

Pressure Calibration Center

MODEL: PCC-5070

- > ±0.05% ACCURACY
- > UP TO 4 PRESSURE INPUTS
- > GENERATES MA AND VOLTS
- > MEASURES PRESSURE, VACUUM, DP, mA AND VOLTS
- > CONTACT INPUT FOR PRESSURE SWITCH VERIFICATION
- > PROVIDES A 24 VDC POWER SUPPLY FOR 2-WIRE TRANSMITTERS
- > POTABLE AND COMPACT, IDEAL FOR IN-FIELD USE
- > RTD TEMPERATURE PROBE (OPTION)
- > CALIBRATION SOFTWARE (OPTION)
- > RS-232/485 COMMUNICATIONS

INTRODUCTION

The PCC-5070 Pressure Calibration Centre is a compact, battery operated instrument for calibration of pressure instruments and sensors. It is offered with one standard pressure input for up to 30 psig, and can have up to three other pressure sensors (total four) to measure pressures as low as 10" H2O to a maximum of 3000 psi. It also measures vacuum and differential pressures between any pair of sensors. It is capable of measuring and generating mA and voltage signals with 0.02% accuracy. A 24 VDC power supply is also provided to power 2-wire transmitters.

Designed for both laboratory and field use, the calibrator comes with connecting cables in a sturdy carrying case. If PCC-5070 was not ordered with all four pressure sensors, the number of sensors may be increased to four by adding sensors at a later time.

The instrument has two pressure regulators for 30 psig range, sensitive to 1/4" H2O (0.63 mbar) variations, and a 5-way valve, designed to stand pressures up to a maximum of 1000 psi.

An input terminal is included for attaching the optional RTD precision temperature probe with 0.1°C accuracy.



Communication with computer is established via the RS-232/485 serial communication port. When the calibrator is used together with the SCA850 software, it takes advantage of the documenting calibration concept which automatizes the calibration process, allowing storage of data and sharing them between calibrator and computer, improving efficiency in handling information, preparing report, issuing certificates and registering the process instruments and sensors. This feature is important for those complying with the ISO9000 requirements.

Values are displayed on a high contrast, 11 mm high, graphic LCD display for better viewing in poor conditions. Rechargeable battery and a high-size memory to store values obtained for a later upload are other standard features of this versatile and accurate pressure calibrator.

The PCC-5070 Pressure Calibration Centre is virtually an advanced version of WALLACE™ boxes, with the exception of having a digital pressure calibrator with electronic inputs and outputs instead of a mechanical manometer, and with the capability of having three more pressure modules than the WALLACE™ boxes.

SPECIFICATIONS

General

Engineering Units psi, kPa, bar, mbar, atm,

mmH2O, cmH2O, inH2O, mH2O, mmHg, cmHg, inHg

and torr

Over Pressure Up to twice the sensor full

scale pressure

Pneumatic Connection Mo" NPTF

±0.005% FS/°C in **Thermal Stability** operation range

Temp. Probe (Option) Pt-100

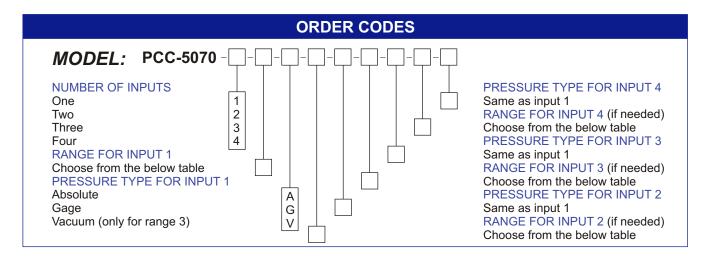
Ambient 0 to 50°C and up to 90%

relative humidity

Dimensions (H x W x D) 180 x 420 x 340 mm Weight Approximately 7.5 kg

Electrical Specifications

	Input Ranges	Resolution	Accuracy	Remarks
Volt	-10 to 45 V	0.0001 V	±0.02% FS	R input > $1M\Omega$
mA	-5 to 24.5 mA	0.0001 mA	$\pm 0.02\%$ FS	R input < 160 Ω
	Output Ranges	Resolution	Accuracy	Remarks
Volt	-1 to 11 V	0.0001 V	±0.02% FS	R output < 0.3 Ω
mA	0 to 22 mA	0.0001 mA	$\pm 0.02\%$ FS	R $_{max}$ = 700 Ω
Transmitter	4 to 22 mA	0.0001 mA	±0.02% FS	$V_{max} = 60 V$
	Output Ranges	Resolution	Accuracy	Remarks
Pt-100	-200 to 850°C	0.01°C	±0.1°C	IEC-751



Code	Range	Resolution	Accuracy	Remarks
0	0250 mmH2O	0.001	0.1%	Gage pressure
1	01 psi	0.0001	0.1%	used with air or
2	05 psi	0.0001	0.05%	inert gases
3	015 psi	0.0001	0.05%	
4	030 psi	0.0001	0.05%	Gauge or absolute
5	0100 psi	0.001	0.05%	pressure
6	0250 psi	0.001	0.05%	Llood with fluids
7	0500 psi	0.01	0.05%	Used with fluidscompatible with
8	01000 psi	0.01	0.05%	316L St. Steel
9	03000 psi	0.01	0.05%	0102 01. 01001

