

CRR50 SERIES

Inlet to 3,000 PSIG & Outlet to 200 PSIG

HIGH FLOW PRESSURE REGULATOR

Features

- **Corrosion & Diffusion Resistant**
- **Accurate & Sensitive**
- **Adjustable Outlet Ranges**
- **Full Range Capability**
- Panel Mount & Self Venting Option

Applications

- Inerting
- **Process Systems**
- **Corrosive Atmosphere**
- Control of Corrosive Gases & Liquids, Doping Gas Mixtures, Chromatograph Carrier Gases, and High Purity Gases for Crystal Growing Purge Gases
- High Flow Line Regulator for **Manifold Systems**

Technical Data

Materials of Construction

Body

- 316 Stainless Steel

Seat

- Kel F & Stainless Steel

Seals

- Teflon® & St. Steel

Diaphragm - 17-7 Stainless Steel

Other Metal Parts Exposed to Fluid are

316 St. Steel & Nickel Plated 302 St. Steel

Gaudes

- 316SS Bourdon Tubes/Cases

Inlet Fitting (if specified) – 316 St. Steel

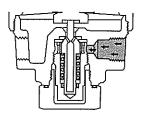
Temperature Range

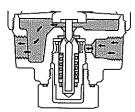
-65°F to +180°F; -54°C to +82°C

How It Works

CLOSED

The balanced poppet is spring loaded against the seat. When full upstream pressure is applied, a slightly unbalanced force is developed which enhances sealing.





REGULATING

As the downstream process demands flow, the downstream pressure acting on the bottom of the diaphragm decays. allowing the adjusting spring force to push the poppet down. This in turn unseats the poppet, allowing flow to begin

and the pressure under the diaphragm to increase until balance is achieved between adjusting spring force and downstream pressure. This condition continues until process demand ceases. At this point, increasing pressure overcomes the spring force. moving the diaphragm up and allowing the poppet to close.

Sizes & Connections

Inlet 1/4" NPT(F) or Specified CGA Fitting Fitting Outlet & Gauges – 1/4" NPT(F)

Pressure Ratings

Inlet - To 3,000 PSIG (207 BAR) Outlet - To 200 PSIG (14 BAR)

Flow Capacity

 $C_V = 0.30$

ESEOD = 0.129"

Weight

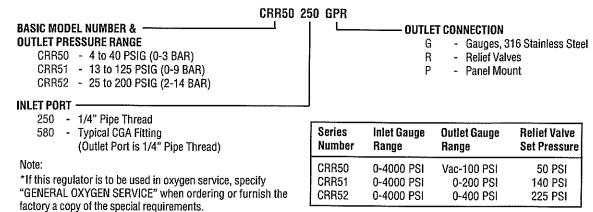
3.5 lbs. (with gauges)



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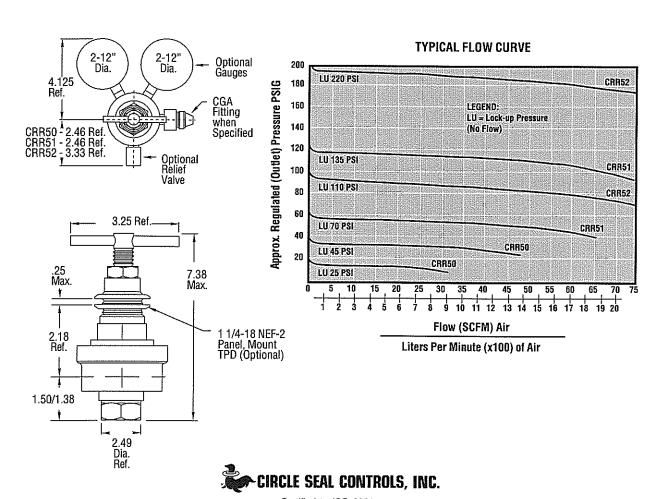
How To Order



Please consult your Circle Seal Controls Distributor, Representative or the factory for information on special connections, operating pressures and temperature ranges.

Teflon® is a registered trademark of DuPont.

Dimensions & Flow Curves



Certified to ISO 9001
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