

CANbus Digital Output Pressure Transducer

- Ranges from 100 mbar to 700 bar
- High accuracy over wide temperature range
- Full CAN version 2.0B
- CANopen protocol to CiA DS 404
- Input/output isolation
- Device self-checking and diagnostics



The PDCR 450 is a state of the art digital output pressure transducer featuring a CANbus serial communications interface. Fully temperature corrected pressure readings are output as a digital word in any one of 24 engineering units, requiring no user system set-up or calibration. The integral digital electronics enhance performance to levels unmatched by traditional analogue transducers.

Communication software is based on the CANopen protocol. The PDCR 450 functionality offers the user access to last/next calibration date, calibration routines and serial number identification amongst others.

Capable of operation from a range of supply voltages (including batteries) the transducer is fully input/output isolated for complete system protection and user confidence. With ranges from 100 mbar to 700 bar and 400% overpressure it is ideal for many applications where optimum transducer performance is essential and customer specific requirements can be accommodated.

CANbus Digital Output Pressure Transducer

STANDARD SPECIFICATIONS

Pressure Measurement Operating Pressure Ranges

Any zero based pressure range between:
100 mbar to 60 bar gauge
350 mbar to 700 bar absolute
60 bar to 700 bar sealed gauge

Bi-directional gauge, differential and compound ranges (e.g. barometric) available.

Overpressure

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

4 x FS up to 60 bar
2 x FS above 60 bar

Media Compatibility

Fluids compatible with Stainless Steel 316L and Hastelloy C276.

Excitation Voltage

7.5 to 30 Vd.c.

Output Configuration

Digital word via CANbus interface. Standard update 10 times per second.
Faster updates available - refer to Druck

Software Protocol

CANopen protocol to CiA DS 404. *Device functionality details available - refer to Druck*

Performance Specification

Accuracy

0.2% span including all errors over 10 to 60°C.
Alternative specifications available - refer to Druck

Long Term Stability

Typically less than 0.08% FS per annum.

Operating Temperature Range

-40° to +80°C.

Insulation Resistance

Greater than 100 MΩ at 500Vdc.

Mechanical Shock

1000g, 1mS half sine pulse in each of three mutually perpendicular axes will not affect performance.

Vibration

Response less than 0.05% FS/g at 30g peak 10Hz to 2kHz, limited by 12mm double amplitude.

Safety

CE marked
EMC emissions: EN 50081-1
EMC immunity: EN 50082-2

Physical Specification

Weight

180 grams nominal.

Pressure Connection

100mbar to 60 bar ranges

Male:-
G¹/₈B (60° Int cone)
G¹/₄B (60° Int cone or flat end)
1/4" NPT
7/16" UNF to MS33656-4
M10 x 1
Bulkhead fittings

Female:-

G¹/₄
1/4" NPT
Others available - refer to Druck

Above 60 bar to 700 bar ranges

G¹/₄ female
Adaptors available - refer to Druck

Electrical Connection

MIL-C-26482 6 pin bayonet plug or 6 core shielded cable (1m supplied as standard)
Alternatives available - refer to Druck

OPTIONS

- (A) Mating connector for bayonet plug.
- (B) Male/male pressure adaptors for ranges above 60 bar. Specify thread required.
- (C) Additional cable (length to be specified).

CALIBRATION STANDARDS

Pressure transducers manufactured by Druck are calibrated against precision pressure calibration equipment which is traceable to international standards.

RELATED PRODUCTS

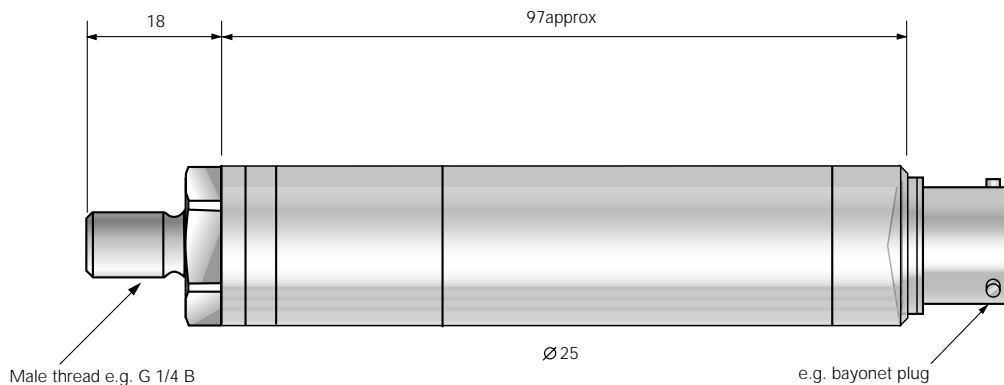
Druck manufacture a wide range of pressure transducers and transmitters, portable calibrators, pressure controllers and deadweight testers.
For further information - refer to Druck

ORDERING INFORMATION

Please state the following:
(1) Model number PDCR 450
(2) Pressure range and units
(3) Gauge, sealed gauge or absolute
(4) Pressure connection
(5) Electrical connection
(6) Options (if required)

Continuing development sometimes necessitates specification changes without notice

Installation Drawings - Dimensions mm



ELECTRICAL CONNECTIONS

CABLE	PLUG	FUNCTION
ORANGE:	PIN A:	CAN_GND
RED:	PIN B:	SUPPLY +ve
WHITE:	PIN C:	SUPPLY -ve
YELLOW:	PIN D:	CAN_H
BLUE:	PIN E:	CAN_L

OTHERS NOT CONNECTED

Druck Limited

Fir Tree Lane, Groby
Leicester, England, LE6 0FH

Tel: +44 (0) 116 231 7100
Fax: +44 (0) 116 231 7103
E-Mail: sales@druck.com
Internet: www.druck.com



0221

Agent: