

Features

The PTX 7500 Series of current output sensors use a modular construction to offer customers a wide choice of configurations at an economic cost. This is combined with fast delivery to meet the demands of today's market.

- 2 wire, 4 to 20 mA
- Flexible ranges from 100 mbar to 700 bar
- Accuracy up to $\pm 0.1\%$ typical
- Temperature range -40 to 100°C
- High reliability and stability
- With range of electrical connections

Applications

- Industrial autoclaves
- Automotive test standards
- Industrial compressors
- Aerospace test stands
- Analytical gas vapour
- Water pump systems
- Marine engine test stands

PTX 7500 Series

Druck Industrial Pressure Transmitter

PTX 7500 Series is a Druck product. Druck has joined other GE high-technology sensing businesses under a new name—GE Industrial, Sensing.



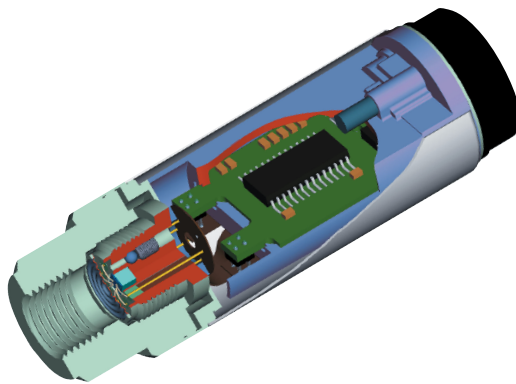
GE Sensing

High Stability

At the heart of each pressure sensor is an advanced micromachined silicon diaphragm produced in GE Sensing's own processing facility. This diaphragm is mounted within a high stability pressure module which eliminates non-repeatable errors and provides a stable measuring element for the sensor.

High Reliability

GE employs a multi-disciplined sensor engineering team, experienced in combining the pressure module, ASIC signal conditioning electronics and final mechanical packaging. This ensures that the sensor design is suitable for a wide range of demanding applications and provides lowest cost of ownership.

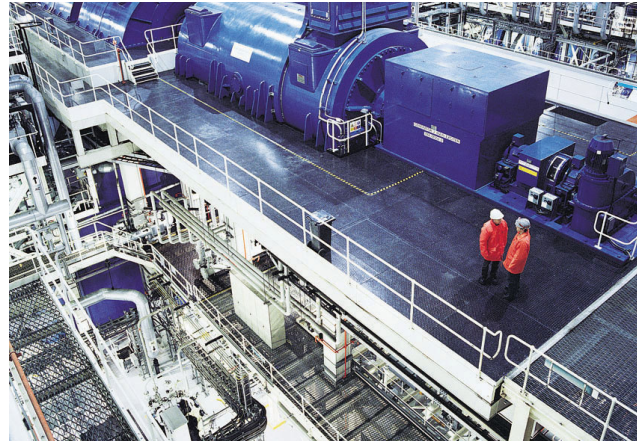


Build Quality

GE is committed to producing the highest quality products. This commitment extends from initial concept and development through to manufacturing, testing and despatch.

GE is approved to the highest international quality standards, including ISO 9001 and many industry specific standards, it is also approved by many companies who apply their own specific QA requirements.

In addition, UKAS and NKO accredited laboratories provide traceability to international standards for pressure, electrical and temperature measurements.



PTX 7500 Specifications

Pressure Measurement

Operating Pressure Ranges

Any zero based full scale (FS) from 1.5 to 1000 psi (100 mbar to 70 bar) gauge or absolute
Any zero based FS above 1000 psi (70 bar) up to 10000 psi (700 bar) sealed gauge or absolute
Barometric 11.5 to 17.4 psi (800 to 1200 mbar) absolute

For other barometric, elevated zero (e.g. 15 to 60 psi (1 to 4bar)) and compound ranges (e.g. -15 to +15 psi (-1 to +1 bar)) Refer to GE Druck for further information

Pressure Units

psi, mbar, bar, hPa, kPa, MPa, mmH₂O, torr, kgf/cm²
cmH₂O, mH₂O, inH₂O, ftH₂O, mmHg, inHg, kg/cm²

Over Pressure

The operating FS pressure range can be exceeded by the following multiples with negligible effect on calibration:

- 8 x for ranges up to 2.5 psi (160 mbar)
- 6 x for ranges above 2.5 to 7.5 psi (160 up to 500 mbar)
- 4 x for ranges above 7.5 to 30 psi (500 mbar up to 2 bar)
- 3 x for ranges above 30 up to 2030 psi (2 up to 140 bar) (2900 psi (200 bar) max)
- 2 x for ranges above 2030 up to 10000 psi (140 up to 700 bar) (14500 psi (1000 bar) max.)

Pressure Containment

The operating FS pressure range may be exceeded by the following multiples without a loss of mechanical containment:-

Gauge ranges:

- 12 x for ranges up to 2.5 psi (160 mbar)
- 8 x for ranges above 2.5 to 7.5 psi (160 up to 500 mbar)
- 6 x for ranges above 7.5 to 30 psi (500 mbar up to 2 bar)
- 4 x for ranges above 30 to 1015 psi (2 up to 70 bar) (2900 psi (200 bar) max)

Sealed gauge and absolute ranges:

- 3625 psi (250 bar) for ranges 1.5 to 2030 psi (100 mbar to 140 bar)
- 14500 psi (1000 bar) for ranges above 2030 up to 10155 psi (140 up to 700 bar)

Pressure Equipment Directive (PED) 97/23/EC approved (Category 1 - Pressure Accessory)

Pressure Media

Fluids compatible with 316L stainless steel and Hastelloy C276 (NACE compatible grades)

Supply Voltage

9 to 30 V at PTX terminals (28 V maximum for Intrinsically Safe option)

Start -Up Time

Recommended minimum power on time before output sample is taken is 500 msec

Output Signal

4 to 20 mA (2 wire) proportional to the zero to FS pressure range

Performance

Accuracy

Combined effects of non-linearity, hysteresis and repeatability

±0.1% FS Best Straight Line (BSL) typical (±0.2% FS BSL max)
0.15% Terminal Straight Line (TSL) typical (0.3% TSL max.)

Zero Offset and Span Setting

Supplied with ±5% zero and span noninteractive site adjustable potentiometers (excludes 7533 model)

Long Term Stability

±0.1% FS per year

Operating Temperature Range

-40 to 212°F (-40 to 100°C) ambient (176°F (80°C) max for 7511/7533/7534 models)
-40 to 248°F (-40 to 120°C) process media

Temperature Effects

Output will not deviate from room temperature (RTE) by more than:

- 0.7% FS typical (1% FS max) over 14 to 122°F (-10 to 50°C)
- 1.5% FS typical (2% FS max) over -4 to 176°F (-20 to 80°C)

For ranges below 500 bar, these values will multiply on a pro rata basis.

Shock

- 1000g, half sine pulse, duration 1 msec
 - 100g, peak half sine wave duration 11 msec
 - 2000g, half sine pulse, duration 0.5 msec
- All in each of 3 mutually perpendicular axis will not effect calibration.

Vibration

Conforms to MIL-STD 810C method 514.2 figure 514.2-2 curve L

Pressure Response

1kHz band width (63% response to step change in pressure).

Certification

Certificate of Calibration supplied as standard.

CE marking

Marked for use in potentially explosive atmosphere, electromagnetic compatibility and the pressure equipment directive.

Hazardous Area Approval

EEX ia IIC T4 (-40 < T amb < 80°C)

Certificate BAS01 ATEX1254

300 metres max integral cable (models PTX 7511/7533)

Physical

Pressure Connection

G1/4 female with Option B screw-in adaptors

Electrical Connection

- IP65 Integral 5.7mm polyurethane cable
- IP65 6-pin bayonet plug
- IP65 DIN 43650A plug/socket
- IP68 Integral 8mm polyurethane or hytrel cable
- IP65 M20 female conduit (PTX 7500)

Options

(A) ATEX Intrinsically Safe Approval

(B) Screw in adaptors with bonded seals

(C) Separate vented cable (7517)

5.7mm vented cable provided as a separate line item (supplied unfitted)

(D) Pressure snubber adaptor

Refer to GE for further information

Ordering Information

Please state the following:

(1) Select model number

Code	Output
PTX75	mA output
Electrical Connections	
Code	
11	5.7 MM INTEGRAL CABLE Core (IP 65)
16	6-pin bayonet plug (IP 65)
17	DIN 43650 plug/socket (IP 65)
33	8 mm integral cable (IP 68)
34	8 mm integral Hytrel cable (IP68)
35	M20 female conduit (IP 65)
PTX 75	11
Typical model number	

(2) Pressure range

(3) Pressure units e.g. psi, bar, etc...

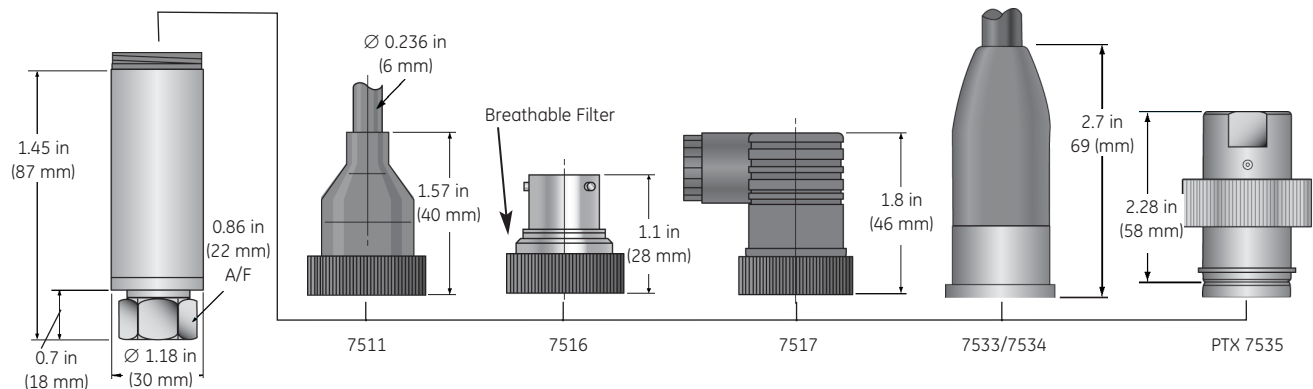
(4) Specify gauge or absolute

(5) Cable lengths (7511, 7533, 7534)

(6) Required options

Wiring Details

	+ supply	- supply
PTX 7511	Red	Blue
PTX 7516	A	B
PTX 7517	1	2
PTX 7533/7534	Red	Blue
PTX 7535	A	B



Installation drawing



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