

## Handheld Pressure Indicator

- Ranges 0 to 1 psi through to 10,000 psi
- 0.1% FS accuracy
- Rugged, lightweight handheld design
- Leak test, tare, max/min and filter
- Intrinsically safe version
- Standard ranges available from stock
- Optional pneumatic and hydraulic hand pumps



# DPI 705

## Handheld Pressure Indicator

The Druck DPI 705 handheld pressure indicator combines tough and rugged design with accurate and reliable pressure measurement. New materials and technical innovations from over fifteen years experience with portable pressure testers has resulted in this advanced new product.

Compact, robust and lightweight, the DPI 705 is designed for single handed operation. It provides many essential features required for routine maintenance and system troubleshooting.

The DPI 705 is ready for use anywhere, anytime ...

- Impact resistant, sealed generally to NEMA 12 (IP54)
- Clear high resolution LCD
- Carrying case with belt loop
- Long battery life
- Integral desk stand and hanger

... and improves test efficiency ...

- No warm up time
- 16 pressure units
- 1 minute leak test
- Ambient temperature measurement

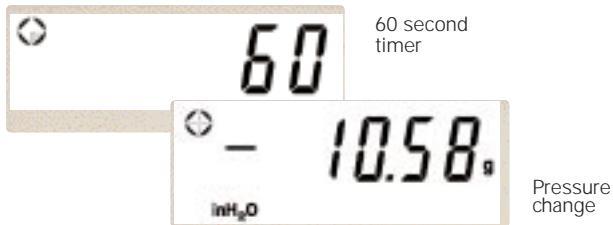
The calibration tools required to comply with quality assurance programs such as ISO 9000 put ever increasing demands on maintenance budgets. The DPI 705, used in conjunction with pneumatic or hydraulic pressure generators, is a simple, low cost solution complementing the wide range of Druck portable process calibrators.

### SPECIAL FEATURES

**Standard ranges** - available from stock.

**Pressure units** - psi, inHg, inH<sub>2</sub>O (4°C, 20°C and 60°F), ftH<sub>2</sub>O (4°C, 20°C and 60°F), mmHg, mHg, mbar, bar, mH<sub>2</sub>O, Pa, hPa, kPa, MPa, Kg/cm<sup>2</sup> and an optional user defined scale.

**Leak test** - a standard 60 second leak test.



**Max/Min** - captures both maximum and minimum readings.



**Zero** - zero pressure correction.

**Tare** - 0 to 100% FS zero offset capability.

**Filter** - a 10 reading rolling average for unstable pressures.

**Alarm** - adjustable high pressure alarm with visual and audible warning.

**Ambient temperature** - °F and °C reading of local condition (±3°F).

**Calibration** - used with the optional pneumatic or hydraulic pumps the DPI 705 becomes a low cost calibration tool for gauges and indicators.

**Power management** - low battery indicator and selectable 'Auto Off'.



### PRESSURE RANGES

#### DPI 705 internal sensor version

The DPI 705 includes an internal sensor and has a 1/8" NPT (female) pressure connector. **Most internal ranges are available from stock.**

#### DPI 705R remote sensor version

The remote sensor of the DPI 705R has an integral cable connector, a 3 foot mating cable and a 1/4" NPT (female) pressure connector.

Pressure range	Internal sensor DPI 705	Remote sensor DPI 705R
1 or 3 psi	d	
5 psi		g, a, d
10 psi	g	g, a, d
15 psi	d	g, a, d
30 psi	g, a	g, a, d
50 psi		g, a, d
100 psi	g	g, a, d
150 psi		g, a, d
300 psi	g	g, a, d
500 psi		g, a, d
1000 psi		g, a
2000, 3000, 5000, 10,000 psi		a

a = absolute, d = differential (line pressure: 30 psi for internal ranges and 500 psi for remote sensors), g = gauge

#### Accuracy

+/-0.1% FS non-linearity, hysteresis and repeatability.

### ENVIRONMENTAL

#### Temperature performance (averaged 32° to 122°F)

±0.01% rdg/°F.

For absolute ranges ≤ 15 psi add ±0.025%FS/°F.

For absolute ranges > 15 psi add ±0.01%FS/°F

Calibrated 32° to 122°F, operating range 15° to 122°F

#### Humidity

0 to 95% non condensing.

#### Overpressure

Safe to 2 x FS. Display flashes at 110% FS.

#### Media compatibility

Internal sensor: stainless steel, except positive differential non-corrosive fluid and negative differential dry gas.

Remote sensor: stainless steel, except negative differential non-corrosive fluid.

#### Safety conformance

EN61010, EN50081-1, EN50082-2, CE marked.

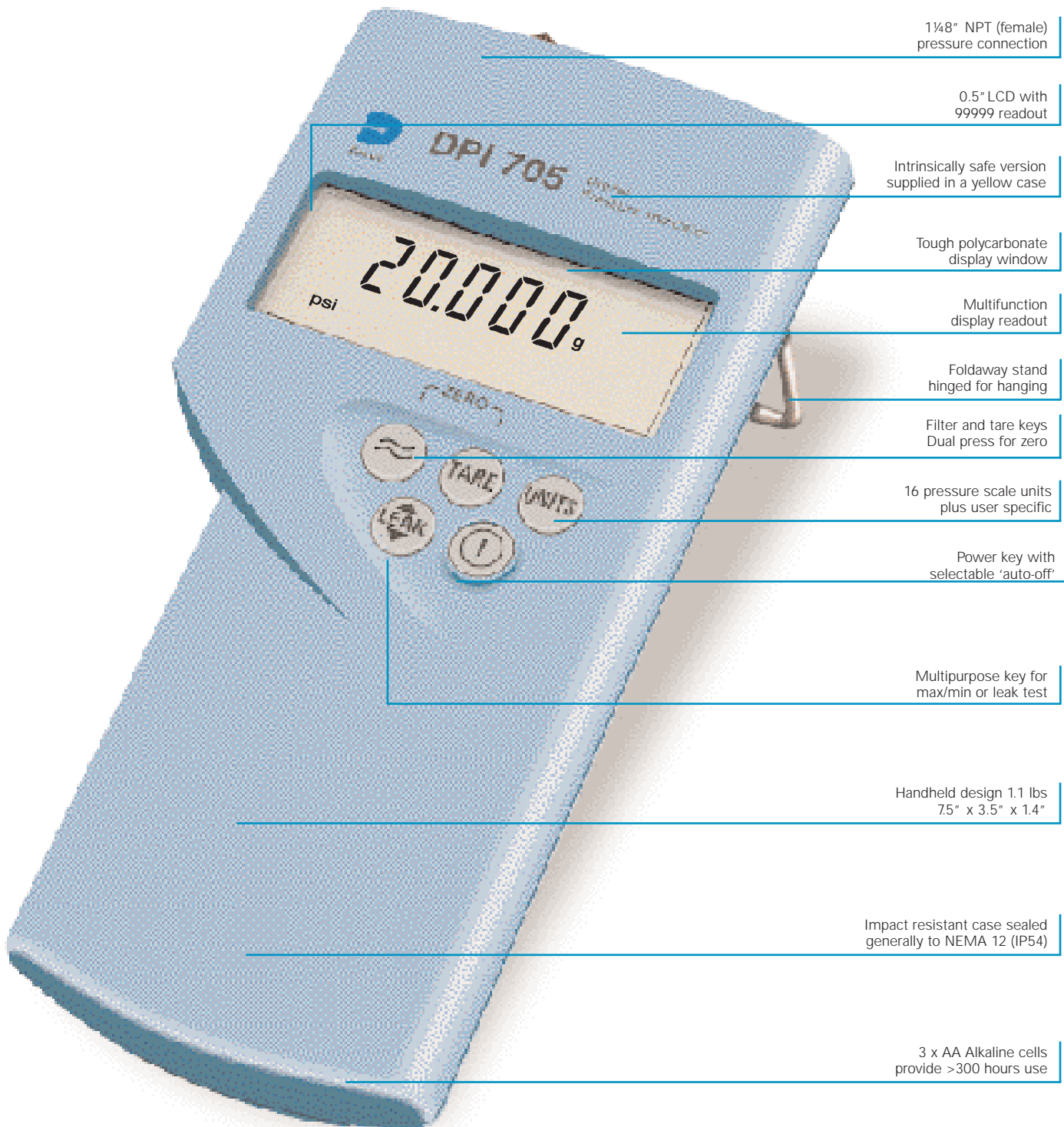
#### Intrinsically safe version

To CAN/CSA - E79 - 11 - 95 and CAN/CSA E79 - 0 - 95 (Division 1, class 1, Groups A, B, C and D)

EEx ia IIC T4 (15° to 122°F)

To EN50020 : 1994 and EN500014 : 1992

Ex ia IIC T4 (15° to 122°F)



1/4" NPT (female) pressure connection

0.5" LCD with 99999 readout

Intrinsically safe version supplied in a yellow case

Tough polycarbonate display window

Multifunction display readout

Foldaway stand hinged for hanging

Filter and tare keys  
Dual press for zero

16 pressure scale units plus user specific

Power key with selectable 'auto-off'

Multipurpose key for max/min or leak test

Handheld design 1.1 lbs  
7.5" x 3.5" x 1.4"

Impact resistant case sealed generally to NEMA 12 (IP54)

3 x AA Alkaline cells provide >300 hours use

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### OPTIONS

#### Negative calibration

Ranges below 15 psi are calibrated to  $\pm$ FS e.g.  $\pm$ 3 psi.  
 Ranges of 15 psi and above are calibrated -15 psi to FS.  
 Accuracy is 0.1% of the compound range. Certificate provided.

#### PV 110 Pneumatic Hand Pump

Enables the DPI 705 user to remotely generate pressure from -22 inHg up to 300 psi.

#### PV 112 Hydraulic Hand Pump

Enables the DPI 705R user to remotely generate hydraulic pressure 0 to 10,000 psi.



PV 110



PV 112

For further details on the pneumatic and hydraulic hand pumps, please refer to the PV 110/PV 112 product note.

### ACCESSORIES

The DPI 705 and 705R are supplied with a user guide, protective carrying case and calibration certificate as standard.

### CALIBRATION STANDARDS

Instruments manufactured by Druck are calibrated against precision pressure calibration equipment which is traceable to the National Institute of Standards and Technology (NIST).

**Druck is an ISO 9001 registered company.**



### RELATED PRODUCTS

#### Portable field calibrators

Druck manufactures a wide range of portable pressure, temperature and electrical field calibrators both standard use and intrinsically safe versions. A selection of these are shown below.



#### Laboratory and workshop instruments

Druck also manufactures a comprehensive range of pressure indicators and controllers. Included in this range are the Pressurements industrial deadweight testers and the Ruska high precision controllers and primary standard piston gauges.

#### Pressure Transducers and Transmitters

The DPI 705 is the ideal maintenance tool for Druck sensors including the PTX 1200 series industrial pressure transmitters with UL, CSA and FM intrinsically safe certification.

Please refer to manufacturer for further information on related products.

### ORDERING INFORMATION

Please state the following (where applicable)

1. Type number DPI 705 (internal sensor) or DPI 705R (remote sensor).  
 For intrinsically safe version order DPI 705IS (internal use) or DPI705ISR (remote sensor).
2. Pressure range.
3. Pressure reference gauge, absolute or differential.
4. Options required.

*Continuing development sometimes necessitates specification changes without notice.*