

H2 3116SL SERIES

Stacked Air Load, Hydrogen, High Pressure, High Flow
Back Pressure Regulators



Premier H2 3116SL Series regulators are high pressure, high flow, piston sensed, back pressure regulators rated for inlet pressures up to 6000 psig / 413.7 bar and Cv 1.0, or 2.0. Premier H2 3116SL Series regulators feature a four-tier air loader for compatibility with electropneumatic controllers, enabling piloted pressure control from an inert gas at low pressures (110 psig / 7.5 bar max air load). Premier H2 3116SL Series regulators are designed for use in Hydrogen applications; they are available with a wide range of inlet and outlet configurations.

FEATURES

- Designed for use with Hydrogen
- High flow capacity (Cv): 1.0 or 2.0
- Compatible with electro-pneumatic controllers
- Optional surface mount
- 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:**
 - 6000 PSIG / 413.7 bar
- **CONTROL PRESSURE RANGES:**
 - 10-1500 PSIG (0.7-103.4 bar)
 - 15-3000 PSIG (1.0-206.8 bar)
 - 50-6000 PSIG (3.5-413.7 bar)
- **FLOW (C_v):** 1.0 or 2.0
- **OPERATING TEMPERATURE:****
 - -15°F/-26°C to 212°F/100°C (BUNA-N)
 - -4°F/-20°C to 400°F/204°C (Viton®)
 - -65°F/-54°C to 302°F/150°C (EPDM)
 - -40°F/-40°C to 180°F/82°C (Polyurethane)

** Lower temperature compounds available

MATERIALS OF CONSTRUCTION

- **BODY:**
 - 316 Stainless Steel
- **MAIN VALVE STEM:**
 - 316 Stainless Steel
- **MAIN VALVE SEAT:**
 - Vespel®
- **BACK-UP RINGS:** PTFE & PCTFE
- **O-RING MATERIAL OPTIONS:**
 - BUNA-N
 - Viton-A®
 - EPDM
 - Polyurethane
- **OTHER WETTED PARTS:**
 - 316 Stainless Steel, Toughmet® 3 TS160U
- **HOUSING, AIR ACTUATOR:**
 - 6061-T6 Aluminum/Clear Anodized

PORTING

- **INLET & OUTLET OPTIONS:**
 - 3/8" FNPT, SAE J1926, SAE AS5202, BSPP
 - 1/2" FNPT, SAE J1926, SAE AS5202, BSPP
 - 3/4" FNPT, SAE J1926, SAE AS5202, BSPP
 - 1" FNPT, SAE J1926, SAE AS5202, BSPP
- **OPTIONAL GAUGE PORT:** 1/4" FNPT
- **LOAD PORT:**
 - 1/4" FNPT (STANDARD)
 - 1/4" SAE J1926
 - 1/4" SAE AS5202
 - 1/8" FNPT

OPTIONS

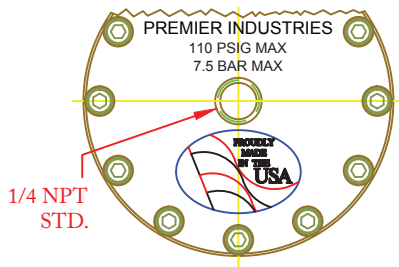
- Private label
- Surface mount

SAE AS5202 supersedes MS33649

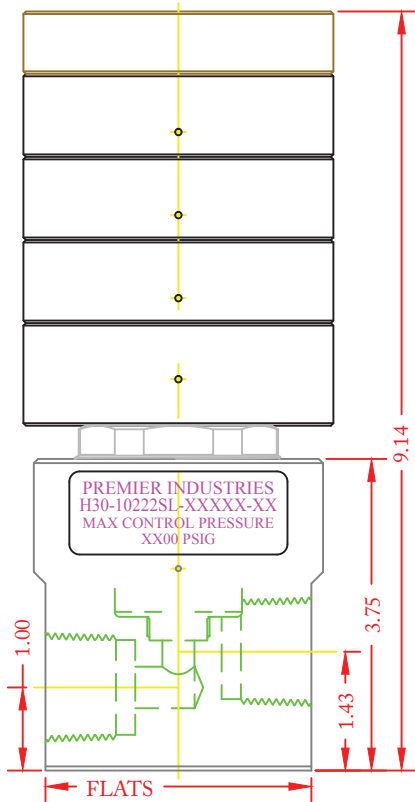
Viton-A®, Vespel®, and Kalrez® are registered trademarks of E.I. duPont de Nemours & Company.

Contact factory for material certifications. Fees may apply.

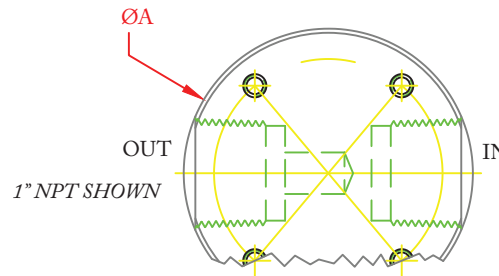
PART NUMBER: H30-10222SL



PORT TYPE	ØA	FLATS
NPT	Ø3.23	—
1" NPT	Ø3.48	3.20
1/2" SAE	Ø3.48	3.32
3/4" SAE	Ø3.98	3.72
1" SAE	Ø3.98	3.62



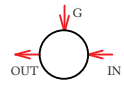

*Optional Surface
mounting holes:
1/4-20 UNC X .5 DP
bolt circle subject to body size*



H2 3116SL SERIES

Stacked Air Load, Hydrogen, High Pressure, High Flow
Back Pressure Regulators

PART #:	-	1	2	3	4	5	-	6 7	-	MODS
H30-10222SL	-						-		-	

1	CONTROL PRESSURE
3	10-1500 PSIG (0.7-103.4 bar)
4	15-3000 PSIG (1.0-206.8 bar)
6	50-6000 PSIG (3.5-413.7 bar)
2	Cv (FLOW)
1	Cv 1.0
2	Cv 2.0
3	PORT CONFIGURATIONS (FROM TOP)
H	
S	 (STANDARD)

4	PORT SIZE (INLET/OUTLET)
6	3/8"
8	1/2"
T	3/4"
W	1"
<i>GAUGE PORT: 1/4" FNPT</i>	
5	PORT TYPE (INLET/OUTLET)
1	FNPT
2	SAE J1926
3	SAE AS5202*
P	BSPP
<i>*SAE AS5202 supersedes MS33649</i>	
67	O-RING MATERIAL
00	BUNA-N
02	VITON-A®
05	EPDM
08	POLYURETHANE

MODIFICATION	
BLANK	NONE
AS	1/4" SAE AS5202 LOADER PORT
E	1/8" NPT LOADER PORT
J	1/4" SAE J1926 LOADER PORT
SM	SURFACE MOUNT

6000 PSIG MAX INLET (316 stainless steel body)

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

VespeI® and Viton® are registered trademarks of E.I. duPont de Nemours and Company.

Contact Premier for material certifications. Fees may apply