

Furness Controls

FC0354

FC0354

Differential Pressure  
**TRANSMITTER**  
INTRINSICALLY SAFE



*Meets the Atex Standard  
ATEX II 1 G Classification  
CENELEC Classification EEx ia IIC T5*

- PRESSURE RANGES DOWN TO  $\pm 5$  Pa FULL SCALE
- ACCURACY  $< \pm 0.5\%$  OF READING
- SQUARE ROOT OUTPUT FOR FLOW/VELOCITY
- INTEGRAL DISPLAY OF ENGINEERING UNITS (OPTIONAL)
- 2 WIRE SYSTEM CURRENT OUTPUT
- PC PROGRAMMABLE (IN SAFE AREA)

# Differential Pressure TRANSMITTER

### DESCRIPTION:

The FCO354 is a configurable, Intrinsically Safe differential pressure transmitter using a two-wire (4-20mA) interface.

The pressure cell is based on the unique Furness Controls capacitive sensor of proven reliability, and a microprocessor is used to control all functions of stability, such as temperature correction and linearity.

The pressure range can be adjusted by a 10:1 ratio while maintaining transducer accuracy. The measured pressure is indicated on an alphanumeric display in user configurable engineering units.

Both the display and the 4 to 20mA output can be scaled as a linear or square root function to facilitate the use of Pitot Static Tubes or other primary flow elements.

An additional keypad (FCO302) or the FCO301 utility software allows set-up of functions such as signal filtering, display, and output range (only in a Safe Area).

The FCO354 is suitable for industrial applications of control, measurement, and monitoring. The instrument has been designed and manufactured so as to avoid the risks of injury as described in Clause 1.2.7 of the Essential Health and Safety Requirements.

NOTE: the FCO301 and FCO302 can only be used in a Non-hazardous location.

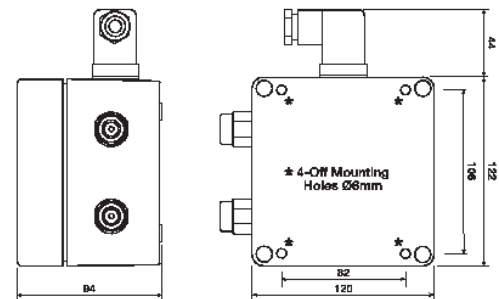
### SPECIFICATIONS

#### FEATURES AND FUNCTIONS:

- 6 available Models from  $\pm 50$  Pa to  $\pm 20$  kPa. Each Model programmable by PC or Keypad to any precise range and/or any equivalent engineering units required, over a 10:1 span.
- Single zero button
- Security PIN number
- Large 8 character alphanumeric liquid crystal display
- Configuration of display and units
- Linear or square root output
- 10:1 range adjustment

Agents Stamp:

CF12807108/03



### PERFORMANCE:

Accuracy including hysteresis, linearity and repeatability	$\pm 0.25\%$ reading $\pm 0.5\%$ for CZ
Span adjustment	10-100% of set range
Minimum step response	100ms
Temperature coefficient (zero)	Typically 0.01 %/°C
Temperature coefficient (span)	Typically 0.01 %/°C
Temperature working limits	-20 to +40°C
Temperature storage limits	-10 to +70°C
Long term drift	Typ. 0.2% per annum
Media compatibility	Non-corrosive gases Max. 95% RH non-condensing gases
Maximum static working pressure	-1 to 10 Bar Gauge
Pneumatic connections	1/4" BSP Female or optional 54mm Centre Manifold Block
Pneumatic overload	100 x instrument range
Supply voltage	9Vdc to 28Vdc

### CONSTRUCTION:

- Output current 4 to 20mA
- Dimensions: 122 x 120 x 90 mm (w x h x d)
- Weight: 3.0 kg (+0.5 kg process manifold)
- Endorsement rating: IP65

### ACCESSORIES:

- UKAS calibration
- FCO301 Software utility programme
- FCO302 Keypad programmer