CIR-LOK
FLUID SYSTEM SOLUTIONS

Pressure Reducing Regulators

PR2 Series

- Maximum rated intel pressure 3000 psig (206 bar)
- Flow Coefficient Cv=1.0
- Single stage
- Metal-to-metal diaphragm seal
- 316, 316L or Brass, Alloy 276 and Alloy 400 body material

Pressure Reducing Regulators-PR2

The CIR-LOK PR2 Series is a compact, lightweight high purity single-stage regulator for specialty and industrial gas flows of less than 50 SCFM / 1415 SLPM. Sensitive, extra long-life metal diaphragm ensures gas purity and integrity.

Applications

- Laboratory and Point-of-Use Gas Systemsin medical, pharmaceutical, food and beverage, and other high purity applications
- Process analyzer gases,metal fabrication and specialty and industrial gas cylinders

Features

- Cartridge valve design incorporates a 10 micron filter that protects the regulator seat and makes service simple
- Optional neoprene diaphragm provides exceptional sensitivity for precise pressure control
- Gauges, relief and shut-off valves, and cylinder connections are available

Operating Parameters

- Maximum Inlet Pressure
  3000 psig (206 bar)
- Outlet Pressure Ranges
  0-25 psig (0-1.7 bar),0-50 psig (0-3.4 bar) , 0-100 psig (0-6.8 bar), 0-125 psig (0-8.6 bar), 0-250 psig (0-17.2 bar)
- Design Proof Pressure
  150% maximum rated
- Leakage
  Internal: bubble-tight
  External: design to meet ≤ 2×10^{-8} mbar l/sec He
- Operating Temperature
  PCTFE seat: -40 °F to 140 °F (-40 °C to 60 °C)
  PEEK: -40°F to 392°F (-40°C to 200°C)
  PI seat: -40 °F to 250 °F (-40 °C to 121 °C)
- Flow Capacity
  Cv = 1.0

Cleaning

- CGA4.1 and ASTM G93 Grade C

Internal Volume

- 6 cc

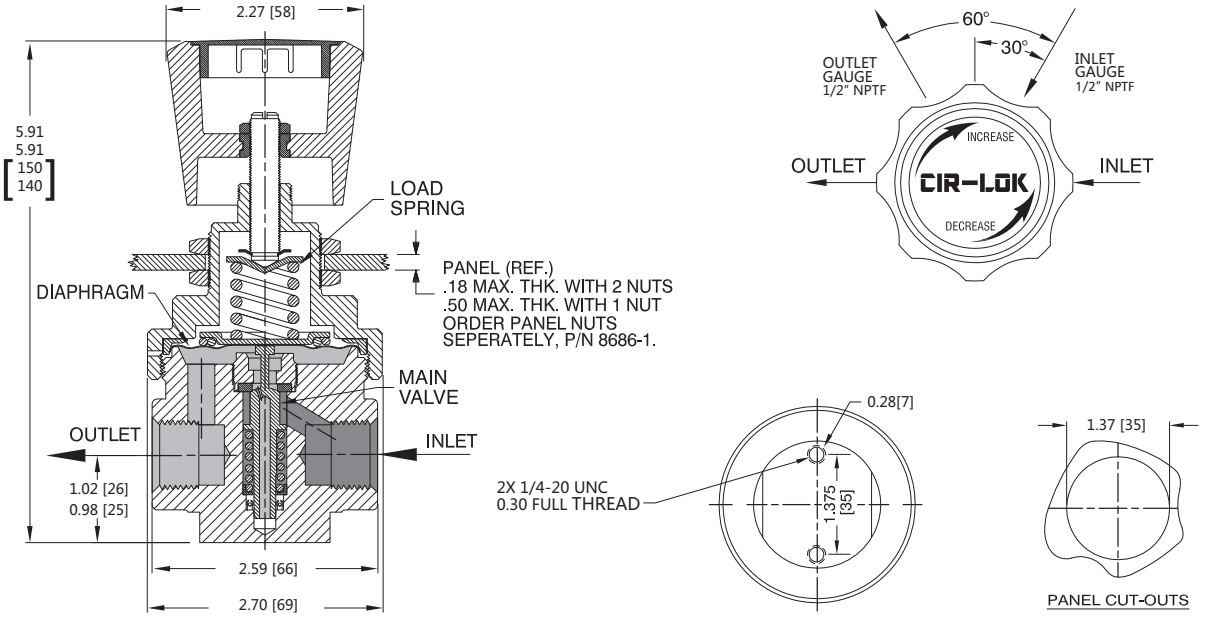
Weight (without gauges)

- 2.4 lbs / 1.1 kg

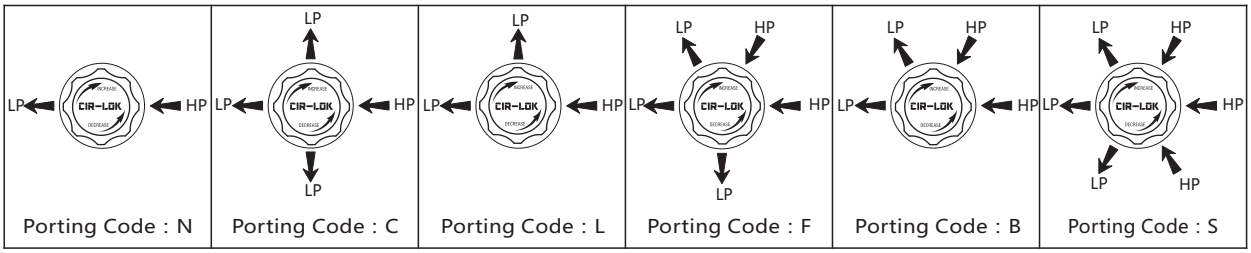
Wetted Material

- Body
  316L S. S., Brass
- Bonnet
  300 series S. S., Brass
- Filter
  10 micron nominal sintered 316 S. S.
  310 micron nominal sintered Bronze
- Diaphragm
  316 S. S.
- Seat
  PEEK, PI, PCTFE
- Remaining Parts
  316 S. S., Brass

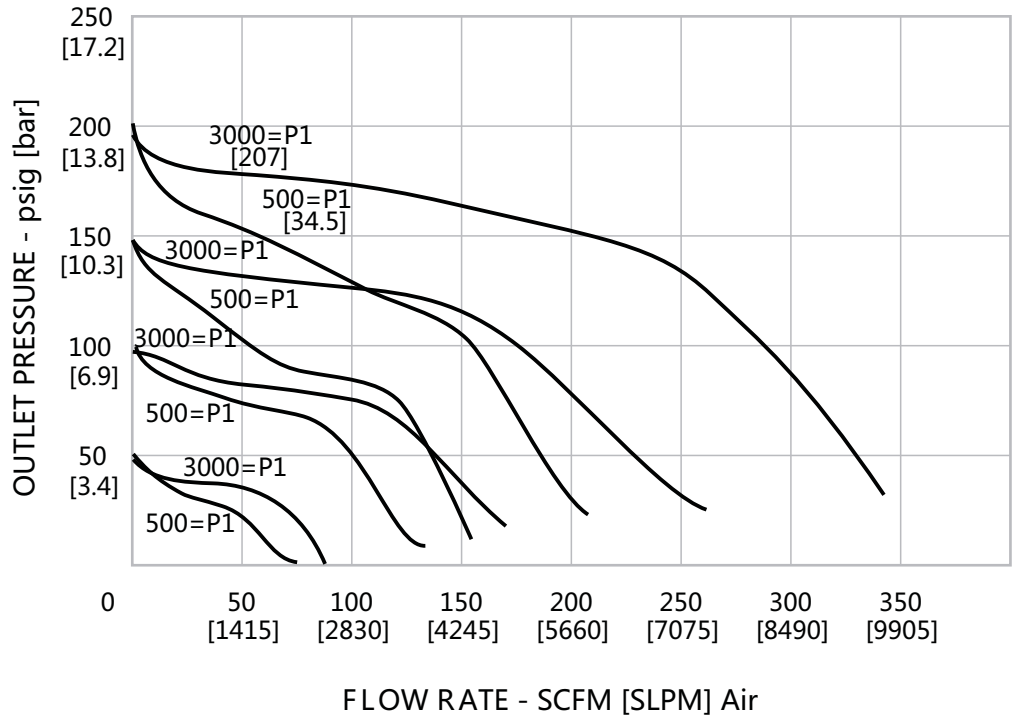
Dimensions In. [millimeter]

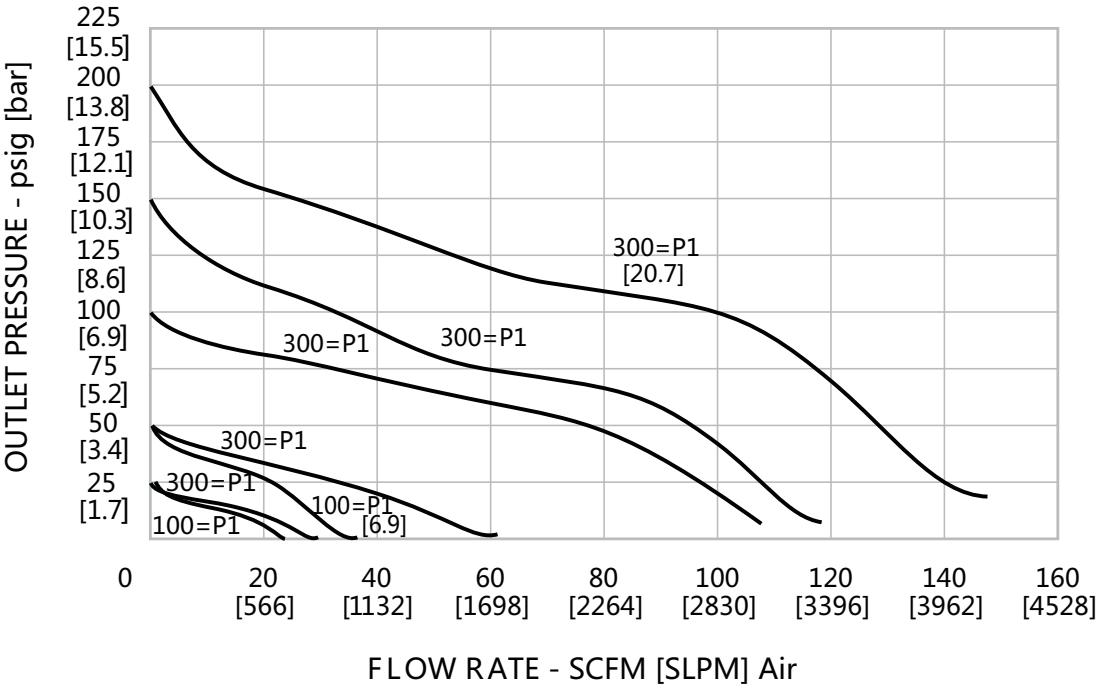


Port Configurations Notes: HP=High Pressure; LP=Low Pressure



Flow Charts


OUTLET PRESSURE - psig [bar]
250 [17.2]
200 [13.8]
150 [10.3]
100 [6.9]
50 [3.4]
0
3000=P1 [207]
500=P1 [34.5]
3000=P1
500=P1
3000=P1
500=P1
3000=P1
500=P1
50 [1415]
100 [2830]
150 [4245]
200 [5660]
250 [7075]
300 [8490]
350 [9905]
FLOW RATE - SCFM [SLPM] Air


OUTLET PRESSURE - psig [bar]
225 [15.5]
200 [13.8]
175 [12.1]
150 [10.3]
125 [8.6]
100 [6.9]
75 [5.2]
50 [3.4]
25 [1.7]
0
300=P1 [20.7]
300=P1
300=P1
300=P1
300=P1
100=P1
100=P1 [6.9]
20 [566]
40 [1132]
60 [1698]
80 [2264]
100 [2830]
120 [3396]
140 [3962]
160 [4528]
FLOW RATE - SCFM [SLPM] Air

How to Order

PR2— FNPT8 — IB — 3250G — 316L

Series	Inlet Type Outlet Type	Inlet Size Outlet Size	Seat Material	Porting	Intel Pressure	Out Pressure	Gauges	Body Material
PR2	**FNPT** Female NPT **FBT** Female BSPT **F** Fractional Tube Fitting **M** Metric Tube Fitting	**6** 3/8 in. **8** 1/2 in. **10** 10 mm **12** 12 mm	PCTFE **P** PEEK **I** PI	**N** No Gauge Ports **L** One Gauge Ports **C** One Gauge Ports **B** Two Gauge Ports **F** Two Gauge Ports **S** Two Gauge Ports	**3** 3000 psig	**250** 0-250 psig **125** 0-125 psig **100** 0-100 psig **50** 0-50 psig **25** 0-25 psig	No gauges **G** with gauges	**316** 316 S.S. **316L** 316L S.S. **A400** Alloy 400 **A276** Alloy C276 **BR** Brass