

Differential Pressure Transmitter



- Accuracy 0.25% 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
- Robust stainless steel enclosure

Suitable for a variety of clean environment applications the FCO342 low differential pressure transmitter is housed in a IP64 brushed stainless steel enclosure and is available in a variety of voltage or current loop configurations.

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.

The FCO342 can be adjusted from a PC using the FCO301 software utility and cable.

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: ± 1 VDC to ± 10 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	Optional		
Trip Level Relays	Optional: 2 relays, rated 2A @ 55Vac, 30Vdc		
Zero Control	Optional: Automatic or Remote		
Pneumatic Ports	Barbs with locknuts for 6mm OD x 4mm ID for flexible tubing $\frac{1}{8}$ " BSPF $\frac{1}{4}$ " BSPF Front panel calibration ports		

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	
Minimum Step Response	100ms	
Output Update	50ms	
Output Resolution	Better than 0.033 % Span	
Overload	20 x DP range	
Static Pressure	± 1 bar Gauge	

Construction

Enclosure	IP64 rated Stainless Steel Choice of flush mounting or wall mounting options
Dimensions	Flush mount: 160 x 160 x 54mm Wall Mount: 156 x 162 x 56mm
Materials in Contact With Media	Copper, brass, nickel, mica & PVC
Media Compatibility	Air and non-corrosive gases max 95% humidity non-condensing
Weight	1.6kg

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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

