

HPR800 Series

Pressure Regulator



Veriflo's HPR800 Series High Pressure Regulators were designed to meet those applications requiring high outlet pressures to 2500 psig.



features

- ▶ "VeriClean", Veriflo's custom low sulfur, high purity type 316L VAR Stainless Steel, enhances electropolishing and welding or brass bar stock.
- ▶ Low actuating torque.
- ▶ Diaphragm sensing regulator.
- ▶ Easily maintained.
- ▶ Self-contained valve seat assembly.
- ▶ Over 20 years of proven reliability.
- ▶ Fluid media capabilities: Corrosive and non-corrosive gases.

materials of construction

Wetted

Body "VeriClean", Veriflo's high purity type 316L Stainless Steel, Brass Bar Stock
Poppet 316 Stainless Steel, Brass
Poppet Spring Inconel® 625
Nozzle Assembly 316 Stainless Steel, Brass
Nozzle Assembly Seal Teflon®
Seat PCTFE (formerly Kel-F 81®)
Diaphragm 316L Stainless Steel, Teflon® lined

Non-wetted

Spring housing Nickel Plated Brass, Brass
Bushing Nickel Plated Brass
Stem Handle Tee Nickel Plated Brass

operating conditions

Maximum inlet 5000 psig @ 70°F
(345 barg @ 21°C)
For oxygen 3000 psig (207 barg)
Outlet 10-800 psig (.7 - 55 barg) adjustable
20-1500 psig (1.4 - 103 barg) adjustable
50-2500 psig (3.4 - 172 barg) adjustable
Temperature -40°F to 165°F (-40°C to 74°C)
Temp. (Brass) -40°F to 150°F (-40°C to 66°C)

functional performance

Flow capacity $C_v = .02$
(ANSI/ISA S75.02 1988 using water)
Design Burst Pressure 15,000 psig (1,034 barg)
Design Proof Pressure 22,500 psig (1,551 barg)

Design Leak Rate:

Outboard 1×10^{-9} scc/sec He
Inboard 2×10^{-9} scc/sec He
Across seat 2×10^{-6} scc/sec He
Supply pressure effect 0.5 psig per 100 psig
(.03 barg per 7 barg)

See flow curves

standard configurations

1/4 inch female pipe threads inlet and outlet
End to end length 1.88 in. (47.8 mm)

Any combination of FS male and/or female fittings.
1/4" gland to gland length 1.85 ± .02 in. (47 ± .05 mm)

internal volume

6.5 cc

surface finishes

Standard Ra 15-20 micro inch
(3.8 to .5 micro meter or less)

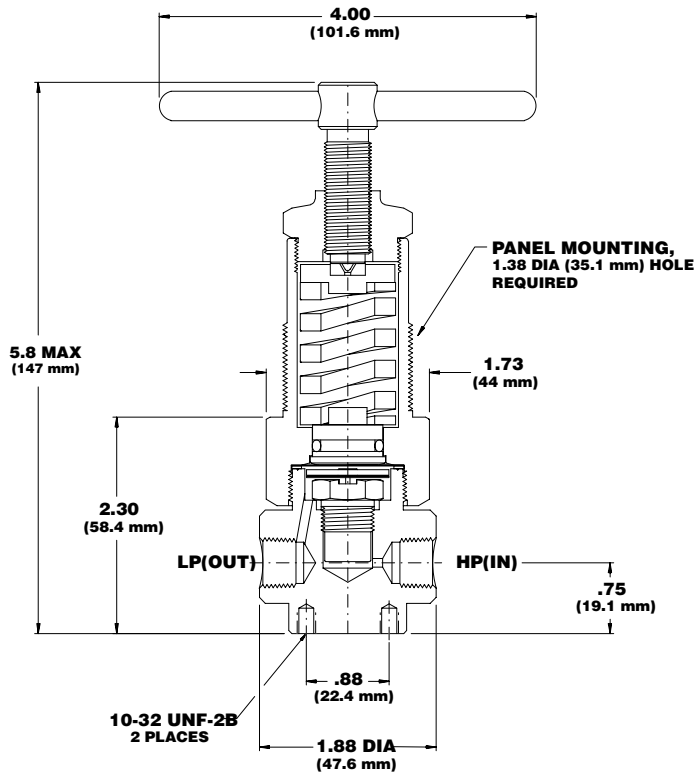
approximate weight

2.19 lbs. (.993 kg)

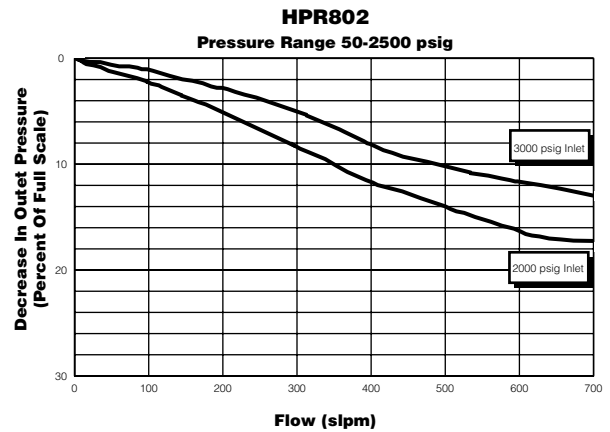
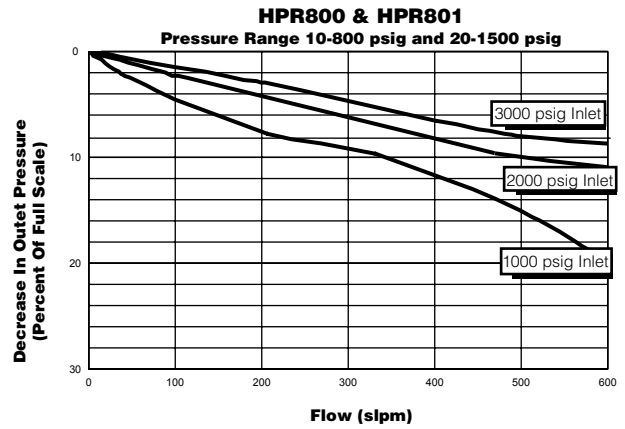


HPR800 Series

Cross Sectional Drawing



Flow Curve



Ordering Information

BASIC SERIES	HPR800	S	5P	30	40	4	PM	OPTIONAL FEATURES
HPR800 = 10 - 800 psig								CGA= Inlet Connector (Specify CGA No.)*
HPR801 = 20 - 1500 psig								PM = Panel Mounting
HPR802 = 50 - 2500 psig								PORT CONFIGURATION**
								M = Male
								F = Female
								I = Internal Female Face Seal (2" Body Diameter)
MATERIALS								PORT STYLE
B = Brass								4 = 1/4" NPTF
S = Stainless Steel								FS = 1/4" Face Seal**
W = Welded Stainless Steel								REGULATOR INLET GAUGE
PORTING								30 = 0 - 3000 psig
2P = 2 Port								40 = 0 - 4000 psig
3P = 3 Port								X = No Gauge
4P = 4 Port								
5P = 5 Port								
REGULATOR OUTLET GAUGE								
10 = 0 - 1000 psig								
20 = 0 - 2000 psig								
30 = 0 - 3000 psig								
X = No Gauge								

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Inconel® is a registered trademark of Inco Alloys International
Kel-F 81® is a registered trademark of 3M Company.

* Do not exceed the rated pressure of the CGA Connection.
** Welded Stainless Steel Option Only

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