

#### 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

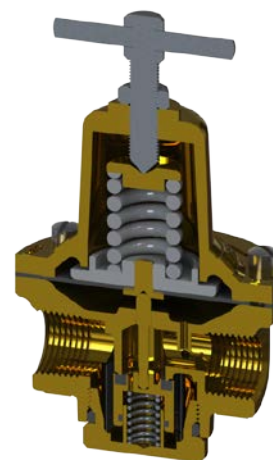
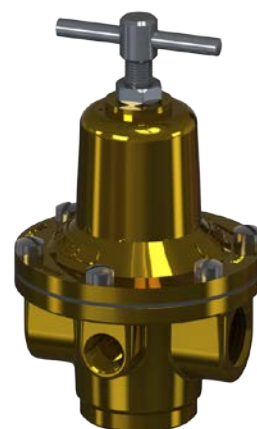
Spring Code	Outlet Pressure Range PSI (bar)
A	0 - 50 (0-3.4)
B	5 - 125 (0.3-8.5)
C	10 - 200 (0.7-13.6)

#### 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)			



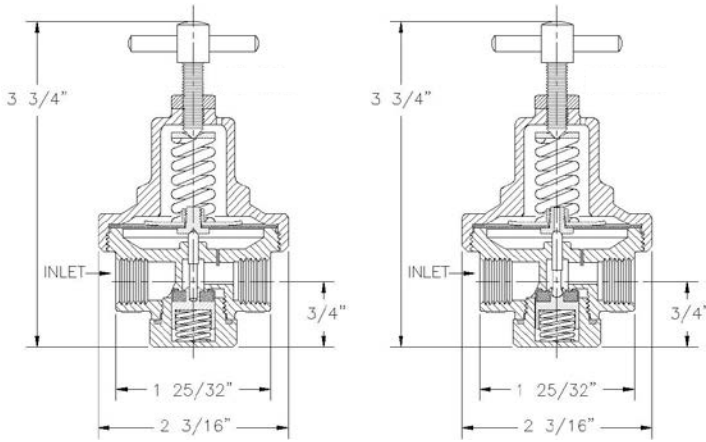
# HC

# SERIES

# HIGH CAPACITY PRESSURE REGULATOR

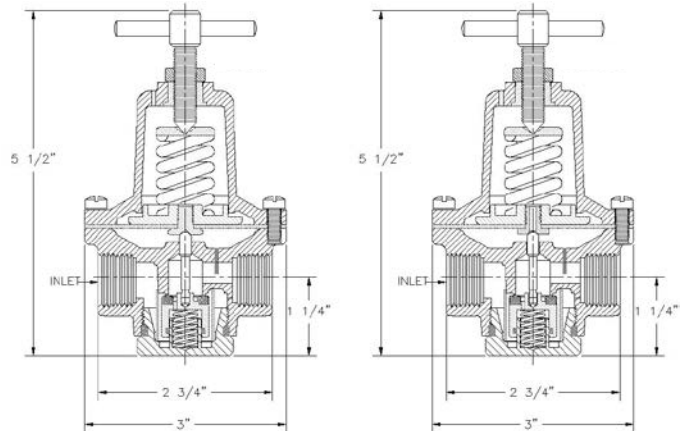
## HC-250 (1/4" NPT Ports)

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



HC, Non-Relieving

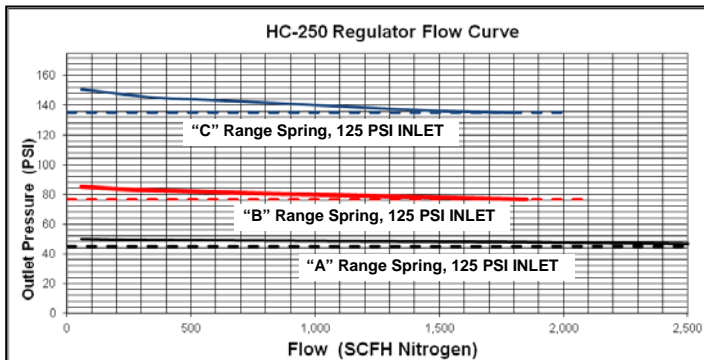
HCR, Relieving



HC, Non-Relieving

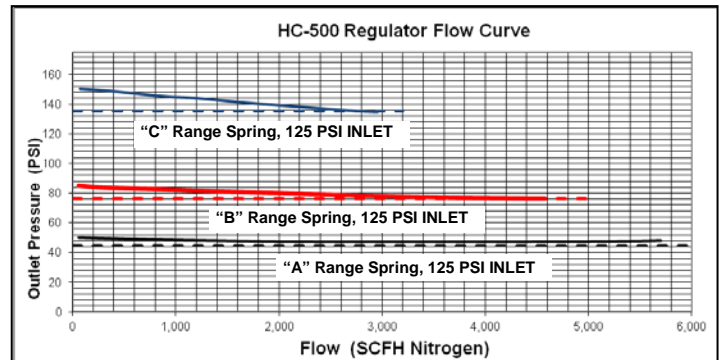
HCR, Relieving

### 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)

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### How To Order

**4HCR P - 375 - A - M**

**SERIES**  
4HC - 4 Port, High Capacity, Non-Relieving Pressure Regulator  
4HCR - 4 Port, High Capacity, Relieving Pressure Regulator  
Note: Regulators have 1/4" NPTF Outlet Pressure Gauge Ports

**OPTIONS**  
M - Plastic Knob

**SPRING RANGE**  
A - (0-50) Psig  
B - (5-125) Psig (standard/Omit)  
C - (10-200) Psig

**PORT SIZE (NPT)**  
250 - 1/4"  
375 - 3/8"  
500 - 1/2"

**PANEL MOUNT OPTION (HC-250 Only)**  
Add "P" to Series Code for Panel Mount Option  
e.g. 4HCP - 4 Port, Non-Relieving Panel Mount  
Note: All Panel Mount Options come with Plastic Knob

\*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.

