

Differential Pressure Transmitter

FC0352



- Accuracy 0.25% of reading
- Ultra low pressure measurement
- Wide span adjustment
- 2-wire mA, 3-wire or 4-wire voltage output
- Two configurable relays
- Square-root output for flow/velocity
- Auto zero and remote zero options
- Polycarbonate enclosure

The FC0352 is a fully configurable IP66 rated low differential pressure transmitter available in 2, 3 or 4 wire configuration to suit a wide range of input and output configurations and has pneumatic connections for standard 54mm centre process manifolds.

The output is scalable as linear to differential pressure or as a square-root function to facilitate the use of Pitot Static Tubes or other primary flow elements.

The large LCD may display a variety of engineering units, and two independent relays can provide alarm signals.

Features

Models/Ranges	Model1: $\pm 50\text{Pa}$ Model2: $\pm 150\text{Pa}$ Model3: $\pm 500\text{Pa}$	Model4: $\pm 2500\text{Pa}$ Model5: $\pm 10\text{kPa}$ Model6: $\pm 20\text{kPa}$	High pressure ranges available on request
Output Options	2 wire 4-20mA 3 wire voltage: 0-1 VDC to 0-10VDC full scale 4 wire voltage: 0-1 VDC to 0-10VDC full scale 4 wire voltage: $\pm 1\text{ VDC}$ to $\pm 10\text{ VDC}$ full scale 4 wire isolated: any of the mA or voltages above		
Display (Optional)	Most common differential pressure, volumetric flow, mass flow, and velocity units		
Adjustable Damping	0.0 to 60.0 seconds		
Square Root function	Standard		
Trip Level Relays	Optional: 2 relays, rated 2A @ 55Vac, 30Vdc		
Zero Control	Optional: Automatic or Remote		
Pneumatic Ports	$\frac{1}{4}$ " BSPF fittings and mounting for 54mm centres manifold		

Performance

Enhanced Accuracy @ 20°C	10% to 100% range: $< \pm (0.25\% \text{ reading} + 1 \text{ digit})$ 0 to 10% range: $< \pm (0.025\% \text{ range} + 1 \text{ digit})$	Note: Unipolar span only, standard accuracy applies to bipolar span.
Standard Accuracy @ 20°C	10% to 100% range: $< \pm (0.5\% \text{ reading} + 1 \text{ digit})$ 0 to 10% range: $< \pm (0.05\% \text{ range} + 1 \text{ digit})$	
Span Adjustment	10% to 100% of range	Note: Span can be set anywhere within instruments range.. For span $< 20\%$ of range, accuracy is reduced to the standard specification
Long Term Drift	Typically 0.2% per annum	
Temperature Coefficients	Standard Zero: $< 0.2\%/^{\circ}\text{C}$ Range: $< 0.4\%/^{\circ}\text{C}$	Enhanced Zero: $< 0.02\%/^{\circ}\text{C}$ Range: $< 0.02\%/^{\circ}\text{C}$
Working Temperature	-10 to 60°C	
Output Resolution	Better than 0.033 % Span	
Overload	20 x DP range	
Static Pressure	-1 to $+10$ bar Gauge	
Minimum Step Response	100ms	
Output Update	50ms	
Configuration	Output	Supply Voltage
2-Wire	4 to 20mA	9 to 40Vdc, 22mA
3-Wire	0 to 1V, 0 to 2V, 0 to 5V	9 to 36Vdc, 5mA
3-Wire	0 to 10V	14 to 36Vdc, 5mA
4-Wire	0 to 1V, 0 to 2V, 0 to 5V $\pm 1\text{V}$, $\pm 2\text{V}$, $\pm 5\text{V}$	± 9 to $\pm 18\text{Vdc}$, 5mA
4-Wire	$\pm 10\text{V}$	± 14 to $\pm 18\text{Vdc}$, 5mA
4-Wire Isolated	4 to 20mA, 0 to 1V, 0 to 2V, 0 to 5V, 0 to 10V, $\pm 1\text{V}$, $\pm 2\text{V}$, $\pm 5\text{V}$, $\pm 10\text{V}$	24Vdc $\pm 10\%$, 12mA
Relays	24Vdc $\pm 10\%$, 50mA	
Auto Zero	24Vdc $\pm 10\%$, 30mA	

Construction

Enclosure	IP66 rated Polycarbonate. M20 cable gland entry Choice of mounting options
Dimensions	144 x 155 x 93mm
Materials in Contact With Media	Stainless Steel, nickel, mica & PTFE
Media Compatibility	Air and non-corrosive gases max 95% humidity non-condensing
Weight	1.4kg

30/10/2014

Furness Controls has a UKAS accredited laboratory which offers pressure calibration from 0 to 40 kPa and flow calibration from 0.1 ml/min to 2000 litres/min