CONOFLOW
I/P TRANSDUCER
IEEE QUALIFIED

Model GT25CA1826
Model GT45CA1826
Model GT65CA1826
Model GT25FA1826
Model GT45FA1826
Model GT65FA1826

Conoflow's Models GT25/45/65CA-FA1826 Transducers have 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.

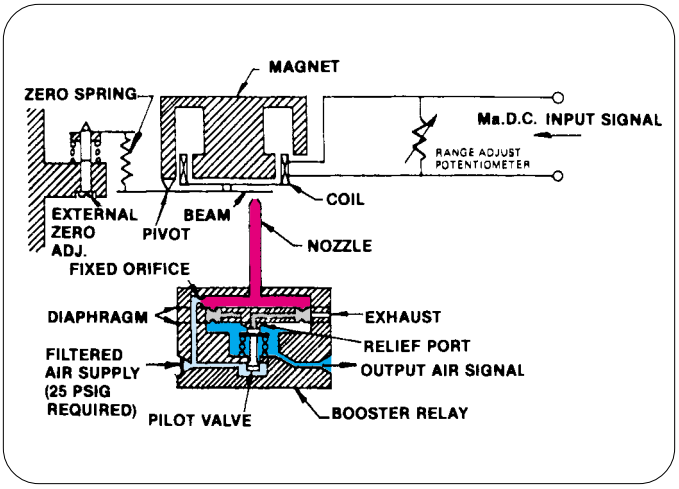
The unit operates on a 4-20 or 10-50 mA DC input signal providing a proportional output of 3-15, 3-27 or 6-30 PSIG (21-103, 21-186 or 41-207 kPa). The unit is equipped with a GFH20XT1767 [0-60 PSI (0-414 kPa)] Airpak-Filter Regulator. This airpak has also been qualified to the requirements and recommended practices of IEEE 323-1974 and IEEE 344-1975.

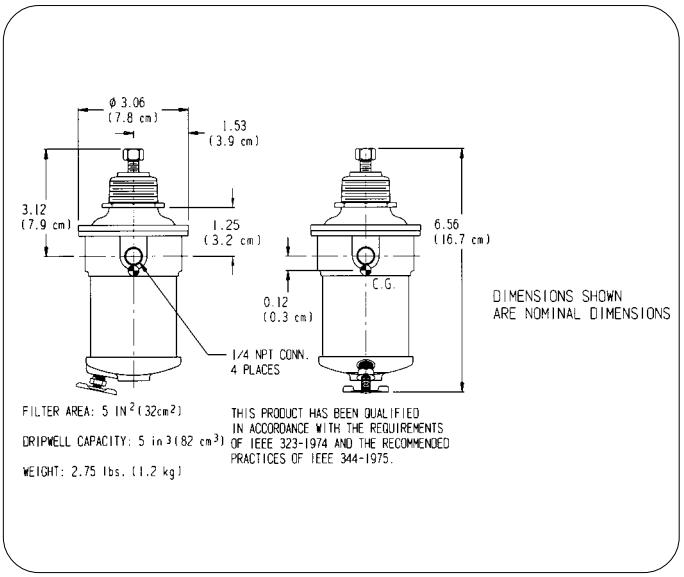
The materials of construction for the transducer include a zinc alloy housing, Viton elastomers and a specially-coated printed circuit board. The Airpak is of an all brass construction incorporating the same Viton elastomers.

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

DIMENSIONAL DATA - ADVERTISING DRAWINGS:

GT25CA1826: A28-16
GFH20XT1767F: A17-60





Dimensions - Airpak

PRINCIPLE OF OPERATION

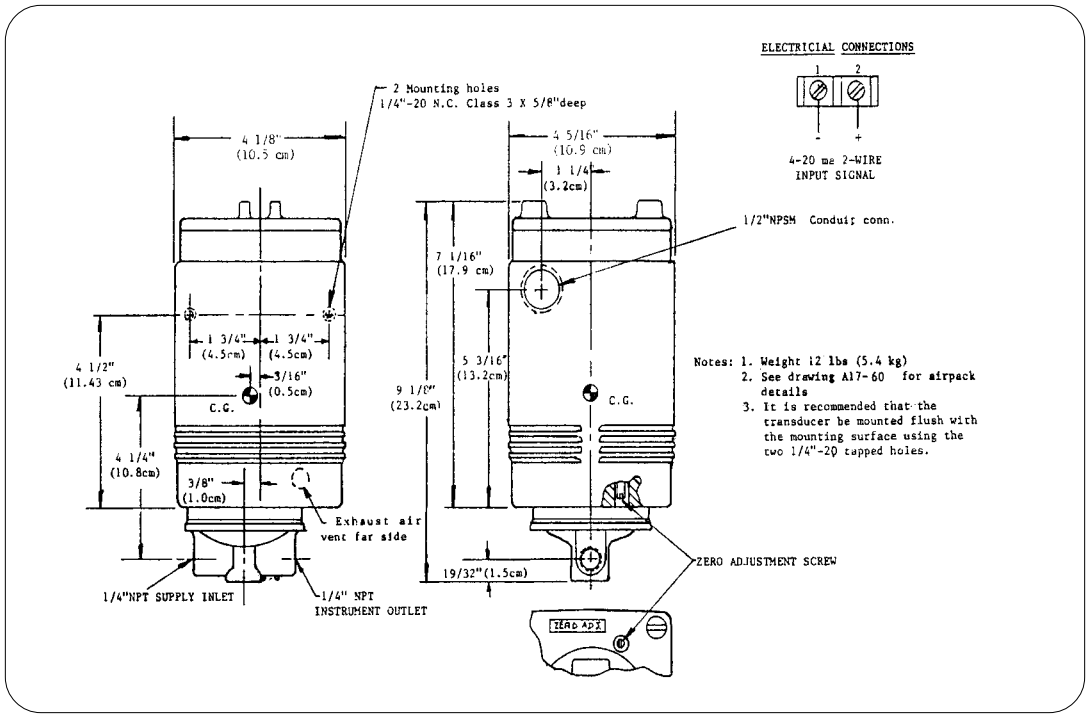
The Conoflow IEEE Transducer is a force-balanced unit which accepts a 4-20 or 10-50 mA DC input signal and converts it to a proportional 3-15, 3-27, or 6-30 PSIG (21-103, 21-186, or 41-207 kPa) output.

In the direct acting mode, an increase in the input signal causes the coil to move away from the magnet which moves the balance beam toward the nozzle. This reduces the flow through the nozzle increasing the back pressure in the top chamber of the booster. The increased pressure in the booster causes the diaphragm assembly to move downward, opening the pilot valve and increasing the output pressure. The output pressure will continue to increase until it is equal to the nozzle back pressure and the forces on the diaphragm assembly are balanced.

A decrease in the input signal allows the coil to move toward the magnet which moves the balance beam away from the nozzle. This allows the flow through the nozzle to increase which reduces the back pressure in the top of the booster. Since the output pressure is greater than the nozzle back pressure, there is a net upward force on the diaphragm assembly which causes it to move upward allowing the pilot valve to close and the relief port to open. The excess output pressure is vented to atmosphere through the relief port until equilibrium is established.

SPECIFICATIONS

Input Range: 4-20 mA DC, 10-50 mA DC
Output Signal: 3-15, 3-27 or 6-30 PSIG (21-103, 21-186 or 41-207 kPa)
Nominal Input Impedance: 580 Ohms-235 Ohms (4-20 mA DC)-(10-50 mA DC)
Required Regulated Air Supply Pressure:
25 PSIG (172 kPa)/35 PSIG (241 kPa) for 3-27 (21-186 kPa) and 6-30 PSIG (41-207 kPa) units (Filtered Air Supply - Units equipped with a GFH20XT1767 Airpak®, Filter-Regulator).
Air Consumption: 0.2 SCFM (0.006 m^3/min)
Air Delivery Rate (Maximum): 5 SCFM (0.142 m^3/min)
Exhaust Rate (Maximum): 3 SCFM (0.085 m^3/min)
Linearity: ± 0.75% of output span
Temperature Effect: 0.15% of output span per °F
Ambient Temperature Range: 0°F to +150°F (-18°C to +66°C)
Approximate Shipping Weight: 12 lbs. (5.44 Kg)
Minimum (Output) Piping Requirements: 3/8" tubing or 1/4" pipe



Dimensions - Transducer