PPC1™

Positive Shut-Off Pressure Controller/Calibrator

PURPOSE/APPLICATION

PPC1 is the standard automatic pressure control components in a **DHI** PG7601 or PG7102 high accuracy piston gauge system. It covers the range from vacuum to 1 000 psi.

See the PPC2+ brochure for information on a programmable, high accuracy, multi-ranging pressure controller.

DESCRIPTION

PPC1 uses solenoid valves and an internal low accuracy pressure transducer to set and adjust pressure.

A pressure source is connected to the SUPPLY port and a vacuum source to the REFERENCE port if pressures under vacuum are to be set. The TEST port is connected in series with the PG7000 piston gauge and a connection for the device or system under test.

The PPC1 COM1 port is connected to the PG7000 COM3 port and the PG7000 controls the PPC1 as necessary to float its piston automatically.

Front panel push button control is also available to increase pressure, decrease pressure and vent to atmosphere.

DHI®
Calibration Solutions for Pressure and Flow™

PPC1™ Positive Shut-Off Pressure Controller/Calibrator

SPECIFICATIONS

Nominal Control Ranges:	5 to 7 000 kPa (0.7 to 1 000 psia/psig)
Adjustable Control Settings:	
Target Limit	± 0.0005 to 2% FS
Hold Limit	± 0.001 to 2% FS
Stability Test	Unlimited
Control Precision:	± 0.0005% FS max.
Nominal Control Volume:	
Standard	0 to 400 cc (0 to 25 $in.^3$)
High Volume	400 cc to 2 l (25 to 122 $in.^3$)
Slew Rate (0 to FS)**:**	
Standard	30 sec.
High Volume	30 sec. to 3.5 min.
Accuracy of Measured Pressure:	
With Internal Sensor	± 0.2% FS
Ready Indication:	
Level 0 (Static)	Ready condition exists only if no valve is in operation, pressure is inside hold limits and stability test is met
Level 1 (dynamic)	Ready condition exists if pressure is inside hold limit and stability test is met
Engineering Units Supported:	psi, bar, mbar, Pa, kPa, mmHg, inHg, inH_2O, mmH_2O, kg/cm^2, counts, one user defined and absolute of all above
Interfaces:	
External Communications	RS232C; GPIB (IEEE 488) optional
Remote Measurement Device	RS232C Remote device may be **DHI** PG7601 or PG7102 piston gauge
Pressure Supply:	Clean, dry, non-corrosive gas at 20% over nominal control range
Pressure Connections:	
Supply	1/8″ NPTM
Test, Vent, Reference	1/8″ NPTF
Temperature Range:	
Operation	0 to 50 °C (32 to 122 °F)
Storage	-25 to 85 °C (-15 to 185 °F)
Power Requirements:	85 to 264 VAC, 42 to 440 Hz, 22 VA max. consumption

ORDERING INFORMATION

PPC1 is delivered complete with:

- User's manual
- Power cord
- Utility software

MODEL AND RANGE

PPC1-1000: 5 to 7 000 kPa (0.7 to 1 000 psi)
(P/N 400254)

OPTIONS

PPC-001: (GPIB/IEEE-488) interface for external communications
(P/N 400231)

PPC-004: Rack mount kit
(P/N 400200)

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Refer to PPC2 and PG7000 brochures for additional information on these **DHI** *products.*

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

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