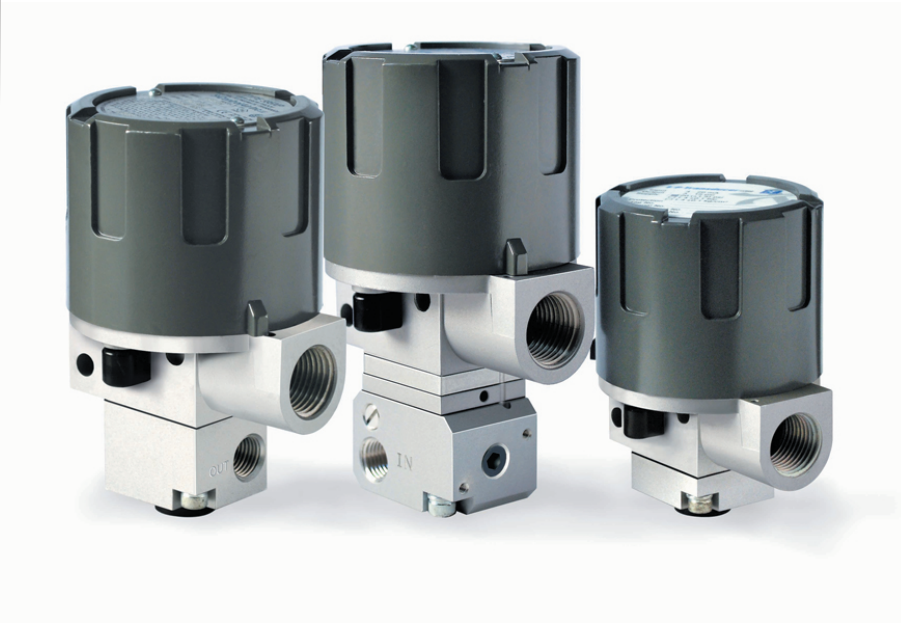


Transducers *FC600 series*

► Explosion Proof (I/P - E/P) Current / Voltage to Pressure



► Description

The Flucon FC600 series Explosionproof I/P (current to pressure) transducer converts a 4–20mA electrical current signal to a proportionally linear pneumatic output. The unique conversion technology utilizing open loop control provides a high level of accuracy and repeatability for the operation of actuated valves. A low mass control circuit provides consistent output in high vibration applications.

This compact unit is housed in an explosion proof enclosure that is designed for pipe, bracket or direct manifold mounting. This explosion-proof and intrinsically safe field device is available with an integral volume booster or as a low-flow signal converter that directly mounts to a pneumatic valve positioner. The Flucon FC600 series has worldwide agency approvals for use in hazardous areas.

Multiple choices for wiring and porting simplify installation and decrease the time required to do so. In addition to standard wall, panel or pipe mounting, optional DIN rail and manifold mounting kits are available. The Flucon FC600 series Multifunction Manifold provides a common supply port and individual shutoff valves for sets of 3, 5, 10 or 15 units.

Mounting

The Flucon FC600 series transducers can be pipe, panel or bracket mounted in any position. Position other than vertical will require recalibration of the zero and span adjustment. Transducers should be mounted in a vibration-free area.

* ATEX approval pending

► Integrated Characteristics

- Compact Design.
- Low Air Consumption.
- Low Power Consumption.
- Integral Volume Booster
- Flexible Adjustments of Zero & Span.
- Standard Process Inputs.
- Vibration and Position Insensitive.

► Specifications

Functional	P Connection (with Flow Booster)	M & N Connection (without Flow Booster)
Input	4-20 mA	4-20 mA
Outputs	3-15 psig 0.20-1.0 BAR	3-15 psig 0.20-1.0 BAR
	3-27 psig 0.20-1.8 BAR	3-27 psig 0.20-1.8 BAR
	6-30 psig 0.40-2.0 BAR	6-30 psig 0.40-2.0 BAR
Air Consumption	0.1 scfm (0.17m³/hr)	2.00 scfh (0.06 m³/hr) @ 20 psig supply (1.4 BAR) 4.94 scfh (0.14 m³/hr) @ 85 psig supply (6.0 BAR) 8.36 scfh (0.24 m³/hr) @150 psig supply (10.0 BAR)
Supply Pressure Note: Supply pressure must be a minimum of 5 psig (0.3 BAR) above maximum output	3-15: 22 psig (1.5 BAR) max 3-27, 6-30: 42 psig (2.8 BAR) max	150 psig (10.0 BAR) max.
Flow Capacity	2.4 scfm (4.1 m³/hr) max.	Same as Air Consumption
Temperature Limits	-67°F to 185°F (-55°C to 85°C)	
Relative Humidity	75% average - 95% short time non-condensing	
Impedance	260 Ohms ± 5% @ 70°F	
Loop Load	5.2 Volts @ 70°F	

Performance

Linearity (Independent)	<±0.5% of span	
Hysteresis	<±0.3% of span	
Deadband	<±0.1% of span	
Repeatability	<±0.3% of span; <±0.15% of span typical	
Mounting Orientation Effect	<±0.5% / 90 degree change	
Air Supply Sensitivity	< .3% / 1.5 (0.10 BAR) psig change	<±0.6% / 25 (1.72 BAR) psig change
Vibration Effect	<±1% up to 10g and 20-80 Hz	
Temperature Effect	<±0.75% / 10°F (5.6°C) change	

Physical

Housing	NEMA 4X (IP 65)
Port Sizes	Pneumatic : 1/4" NPT (P & N versions); 1/16" manifold mount (M version) 1/8" NPT Gauge Port (P version) Electric : 1/2" NPT, M20-1.5 (ATEX)
Media	Clean, dry, oil-free, instrument air, filtered to 40 micron
Electrical Connections	Terminal block
Mounting	Direct (standard) or 2" pipe (optional)
Materials	Housing : Chromate-treated aluminum with epoxy paint. NEMA 4X (IP65) Elastomers : Buna-N Trim : Stainless steel; brass; zinc-plated steel
Weight	P Version = 1.4 lbs. (0.64kg.) N Version = 1.25 lbs. (0.57kg.) M version = 1.20 lbs. (0.54kg.)

Ordering Information

Use this coding system to order

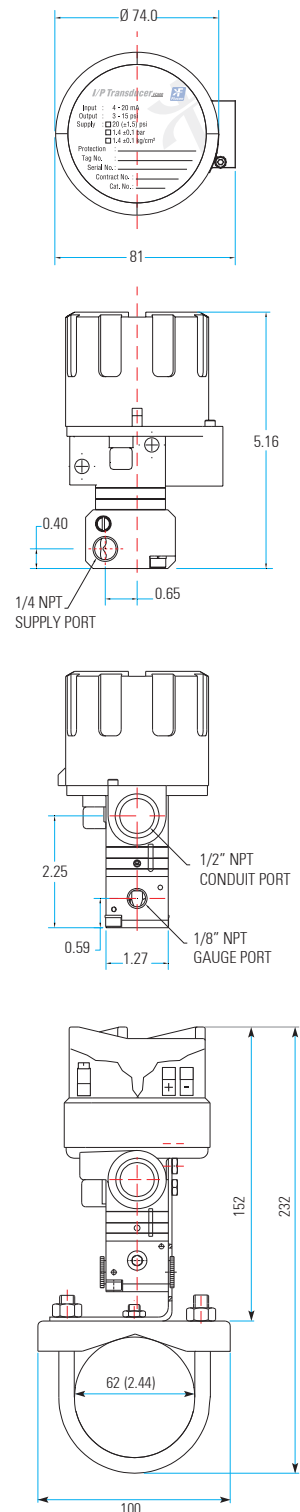
FC600 —	■	■	■	■	Options
	Input Signal	Connection			K ATEX Approval
A	4-20mA	M	Manifold Mount without Booster		
		N	1/4" NPT Port without Booster		
	Output Pressure	P	1/4" NPT Port with Booster		
C	3-15 psig				
D	3-27 psig				
E	6-30 psig				

Accessories

Optional - 2" Pipe mounting Bracket kit.

► Dimensional drawings

(All Measurement in mm)



Aluminum or stainless steel housing unit as add-on module for OEM applications.

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