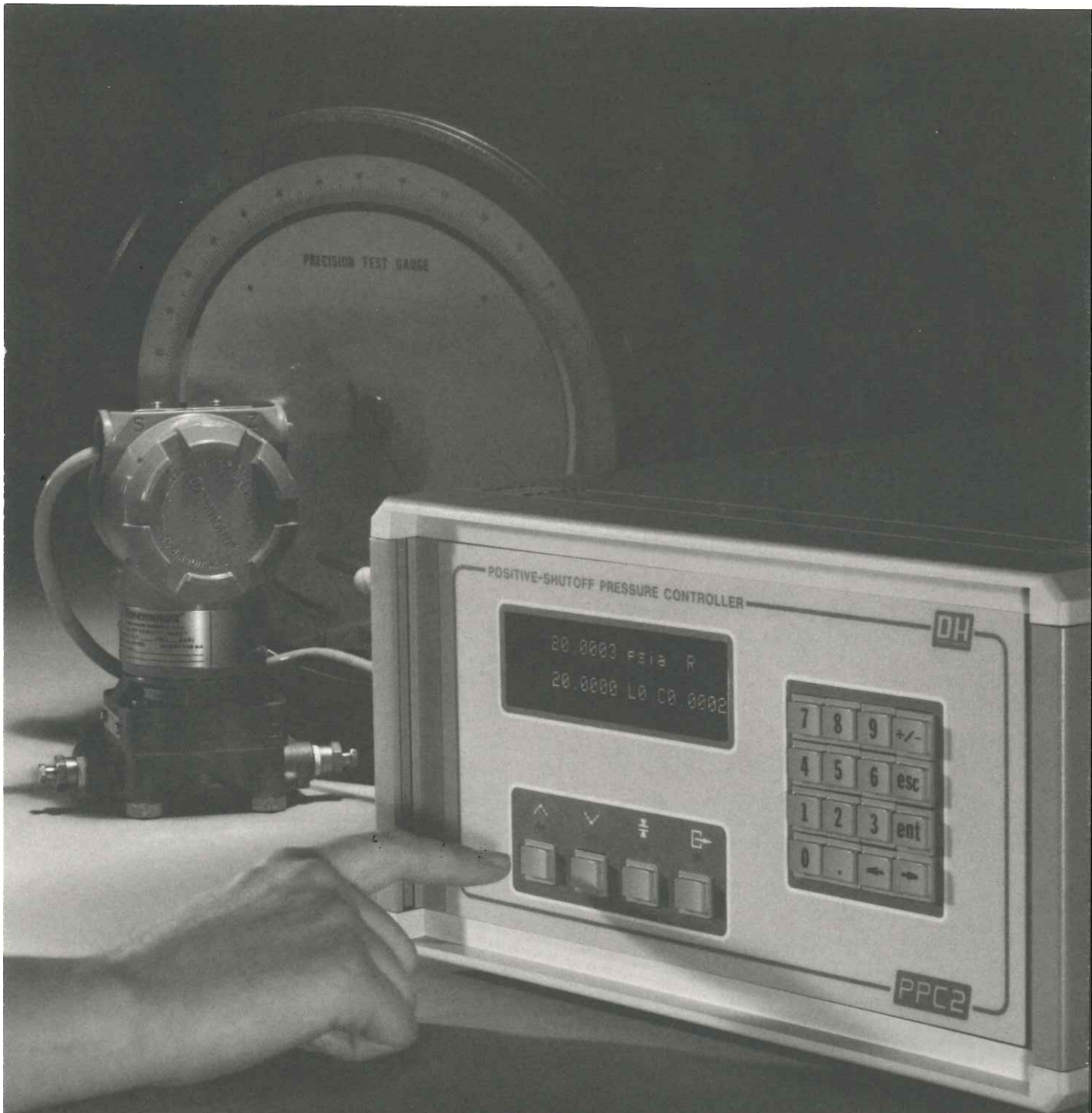




Calibration Solutions for Pressure and Flow



PPC2 A pressure controller that's a stand-alone, interactive calibration workstation...



Calibration Solutions for Pressure and Flow

PPC2



PPC2 is an integrated high accuracy pressure controller/calibrator for use both as a stand-alone, locally operated calibration system and in computer controlled automated test systems. It covers the range of low absolute pressures to 7 MPa (1 000 psi) using gas as the pressurized medium.

PPC2 offers many unique features that make it the ideal high-accuracy pressure setting and measuring component.

- Direct pressure adjustment, single increment setting or automatic execution of complete calibration routines by simple front panel commands or remotely via RS-232 and IEEE-488 interfaces.
- Ergonomically designed front panel and simple menu-driven instructions assure efficient, user friendly operator interaction.
- Built-in state of the art transfer standard quality reference pressure sensor for unrivaled accuracy and stability over time.
- Up to 80 complete calibration and cycling routines can be defined and stored locally for subsequent recall and execution.

- Add additional measurement ranges at any time to setup multi-range systems using a single controller.
- DHI's patented "positive shut-off pressure control" with both dynamic and static control capability. Dynamic control stability of less than 10 ppm F.S.
- Compact, rugged and easily transportable presentation.
- Very high reliability over time.

PPC2, first introduced in 1990, is at work today in a variety of calibration and testing applications around the world. As with all DHI products, PPCs excel in applications where the most critical requirements are top quality, very high accuracy and long-term reliability.

PPC2 covers pressures to 7 MPa (1 000 psi). Other models are available for pressures up to 70 MPa (10 000 psi) in gas and 200 MPa (30 000 psi) in liquids.

PPC2 SPECIFICATIONS

Ranges

0 to 7 MPa (1 000 psi) gauge and absolute. All units can be multi-ranged. See exact models and ranges below. For higher pressures please see PPCK and PPCK-H models.

Control Modes

Static and dynamic, user selectable with adjustable target, hold and stability criterion limits.

Ready Indication

Provides permanent indication of ready/not ready status. "Ready" indicates that conditions are appropriate to make in-tolerance measurements.

Control Precision

± 10 ppm full scale max. typical.

Nominal Control Volume

Standard: 0 to 400 cc (0 to 25 cubic in.)
High volume: 400 cc to 2 l (25 to 122 cubic in.)

Measurement Specifications

Accuracy: ± (0.01% F.S. + 0.005% of reading) for 90 days;
± 0.02% F.S. for one year.

Linearity: ± 0.005% F.S.

Hysteresis: ± 0.005% of excursion.

Resolution: 7 digits

Engineering Units Supported

psi, bar, mbar, Pa, kPa, mmHg, inHg, inH₂O, mmH₂O, kg/cm², counts, one user defined (all in both gauge and absolute).

Programmable Sequences

Cycle: Repeat a two step sequence, store up to 20.

Step: Sequence of evenly spaced increments between two points, stores up to 30.

Custom: Sequence of up to 41 user defined pressures, stores up to 30.

Interfacing

External communications:
RS-232 standard, IEEE-488 optional.

Remote measurement device: RS-232.

Pressure Supply Requirements

Clean, dry, non-corrosive gas at 20% over nominal control range.

Pressure Connections

Supply, test, vent, reference: 1/8" NPTF

Temperature

Operation: 0° to 50°C (32° to 122°F)
Storage: -25° to 85°C (-15° to 185°F)

Power Requirements

85 to 264 VAC, 47 to 440 Hz, 30 VA max. consumption.

Weight and Dimensions

11 kg (23 lb)

18 cm H x 32 cm W x 40 cm D (7.1" x 12.6" x 15.8" approx.)

Due to a policy of continual product improvement, all specifications are subject to change without notice.

ORDERING INFORMATION

Each PPC2 is delivered complete with a user's manual, calibration certificate, power cord and utility software.

Models & Ranges:

PPC2-A0015: 0 to 15 psia
PPC2-A0030: 0 to 30 psia, ± 15 psig
PPC2-A0050: 0 to 50 psia, -15 to 35 psig
PPC2-A0100: 0 to 100 psia, -15 to 100 psig
PPC2-A0200: 0 to 200 psia, -15 to 200 psig
PPC2-A0300: 0 to 300 psia, -15 to 300 psig
PPC2-A0500: 0 to 500 psia, -15 to 500 psig
PPC2-A1000: 0 to 1000 psia, -15 to 1000 psig
PPC2-G0015: 0 to 15 psig
PPC2-G0030: 0 to 30 psig
PPC2-G0100: 0 to 100 psig
PPC2-G0200: 0 to 200 psig

Options

PPC-001 GPIB (IEEE 488) Interface for external communications
PPC-003 Joystick pressure control
PPC-004 Remote digital display with cable
PPC-005 All stainless steel internal hardware
PPC-006 Special range
PPC-007 High volume adjustment
PPC-008 Internal isolation valve (isolates supply and connects test port directly to reference port)



For additional information on DH reference measurement devices for use with PPC2, please refer to the RPM1/RPM2 and Type 20000 Digital Piston Gauges literature.

PPC2 is manufactured under U.S. patent No. 5 142 483.

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PRESSURE/FLOW
Standards, Systems, Services