

GFH45 SERIES

Conoflow's GFH45 Series Airpak® Filter-Regulators are widely used to provide clean, regulated air pressure to instruments and controls, automatic machinery and other pneumatic devices.

PRINCIPLES OF OPERATION

Turning the knob 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 plug assumes a position which supplies the required flow while maintaining the output pressure at the set pressure.

Standard Specifications

Maximum Supply Pressure:

300 PSI (2068 kPa)

Connections:

1/4" NPT

Regulated Output Pressure Ranges:

0-25 PSI (0-172 kPa)

0-60 PSI (0-414 kPa)

0-125 PSI (0-862 kPa)

Flow Capacity:

[100 PSI (690 kPa) Supply]

20 SCFM (0.566 m³/min)

Sensitivity:

0.02 PSI (0.14 kPa)

Ambient Temperature Range:

-20°F to +150°F (-29°C to +66°C)

Approximate Shipping Weight:

3.4 lbs. (1.54 kg-cm)

Materials of Construction

Body:

Brass

Bonnet:

Brass

Diaphragm Assembly:

Buna "N"

Nozzle:

Brass w/Buna "N" Seat

Range Spring:

Steel Plated

Bowl and Draincock:

Brass/Brass



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PRODUCT CONFIGURATION CODING

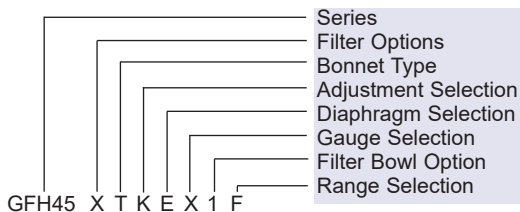
Product configuration coding is intended to provide a single source from which one can determine, in detail, the full scope of the product line. In addition to materials of construction, diaphragm selection and filtering capabilities, it also provides all necessary data, regarding adjustment options 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.

Ordering Sequence — Select desired option for each category

TEXT POSITION 1 through 5	OPTION CODE GFH45	DEFINITION OF CHARACTER AIRPAK® Filter, Regulator Combination
6	A B C X	FILTER OPTIONS Filter - Cellulose (10 Micron) (Air Filtration 5 Micron Nominal) Filter - Stainless Steel (40 Micron - Cleaned for Oxygen Service) Filter - Stainless Steel (40 Micron) Filter - Polypropylene (35 Micron) (Standard)
7	F T S	BONNET TYPE Tapped Bonnet for Flush-Back Panel Mounting Threaded Bonnet (Standard) Plain
8	C H K P	ADJUSTMENT SELECTIONS Tamperproof (Factory Output Setting CANNOT be Field Adjusted) Handwheel Knob (Wrench Style) (Standard) Preset (Factory Output Setting CAN be Field Adjusted)
NOTES:		Customer must specify desired output setting, supply pressure and flow with PRESET option.
9	E F J M	DIAPHRAGM SELECTIONS Buna "N" (w/Relief, No Bleed) (Standard) Viton on Nomex (No Bleed, No Relief) Viton on Nomex (w/Relief, No Bleed) Buna "N" (No Bleed, No Relief)
10	X	GAUGE SELECTIONS Absence of Specification - (Standard)
NOTES:		1. Pressure gauge options are available in the price pages. 2. All gauges are supplied with brass bourdon tubes.
11	1	FILTER BOWL OPTIONS Standard
12	C F G	RANGE SELECTIONS 0-25 PSI (0-172 kPa) 0-60 PSI (0-414 kPa) 0-125 PSI (0-862 kPa)

Example



Dimension Specifications

