

## PTX 1400

### Industrial Pressure Transmitter

- $\pm 0.15\%$  typical accuracy
- Wide choice of pressure ranges
- Absolute and gauge format
- Compatible with hostile media
- Low cost, ex-stock delivery
- CE marked

The PTX 1400 Industrial Pressure Transmitter has been designed for use with aggressive pressure media found in many industrial and process applications.

The stainless steel isolation diaphragm and fully welded stainless steel pressure module ensures excellent media compatibility without compromising the performance from Druck's own micro-machined silicon pressure diaphragm.

Integral two-wire electronics provide conditioning of the signal from the silicon diaphragm to generate a 4 to 20 mA output proportional to applied pressure. In addition, the electronics provide power supply regulation, reverse polarity, over voltage and EMC protection. Integral non-interactive zero and span controls ensure system interchangeability and ease of calibration.

The PTX 1400 incorporates developments from aerospace applications and volume manufacturing advanced to achieve good performance with competitive pricing. Industry demands for rapid despatch are met by stock holding fully compensated and calibrated sensors in DIN pressure ranges.

This transmitter features a compact, rugged design with field proven electronics to ensure long term reliable measurement and low cost of ownership.



## STANDARD SPECIFICATION

### Operating Pressure Ranges

0 to 100, 250mbar gauge  
 0 to 400, 600mbar, 1, 1.6, 2.5, 4, 6, 10, 16, 25, 40, 60 bar gauge and absolute.  
 0 to 100, 160, 250, 400, 600 bar sealed gauge 800 to 1200mbar absolute (barometric).

-1 to 1.6 bar gauge  
 -1 to 2.5 bar gauge  
 -1 to 4 bar gauge

### Overpressure

The rated pressure range can be exceeded by the following without degrading performance:  
 1 bar for 100 and 250mbar ranges  
 2 bar for 400 and 600mbar ranges  
 2 x for other ranges up to 180 bar maximum

### Pressure Media

Fluids compatible with a fully welded assembly of 316 stainless steel

### Supply Voltage

9 to 28V d.c.

The minimum supply voltage (VMIN) that must appear across the transmitter terminals is 9V and is given by:-

$$VMIN = V_s - (0.02 \times RL)$$

Where  $V_s$  is supply voltage in volts  
 $RL$  is total loop resistance in ohms.

### Output Current

4 to 20mA (two wire configuration).

### Zero Offset and Span Setting

$\pm 0.1$ mA  
 $\pm 5\%$  site adjustable by sealed, non-interacting potentiometers.

### Long Term Stability

$\pm 0.2\%$  \*/annum typical.

### Combined Non-linearity, Hysteresis and Repeatability

$\pm 0.15\%$  typical  
 $\pm 0.25\%$  maximum  
 Best Straight Line Definition.  
 Each side considered separately.

### Operating Temperature Range

-20 to +80°C.

### Temperature Effects

$\pm 1.5\%$  Total Error Band typical  
 $\pm 2\%$  Total Error Band Maximum  
 Over -20° to 80°C  
 For ranges below 400mbar these values will increase pro-rata with calibrated span.

\* Percentage errors are expressed as % of span, i.e. the difference between the lowest and highest pressure except for the barometric range where span is defined as 1200mbar.

### Weight

200 grams nominal

### Pressure Connection

G1/4 female.

### Electrical Connection

DIN 43650 plug with free mating socket supplied as standard.

### Ingress Protection

IP65

### Voltage Spike Protection

Units will withstand 600V spike test to ENV 50142 without damage, applied between excitation and case.

### Safety

EMC emissions EN50081-1  
 EMC Immunity EN50082-1  
 Certification CE marked.

## ACCESSORIES

The following accessories are available to order as separate items:-

### Screw-in Male/Male Adaptor

G1/2 (Druck Part Number 190-039) supplied with bonded seal.

### Vented Electrical Cable

To maintain an Ingress Protection rating IP65, gauge pressure ranges Druck vented electrical cable (Druck Part Number 192-004). *Cable length to be specified on order (1m minimum)*

## ORDERING INFORMATION

Please state the following:

- (1) Type number PTX 1400
- (2) Operating pressure range (Gauge or absolute)
- (3) Accessories (if required).  
*State Druck Part Number*

*Continuing development sometimes necessitates specification changes without notice.*

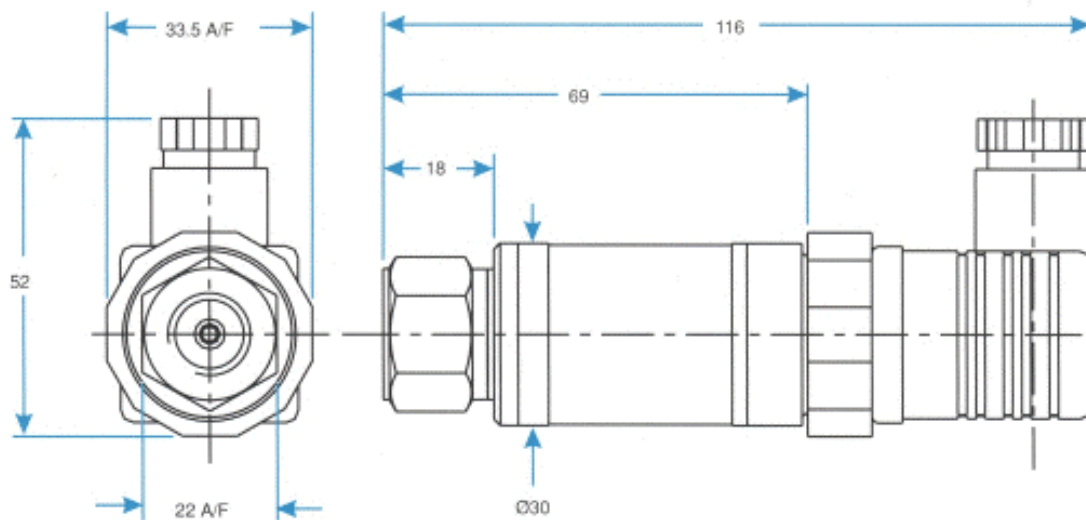
## RELATED PRODUCTS

Druck manufactures a comprehensive range of pressure sensors, indicators, calibrators, controllers and deadweight testers. The range of portable calibrators also covers temperature and electrical parameters.

*Please refer to manufacturer for further information and product datasheets.*

## INSTALLATION DRAWINGS

Dimensions: mm



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