PREMIER INDUSTRIES

H2 3016AL SERIES

Air Loaded, High Pressure, High Flow, Hydrogen
Pressure Reducing Regulators

Premier H2 3016AL Series hydrogen regulators are high pressure, high flow, piston sensed, pressure reducing regulators rated for inlet pressures up to 6000 psig (*413.7 bar)* and Cv 2.0. This regulator features an air loader with a max load pressure of 110 PSIG *(7.58 bar)* and a balanced stem for increased outlet pressure stability.

H2 3016AL Series regulators are designed for use in Hydrogen applications; they are available with a wide range of outlet and inlet configurations. Captured venting is standard.

FEATURES

- Captured venting standard
- Designed for use with Hydrogen
- High flow capacity (Cv): 2.0
- Balanced stem for increased outlet pressure stability
- 316 stainless steel construction
- Compatible with electro-pneumatic controllers
- Max inlet pressure:
  6000 PSIG (*413.7 bar)*, Cv 2.0
- 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.

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SPECIFICATIONS

- **MAXIMUM INLET PRESSURE:**
  - REGULATOR:
    - 6000 PSIG (*413.7 bar*), Cv 2.0
  - AIR ACTUATOR: 110 PSIG (*7.58 bar*)
- **OUTLET PRESSURE RANGES:**
  - 10-1500 PSIG *(0.69 - 103.42 bar)*
    Diameter: 1.000"
    Area: 0.7854 in²
    *Ratio: $^{16}/_{1}$ ***
  - 15-2500 PSIG *(1.03 - 172.37 bar)*
    Diameter: 0.750"
    Area: 0.4418 in²
    *Ratio: $^{28}/_{1}$ ***
  - 50-6000 PSIG *(3.45 - 413.69 bar)*
    Diameter: 0.500"
    Area: 0.1964 in²
    *Ratio: $^{64}/_{1}$ ***

*** 4.0" diameter diaphragm*
Diaphragm area: 12.5664 in²

- **FLOW (Cv):**
  - MAIN VALVE: 2.0
  - VENT VALVE: 0.06
- **AMBIENT OPERATING TEMPERATURES:**
  - -4°F/-20°C to 212°F/100°C (Viton®)*
  - -15°F/-26°C to 212°F/100°C (BUNA-N)*
  - -65°F/-54°C to 212°F/100°C (EPDM)

**lower temperature compounds available upon request*

MATERIALS OF CONSTRUCTION

- **BODY:**
  - 316 Stainless Steel
- **HOUSING, AIR ACTUATOR :**
  - 6061-T6 Aluminum/clear anodized
- **DIAPHRAGM, AIR ACTUATOR :**
  - Neoprene, nylon fabric-reinforced
- **MAIN VALVE SEAT:**
  - ETFE
- **VENT VALVE SEAT:** Vespel® SP-1
- **ELASTOMER SEALS:**
  - BUNA-N
  - Viton®
  - EPDM
- **BACK-UP RING OPTIONS:**
  - PTFE
- **OTHER WETTED PARTS:**
  - 316 Stainless Steel

PORTING

- **INLET/OUTLET:**
  - 1/2" NPT, SAE AS5202**, SAE J1926
  - 3/4" NPT, SAE AS5202**, SAE J1926
  - 1" NPT, SAE AS5202**, SAE J1926
- **AIR ACTUATOR:**
  - 1/4" FNPT *(standard)*
  - 1/4" SAE AS5202
  - 1/8" FNPT
  - 1/4" SAE J1926
- **VENT:** 1/4" *(inlet/outlet port type)*
- **GAUGE PORTS:** 1/4" FNPT

OPTIONS

- Private Label
- Surface mount

Viton® is a registered trademark of E.I.duPont de Nemours and Company

***SAE AS5202 supersedes MS33649 see part numbers for more porting options*

Contact factory for material certifications. Fees may apply.

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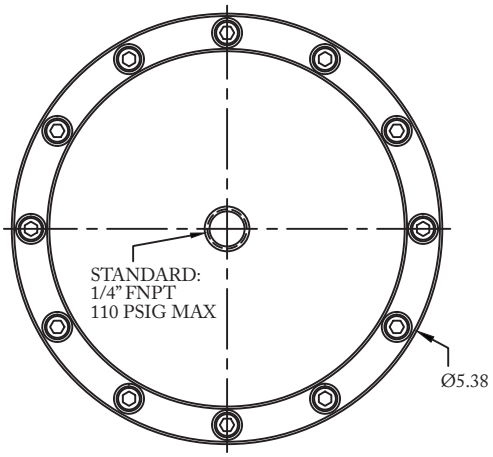
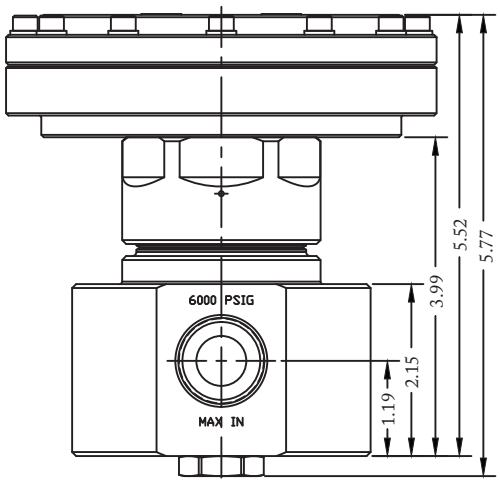
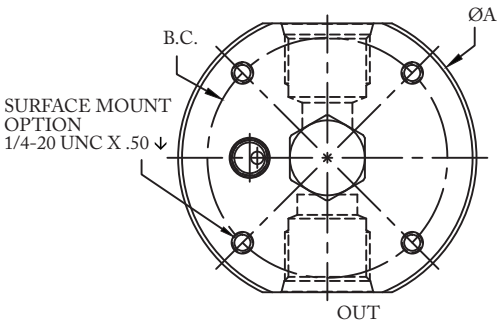
PART NUMBER: H30-10227





PORT TYPE	ØA	FLATS	B.C.
1/2" & 3/4" NPT	Ø2.98	——	Ø2.50
1/2" SAE	Ø3.23	3.05	Ø2.63
1" NPT	Ø3.48	——	Ø2.75
3/4" J1926	Ø3.73	3.36	Ø3.00
3/4" AS5202	Ø3.98	3.72	Ø3.25
1" SAE	Ø3.98	3.72	Ø3.25



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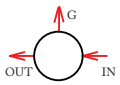
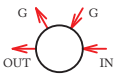
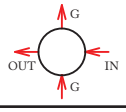
PART #	-	1	2	3	4	-	5 6	-	MODS
H30-10227	-					-		-	

Cv 2.0 MODEL

1	OUTLET PRESSURE
3	10-1500 PSIG *(0.69 - 103.42 bar)* ***Diameter:*** *1.000"* ***Area:*** *0.7854 in²* ***Ratio:*** *16/1* **
4	15-2500 PSIG *(1.03 - 172.37 bar)* ***Diameter:*** *0.750"* ***Area:*** *0.4418 in²* ***Ratio:*** *28/1* **
6	50-6000 PSIG *(3.45 - 413.69 bar)* ***Diameter:*** *0.500"* ***Area:*** *0.1964 in²* ***Ratio:*** *64/1* **

*** 4.0" diameter diaphragm*
Diaphragm area: 12.5664 in²

2	PORTING CONFIGURATIONS
A	
C	
L	
S	

3	PORT SIZE
8	1/2"*
T	3/4"
W	1"

(Gauge ports: 1/4" FNPT)

4	PORT TYPE *(IN/OUT/VENT)*
N	NPT
J	SAE J1926
A	SAE AS5202**

***SAE AS5202 supersedes MS33649*

5 6	O-RING MATERIAL
00	BUNA-N
02	VITON-A®
05	EPDM

MODIFICATIONS *Separate multiple mods with a dash*	
Blank	None
AS	1/4 SAE AS5202 loader port
E	1/8 NPT air loader port
J	1/4 SAE J1926 loader port
SM	Surface mount
PTU	Port type uniform

6000 PSIG MAX INLET
The end user is responsible to ensure adequate fittings are used to connect regulator to plumbing.

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