

PMP 1400

Industrial Amplified Pressure Transducer

- $\pm 0.15\%$ typical accuracy
- Pressure ranges up to 600 bar
- Absolute and gauge format
- Compatible with hostile media
- Low cost, ex-stock delivery
- CE marked



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

The Hastelloy C276 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 surface mount electronics provide conditioning of the signal from the silicon diaphragm to generate a 3 wire 0 to 5V 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 PMP 1400 incorporates developments from aerospace applications and volume manufacturing advances 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 transducer 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
and absolute.

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

Over Pressure

The rated pressure 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 (up to 180 bar maximum) for
ranges 1 bar to 100 bar
2 x (up to 900 bar maximum) for
ranges 160 to 600 bar.

Pressure Media

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

Supply Voltage

9 to 30V d.c.

Output Voltage

0 to 5V (three wire configuration calibrated between 5% and 100% of full scale).

Load Impedance

Greater than 100k ohms for quoted performance.

Zero Offset and Span Setting

±0.5%
±5% site adjustable by sealed,
non-interacting potentiometers.

Long Term Stability

±0.2% */annum typical.

Combined Non-linearity, Hysteresis and Repeatability

±0.15% * typical
±0.25% * maximum
Best Straight Line Definition.

Operating Temperature Range

-20° to +80°C.

Temperature Effects

±1.5%* Total Error Band typical
±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.

Weight

200 gms 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 lines and case.

Safety

EMC Emissions	EN50081-1
EMC Immunity	EN50082-1
Certification	C E 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 require 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 PMP 1400
- (2) Operating pressure range (gauge or absolute).
- (3) Accessories (if required).
State Druck Part Number.

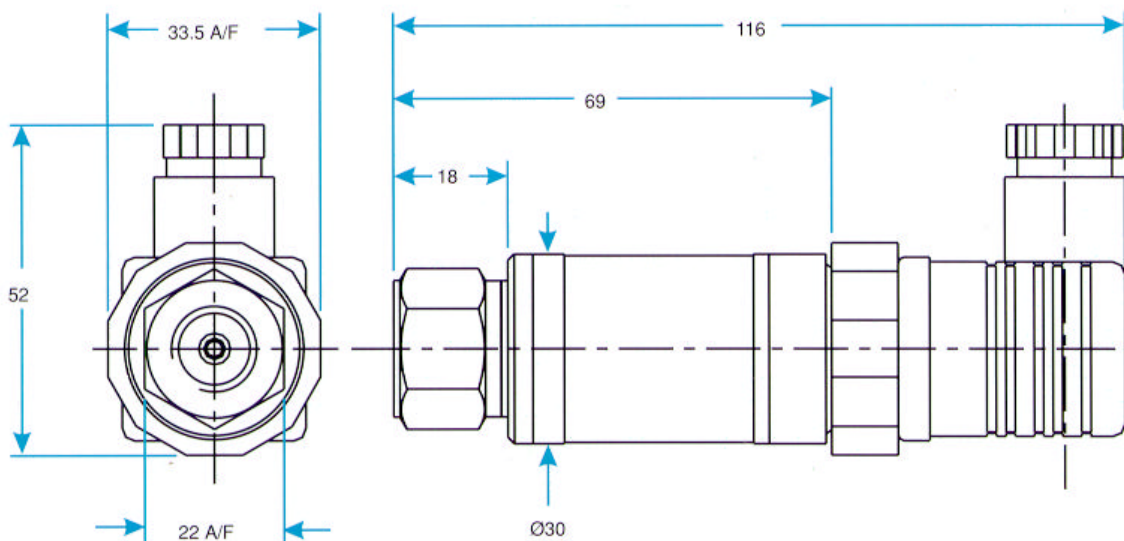
Continuing development sometimes necessitates specification changes without notice.

RELATED PRODUCTS

Druck manufacture a comprehensive range of transducers, transmitters, pressure indicators, controllers and calibrators.

Please refer to manufacture for further information and data sheets.

INSTALLATION DRAWINGS Dimensions: mm



Druck Limited
Fir Tree Lane, Groby
Leicester LE6 0FH England
Tel: +44 (0) 116 231 7100
Fax: +44(0) 116 231 7103
E-mail: sales@druck.com
Internet: www.druck.com

Agent

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