

PRESSURE SENSOR/ TRANSMITTER

Smart programmable analogue pressure sensor for GAUGE, ABSOLUTE and DIFFERENTIAL measurement in process systems and plant monitoring applications.

- Long term stability and exceptional corrosion resistance to most aggressive media.
- High accuracy pressure capsule with characterised temperature compensation. Data intelligence gives a standardised output signal for simple servicing.
- Choice of analogue output signal:-
4...20mA • 0.4...2V • 5...15Hz.
- Keypad programmable function calibration.
- LCD information display of signal values and all function mode parameters.
- Simple pushbutton scaling to match on-site parameters.
Offset • elevated zero • volumetric conversions, etc.
- Programmable turndown and signal transfer characteristic expressed in true engineering units; square root, tank content, etc.
- Programmable signal damping and display suppression.
- Pressure ranges from 0-600bar Gauge, Absolute or Differential.
- Intrinsically Safe to Euronorm standards.




TX6141



TX6143



Technical Details

Overall Accuracy:	±0.25%.
Long Term Drift:	±0.5% per annum.
Linearity:	±0.25%.
Temperature Stability:	±0.06% / °C.
Ambient Temperature Limits:	Housing: -10...50°C. Sensor: -20...150°C.
Humidity:	0...95% non-condensing.
Vibration Limits:	0.25min pk (10Hz...100Hz) 2g pk (100Hz...600Hz) 40g (Impact)
Protection Classification:	Dust and waterproof to IP66.
Housing Material:	Stainless steel filled Polyamide 6.
Wetted Parts Material:	TX6141 • Stainless steel/Ceramic diaphragm. TX6143 • Stainless steel/Stainless steel diaphragm.
Nett Weight:	0.7kg.
Cable Entries:	M20 x 1.5.
Sensing Element:	Positive strain gauge with integral data intelligence and standardised conditioned output signal. Gauge, Absolute, Differential.
Electrical Connections:	4mm Barrier/clamp terminals.
Information Display:	Dot Matrix alpha numeric LCD 17 characters.
Operation:	Microprocessor controlled with non-volatile data retention.
Menu System:	Keycode. Programming of Span, Zero, On-site scaling, Signal offset, Failure mode, Turndown, Hydrostatic level factor, Square law transfer function, Engineering units, Signal damping, Display contrast, Display suppression, Signal fix. Master Reset. Text Language:  English German French Spanish

Certification and Approval



Group I EEx ia I

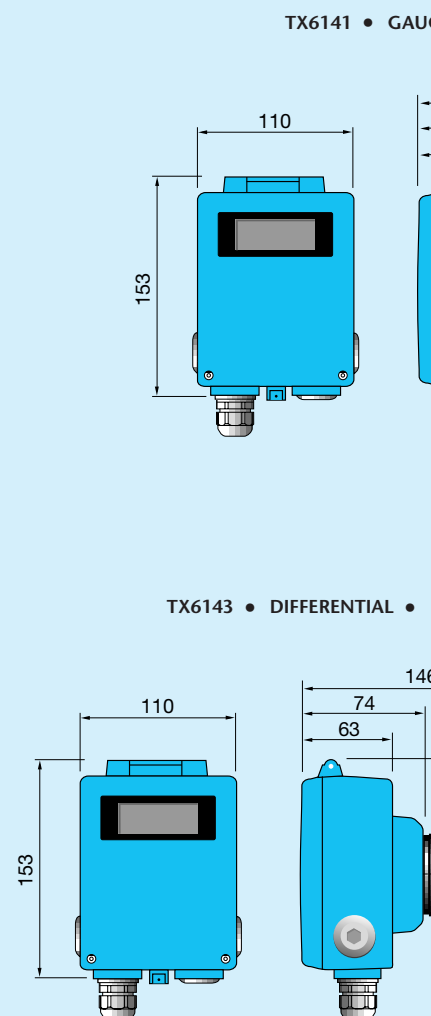
Group II EEx ia IIC T4



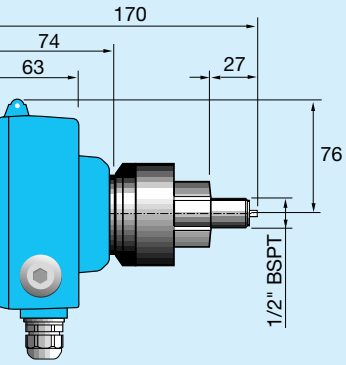
Designed to comply with the requirements of the EC directive on :

- ATEX directive 94/9/EEC
- EMC directive 89/336/EEC

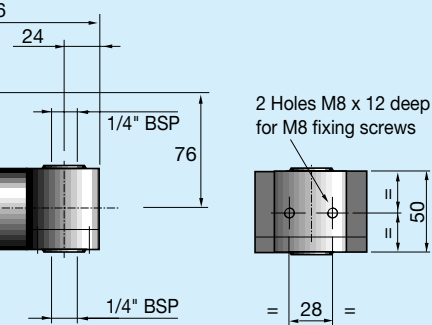
Dimensions



GE • ABSOLUTE



STAINLESS STEEL DIAPHRAGM



All dimensions in mm

Electrical Details

GENERAL PURPOSE AND Ex GROUP II APPLICATIONS (24V dc)

TX6141 • TX6143

Output	4...20mA (2 wire)	
Load	600 ohms at 24V dc	
Supply	10...30V dc	
Max Current	20mA	

Ex GROUP I APPLICATIONS (12V dc)

TX6141 • TX6143

Output	0.4...2V dc (4 wire)	
Load	10k ohms at 12V dc	
Supply	6.5...16.5V dc	
Max Current	15mA	

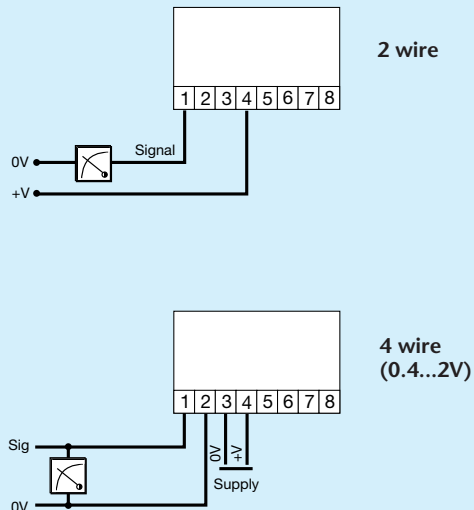
TX6141 • TX6143

Output	4...20mA (2 wire)	
Load	300 ohms at 12V dc	
Supply	6.5...16.5V dc	
Max Current	20mA	

TX6141 • TX6143

Output	5...15Hz (4 wire)	
Load	Opto isolated. 2mA max	
Supply	6.5...16.5V dc	
Max Current	25mA	

Connections:



Pressure Measuring Range

TX6141

GAUGE Ceramic diaphragm (21)
FOR GAS AND LIQUID APPLICATIONS



Range:	0-2bar	0-5bar	0-10bar	0-20bar	0-50bar	0-100bar	0-200bar	0-400bar
Maximum:	3bar	7.5bar	15bar	30bar	75bar	150bar	300bar	600bar
Burst:	6bar	15bar	30bar	60bar	150bar	300bar	600bar	1200bar

TX6141

ABSOLUTE Ceramic diaphragm (22)
FOR GAS AND LIQUID APPLICATIONS



Range:	0-2bar	0-5bar	0-10bar	0-20bar	0-50bar	0-100bar	0-200bar	0-400bar
Maximum:	3bar	7.5bar	15bar	30bar	75bar	150bar	300bar	600bar
Burst:	6bar	15bar	30bar	60bar	150bar	300bar	600bar	1200bar

TX6143

DIFFERENTIAL Stainless steel diaphragm
FOR GAS AND LIQUID APPLICATIONS



Range:	0-0.1bar	0-0.2bar	0-0.5bar	0-1bar	0-2bar	0-5bar	0-10bar	0-20bar
Maximum:	+2.5,-1bar	+2.5,-1bar	+2.5,-1bar	+3,-2bar	+4,-3bar	+10,-5bar	+20,-7bar	+40,-10bar
Burst:	200bar	200bar	200bar	200bar	200bar	200bar	200bar	200bar

Order Reference

TX6141 PRESSURE SENSOR/TRANSMITTER.

PRESSURE FORMAT:
Gauge or Absolute

TX6143 DIFFERENTIAL PRESSURE SENSOR/TRANSMITTER.

PRESSURE FORMAT:
Differential

Please specify additional information:

Options:

CERTIFICATION:

Intrinsically Safe Group I	(01)
Intrinsically Safe Group II	(02)
General Purpose	(03)

OUTPUT SIGNAL:

0.4...2V	(11)
4...20mA	(12)
5...15Hz	(13)

PRESSURE FORMAT (TX6141):

Gauge	(21)
Absolute	(22)

ADDITIONAL INFORMATION:

Pressure Measuring Range (bar)
Non Standard process connections to specification

Accessories

TX9200.11 PIPE MOUNTING BRACKET.

