

CONOFLOW MINIATURE REGULATOR GH15 SERIES

Conoflow's Model GH15 Miniature Regulator is a compact unit with flow capacities and operating characteristics which rival much larger regulators. This unit is designed to perform equally well in both instrument and industrial applications.

The Model GH15 is available in four regulated pressure ranges from 0-15 PSI to 0-125 PSI (0-103 to 0-862 kPa). An easily adjustable handwheel is standard on the 0-15 PSI and 0-30 PSI (0-103 and 0-207 kPa) range regulators. A wrench knob and locknut adjustment is standard on the 0-60 PSI and 0-125 PSI (0-414 and 0-862 kPa) units to accommodate service regulator applications. All units are available with either style of adjustment as well as in preset and tamperproof versions.

The four 1/4" NPT connections allow the installation of gauges to monitor both the inlet and outlet pressures. The two additional ports eliminate the need for extra piping normally required to install gauges. The regulator can be line, panel, or flush back panel mounted.

The GH15 is designed for superiority and reliability with an absolute minimum of maintenance. These characteristics are a result of Conoflow's high standards of manufacturing and years of experience as a leading producer of precision built pneumatic regulators.



SPECIFICATIONS:

Regulated Output Pressure Ranges:

0-15, 30, 60 and 0-125 PSI (0-103, 207, 414 and 0-862 kPa)

Maximum Supply Pressure: 300 PSI (2068 kPa) All Ranges

Flow Capacity:

20 SCFM w/100 PSI Supply Pressure (0.566 m³/min w/690 kPa Supply)

Sensitivity: 0.05 PSI (0.35 kPa)

Supply Pressure Effect: Less than 0.25 PSI (1.72 kPa) for 25 PSI

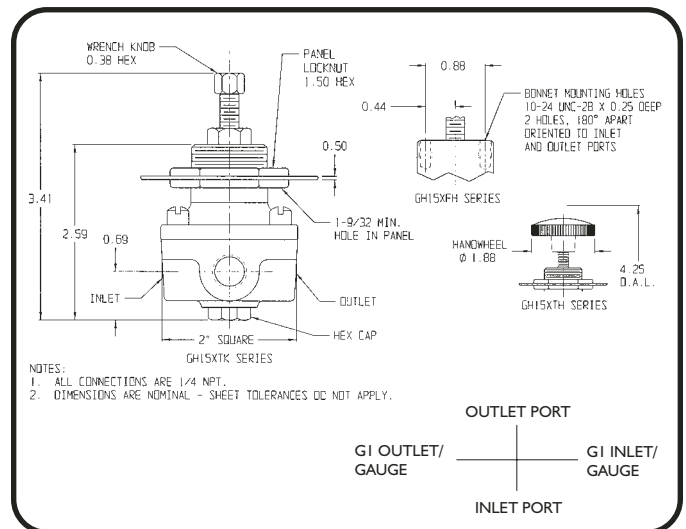
(172 kPa) change in supply pressure

Ambient Temperature Range:

-20°F to +150°F (-29°C to +66°C) (w/Buna "N" diaphragm)

Connections: 1/4" NPT (Four Port)

Approximate Shipping Weight: 1 lb. (0.45 Kg)



GHI5XTH Series

OPTIONS

PRESSURE GAUGE

2" Diameter - Steel Case

Ranges: 0-15, 30, 60 and 160 PSI (0-103, 207, 414 and 1103 kPa)

MOUNTING

Flush Back Panel Mounting (2 Hole)

ADJUSTMENT

Knob - Optional

Handwheel - Standard

Preset - Factory output setting CAN be field adjusted

Tamperproof - Factory output setting CANNOT be field adjusted

DIMENSIONAL DATA - ADVERTISING DRAWING:

GHI5: A17-58

MATERIALS OF CONSTRUCTION:

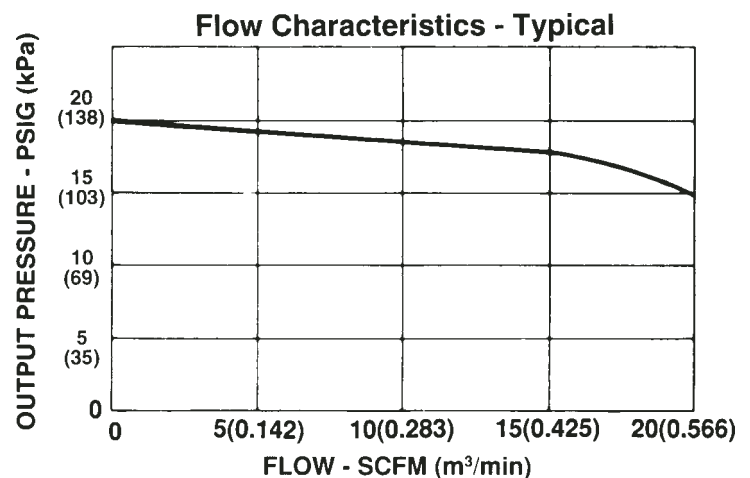
Body: Aluminum

Body:	Aluminum
Bonnet:	Aluminum

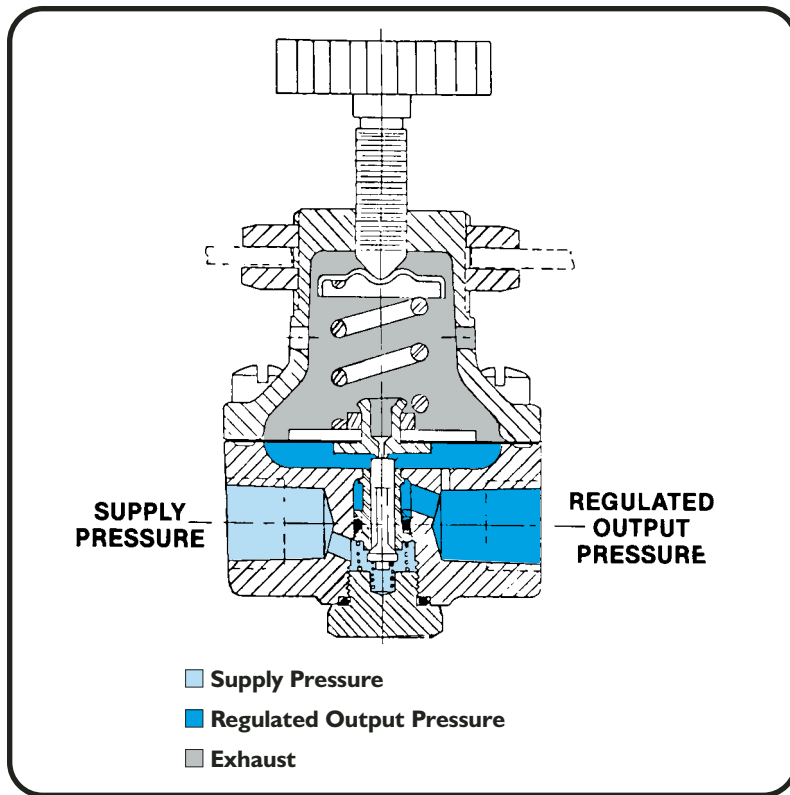
Nozzle Assembly: Brass Body with Stainless Steel Plug

Diaphragm Assembly: Buna "N"

Range Spring: Cadmium Plated Carbon Steel



Typical curve for a 0-60 PSI (0-414 kPa) unit with a 20 PSI (138 kPa) set pressure and 100 PSIG (690 kPa) supply.



GH15 Series - Relief/No Bleed

PRINCIPLE OF OPERATION

Turning the handwheel changes the force exerted by the range spring on the diaphragm assembly. In equilibrium, the force exerted by the range spring is balanced by the force from the output pressure acting underneath the diaphragm assembly.

An unbalance between the output pressure and the range spring force causes a corresponding reaction in the diaphragm and nozzle assemblies. If the output pressure rises above the set pressure, the diaphragm seat is lifted from the plug, venting the excess pressure to atmosphere until equilibrium is reached. If the output pressure drops below the set pressure, the unbalanced force from the range spring acts through the diaphragm assembly unseating the nozzle plug. This allows supply pressure to flow through the nozzle to the downstream port increasing the output pressure. The output pressure increases until it balances the force on the diaphragm assembly by the range spring. At equilibrium, the ball assumes a position which supplies the required flow while maintaining the output pressure at the set pressure.

CONTROL ENGINEERING DATA

Control Engineering Data is intended to provide a single source from which one can determine, in detail, the full scope of the product line. In addition to materials of construction and diaphragm selection, it also provides all necessary data, regarding adjustment options and range selections. Control Engineering Data also provides a means of communicating, by way of a code number, which is fully descriptive of the product selection.

NOTE: 1. Catalog numbers as received must contain twelve (12) characters.

1-4 Model	GH15 = Regulator - Miniature For Dimensional Data, Refer to Drawing A17-58
5 Future Option	X = Standard
6 Bonnet Options	F = Tapped Bonnet for Flush Back Panel Mounting S = Plain Bonnet T = Threaded Bonnet (Standard)
7 Adjustment Selections	C = Tamperproof - Factory output setting CANNOT be field adjusted (See Notes 1 and 2) H = Handwheel (Standard) K = Knob (Wrench Style) P = Preset - Factory Output Setting CAN be field adjusted (See Notes 1 and 2) NOTES: 1. When option "C" or "P" is specified, refer to price list CP-5000 for price adder. 2. Customer must specify desired output setting, supply pressure and flow.
8 Diaphragm Selections	E = Buna "N" (w/Relief, No Bleed) GH15XTHXXXX_ M = Buna "N" (No Bleed, No Relief)
9 Future Option	X = Standard - Unless option code is specified
10 Future Option	X = Standard - Unless option code is specified.
11 Cleaning Options	A = Cleaned for Oxygen Service X = Standard - Unless option code is specified.
12 Range Selections	A = 0-5 PSI (0-35 kPa) B = 0-15 PSI (0-103 kPa) F = 0-60 PSI (0-414 kPa) H = 0-30 PSI (0-207 kPa) J = 0-100 PSI (0-690 kPa)