

# H2 3000 SERIES

High Pressure, Hydrogen  
Pressure Reducing Regulators



The Premier H2 3000 Series are piston-sensed, pressure-reducing regulators engineered specifically for high-pressure hydrogen service. Rated for inlet and outlet pressures up to 10000 PSIG (689.48 bar) and Cv 0.04, 0.06, 0.12, and 0.20. Captured venting is standard, allowing safe routing of vented hydrogen away from operators and equipment.

Built to address the unique challenges of hydrogen systems, these regulators use materials and internal components selected to resist hydrogen embrittlement, ensuring long-term durability and consistent performance.

The H2 3000 Series delivers a robust, hydrogen-ready solution where safety, material integrity, and pressure stability are critical.

## FEATURES

- Designed for use with Hydrogen
- 10000 PSIG (689.48 bar) MAX
- Captured venting standard
- Cv 0.04, 0.06, 0.12, 0.20
- Numerous optional features
- 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

- **MAXIMUM INLET PRESSURE (brass):**
  - 6000 PSIG (413.7 bar)
- **MAXIMUM INLET PRESSURE (SS):**
  - 10000 PSIG (689.5 bar)
- **OUTLET PRESSURE RANGES:**
  - 0-200 PSIG (0-13.79 Bar)
  - 5-500 PSIG (0.35-34.5 Bar)
  - 5-800 PSIG (0.35-55.2 Bar)
  - 10-1500 PSIG (0.69-103.4 Bar)
  - 15-2500 PSIG (1.0-172.4 Bar)
  - 20-3000 PSIG (1.38-206.84 Bar)
  - 25-4000 PSIG (1.7-275.8 Bar)
  - 50-6000 PSIG (3.4-413.7 Bar)
  - 100-10000 PSIG (6.9-689.5 Bar)
- **FLOW (Cv):** 0.04, 0.06, 0.12, or 0.2
- **VENT VALVE Cv:** 0.06

## MATERIALS OF CONSTRUCTION

- **BODY OPTIONS:**
  - SAE 360 brass
  - 316 Stainless Steel
- **WETTED, OTHER:**
  - 316 Stainless Steel
- **SEAL OPTIONS:**
  - Viton-A®
  - Buna-N
  - EPDM
  - Other compounds available upon request
- **BACK-UP RINGS:** PTFE & PCTFE
- **MAIN VALVE SEAT:**
  - Vespel® SP-1 (Cv 0.04, 0.06, 0.12)
  - Vespel® SCP 5000 (Cv 0.20)
- **VENT VALVE SEAT :**
  - Vespel®
- **VALVE ACTUATOR STEM :**
  - Toughmet® 3 TS160U Alloy

## PORTING

- **INLET/OUTLET**
  - 1/4", 3/8", 1/2" FNPT
  - 1/4", 3/8", 1/2" SAE J1926
  - 1/4", 3/8", 1/2" SAE AS5202 (MS33649\*\*)
  - 1/4", 3/8", 9/16" MEDIUM PRESSURE

## 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)
- Tamper resistant acorn nut

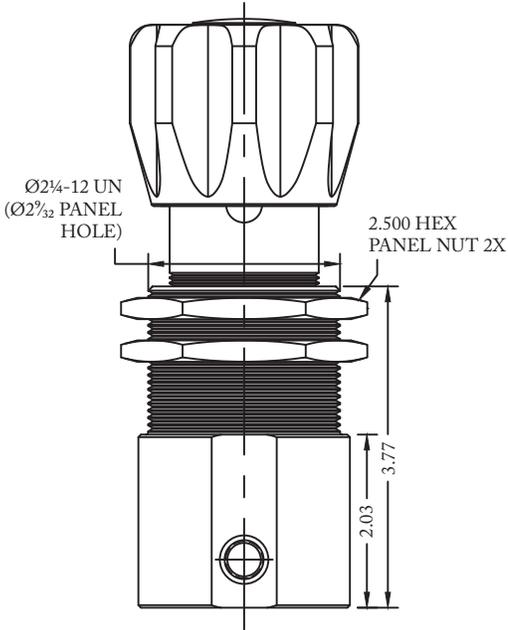
*Vespel® and Viton-A® are registered trademarks of E.I. duPont de Nemours and Company.*

*ToughMet® is a registered trademark of Materion Brush Inc.*

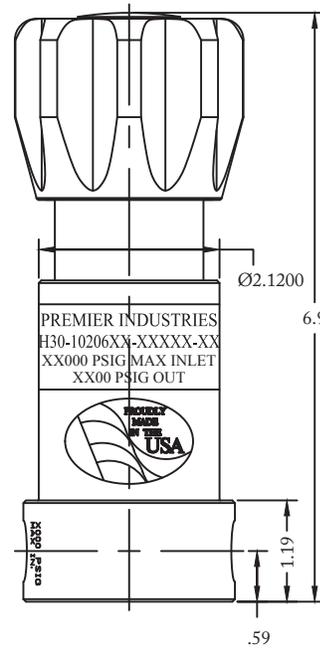
*Contact factory for material certifications. Fees may apply.*

**PART NUMBER: H30-10206**

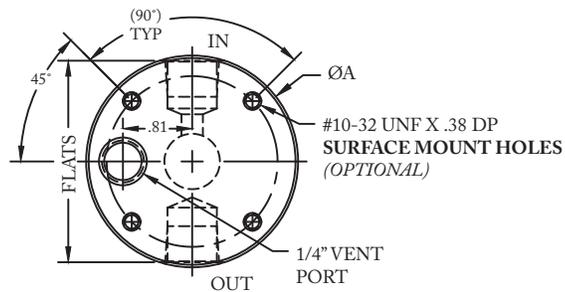
**PANEL NUT STYLE BODY**



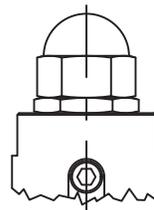
**MOUNTING BRACKET STYLE BODY**



BODY DIMENSIONS		
PORT SIZE & TYPE	ØA	FLATS
NPT	Ø2.48	—
1/4" J1926, M.P.	Ø2.48	2.36
1/4" AS5202	Ø2.98	2.81
3/8" SAE, M.P.	Ø2.98	2.81
1/2" SAE, 9.16" M.P.	Ø3.23	2.98
3/8" & LARGER 'L' CONFIGURATION BODIES REQUIRE A LARGER ØA		



**TAMPER RESISTANT ACORN NUT**



PART #	1	2	-	3	4	5	6	7	-	8	9	-	MODS
H30-10206			-						-			-	

1 2	BODY MATERIALS (MAX. INLET PRESSURE)
<b>MB</b>	MOUNTING BRACKET
<b>PN</b>	PANEL NUT STYLE BODY
3	OUTLET PRESSURE
<b>0</b>	0-200 PSIG (0-13.79 BAR)
<b>1</b>	5-500 PSIG (0.35-34.5 BAR)
<b>2</b>	5-800 PSIG (0.35-55.2 BAR)
<b>3</b>	10-1500 PSIG (0.69-103.4 BAR)
<b>4</b>	15-2500 PSIG (1.0-172.4 BAR)
<b>5</b>	25-4000 PSIG (1.7-275.8 BAR)
<b>6</b>	50-6000 PSIG (3.4-413.7 BAR)
<b>7</b>	100-10000 PSIG (6.9-689.5 BAR)
<b>8</b>	20-3000 PSIG (1.38-206.84 BAR)
4	FLOW (Cv) MAIN VALVE SEAT
<b>A</b>	Cv 0.04, Vespel SP-1
<b>0</b>	Cv 0.06, Vespel SP-1
<b>1</b>	Cv 0.12, Vespel SP-1
<b>2</b>	Cv 0.2, Vespel SCP-5000

5	PORTING CONFIGURATION
<b>A</b>	
<b>C</b>	
<b>D</b>	
<b>L</b>	
<b>S</b>	
6	PORT SIZE
<b>4</b>	1/4"
<b>6</b>	3/8"
<b>8</b>	1/2"*
<b>9</b>	9/16"***
<p><i>*1/2" NOT AVAILABLE IN MEDIUM PRESSURE/HIGH PRESSURE</i></p> <p><i>**9/16" ONLY AVAILABLE IN MEDIUM PRESSURE</i></p>	
7	PORT TYPE
<b>1</b>	FNPT
<b>2</b>	SAE J1926
<b>3</b>	SAE AS5202 (MS33649**)
<b>4</b>	MEDIUM PRESSURE
<p><i>**SAE AS5202 SUPERSEDES MS33649</i></p>	

8 9	O-RING MATERIAL
<b>00</b>	BUNA-N
<b>02</b>	VITON-A®
<b>05</b>	EPDM
MODIFICATIONS SEPARATE MULTIPLE MODS WITH A DASH	
<b>BLANK</b>	NONE
<b>ANT</b>	ACORN NUT
<b>B</b>	BRASS BODY & BONNET
<b>NV</b>	NON-VENTING
<b>PTU</b>	PORT TYPE UNIFORM
<b>SM</b>	SURFACE MOUNT

*10000 PSIG MAX INLET (STAINLESS STEEL)  
6000 PSIG MAX INLET (BRASS)  
THE END USER IS RESPONSIBLE TO  
ENSURE ADEQUATE FITTINGS ARE USED  
TO CONNECT REGULATOR TO PLUMBING.*

*VITON-A® IS A REGISTERED TRADEMARK  
OF E.I. DUPONT DE NEMOURS AND  
COMPANY*

*CONTACT FACTORY FOR MATERIAL  
CERTIFICATIONS. FEES MAY APPLY.*

*SURFACE MOUNT: PATTERN DEPENDENT  
ON PORT TYPE, SIZE & CONFIGURATION.  
-NOT AVAILABLE ON PANEL MOUNT STYLE  
BODIES.*