CONOFLOW AIRPAK® FILTER-REGULATOR IEEE QUALIFIED

Model GFH20XT1767C - 25 PSI (172 kPa)
Model GFH20XT1767F - 60 PSI (414 kPa)
Model GFH20XT1767G - 125 PSI (862 kPa)

Conoflow's model GFH20XT1767*__ Airpak® has been qualified in accordance with the requirements of IEEE 323-1974 and the recommended practices of IEEE 344-1975. The test program included Thermal Aging, Radiation Aging, Wear Aging, Seismic Qualification and Steam Line Break Testing. For details of test conditions, consult the factory.

This unit is a pressure reducing, relief type regulator and air filter combination. It is used to provide clean, regulated air pressure to instruments, controls and other pneumatic devices thereby allowing them to operate at peak efficiency. The GFH20XT1767*__Airpak® is supplied with 0-25, 60 and 125 PSI (0-172, 414 and 862 kPa) pressure ranges with a maximum allowable supply pressure of 200 PSI (1379 kPa).

The materials of construction for this Airpak® include a brass body and bonnet. The nozzle body is constructed of brass and incorporates a stainless steel valve plug. The filter element is cellulose and all diaphragms and o-rings are Viton.

Performance of these units is assured by Conoflow's high standards of manufacturing and stringent quality program.

* C = 0-25 PSIG (0-172 kPa)
F = 0-60 PSIG (0-414 kPa)
G = 0-125 PSIG (0-862 kPa)

DIMENSIONAL DATA - ADVERTISING DRAWING:
GFH20XT1767 (ALL RANGES): A17-60

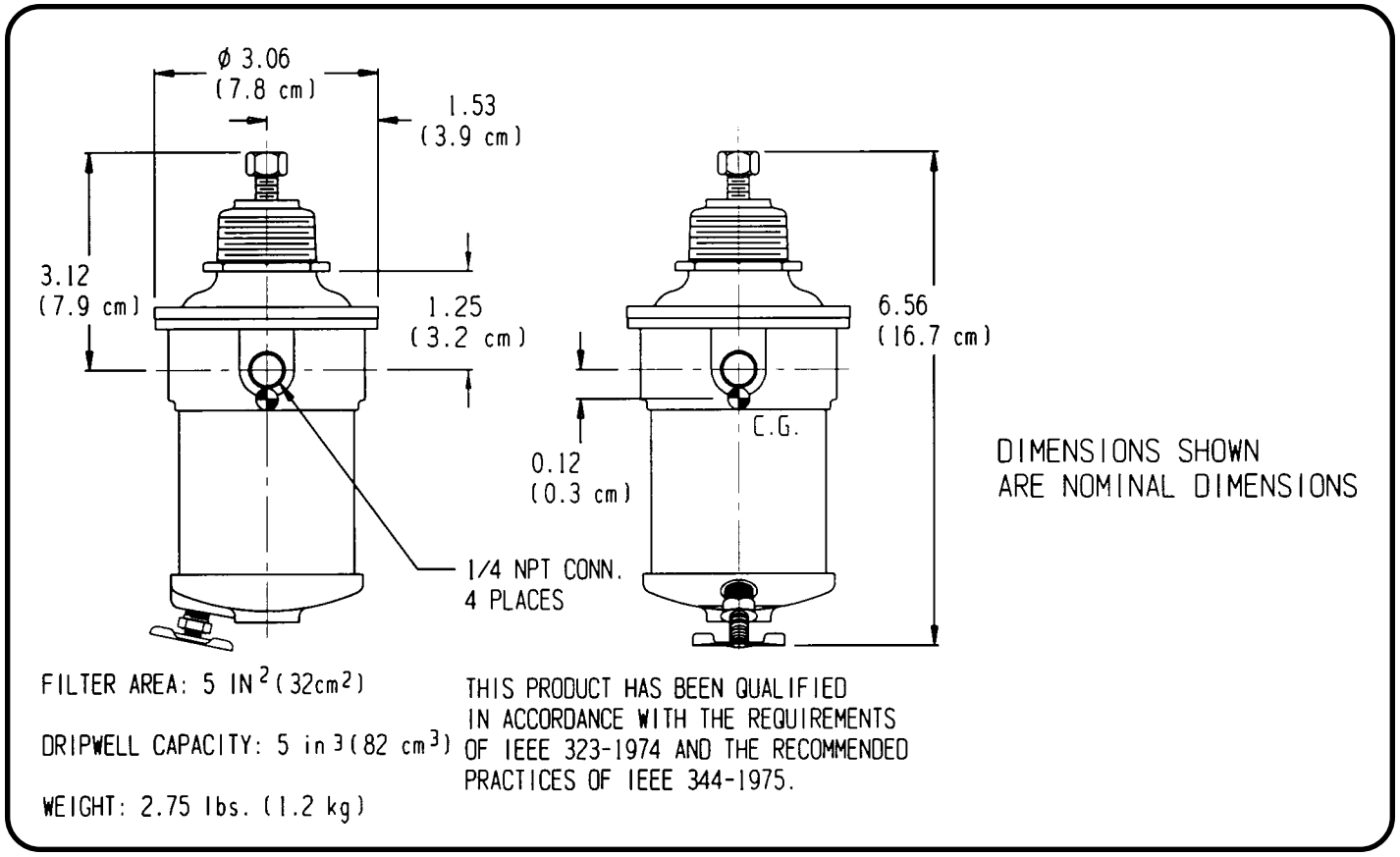
SPECIFICATIONS

OPERATING CHARACTERISTICS

Regulated Output Pressure Ranges: 0-25, 60 and 125 PSI (0-172, 414 and 862 kPa)
Maximum Supply Pressure: 200 PSI (1379 kPa)
Flow Capacity: 16 SCFM (0.453 m^3/min) (with 100 PSI (690 kPa) Supply Pressure
Sensitivity: 0.1 PSI (0.69 kPa)
Supply Pressure Effect: 0.03% of output per 100 PSI (690 kPa) change in supply pressure
Ambient Temperature Range: -20°F to +150°F (-29°C to +66°C)
Filter Rating: 10 micron (cellulose)
Approximate Shipping Weight: 2.75 lbs. (1.2 kg)

FLOW CHARACTERISTICS

Typical Curve for 20 PSI (138 kPa)
Set Pressure with 100 PSI (690 kPa) Supply

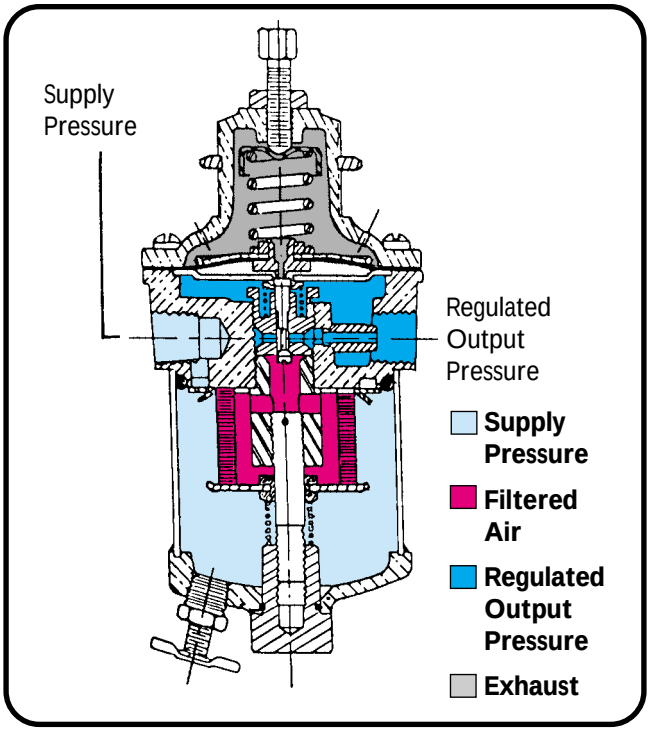


For Certified Dimensional Drawing, Refer to A17-60

PRINCIPLE 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.



GFH20XT1767 Relief - No Bleed/Metal Seat Nozzle