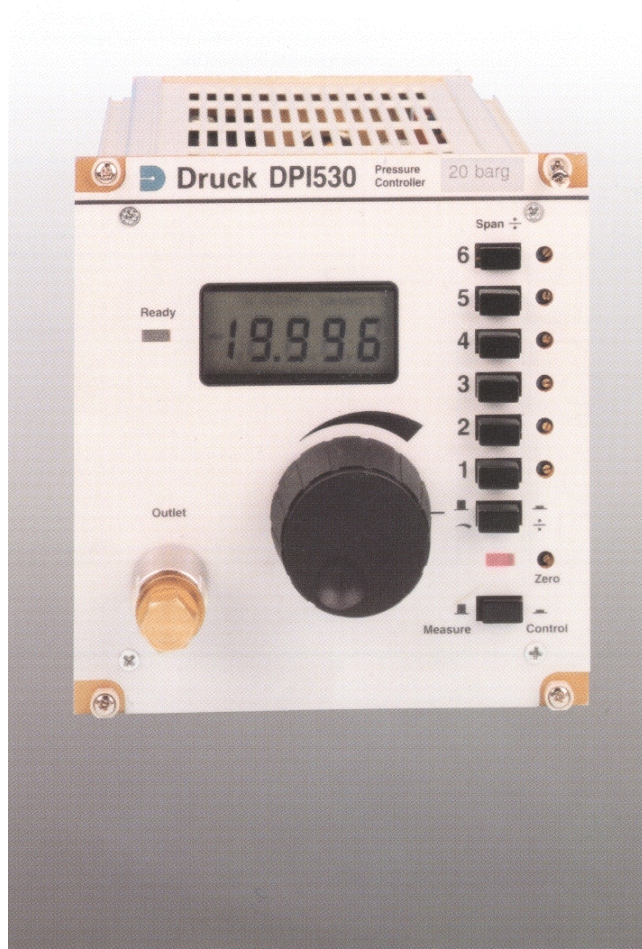


DPI 530

Digital Pressure Controller

- Ranges up to 20 bar gauge or absolute
- Control stability $\pm 0.01\%$ F.S.
- Accuracy $\pm 0.1\%$ F.S.
- Fast response
- Manual or remote control



The DPI 530 is a fast response, digital closed loop pressure controller, using pulse width modulated valve technology. The controller is available with ranges up to 20 bar gauge or absolute and controls to an accuracy of $\pm 0.1\%$ F.S. with a stability of $\pm 0.01\%$ F.S.

The inherent high stability of the DPI 530 can be fully utilised by combining the controller with Druck's range of high accuracy pressure indicators such as the DPI 605R rack mounted instrument which measures to $\pm 0.05\%$ reading.

Control is effected either, manually via a multi-turn setpoint adjuster, span divider keys or remotely by either a 0 to 10V dc or 0 to 20mA DC analogue input signal. The setpoint or measured value is presented on a 4 $\frac{1}{2}$ digit, 7-segment LCD display in one of 6 selectable pressure units. The DPI 530 provides an economical solution for applications requiring a stable pressure source such as calibration, leak testing and general pneumatic regulation.

STANDARD SPECIFICATION

Pressure Measurement

Operating Pressure Ranges
Any full scale can be specified between the ranges listed below:

0-70mbar to 0-20bar gauge
0-350mbar to 0-21bar absolute.
Versions available with -1barg capability as an option

Pressure Scale Units

1 of 6 selectable scale units via rear panel switches; bar, psi, inHg, kg/cm², kPa and 0-100% F.S.

Overpressure

2 x F.S. will cause negligible calibration change. Maximum safe working pressure 30barg.

Pressure Media

Source supply to be dry, non-corrosive gas.

Readout and Display

± 19999, LCD 7 segment. Overload condition 1 (blank).

Resolution

± 0.005% F.S. maximum, dependant on scaling units.

Response

2 readings per second display update rate.

Zero Control

Front panel potentiometer

Accuracy

± 0.1% of F.S.
For combined positive and negative ranges accuracy will be ± 0.1% of compound range.

Temperature Effects

Over the range 0° to 50° C
± 0.5% F.S.

Calibration Controls

Via screwdriver potentiometer adjustments.

Positional Effect

Negligible.

Source Supply Pressure

110 to 140% F.S.

Controller Stability

Better than 0.01%F.S. random variation around the control value setpoint.

Controller Setting Time

For dead end system, typical time to set point value is 5 seconds.

System Volume

No limitation on controlled volume. Increasing volume external to the unit improves stability and increases filltime.

Gas Consumption

At control point zero gas flow in a leak tight system.

Leak Consumption

Controller will "feed" small leaks.

Leak Detection

In the measure mode the display will show leaks as a pressure drop.

Electrical Specification

Remote Control

Ability to input 0-10V dc or 0 to 20mA equivalent to F.S. Connections via rear screw terminals.

Power Supply

88 to 130V or 205 to 260V set at manufacture.
45 to 65Hz 15VA. Connection via rear screw terminals.

Environmental Specification

Temperature

Operating 0° to 50° C
Storage -20° to 70° C

Electro Magnetic Compatibility

Designed to EN50081-1 and EN50082-1

Electrical Safety

IEC 1010

Physical Specification

Weight

2 Kg

Dimensions

Front panel to IEC standard 297-3
Assembly to Euro Cassette Format (3U x 24P)
130mm (high) x120mm (wide) x 190mm (deep)

Pneumatic Connections

Outlet on front panel and rear. Unused port to be blanked. Source inlet, Vent outlet and Reference Port on rear.

All G 1/8 except rear reference port, M5.

OPTIONS

(A) - 1 barg calibration. Specify for a calibration in the negative direction.

ACCESSORIES

Calibration certification and handbook supplied with instrument.

ORDERING INFORMATION

Please state the following:

- (1) Type number
- (2) Range, Units and G or Abs
- (3) Power Supply
- (4) Option

OPTIONS

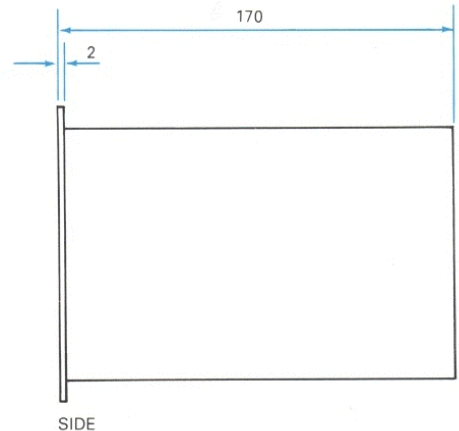
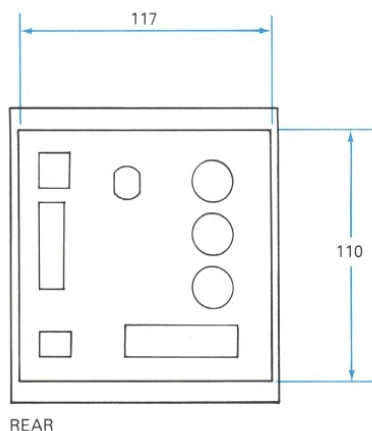
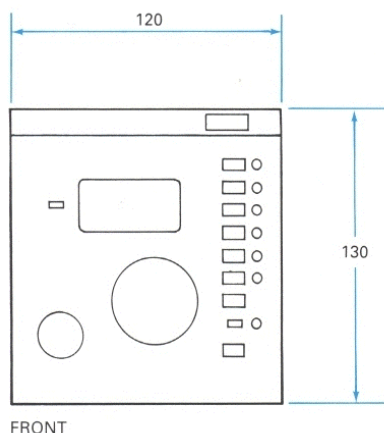
Druck manufacture a comprehensive range of pressure indicators, controllers, calibrators, transducers and transmitters. Please refer to Druck Limited for further information and datasheets.

CALIBRATION STANDARDS

Instruments manufactured by Druck Limited are calibrated against precision pressure calibration equipment which is traceable to International Standards.

INSTALLATION DRAWINGS

Dimensions: mm



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