
SAE J1926	Ø3.23	3.05
3/8" SAE AS5202	Ø3.23	3.05
1/2" SAE AS5202	Ø3.48	3.30

**TAMPER RESISTANT
ACORN NUT OR WRENCH
ADJUST** *(Optional)*



ACORN NUT

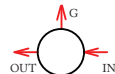
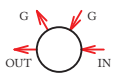
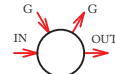
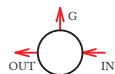
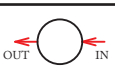


WRENCH ADJUST
(P/N: 30-10225)

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

SELF VENTING, Cv 1.0 or 2.0

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 1.0, 6000 PSIG / 413.7 BAR) (CV 2.0, 4000 PSIG / 275.8 BAR)</i>
2	316 STAINLESS STEEL BODY, 17-4 STAINLESS STEEL BONNET <i>(CV 1.0, 10000 PSIG / 689.5 BAR) (CV 2.0, 6000 PSIG / 413.7 BAR)</i>
4	MONEL 400® BODY, STAINLESS STEEL BONNET <i>(CV 1.0, 6000 PSIG / 413.7 BAR) (CV 2.0, 6000 PSIG / 413.7 BAR)</i>
5	17-4 STAINLESS STEEL BODY & BONNET <i>(CV 1.0, 10000 PSIG / 689.5 BAR) (CV 2.0, 10000 PSIG / 689.5 BAR)</i>
6	6061-T-6 ALUMINUM BODY/BONNET <i>(6000 PSIG / 413.7 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> <i>NOT AVAILABLE FOR BRASS CV 2.0 MODEL</i>
7	100-10000 PSIG <i>(6.9-689.5 BAR)</i> <i>(17-4 STAINLESS STEEL, OR 316 STAINLESS STEEL CV 1.0 ONLY)</i>

5	PORTING CONFIG <i>(gauges optional, sold separately)</i>
A	
C	
D	
L	
S	
6	PORT SIZE <i>(Inlet/outlet)</i>
4	1/4"***
6	3/8"***
8	1/2"
T	3/4"
W	1"
<i>**Not recommended for Cv 2.0</i> GAUGE PORTS: 1/4" FNPT	
7	PORT TYPE <i>(Inlet/outlet)</i>
1	FNPT
2	SAE J1926
3	SAE AS5202
4	MEDIUM PRESSURE
<i>SAE not available in all sizes at 10000 PSIG SAE AS5202 supersedes MS33649</i>	

8 9	O-RING MATERIAL
00	BUNA-N
01	AFLAS®
02	VITON®
05	EPDM
11	FFKM <i>(contact Premier 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
AC	Krytox 240AC
ANT	Acorn nut
BBL	Ball-bearing loader
NV	Non-venting
PTU	Port type uniform
SM	Surface mount

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

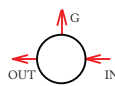
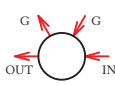
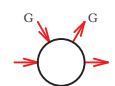
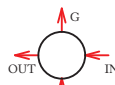
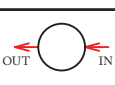
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*Contact factory for material certifications.
Fees may apply.*

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

CAPTURED VENTING, C_v 1.0
316 STAINLESS STEEL BODY

1 2	MOUNTING STYLE
MB	Mounting bracket style body
PN	Panel nut style body <i>(Panel nuts included)</i>
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 CONFIGURATION
A	
C	
D	
L	
S	
5	PORT SIZE (INLET/OUTLET)
6	3/8"
8	1/2"
GAUGE PORTS: 1/4" FNPT	
VENT PORT: 1/4" INLET/OUTLET PORT TYPE	
6	PORT TYPE (INLET/OUTLET/VENT)
N	FNPT
J	SAE J1926
A	SAE AS5202**
**SAE AS5202 SUPERSEDES MS33649	

7 8	O-RINGS
00	BUNA-N
01	AFLAS®
02	VITON®
05	EPDM
11	FFKM <i>(contact Premier for pricing)</i>
MODIFICATIONS <i>Separate multiple mods with a dash</i>	
BLANK	None
AC	Krytox 240AC
ANT	Acorn nut
BBL	Ball-bearing loader
PTU	Port type uniform
SM	Surface mount*
WA	Wrench adjust
*SURFACE MOUNT HOLES: Pattern dependent on port size, type, and configuration. - not available on panel nut style	

10000 PSIG MAX INLET
The end user is responsible to ensure adequate fittings are used to connect regulator to plumbing

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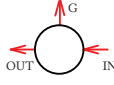
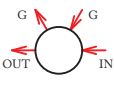
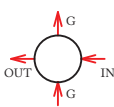

PART #	-	1	2	3	4	-	5	6	-	MODS
30-10228	-					-			-	

CAPTURED VENTING, Cv 2.0

316 Stainless Steel body standard, 6000 PSIG MAX

SAE 360 Brass modification available, 4000 PSIG MAX

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 (GAUGES OPTIONAL, SOLD SEPARATELY)
A	
C	
L	
S	

3	PORT SIZE (INLET/OUTLET)
8	1/2"
T	3/4"
4	PORT TYPE (INLET/OUTLET)
1	FNPT
2	SAE J1926
3	SAE AS5202
GAUGE PORTS: 1/4" FNPT	
VENT PORT: 1/4" INLET/OUTLET PORT TYPE	
5 6	O-RING MATERIAL
00	BUNA-N
01	AFLAS®
02	VITON®
05	EPDM
11	FFKM (contact Premier for pricing)
12	NITRILE, LO-TEMP

MODIFICATIONS <i>Separate multiple mods with a dash</i>	
BLANK	None
AC	Krytox 240AC
ANT	Acorn nut
BBL	Ball-bearing loader
PTU	Port type uniform
B	Brass (4000 PSIG MAX INLET)
SM	Surface mount

6000 PSIG MAX INLET (316 Stainless Steel)
4000 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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