

PRESSURE SENSOR/ TRANSMITTER



smart, programmable,
analogue pressure
sensor for
**GAUGE, ABSOLUTE
and DIFFERENTIAL
measurement**
in process systems
& plant monitoring
applications



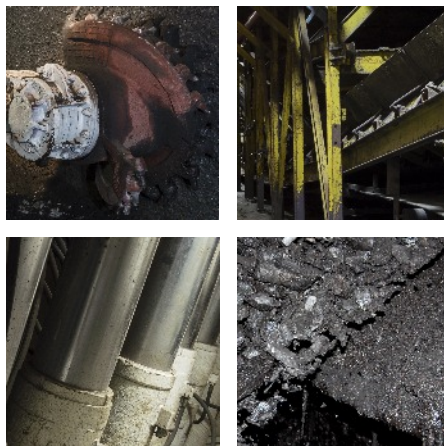
ANZEx

EAC



PETROCHEMICAL
PROCESSING

•
MINING &
TUNNELLING



seriously rugged

Long term stability and exceptional corrosion resistance to most aggressive media.

accurate

High accuracy pressure capsule with characterised temperature compensation. Data intelligence gives a standardised output signal for simple servicing.

choice

4 to 20 mA • 0.4 to 2 V • 5 to 15 Hz
analogue output signal.

intrinsically safe

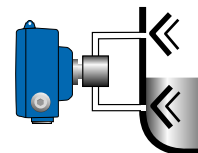
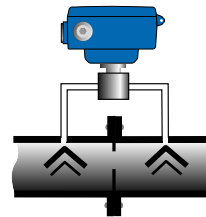
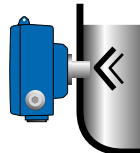
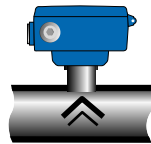
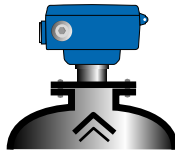
Intrinsically Safe to Euronorm standards.

OPERATING DATA

versatile and easy-to-use features...



- 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 to 600 bar Gauge, Absolute or Differential.



**complete pressure sensing systems from Trolex
to ensure total system compatibility...**



TRIP AMPLIFIER
for use with analogue output pressure sensors.


CONFIGURABLE SENSOR CONTROLLER
for monitoring up to 8 pressure sensors.



COMMANDER DISTRIBUTED I/O SYSTEM
for large scale general plant monitoring systems and the mining and tunnelling industries.

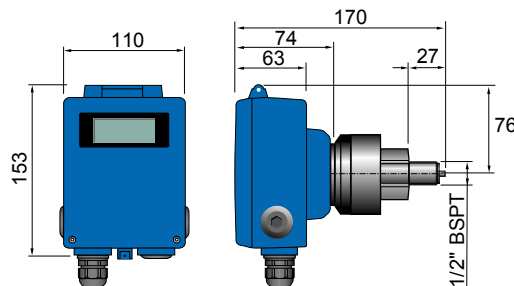
OPERATING DATA

technical details..

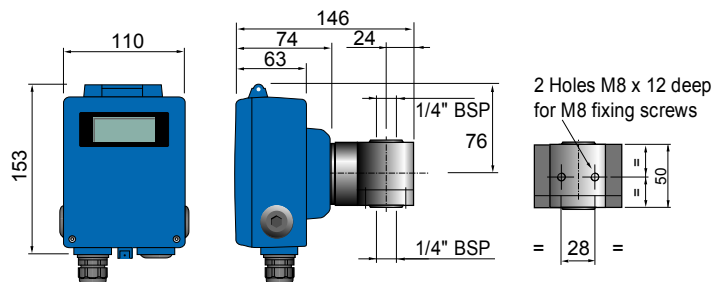
Overall Accuracy:	±0.25%.
Long Term Drift:	±0.5% per annum.
Linearity:	±0.25%.
Temperature Stability:	±0.06% / °C.
Ambient Temp. Limits:	Housing: -10 to +50°C. Sensor: -20 to +150°C.
Humidity:	0 to 95% non-condensing.
Vibration Limits:	0.25 min pk (10 Hz to 100 Hz) 2 g pk (100 Hz to 600 Hz) 40 g (Impact)
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:	0.7 kg.
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:	4 mm 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

Dimensions:

TX6141
GAUGE
ABSOLUTE



TX6143
DIFFERENTIAL
 STAINLESS STEEL
 DIAPHRAGM



ALL DIMENSIONS IN MM

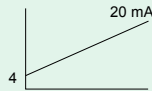


OPERATING DATA

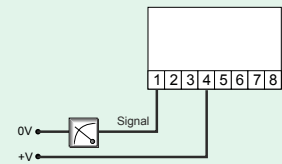
electrical details...

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

TX6141 • TX6143



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

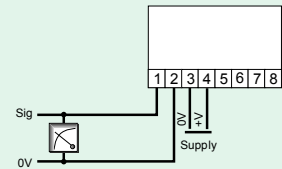


Ex GROUP I APPLICATIONS (12V dc)

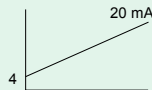
TX6141 • TX6143



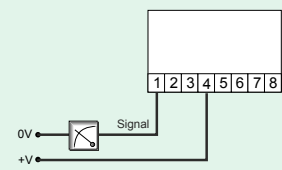
OUTPUT	0.4 to 2 V dc (4 wire)
Load	10 k ohms at 12 V dc
Supply	6.5 to 16.5 V dc
Max. Current	15 mA



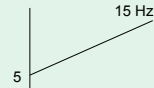
TX6141 • TX6143



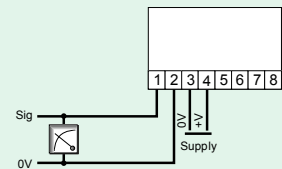
OUTPUT	4 to 20 mA (2 wire)
Load	300 ohms at 12 V dc
Supply	6.5 to 16.5 V dc
Max. Current	20 mA



TX6141 • TX6143



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



pressure measuring ranges...

TX6141

GAUGE CERAMIC DIAPHRAGM (21)

FOR GAS & LIQUID APPLICATIONS

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

TX6141

ABSOLUTE CERAMIC DIAPHRAGM (22)

FOR GAS & LIQUID APPLICATIONS

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

TX6143

DIFFERENTIAL STAINLESS STEEL DIAPHRAGM (24)

FOR GAS & LIQUID APPLICATIONS

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

OPERATING DATA

certification & approval...

Europe (ATEX)



Ex Certification code - Group I:

I M1 EEx ia I (Ta = -20°C to +60°C)

Ex Certification code - Group II:

II 1G EEx ia IIC T4 (Ta = -20°C to +60°C)



ATEX Directive (94/9/EC)

Australia/New Zealand (ANZEx)



Ex Certification code - Group I:

Ex ia I (Ta = -20°C to +60°C)

Ex Certification code - Group II:

Ex ia IIC T4 (Ta = -20°C to +60°C) IP54

Russia (Customs Union)



Ex Certification code - Group I:

PO Ex ia I Ma X

Ex Certification code - Group II:

0Ex ia IIC Ga T4 X

India (CIMFR)



Test report number:

CIMFR/TC/P/H554



OPERATING DATA

order reference...

**TX6141 PRESSURE SENSOR/
 TRANSMITTER**
GAUGE
ABSOLUTE



Please specify additional information:

- Options: CERTIFICATION**
- Intrinsically Safe Group I (01)
 - Intrinsically Safe Group II (02)
 - General Purpose (03)

- OUTPUT SIGNAL**
- 0.4 to 2 V (11)
 - 4 to 20 mA (12)
 - 5 to 15 Hz (13)

- PRESSURE FORMAT**
- **GAUGE** (21)
 - **ABSOLUTE** (22)

- ADDITIONAL INFORMATION**
- Pressure Measuring Range (bar)
 - Non standard process connections to specification.

**TX6143 PRESSURE SENSOR/
 TRANSMITTER**
DIFFERENTIAL



Please specify additional information:

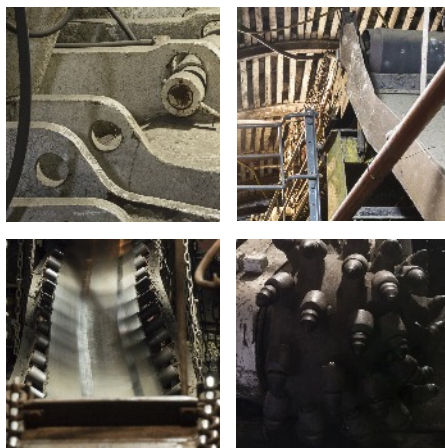
- Options: CERTIFICATION**
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 - General Purpose (03)

- OUTPUT SIGNAL**
- 0.4 to 2 V (11)
 - 4 to 20 mA (12)
 - 5 to 15 Hz (13)

- ADDITIONAL INFORMATION**
- Pressure Measuring Range (bar)
 - Non standard process connections to specification.

accessories...

TX9200.11
PIPE MOUNTING
BRACKET



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