APR-4 Series

Pressure Reducing Regulator

VERIFLO
technological
leadership
by design
ISO 9001 Certified

Veriflo's APR-4 Series pressure reducing single stage regulator is designed to meet the stringent requirements of a process analyzer sample conditioning system. Real-time analysis can be more closely obtained with the low internal volume feature. The versatile APR-4 can be ordered with a variety of options and porting configurations to meet end users system design requirements for non-corrosive media and environments.

(Shown with Optional Aluminum Knob)

features

- Low internal volume.
- Standard Hastelloy C-22® diaphragm for superior strength.
- Convoluted diaphragm provides outlet pressure stability with changes in flow.
- Integral diaphragm stop provides additional safety measure.
- Maintenance friendly.

materials of construction

Wetted

Body . . . . . Brass
Seat . . . . . PCTFE (formerly Kel-F81®)
Seals . . . . . Teflon®
Diaphragm . . . . . Hastelloy C-22®
Poppet . . . . . Brass
Poppet spring . . . . . Inconel®

Non-Wetted

Cap . . . . . Brass
Cap nut . . . . . Brass
Knob. . . . . Plastic
(Optional 6061-T6 Aluminum)
Range Spring. . . . . Chrome Silicon

operating conditions

Inlet pressure . . . . . 4000 psig
(276 barg) maximum
Outlet pressure . . . . . 0-10 psig (0 - .7 barg)
0-25 psig (0-1.7 barg)
0-50 psig (0-3.5 barg)
0-100 psig (0-7 barg)
0-250 psig (0-17 barg)
0-500 psig (0-35 barg)
Temperature . . . . . -40˚F to 150˚F
(-40˚C to 66˚C)

functional performance

Design proof pressure. . . . . 6000 psig
(414 barg)
Design burst pressure . . . . . 12000 psig
(828 barg)
Flow capacity . . . . . C_V = .02
Supply pressure effect . . . . . 0.8 psig
per 100 psig
Design Leakage:
Outboard . . . . . 1 x 10^{-9} scc/sec He
Inboard . . . . . 1 x 10^{-8} scc/sec He
Flow . . . . . See curve

standard connections

1/8" or 1/4" female pipe threads (NPT)

approximate weight

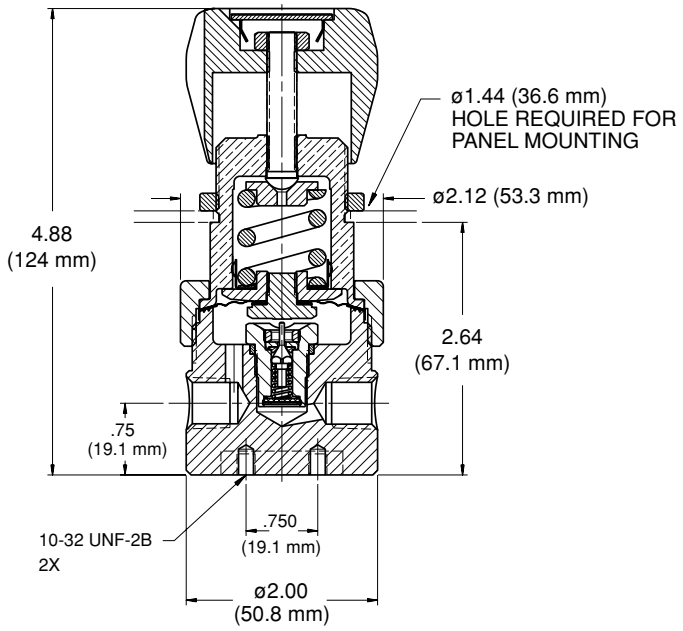
2.24 lbs (1.0 kgm)

LITP/N: 25000026 Revision 5 • 2/99

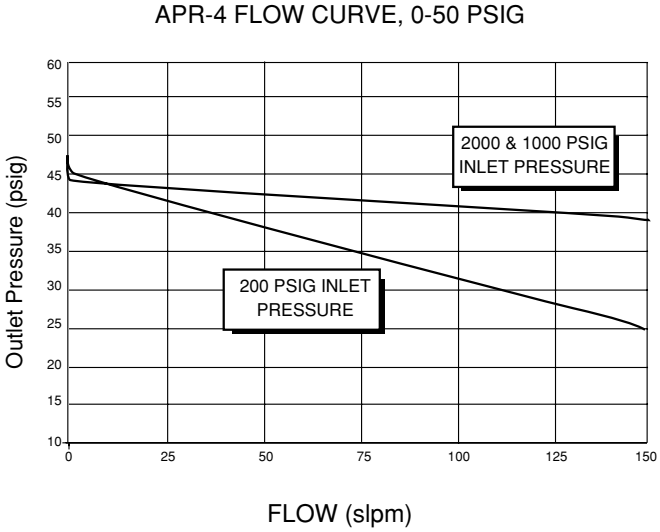
Parker Instrumentation

APR-4 Series

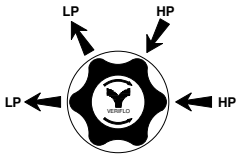
Cross Sectional Drawing



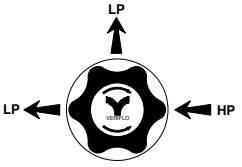
Flow Curves



Porting Configurations



Porting Code: 4P



Porting Code: 3P

Porting Code: 2P

Ordering Information

APR4 B K 2 4P 03 40 4 PM

BASIC SERIES
APR4

MATERIALS
B = Brass

SEAT MATERIALS
K = PCTFE (formerly Kel-F81®)

PRESSURE RANGE
0 = 0 - 10 psig (0 - .7 barg)
1 = 0 - 25 psig (0 - 1.7 barg)
2 = 0 - 50 psig (0 - 3.5 barg)
3 = 0 - 100 psig (0 - 7.0 barg)
4 = 0 - 250 psig (0 - 17 barg)
5 = 0 - 500 psig (0 - 35.0 barg)

PORTING
2P = 2 Ports
3P = 3 Ports
3SP = 3 Ports
4P = 4 Ports
4PB = 4 Ports
5P = 5 Ports
5PP = 5 Ports
6P = 6 Ports

OUTLET GAUGE
03 = 0 - 30 psig
01 = 0 - 100 psig
4 = 0 - 400 psig
6 = 0 - 600 psig
X = No Gauge

INLET GAUGE
2 = 0 - 200 psig
6 = 0 - 600 psig
10 = 0 - 1000 psig
20 = 0 - 2000 psig
30 = 0 - 3000 psig
40 = 0 - 4000 psig
X = No Gauge

PORT STYLE
2 = 1/8" NPTF *
4 = 1/4" NPTF

OPTIONAL FEATURES
A = Aluminum Knob
CGA = CGA Connection (Specify CGA No.)**
DO = Dome Loaded
PM = Panel Mounting
TP = Tamper Proof Knob

Only available in the 2 Port configuration.
**** Do not exceed the ratred pressure of the CGA connection**

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