

PRESSURE SENSOR/ TRANSMITTER

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



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.

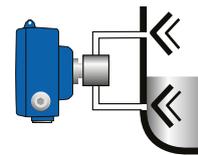
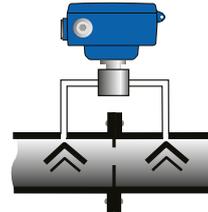
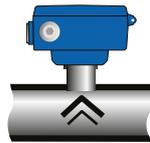


OPERATING DATA

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.

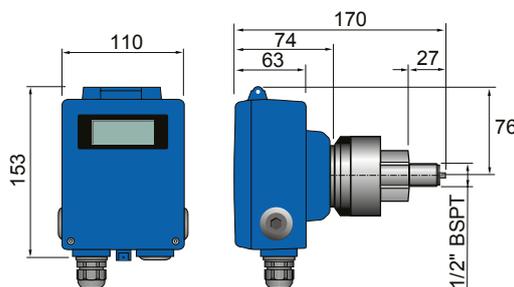
OPERATING DATA

technical details..

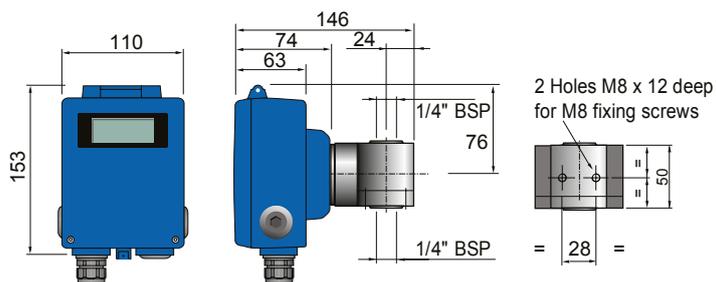
Overall Accuracy:	±0.25%.
Long Term Drift:	±0.5% per annum.
Linearity:	±0.25%.
Temperature Stability:	±0.06% / °C.
Ambient Temp. Limits:	Housing: -10 to +50°C. Sensor: -20 to +150°C.
Humidity:	0 to 95% non-condensing.
Vibration Limits:	0.25 min pk (10 Hz to 100 Hz) 2 g pk (100 Hz to 600 Hz) 40 g (Impact)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

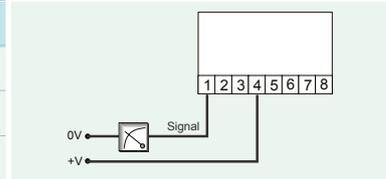


OPERATING DATA

electrical details...

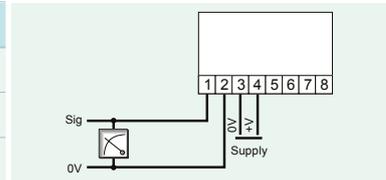
GENERAL PURPOSE AND Ex GROUP II APPLICATIONS (24V dc)

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

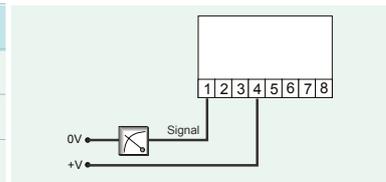


Ex GROUP I APPLICATIONS (12V dc)

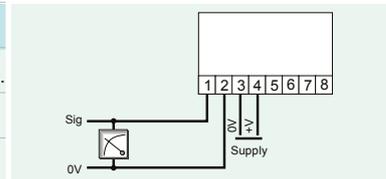
TX6141 • TX6143 	OUTPUT	0.4 to 2 V dc (4 wire)
	Load	10 k ohms at 12 V dc
	Supply	6.5 to 16.5 V dc
	Max. Current	15 mA



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...

Please refer to product user manual (TX6141-3-UM-EN · P5436.1600) for full certification details.



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:

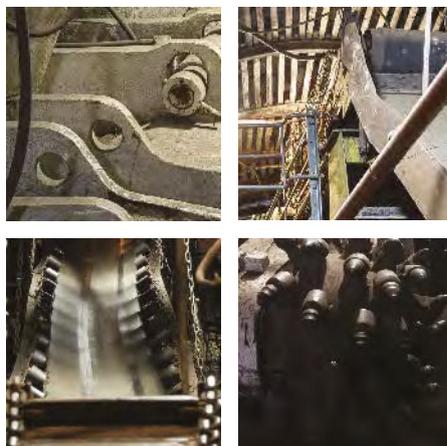
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- OUTPUT SIGNAL**
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 - 4 to 20 mA (12)
 - 5 to 15 Hz (13)

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

accessories...

TX9200.11
PIPE MOUNTING
BRACKET



DISCLAIMER

The information provided in this document contains general descriptions and technical characteristics of the performance of the product. It is not intended as a substitute for and is not to be used for determining suitability or reliability of this product for specific user applications. It is the duty of any user or installer to perform the appropriate and complete risk assessment, evaluation and testing of the products with respect to the specific application or use. Trolex shall not be responsible or liable for misuse of the information contained herein. When instruments are used for applications with technical safety requirements, the relevant instructions must be followed.

All pertinent state, regional, and local safety regulations must be observed when installing and using this instrument. For reasons of safety and to help ensure compliance with documented system data, only Trolex or its affiliates should perform repairs to components.

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We believe that no person should risk their life to earn a living.

Our aim is to become the world's leading name in health and safety technology, through pioneering products that provide real-world benefits to our customers, whenever workers operate in hazardous environments.

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