



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 laser etched on the body tube.

The fully welded stainless steel 316L 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-interacting 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 high accuracy measurement and low cost of ownership.

Features

- 15 pressure ranges up 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, mH₂O)
- Express availability
- Zero and span control to adjust 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 ₂ 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 ₂ O gauge	G 1/4 Female
PTXPRESSX-4	0 to 10.5 mH ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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 ₂ 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:

- 10 x Full Scale (FS) for ranges below 250 mbar
- 6 x FS for ranges below 700 mbar
- 4 x FS for ranges 1 to 60 bar (200 bar maximum)
- 4 x FS for 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 250 bar

Pressure Media

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

Supply Voltage

7 to 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 double 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	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 (for DIN 43650 connector only)

Physical

Electrical Connection

For PTXPRESSX-1 to PTXPRESSX-14:

DIN 43650 Form A plug supplied with mating socket

For PTXPRESSX-15:

M12 x 1 4-pin connector

Weight

0.4 lb (200 g) nominal

Enclosure

Stainless steel 316L body

EDPM gasket (for DIN 43650 connector only)

DIN 43650 connector (IP65)

M12 x 1 4-pin connector (IP67)

CE marked

Wiring Details

Electrical Connection	Connection	Function
DIN 43650	1	+VE supply
	2	-VE supply
	3	-
	⊖	Case
M12 x 1 4-Pin	1	+VE supply
	2	-
	3	-VE supply
	4	Case

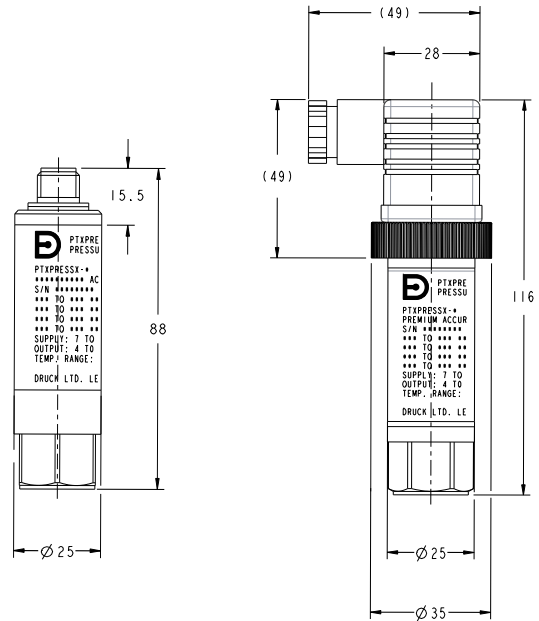
Ordering Information

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.

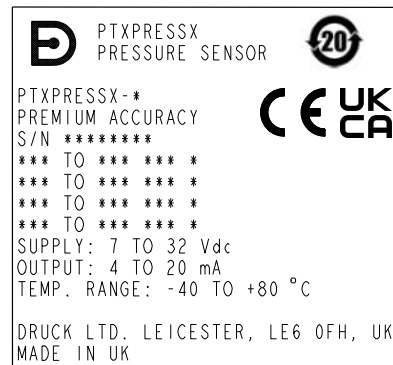
Mechanical Dimensions



M12 x 1 4-pin Construction

DIN 43650 Form A Construction

MARKING DETAILS (LASER MARKED)



Related Products

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