

# Differential Pressure Transmitter

FC0332



- 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
- Compact ABS enclosure

Suitable for a variety of clean environment applications, the FC0332 low differential pressure transmitter 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.

## Features

Models/Ranges	Model 1: $\pm 50$ Pa Model 2: $\pm 150$ Pa Model 3: $\pm 500$ Pa	Model 4: $\pm 2500$ Pa Model 5: $\pm 10$ kPa Model 6: $\pm 20$ kPa	Model 7: $\pm 30$ kPa Model 8: $\pm 1$ bar Model 9: -1bar to +2bar	Model 10: -1bar to +6bar Model 11: -1bar to +10bar
Output Options	2 wire 4-20mA (only available for models 1 to 7) 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: $\pm 1$ VDC to $\pm 10$ VDC full scale 4 wire isolated: any of the mA (only available for models 1 to 7) 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 Options for 4mmOD x 3mm ID tube fittings, $\frac{1}{8}$ " BSPF or $\frac{1}{4}$ " BSPF			

## 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	$\pm 1$ bar Gauge	
Minimum Step Response	100ms	
Output Update	50ms	
<b>Configuration</b>	<b>Output</b>	<b>Supply Voltage</b>
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 $\pm 1\text{V}$ , $\pm 2\text{V}$ , $\pm 5\text{V}$	$\pm 9$ to $\pm 18\text{Vdc}$ , 5mA
4-Wire	$\pm 10\text{V}$	$\pm 14$ 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	IP54 rated ABS Choice of mounting options
Dimensions	120 x 80 x 58mm
Materials in Contact With Media	Copper, brass, nickel, mica & PVC
Media Compatibility	Air and non-corrosive gases max 95% humidity non-condensing
Weight	0.5kg

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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