

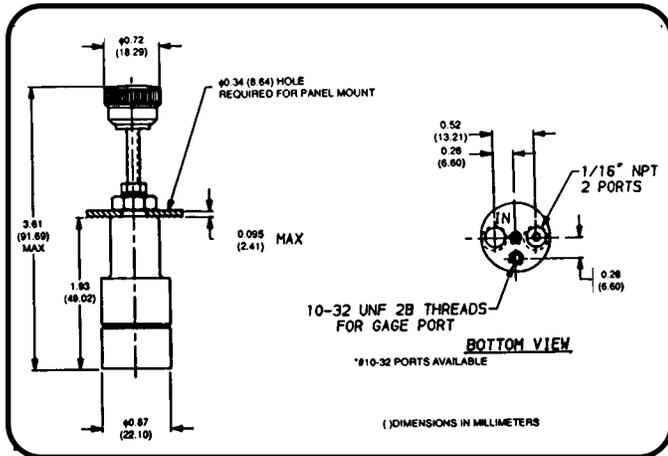
# CONOFLOW SUBMINIATURE REGULATORS GH14 SERIES

Conoflow's Subminiature Regulator is designed for both instrument and industrial applications where accurate regulation is needed in low-flow and dead-ended systems.

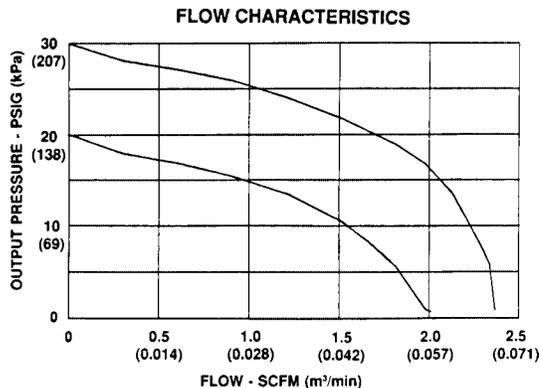
The GH14 Series is offered in brass construction and is rated for a maximum supply pressure of 250 PSI (1724 kPa). Buna "N" diaphragms are standard. This unit is available in five regulated pressure ranges of 0-5 , 15, 30, 60 and 100 PSI (0-35, 103, 207, 414 and 690 kPa).

The inlet and outlet connections are 1/16" NPT with a #10-32 gauge port. #10-32 supply and outlet connections are available. An easily adjustable handwheel is standard with optional wrench knob adjustment available.

These products are backed by Conoflow's high standards of manufacture and years of experience as a leading producer of precision instruments.



For Certified Dimensional Drawing, Refer to A17-88.



## SPECIFICATIONS:

**Maximum Supply Pressure:** 250 PSI (1724 kPa)

**Connections (See Note 1):**

**Inlet/Outlet:** 1/16" NPT or #10-32

**Gauge:** #10-32

**NOTE:** 1. Optional fittings are Available.  
A. G6385969 1/16" NPTx#10-32 Fitting  
B. G6385970 #10x1/8" Tube  
G6385968 Gasket - Buna "N"

**Regulated Output Pressure Ranges:**

0-5, 15, 30, 60 and 100 PSI (0-35, 103, 207, 414 and 690 kPa)

**Flow Capacity:**

2.3 SCFM w/100 PSI Supply @20 PSI set  
(0.065 m³/min w/690 kPa Supply @ 138 kPa set)

**Supply Pressure Effect:**

0.18 PSI (1.24 kPa) for 20 PSI (138 kPa) change in supply pressure

**Air Consumption:**

0.05 SCFM w/100 PSI Supply (20 PSI set)  
[0.001 m³/min w/690 kPa Supply (138 kPa set)]

**Ambient Temperature Range:**

-20°F to +150°F (-29°C to +66°C)

**Approximate Shipping Weight:** 1 lb. (0.45 Kg)

## MATERIALS OF CONSTRUCTION:

**Body:** Brass  
**Bonnet:** Brass  
**Nozzle:** 303 Stainless Steel  
**Diaphragm:** Buna "N"

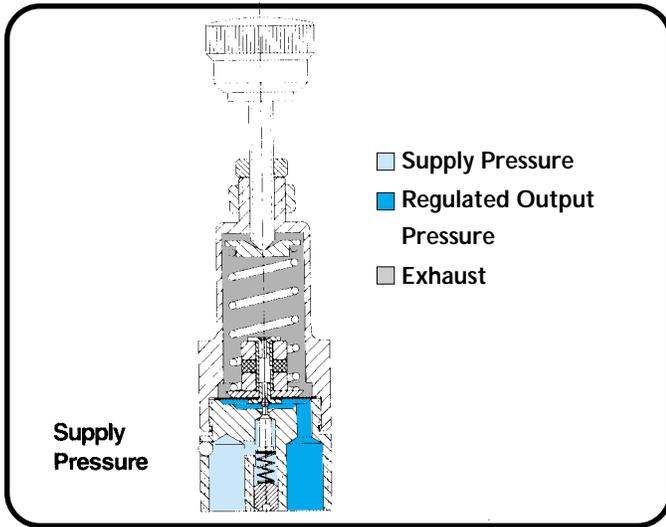
## OPTIONS

### ADJUSTMENT

Handwheel (Standard)  
Knob - Optional

## DIMENSIONAL DATA - ADVERTISING DRAWING:

GH14: A17-88



GH14 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	GH14 = Regulator - Subminiature
5 Operational Features	X = Standard - Unless Option Code is Specified. 3 = #10-32 Inlet and Outlet connections.
6 Bonnet Option	S = Plain Bonnet
7 Adjustment Selections	C = Tamperproof - Factory output setting CANNOT be field adjusted ( Specify desired range setting and supply pressure) H = Handwheel (Standard) K = Knob (Wrench Style) P = Preset - Factory output setting CAN be field adjusted (Specify desired range setting and supply pressure.) See Note 1. <b>NOTE: 1. Refer to price list CP-5000 for price adder.</b>
8 Diaphragm Selections	<b>The catalog number(s) listed under each diaphragm option is the standard diaphragm used in that regulator. These options apply to all output ranges of that unit. For non-standard diaphragm price adders, refer to price list CP-5000.</b> E = Buna "N" (w/Relief, No Bleed) M = Buna "N" (No Bleed, No Relief) GH14XSHEXXX_
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)