

Description

The Generant Series HC, High Capacity Regulators are ideally suited for industrial applications requiring a rugged high flow pressure regulator. The Series HC features Heavy Duty all metallic body and spring chambers and are easily rebuilt in the field. The Series HC is available in Relieving and Non-Relieving configurations ideally suited for both liquid and gas service.

Features

- 3/8" and 1/2" Regulators are fully balanced to maintain constant delivery pressure regardless of inlet pressure fluctuations. 1/4" Regulators are currently available non-balanced only.
- Available Relieving or Non-Relieving
- Optimized spring performance and patented Venturi tube provides high flow rates with low droop
- Easily cleanable by removing bottom plug
- Optional Plastic knob
- Panel Mounting Configurations available on HC-250 Series Only

Technical Data

Maximum Inlet Pressure: 400 Psig (27.6 Bar)
Temperature Range: -20 to 200 °F (-30 to 95 °C)

Pressure Ranges

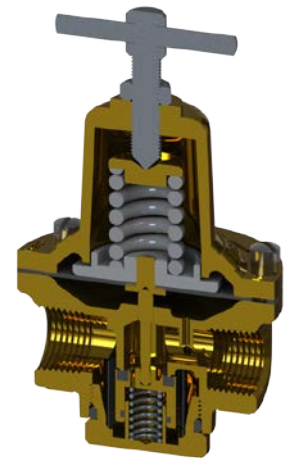
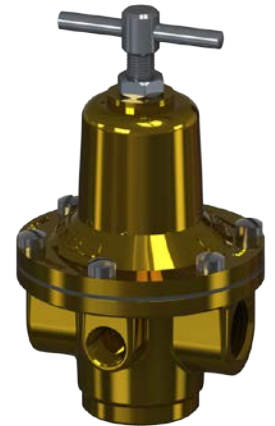
| Spring Code | Outlet Pressure Range PSI (bar) |
|-------------|------------------------------------|
| A | 0 - 50 (0-3.4) |
| B | 5 - 125 (0.3-8.5) |
| C | 10 - 200 (0.7-13.6) |

Flow Coefficient Cv

| Size | Fail Open |
|----------|-----------|
| 1/4" NPT | 1.6 |
| 3/8" NPT | 2.4 |
| 1/2" NPT | 2.9 |

Materials of Construction

| Component | HC-250 | HCR-250 | HC-375/500 | HCR-375/500 |
|---------------------------|-------------------------------------|-----------------------|---------------------------------|-----------------------|
| Body | Forged Brass, ASTM 377 | | | |
| Spring Chamber | Forged Brass, ASTM 377 | | Die Cast Zinc (Zamak) | |
| Spring Retainer | N/A | | Die Cast Zinc (Zamak) | |
| Spring Button | Brass, ASTM B16 | | | |
| Diaphragm Screw | Brass, ASTM B16 | Nylon 6-6, ASTM AD589 | Brass, ASTM B16 | Nylon 6-6, ASTM AD589 |
| Diaphragm Plate / Nut | Brass, ASTM A36 | | N/A | |
| Adjustment Screw | 303 Stainless Steel, ASTM A582 | | | |
| Adjustment Screw Lock Nut | Brass, ASTM B16 | | Plated Steel | |
| Chamber Insert | N/A | | Brass, ASTM B16 | |
| Valve Stem | Brass, ASTM B16 | | | |
| Valve Assembly | Brass, ASTM B16 and FKM, ASTM D1418 | | | |
| Valve O-ring | N/A | | Buna-N | |
| Adjustment Spring | Plated Music Wire, ASTM A228 | | | |
| Valve Spring | 302 Stainless Steel, ASTM A313 | | 17-7 Stainless Steel, ASTM A564 | |
| Turbulence Pin | 18-8 SS, ASTM A276 | | Brass, ASTM B16 | |
| Bottom Plug | Brass, ASTM B16 | | | |
| Bottom Plug O-ring | Buna-N | | | |
| Sieve | N/A | | 304 SS, ASTM A276 | |
| Diaphragm Gasket | Red Fiber | | N/A | |
| Diaphragm | Buna-N and Nylon | | | |
| Panel Nut | Brass, ASTM B16 (HC-250 Only) | | | |



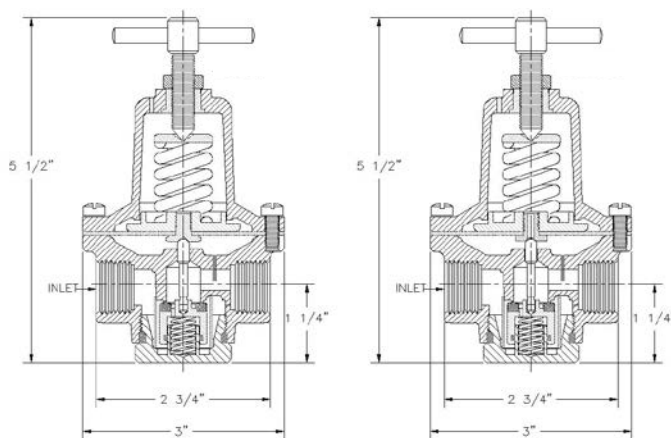
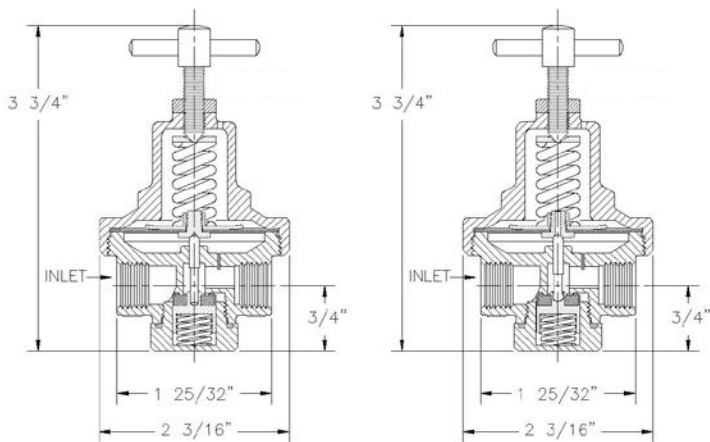
HC

SERIES

HIGH CAPACITY PRESSURE REGULATOR

HC-250 (1/4" NPT Ports)

HC-375 / HC-500 (3/8" and 1/2" NPT Ports)



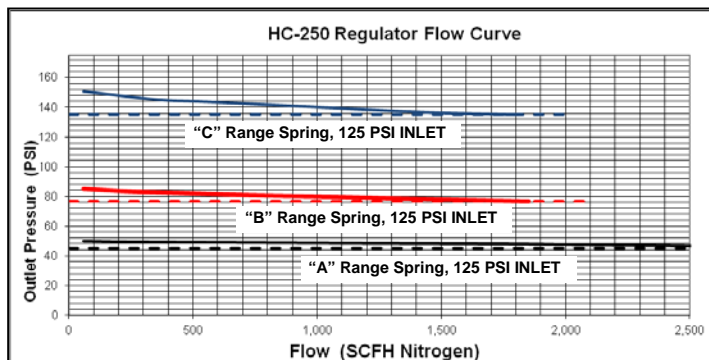
HC, Non-Relieving

HCR, Relieving

HC, Non-Relieving

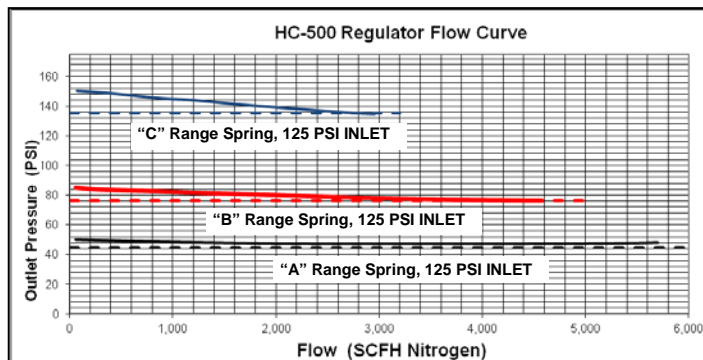
HCR, Relieving

Flow Curve



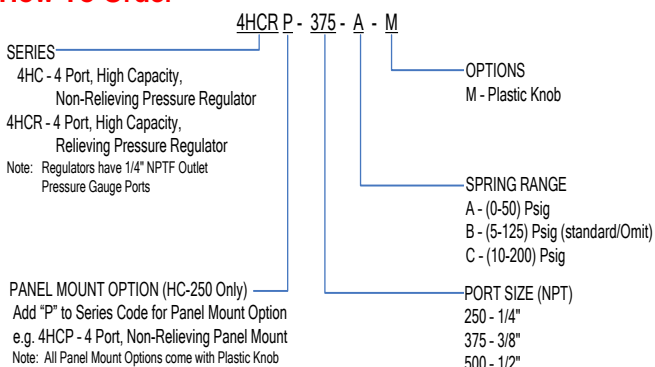
*Initial Set Pressure at 1 SCFM Flow: A - 50 PSIG, B - 85 PSIG, C - 150 PSIG
 ** Dotted line represents 10% decrease in outlet pressure from setpoint (droop)

Flow Curve



*Initial Set Pressure at 1 SCFM Flow: A - 50 PSIG, B - 85 PSIG, C - 150 PSIG
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How To Order



*Panel Mount Option available on HC-250 Series Only. 1/4" Regulator fits in 1" diameter panel hole for panel up to 7/16" thick.

Repair Kits

| Model Size | Specify | Kit Includes |
|-------------------|-----------|--|
| 4HC, 1/4" | HC-100-* | Valve Assembly, Valve Stem, Diaphragm Assembly, Fibre Diaphragm Gasket, Adjusting Spring (Specify Range), Adjusting Spring Button, Valve Spring, Bottom Plug O-Ring |
| 4HCR, 1/4" | HCR-100-* | Relieving Valve & Stem Assembly, Relieving Diaphragm Assembly, Fibre Gasket, Adjusting Spring (Specify Range), Adjusting Spring Button, Bottom Plug O-Ring |
| 4HC, 3/8" & 1/2" | HC-200-* | Valve Assembly with O-Ring, Valve Stem, Sieve, Diaphragm Assembly, Adjusting Spring (Specify Range), Adjusting Spring Button, Valve Spring, Bottom Plug O-Ring |
| 4HCR, 3/8" & 1/2" | HCR-200-* | Relieving Valve & Stem Assembly with O-Ring, Sieve, Relieving Diaphragm Assembly, Adjusting Spring (Specify Range), Adjusting Spring Button, Valve Springs, Bottom Plug O-Ring |

*Specify Spring Range A, B, or C

Note: All Regulators are supplied with 2 (two) 1/4" NPT Pipe Plugs. Pipe plugs are supplied finger tight. Final installation is the responsibility of the end user.

PROPER COMPONENT SELECTION - When specifying a component, the total system design must be considered to ensure safe and trouble-free performance. Intended component function, materials compatibility, pressure ratings, installation, environment and maintenance are the responsibility of the system designer.



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