

H2 3016 SERIES

High Pressure, High Flow, Hydrogen
Pressure Reducing Regulators



Hydrogen regulators from the Premier H2 3016 Series are piston sensed, pressure reducing regulators rated for inlet and outlet pressures up to 10000 PSIG / 689.4 bar and Cv. 1.0 or 2.0 (*dependent upon part number and configuration*). Premier H2 3016 Series regulators are designed for use in Hydrogen applications; they are available with a wide range of outlet and inlet configurations.

FEATURES

- Designed for use with Hydrogen
- Captured venting and non-venting options available
- Cv 1.0 or 2.0
- Optional ball bearing loader or tamper resistant acorn nut
- Economical pricing
- Machined bar stock body, bonnet and piston eliminates porosity found in castings

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

SPECIFICATIONS

- **MAX INLET PRESSURE:**
 - 10000 PSIG / 689.5 bar ***dependent on configuration, see selection tables on pg 6, 7, and 8*
- **OUTLET PRESSURE:**
 - 150 PSIG (10.3 bar) P/N H30-10225 only
 - 300 PSIG (20.7 bar)
 - 500 PSIG (34.5 bar)
 - 1000 PSIG (68.9 bar)
 - 1500 PSIG (103.4 bar)
 - 2500 PSIG (172.4 bar)
 - 4000 PSIG (275.8 bar)
 - 6000 PSIG (413.7 bar)
 - 10000 PSIG (689.5 bar) P/N H30-10225 only
- **FLOW (Cv):** 1.0 or 2.0
- **VENT VALVE Cv:** 0.06
- **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)

MATERIALS OF CONSTRUCTION

- **BODY:**
 - SAE 360 brass P/N H30-10216 only
 - 316 Stainless Steel
- **WETTED PARTS, OTHER:**
 - 316 Stainless Steel
- **MAIN VALVE STEM:**
 - Toughmet3® TS160U or 316 Stainless Steel
- **O-RING OPTIONS:**
 - BUNA-N
 - Viton®
 - EPDM
- **BACK-UP RINGS:**
 - P/N H30-10228: PTFE
 - P/N H30-10225 / H30-10216: PTFE or PCTFE
- **MAIN VALVE SEAT:**
 - ≥6000 psig: PCTFE
 - 10000 psig: Vespel®
- **VENT VALVE SEAT:**
 - Vespel®

PORTING

- **INLET/OUTLET PORTING OPTIONS:**
 - See part number selection tables on pg 6, 7, and 8
- **VENT PORT:** 1/4" inlet/outlet port type
- **GAUGE PORTS:** 1/4" FNPT

OPTIONS

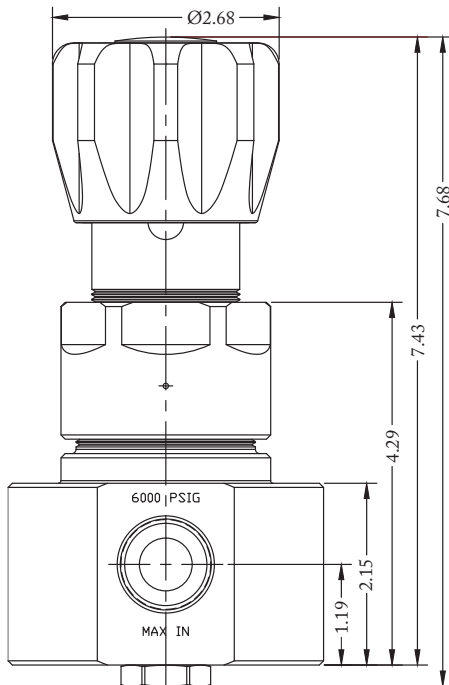
- Surface mount
- Ball bearing loader with oversized knob
- Tamper resistant acorn nut
- Port type uniform (gauge ports 1/4" IN/OUT/VENT PORT TYPE)
- Private label

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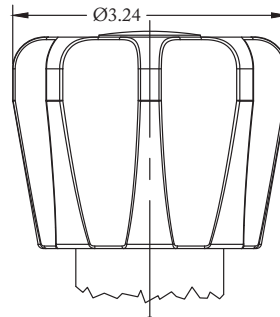
Contact factory for material certifications.
Fees may apply.

PART NUMBER: H30-10228

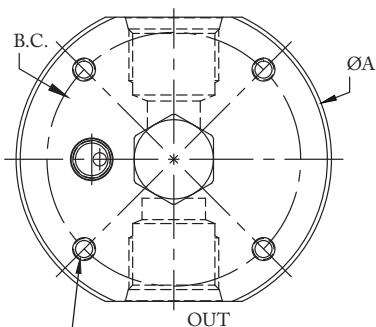
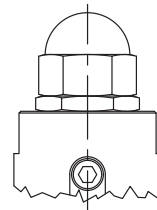
3/4 SAE J1926 SHOWN BELOW



**BALL-BEARING LOADER
W/ OVERSIZED KNOB**



**TAMPER RESISTANT
ACORN NUT**

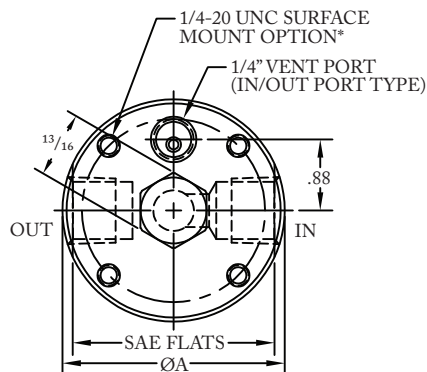
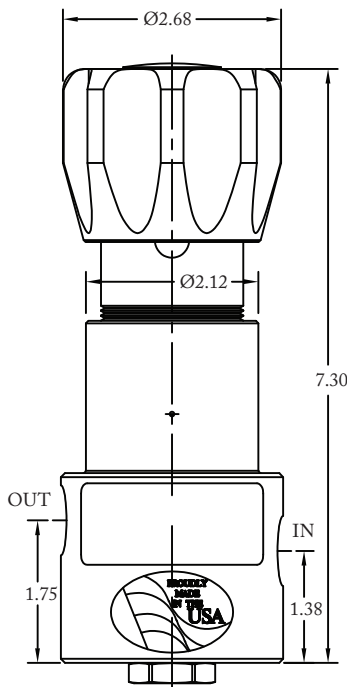


SURFACE MOUNT
OPTION
1/4-20 UNC X .50 ↓

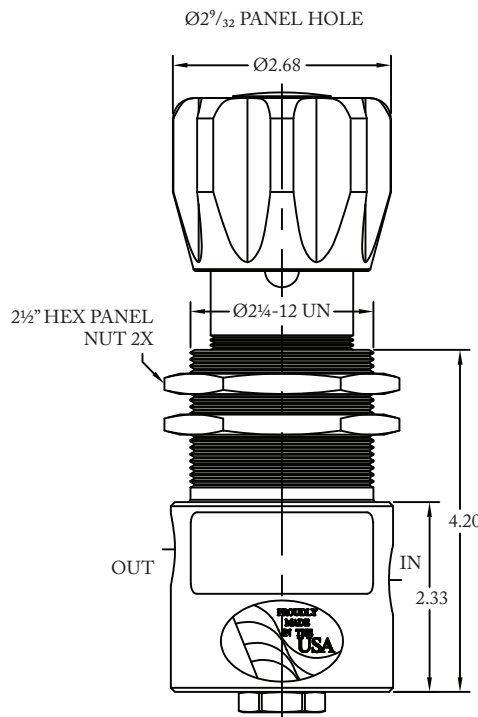
PORT TYPE	$\text{Ø}A$	FLATS	B.C.
NPT	$\text{Ø}2.98$	—	$\text{Ø}2.50$
1/2" SAE	$\text{Ø}3.23$	3.05	$\text{Ø}2.63$
3/4" J1926	$\text{Ø}3.73$	3.36	$\text{Ø}3.00$
3/4" AS5202	$\text{Ø}3.98$	3.72	$\text{Ø}3.00$

PART NUMBER: H30-10225

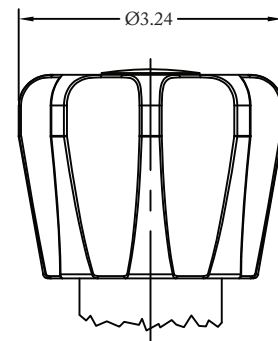
MOUNTING BRACKET STYLE



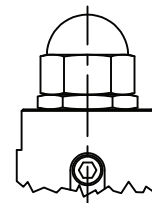
PANEL NUT STYLE



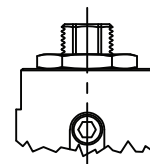
BALL-BEARING LOADER W/ OVERSIZED KNOB



TAMPER RESISTANT ACORN NUT



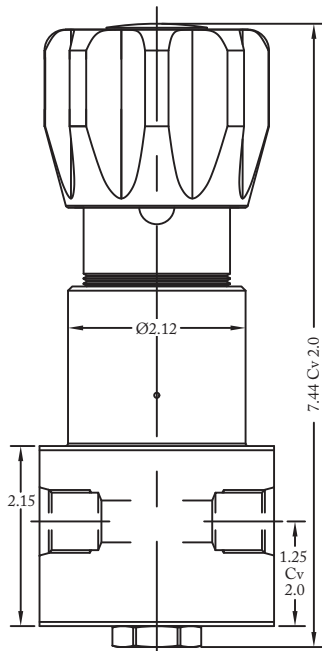
TAMPER RESISTANT WRENCH ADJUST



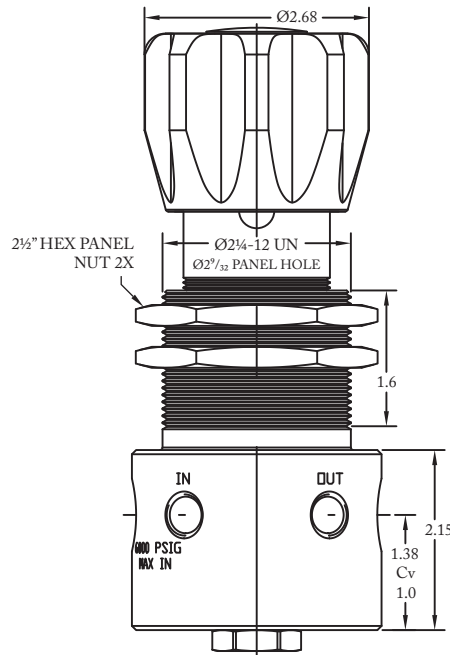
PORT TYPE	ØA	FLATS	BODY
NPT	Ø2.73	—	
SAE J1926	Ø3.23	3.05	
3/8\" SAE AS5202	Ø3.23	3.05	
1/2\" SAE AS5202	Ø3.48	3.30	

PART NUMBER: H30-10216

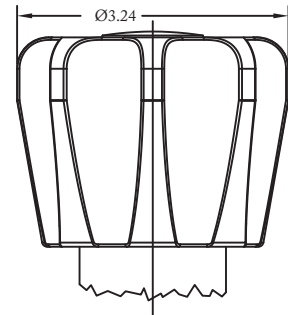
**MOUNTING BRACKET
STYLE**



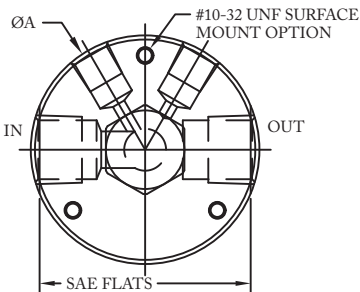
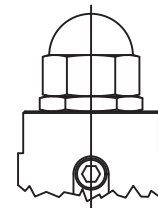
**PANEL NUT
STYLE**



**BALL-BEARING LOADER
W/ OVERSIZED KNOB**



**TAMPER RESISTANT
ACORN NUT**



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

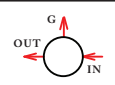
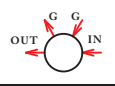
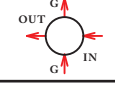
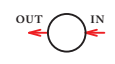
SURFACE MOUNTING HOLES:
PATTERN DEPENDENT ON PORT
SIZE, TYPE, AND CONFIG.

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PART #	-	1	2	3	4	-	5	6	-	MODS
H30-10228	-					-			-	

CAPTURED VENTING, Cv 2.0
316 STAINLESS STEEL BODY
6000 PSIG MAX INLET

1	OUTLET PRESSURE
0	300 PSIG (20.68 bar)
1	500 PSIG (34.47 bar)
2	1000 PSIG (68.95 bar)
3	1500 PSIG (103.42 bar)
4	2500 PSIG (172.37 bar)
5	4000 PSIG (275.79 bar)
6	6000 PSIG (413.69 bar)
2	PORT CONFIGURATION
A	
C	
L	
S	

3	PORT SIZE
8	1/2"
T	3/4"
4	PORT TYPE (INLET/OUTLET)
1	FNPT
2	SAE J1926
3	SAE AS5202
<i>VENT PORT: 1/4" inlet/outlet port type GAUGE PORTS: 1/4" FNPT</i>	
5 6	O-RING MATERIAL
00	BUNA-N
02	VITON-A®
05	EPDM

MODIFICATIONS	
<i>Separate multiple mods with a dash</i>	
BLANK	None
ANT	ACORN NUT
BBL	BALL-BEARING LOADER
PTU	PORT TYPE UNIFORM
SM	SURFACE MOUNT

6000 PSIG MAX INLET
*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.*

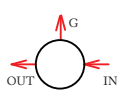
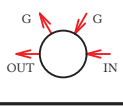
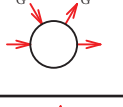
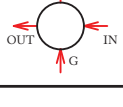

H2 3016 SERIES

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Pressure Reducing Regulators

PART #	1	2	-	3	4	5	6	-	7	8	-	MODS
H30-10225			-					-			-	

CAPTURED VENTING, Cv 1.0
316 STAINLESS STEEL BODY,
10000 PSIG MAX INLET

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 CONFIG.
A	
C	
D	
L	
S	
5	PORT SIZE (INLET/OUTLET)
6	3/8"
8	1/2"
<i>Gauge ports: 1/4" FNPT Vent port: 1/4" inlet/outlet port type</i>	
6	PORT TYPE (INLET/OUTLET)
N	FNPT
J	SAE J1926
A	SAE AS5202 (MS33649**)
<small>**SAE AS5202 supersedes MS33649</small>	

7 8	O-RINGS
00	BUNA-N
02	VITON®
05	EPDM
MODIFICATIONS	
<i>Separate multiple mods with a dash</i>	
Blank	None
ANT	Acorn nut
BBL	Ball-bearing loader
PTU	Port type uniform
SM	Surface mount*
WA	Wrench adjust
<small>*SURFACE MOUNT HOLES: Pattern dependent on port size, type, and configuration. - not available on panel nut style</small>	

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

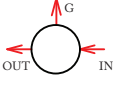
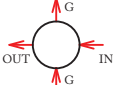


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PART #	1	2	-	3	4	5	6	7	-	8	9	-	10	-	MODS
H30-10216			-						-			-			

**NON-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 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	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 SAE 360 Brass, Cv 2.0)</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
02	VITON®
05	EPDM
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
SM	Surface mount

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

*SAE AS5202 supersedes MS33649
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