



Hazardous area
pressure indicator

The Druck DPI705E-IS Manometer carries ANZEx certification

Ex ia I Ma (-10°C ≤ Ta ≤ +50°C)

Ex ia IIC T4 Ga (-10°C ≤ Ta ≤ +50°C)

IEC 60079-0:2017 Explosive atmospheres – Part 0: Equipment—General requirements

IEC 60079-11:2011 Explosive atmospheres – Part 11: Equipment protection by intrinsic safety "i"

Please refer to ANZEx certification document for further details.

DPI705E-IS Series

Druck Handheld Pressure Indicators

The Druck DPI 705E-IS Series of handheld pressure and optional temperature indicators combine tough and rugged design with accurate and reliable measurements.

Compact and robust, the DPI 705E-IS Series is designed for single handed operation and provides many essential features required for routine maintenance and system troubleshooting.

Features

- 7 pressure ranges available from ±25 mbar to 2 bar (±10 inH₂O to 20,000 psi/2.5 kPa to 0.2 MPa)
- Integral calibration record with calibration due count-down display

- Rugged, handheld design with backlit high-contrast display
- Intrinsically Safe
- Compatible with our pneumatic and hydraulic hand pumps

Contact us today

✉ sales@pacdatasys.com.au

☎ 07 3361 2000

DPI705E-IS Improves test efficiency

- Power on and use. No warm up time required.
- 20 pressure measurement units (See below)
- 1, 3 or 5 minute leak test
- Impact resistant, sealed to IP54
- Large digit high-contrast LCD with backlight
- Includes carry case with belt loop
- Optional magnetic/loop hanging strap
- Long battery life
- Integral desk stand and hanger

Special features

Pressure units

mbar, bar, Pa, kPa, hPa, MPa, psi, lb/ft², kgf/cm², kgf/m², mmHg(0°C), mHg(0°C), inHg 0, mmH₂O, cmH₂O, mH₂O, inH₂O (4°C, 20°C), ftH₂O (4°C, 20°C)

Calibration certificates

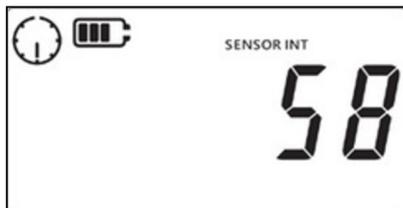
- Supplied as standard in bar, psi and kPa

Leak test

Used to determine if there is a leak in the system by recording the pressure change over a fixed time.

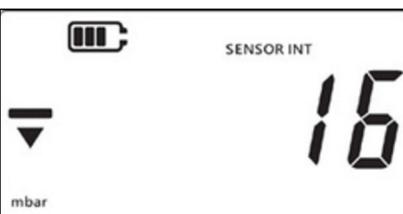
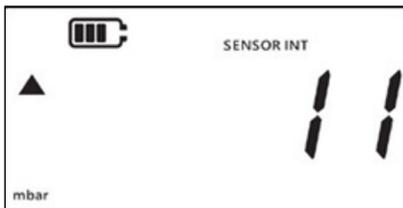
Leak test can also be used with the RTD sensor to record a temperature change over time.

User defined 1, 3 or 5 minute leak test with live countdown timer.



Maximum/minimum

Captures both maximum and minimum readings in peak-hold mode.



Zero

Zero pressure correction (gauge/differential sensors)

Tare

0 to 100% FS temporary zero offset capability by subtracting the current reading from subsequent measurements.

Filter

Enables a filtered pressure reading by showing a rolling average of the last 10 measurements. Providing a more stable reading in a noisy measurement.

Alarm

User adjustable high and low pressure alarms with visual (Bell Icon, Pressure Reading and Backlight flash) and audible warning for 60 seconds.

Calibration

NATA Accredited calibration available through [Pacific Data Systems Australia](#)



Battery

- 4 x AA Alkaline/NiCd/NiMH cells
- Ultra power efficient design, can be used for 8 Hours per day, 6 days per week for up to a year using a single set of batteries.

Display

16mm digital height LCD with ±99999 readout

Differential Pressure Ranges

DPI705E-IS Internal pressure sensors

Available ranges as per table:

Type

25 mbar / 10 inH₂O / 2.5 kPa

70 mbar / 1 psi / 7 kPa

200 mbar / 3 psi / 20 kPa

350 mbar / 5 psi / 35 kPa

700 mbar / 10 psi / 70 kPa

1 bar / 15 psi / 100 kPa

2 bar / 30 psi / 200 kPa

Accuracy

1-Standard ±0.1% FS Total accuracy over -10 to 50 degrees C including NLH&R, 1 year drift and calibration uncertainty

Accuracy specification

Gauge/differential sensors	Standard accuracy	
	NLH&R	Total uncertainty
	(% FS)	(% FS)
25 mbar	0.3	0.348
70 mbar	0.1	0.121
200 mbar	0.08	0.1
350 mbar to 1 bar	0.08	0.1
2 bar to 200 bar	0.08	0.1

Media compatibility

- Gauge/absolute sensors up to and including 200mbar (and all differential sensors) are exposed.
- 350mbar-1400bar sensors are diaphragm isolated.

Pressure FS	Media compatibility
0 to 200mbar	Non-condensing dry gases compatible with 316L Stainless Steel, Pyrex, Silicon, Gold, Aluminium, Glass, Silicon Dioxide and RTV Adhesive.
Differential sensor reference port	Non-condensing dry gases compatible with 316L and 304 Stainless Steel, Pyrex, Silicon, Glass, Silicon Dioxide and RTV Adhesive.

Note: Only fluids that are compatible as per above table should be used, to ensure the integrity of the pressure sensor.

DPI705E-IS General specifications

Working pressure	110% FS (alarm active beyond this range)
Sealing	IP54 ingress protection when installed with the protective skin
Operating temperature	-10 to 50°C (14 to 122°F)
Storage temperature	-20 to 70°C (-4 to 158°F)
Humidity	0 to 90% RH non condensing
Shock and vibration	MIL-PRF-28800F for Class II equipment. 1 m Drop Tested @ -20°C (-4°F)
EMC	BS EN 61326-1
Electrical safety	BS EN 61010-1 UL 61010-1
Pressure safety	Pressure equipment directive class SEP. UL61010 Safe to 2xFS
Approval	CE marked, RCM
Size and weight	L 200 mm, W 95 mm, D 43 mm 563 g maximum
RoHS	Compliant
Resolution	5 digits

Pressure fittings

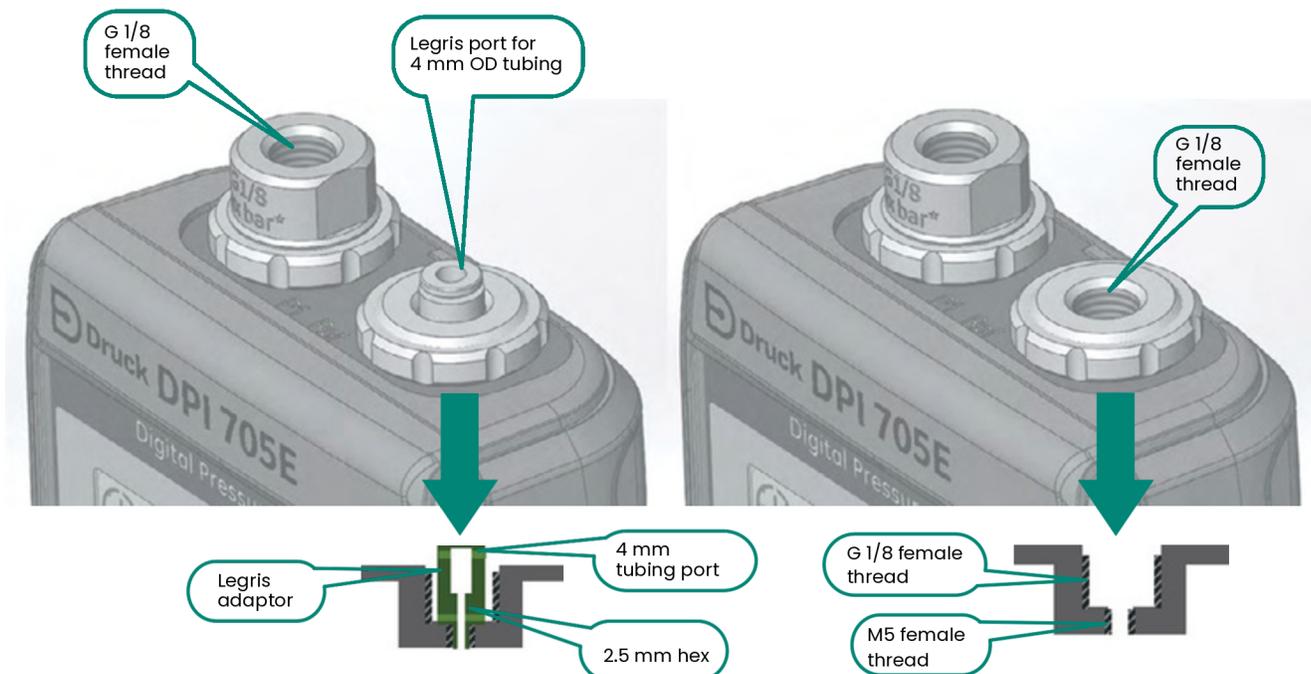
Internal and remote sensors are fitted with pressure connectors as detailed below:

- P1 - G1/8 Female direct sensor connection of instrument, welded non-removable (for ranges 200 bar and below) with optional adaptor:

Differential reference port: Legris 4 mm tubing adaptor.

Adaptors

The Legris adaptor fitted to the reference port can be removed using a 2.5mm hex key leaving a G1/8 female thread and an M5 female thread.



The DPI705E-IS with ANZEx certification for use in
Australian mines is exclusively supplied by

pacific data systems
Australia

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