





# PTXPRESSX

## **Industrial Pressure Sensors**

The PTXPRESSX has been designed based on the hugely popular UNIK5000 series to be an off the shelf, high accuracy, flexible pressure sensor. Ideal for many industrial and process applications, the PTXPRESSX has easily identifiable, multiple pressure ranges lased etched on the body tube.

The 316L fully welded stainless steel and Hastelloy pressure module ensures excellent media compatibility without compromising performance.

Integral electronics provide a two-wire 4 to 20 mA output proportional to applied pressure. Non-interactive zero and span controls ensure system interchangeability and ease of calibration. The PTXPRESSX incorporates developments from aerospace applications and volume manufacturing to achieve high performance. These sensors feature compact, rugged design with measurement and low cost of ownership.

#### **Features**

- 15 pressure ranges from 1mbar to 250 bar
- Barometric and compound pressure range available
- 4 to 20 mA output
- Premium accuracy
- 4 pressure units marked on body tube (Pa, bar, psi, mH<sub>2</sub>O)
- Express availability
- Zero span control to prevent offset and for ease of calibration
- Designed and manufactured in UK



### **PTXPRESSX Specifications**

#### **Operating Pressure Ranges**

Part Number	Pressure Range	Pressure Range 2	Pressure Range 3	Pressure Range 4	Pressure Connector
PTXPRESSX-1	80 to 120 kPa barometric	0.8 to 1.2 bar barometric	11.6 to 17.4 psi barometric		G 1/4 Female
PTXPRESSX-2	-10 to 10 kPa gauge	-0.1 to 0.1 bar gauge	-1.45 to 1.45 psi gauge	-1.02 to 1.02 mH <sub>2</sub> O gauge	G 1/4 Female
PTXPRESSX-3	-50 to 50 kPa gauge	-0.5 to 0.50 bar gauge	-7.25 to 7.25 psi gauge	-5.1 to 5.1 mH <sub>2</sub> O gauge	G 1/4 Female
PTXPRESSX-4	0 to 10.5 mH <sub>2</sub> O gauge	0 to 1 bar gauge	0 to 15 psi gauge	0 to 103 kPa gauge	1/4 NPT Female
PTXPRESSX-5	-1 to 1 bar gauge	-14.5 to 14.5 psi gauge	-100 to 100 kPa gauge	-10.2 to 10.2 mH <sub>2</sub> O gauge	G 1/4 Female
PTXPRESSX-6	0 to 250 kPa gauge	0 to 2.5 bar gauge	0 to 36 psi gauge	0 to 25.5 mH <sub>2</sub> O gauge	G 1/4 Female
PTXPRESSX-7	0 to 400 kPa gauge	0 to 4 bar gauge	0 to 58 psi gauge	0 to 40.8 mH <sub>2</sub> O gauge	G 1/4 Female
PTXPRESSX-8	0 to 600 kPa gauge	0 to 6 bar gauge	0 to 87 psi gauge	0 to 61.2 mH <sub>2</sub> O gauge	G 1/4 Female
PTXPRESSX-9	0 to 100 psi gauge	0 to 6.9 bar gauge	0 to 690 kPa gauge	0 to 70.3 mH <sub>2</sub> O gauge	1/4 NPT Female
PTXPRESSX-10	0 to 10 bar gauge	0 to 145 psi gauge	0 to 1 MPa gauge	0 to 102 mH <sub>2</sub> O gauge	G 1/4 Male Flat
PTXPRESSX-11	0 to 150 psi gauge	0 to 10.3 bar gauge	0 to 1 MPa gauge	0 to 105 mH <sub>2</sub> O gauge	1/4 NPT Female
PTXPRESSX-12	0 to 1.6 MPa gauge	0 to 16 bar gauge	0 to 232 psi gauge	0 to 163 mH <sub>2</sub> O gauge	G 1/4 Female
PTXPRESSX-13	0 to 25 bar gauge	0 to 362 psi gauge	0 to 2.5 MPa gauge	0 to 255 mH <sub>2</sub> O gauge	G 1/4 Female
PTXPRESSX-14	0 to 60 bar absolute	0 to 870 psi absolute	0 to 6 MPa absolute	0 to 611 mH <sub>2</sub> O gauge	G 1/4 Male Flat
PTXPRESSX-15	0 to 250 bar absolute	0 to 3626 psi absolute	0 to 25 MPa absolute		G 1/4 Female





#### Overpressure

The rated pressure range can be exceeded by the following without degrading performance:

6 x Full Scale (FS) for 250 mbar range

4 x FS for ranges 1 to 60 bar (200 bar maximum)

4 x FS for ranges 100 to 250 bar (1200 bar maximum)

2 x FS for barometric range

#### Containment

6 x FS for ranges up to 60 bar (200 bar max)

1200 bar for ranges 100 to 600 bar

#### **Pressure Media**

Fluids compatible with a fully welded assembly of: 316L stainless steel and Hastelloy C276

#### **Supply Voltage**

7-32V

#### Long Term Stability

±0.05% FS per annum typical

±0.1% FS per annum maximum, increasing pro-rata for pressure ranges below 350 mbar

#### **Operating Temperature Range**

-40°C to 80°C

#### **Temperature Effects**

Over the compensated temperature range -40°C to 80°C

±1.0% FS Temperature error band (TEB) typical,

±1.5% FS TEB maximum,

For ranges below 350 mbar values increase pro-rata with calibrated span and doubles for barometric range

#### Performance

#### Accuracy

Combined non-linearity, hysteresis and repeatability: 0.04% FS Best Straight Line (BSL) max

#### Zero Offset and Span Setting

#### Factory set to:

Product Description	Improved and Premium
DIN 43650 Electrical Connection	±0.2% FS
M12 x 1 4-Pin Electrical Connection	±1.0% FS

±5% site adjustable by sealed, non-interacting potentiometers

#### **Physical**

#### **Electrical Connection**

DIN 43650 Form A plug supplied with mating socket

M12\*1 4 PIN connector

#### Weight

0.4 lb (200 g) nominal

#### Enclosure

Stainless steel body

#### EDPM gasket

DIN 43650 connector (IP65) M12 x 1 4 PIN connector (IP67)

#### CE marked

#### Wiring details

<b>Electrical Connection</b>	Connection	Function
	1	+VE supply
	2	-VE supply
DIN 43650	3	-
	x	Case
	1	+VE supply
M12 x 1	2	-
4-Pin	3	-VE supply
	4	Case

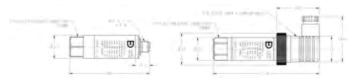
#### **Ordering Information**

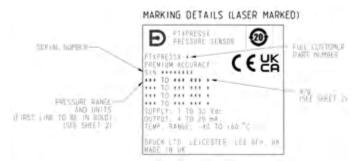
Please state the following:

(1) Type number PTXPRESSX

NOTE: Each part number refers to a specific sensor configuration in terms of pressure range pressure connection and electrical connection. See the pressure range table for detail.

#### **Mechanical Dimensions**





#### **Related products**

PTXPRESSX is a derivative from UNIK series pressure transmitter for flexible stock and quick turn around. If you seek configurations that are not listed within PTXPRESS, there are 500,000+ more configurations available from the UNIK5000 series on a short delivery.

#### Distributed by:

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