

# H2 3000AL SERIES

Air loaded, High Pressure, Hydrogen  
Pressure Reducing Regulators



The Premier H2 3000AL Series Hydrogen, air loaded, piston sensed, single stage, high pressure, pressure reducing regulators feature outlet pressures up to 10000 PSIG (*689.48 bar*), and Cv 0.06, 0.12, or 0.2. Premium H2 3000AL Series regulators are designed for use in Hydrogen applications; they are available with a wide range of outlet and inlet configurations.

## FEATURES

- Compatible with electro pneumatic controllers
- Designed for use with Hydrogen
- Cv 0.06, 0.12, or 0.2
- Outlet pressures up to 10000 PSIG (*689.48 bar*)
- Captured venting standard
- ToughMet® 3 TS Alloy valve actuator stem
- Machined bar stock body, bonnet and piston eliminates porosity found in castings
- Numerous optional features are available

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

## SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
  - REGULATOR:
    - 10000 PSIG / 689.5 bar (316 Stainless Steel)
    - 6000 PSIG / 689.5 bar (SAE 360 Brass)
  - AIR ACTUATOR:
    - 110 PSIG (7.5 bar)
- **OUTLET PRESSURE RANGES:**
  - 10-1500 PSIG (0.69 - 103.42 bar)
  - 15-2500 PSIG (1.03 - 172.37 bar)
  - 25-3000 PSIG (1.7 - 206.84 bar)
  - 50-6000 PSIG (3.45 - 413.69 bar)
  - 100-10000 PSIG (6.89 - 689.5 bar)
- **FLOW (Cv):** 0.06, 0.12, or 0.20
- **VENT VALVE (Cv):** 0.06

## MATERIALS OF CONSTRUCTION

- **BODY OPTIONS:**
  - SAE 360 brass
  - 316 Stainless Steel
- **HOUSING, AIR ACTUATOR :**
  - 6061-T6 Aluminum/clear anodized
- **DIAPHRAGM, AIR ACTUATOR :**
  - Neoprene, nylon fabric-reinforced
- **MAIN VALVE SEAT:**
  - Vespel®
- **VENT VALVE SEAT:**
  - Vespel®
- **VALVE ACTUATOR STEM:**
  - ToughMet® 3 TS Alloy
- **ELASTOMER SEAL OPTIONS:**
  - BUNA-N
  - Viton-A®
  - EPDM
- **OTHER WETTED PARTS:**
  - 316 Stainless Steel
- **BACK-UP RINGS:**
  - PTFE

## 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
  - 1/4", 3/8" HIGH PRESSURE
- **AIR ACTUATOR:**
  - 1/4-18" FNPT (Standard)
  - 1/4" SAE AS5202 (mod)
  - 1/4" SAE J1926 (mod)
  - 1/8" FNPT (mod)

## OPTIONAL ITEMS

- Panel mounting bracket: P/N: 30-10059  
(Ø.15 panel hole)
- Surface mount
- Private label

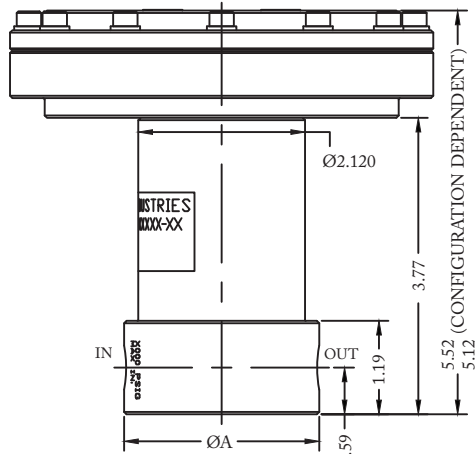
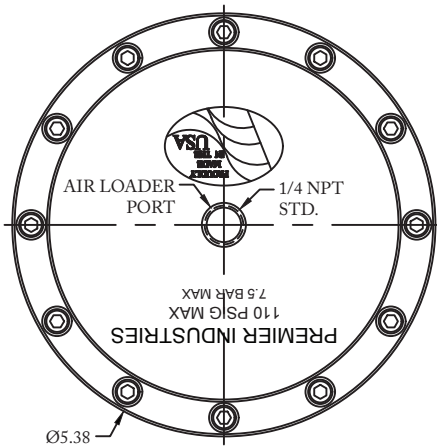
\*\*SAE AS5202 supersedes MS33649

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E.I. duPont de Nemours and Company

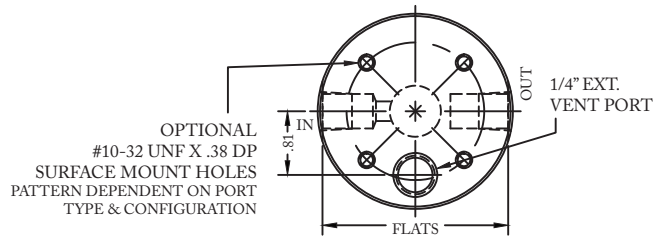
ToughMet® is a registered trademark of Materion  
Brush Inc.

Contact factory for material certifications.  
Fees may apply.

PART NUMBER: H30-10219







BODY DIMENSIONS		
PORT TYPE	ØA	FLATS
NPT	Ø2.48	—
1/4" J1926, M.P., H.P.	Ø2.48	2.36
1/4" AS5202	Ø2.98	2.81
3/8" SAE, M.P., H.P.	Ø2.98	2.81
1/2" SAE	Ø3.23	2.98
9/16" M.P.	Ø3.23	2.98
3/8" & LARGER 'L' CONFIGURATION BODIES REQUIRE A LARGER ØA		



DIAPHRAGM TO SENSOR RATIOS		
	AREA	RATIO - CALCULATED
DIAPHRAGM Ø4.0"	12.5664 IN <sup>2</sup>	—
SENSOR Ø.375	0.1104 <sup>2</sup>	114/1
SENSOR Ø.500	0.1964 <sup>2</sup>	64/1
SENSOR Ø.750	0.4418 <sup>2</sup>	28/1
SENSOR Ø1.000	0.7854 <sup>2</sup>	16/1

PART #	1	-	2	3	4	5	6	-	7 8	-	MODS
H30-10219		-						-		-	

1	BODY MATERIALS (MAX. INLET PRESSURE)
<b>B</b>	SAE 360 Brass (6000 psig / 413.7 bar)
BLANK	316 Stainless Steel (10000 psig / 689.5 bar)
2	OUTLET PRESSURE
<b>3</b>	10-1500 psig (0.69-103.4 bar)
<b>4</b>	15-2500 psig (1.0-172.4 bar)
<b>6</b>	50-6000 psig (3.4-413.7 bar)
<b>7</b>	100-10000 psig (6.9-689.5 bar) (stainless steel only)
<b>8</b>	25-3000 psig (1.7-206.8 bar)
3	FLOW (Cv)
<b>0</b>	Cv 0.06
<b>1</b>	Cv 0.12
<b>2</b>	Cv 0.2

4	PORT SIZE
<b>A</b>	
<b>C</b>	
<b>L</b>	
<b>S</b>	
5	PORT SIZE
<b>4</b>	1/4"
<b>6</b>	3/8"
<b>8</b>	1/2"*
<b>9</b>	9/16"**
<i>*1/2" not available in medium pressure or high pressure **9/16" only available in medium pressure</i>	
6	PORT TYPE
<b>1</b>	FNPT
<b>2</b>	SAE J1926
<b>3</b>	SAE AS5202 (MS33649**)
<b>4</b>	MEDIUM PRESSURE
<b>5</b>	HIGH PRESSURE
<i>**SAE AS5202 supersedes MS33649</i>	

7 8	O-RING MATERIAL
<b>00</b>	BUNA-N
<b>02</b>	VITON-A®
<b>05</b>	EPDM
MODIFICATIONS <i>Separate multiple mods with a dash</i>	
BLANK	NONE
<b>AS</b>	1/4" SAE AS5202 LOADER PORT
<b>E</b>	1/8" NPT AIR LOADER PORT
<b>J</b>	1/4" SAE J1926 LOADER PORT
<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.