

PC6 PRO

PRESSURE CALIBRATOR



The PC6 PRO Pressure Calibrator combines the latest developments in pressure instrumentation with advanced sensor and component technology to offer a versatile calibration instrument.

It is designed for accurately testing and calibrating the following types of instruments:

- Pressure Transducers / Transmitters
- Pressure Switches / Relief Valves
- Pressure Indicators (analogue / digital)
- Process Indicators
- Current / Voltage to Pressure Converters

The PC6 PRO is supplied with our hand held test systems:

LTP1 Low Pressure pneumatic test system -1 to 3 bar (-30 inHg to 45 psi)

TP1 Pneumatic pressure test system -1 to 40 bar (-30 inHg to 600 psi)

HTP1 Hydraulic pressure test system to 1000 bar (15,000 psi)

The compact size of the PC6 PRO does not compromise functionality. It can simultaneously show pressure versus voltage, current, date & time, percentage of pressure, pressure switch status, temperature, maximum or minimum pressure values. Data can be logged and stored with time and date stamping for future reference. PC6 PRO can source current and voltage using various options e.g. continuous, step or square root functions.

The modular design of the PC6 PRO allows for a customised calibrator to be created, giving minimal functions if a non-complex instrument is required (i.e. A simple pressure indicator). Alternatively, fully featured calibration systems can be supplied, accommodating various pressure ranges using external pressure modules (EPM) or Digital Pressure Modules (DPM).

Features

- Low cost, small and portable
- Pressure measurement range -1 to 1000bar /-30 inHg to 15,000psi
- Voltage and current measurement and sourcing
- Pressure to Current or Voltage conversion
- Current or Voltage to Pressure conversion
- Two wire Transmitter Simulation
- Simultaneous display of pressure and selected function
- Timed / Event data storage with date & time stamping
- Up and download Cal procedures via RS232 Interface
- Alternative languages available: French, German, Italian, Spanish
- Pressure switch test
- Leak rate measurement 1 second to 999 days
- Tare, Maximum and Minimum pressure values
- Display hold facility
- Supply output for transducer / transmitter
- Pressure module temperature measurement
- Resolution variation facility
- External pressure module (EPM or DPM) interchangeability for required pressure ranges
- Windows based software 'SiCalPro' for remote control operation and data transfer into many applications (Optional)
- ' CE ' marked



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PC6 PRO Specification

Model		Range		Accuracy (FS) up to
		bar	psi	
PC6-PRO-0.1-C	G	-0.1 to 0.1	-1.5 to 1.5	0.025%
PC6-PRO-1-C	G or A	-1 to 1	-15 to 15	0.025%
PC6-PRO-2-C	G or A	-1 to 2	-15 to 30	0.025%
PC6-PRO-5-C	G or A	-1 to 5	-15 to 75	0.025%
PC6-PRO-10-C	G or A	-1 to 10	-15 to 150	0.025%
PC6-PRO-20-C	G or A	-1 to 20	-15 to 300	0.025%
PC6-PRO-40-C	G or A	-1 to 40	-15 to 600	0.025%

Model		Range		Accuracy (FS) up to
		bar	psi	
PC6-PRO-70-C	SG or A	0 to 70	0 to 1000	0.025%
PC6-PRO-100-C	SG or A	0 to 100	0 to 1500	0.025%
PC6-PRO-200-C	SG or A	0 to 200	0 to 3,000	0.025%
PC6-PRO-350-C	SG or A	0 to 350	0 to 5,000	0.025%
PC6-PRO-700-C	SG or A	0 to 700	0 to 10,000	0.025%
PC6-PRO-1000-C	SG or A	0 to 1000	0 to 15,000	0.025%

Other Pressure ranges are available to special order.

G = Vented Gauge, A = Absolute (Not a standard range), SG = Sealed Gauge

Differential units are available as EPM (Contact **Si** for details and data sheet on EPM)

Overload Pressure 10% FS

Resolution 6 Digits

Pressure units bar, mbar, MPa, kPa, psi, kg/cm², atm, inH₂O, mH₂O, mmH₂O, inHg, mmHg, unit1, unit2 (user defined)

Overload Warning Flashing display and audible tone at 110% of FS

Temperature Display Temperature of pressure sensor module (Accuracy: ± 0.5°C)

Measurement	Range	Resolution	Accuracy	Input resistance
Voltage * (Auto Range)	0 to 100mV	1uV	0.025% FS	1 MW
	0 to 5V	0.1mV	0.025% FS	1 MW
	0 to 50V	1mV	0.025% FS	1 MW
Current *	0 to 50mA	1uA	0.025% FS	3 W

The PC6 PRO Indicator version does not include the Voltage/Current input/output or EPM. Substitute 'C' for 'I' in the part No. when ordering an indicator.

Sourcing				Max. Load
Voltage *	0 to 10V	0.2mV	0.025% FS	20mA
	0 to 50mA	1uA	0.025% FS	330 Ohm

*Temperature coefficient ± 0.005% of reading / °C with respect to 20°C

Voltage Output

Regulated DC supply 10V ± 0.1% max. current 10mA
Unregulated DC supply 24V ± 10% max. current 50mA

Pressure Switch Test

Status OPEN / CLOSED

Operating Temperature

0 to 50°C

Calibrated Temperature

20°C ± 2°C

Calibrated Temp. Range

0 to 50°C

Storage Temperature

-20 to 70°C

Temperature Effects

0.001% of reading /°C between 0 to 50°C

RS232 Parameters

Baud rate 1200, 2400, 4800, 9600, stop bits 1 or 2, status ON or OFF

Zero Reset

Manual - keyboard operation

Data Capacity

437 records into a maximum of 20 files, 32k memory (additional 585 records, 32k memory option available)

Display

Backlit LCD, 16 characters x 2 line alpha numeric

Pressure Media

Water, Oil, Non-corrosive gases (for other media contact **Si**)

Humidity

5 to 95% relative humidity non condensing

Resolution Select

Increase or decrease by a factor of 10

Power Supply

6V NiMH rechargeable battery / mains operation via charger (supplied)

Battery Life

Up to 10 Hours fully charged

Low Battery

Continuous check, audio and visual warning

Dimensions

92 x 110 x 59mm (Calibrator head only)

Weight

850 g (Calibrator head only)

Electrical Connections

Ground, Voltage/Current Input/output, Pressure Switch Standard 2mm sockets
Battery Charger 2-pole miniature round connector
RS232 8-pole miniature round connector
EPM 14-pole miniature round connector

Pressure Connections

3/8BSP male 'quick-fit' / 1/4BSP or 1/4NPT male (Pneumatic)
3/8BSP female 'quick-fit' / 3/8BSP or 3/8NPT male (Hydraulic)

Software (optional)

'SiCalPro' will allow users to control the PC6 PRO Calibrator remotely through a virtual instrument panel on the computer screen. The calibration data can be logged, viewed and printed in graphical format or on a calibration certificate.

System Requirements:

Minimum 486 with maths coprocessor. Windows® 95 or higher.

Ordering Codes:-

PC6 - PRO - XXXX - C - X - X

Range

P - pneumatic system (LTP1 up to 3 bar / TP1 up to 40 bar)

H - hydraulic system (HTP1)

1-UK / **2**-Europe / **3**-USA / **4**-AUS

C or **I** (Calibrator or Indicator)

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