



DPC100 Intelligent Pressure Calibrators

DPC100 Intelligent Pressure Calibrators with advanced microprocessor technology and state-of-the-art silicon pressure sensors. it provides a pressure calibration solution for gauges, transmitters, and switches over a wide pressure range. The DPC100 is a very portable item and can measure pressure precisely with a built-in pressure sensor, as well as read the current or mV produced by a transducer. It can even supply an excitation voltage to power sensors or transmitters during calibration. In order to reach 0.02% F. S. accuracy up to 10,000 psi (700 bar) and 0.1% F. S. accuracy up to 2,500 bar, every silicon pressure sensor in our gauges has been specially aged, tested and screened before assembly. The DPC100 series pressure calibrators are a good and reliable products in lab.

FEATURES

- Pressure measurement range to 2,500 bar
- Measure mA or V with 0.02% RD + 0.003%FS accuracy
- Hart Communication capability
- Advanced temperature compensation
- Large, easy to read display with 6-digit resolution
- Back lighted display
- Rechargeable battery or AC adapter
- Two-point correction, user's friendly
- NIM traceable calibration certificate (optional)



APPLICATIONS

- Gauge calibration
- Precision pressure measurement
- Pressure transmitters calibration
- Pressure switch testing
- Safety relief valve testing
- Pressure regulator testing

SPECIFICATIONS

Accuracy

DPC100-02: 0.025% of full scale

DPC100-05: 0.05% of full scale

Electrical Measurement Specification and Source Accuracy

Measuring Function	Range	Specification
Current	25.0000 mA	Accuracy $\pm(0.02\%RD+0.003\%FS)$
Voltage	25.0000V	Accuracy $\pm(0.02\%RD+0.003\%FS)$
Switch	On/Off	In case the switch comes with voltage, range (1~12)V
Output Function	Range	Specification
Power Output	DC24V $\pm 0.5V$	



Display

- Description: Dual-line 6 full digit LCD with LED Backlight
- Display rate: 3.5 readings per second (Default setting)
- Numeral display height: 16.5mm (0.65")

Pressure Units

- Pa,kPa,MPa, psi, bar, mbar, mmH₂O, mmHg

Environmental

- Compensated Temperature:
- 32F to 122 F (0 °C to 50 °C)
- *0.025%FS accuracy guaranteed only over the ambient temperature range of 68 F to 77 F (20 °C to 25 °C)
- Storage Temperature: -4 F to 158 F (-20 °C to 70 °C) Humidity: <95%

Media Compatible

- (0 ~0.16) bar: Non-corrosive Gas Compatible
- (0.35~ 2500) bar: Liquid, Gas or Steam Compatible with 316 Stainless Steel

Pressure Port

- 1/4,,NPT(700bar)
- 0.156 inch (4mm) test hose (for differential pressure) Other connections per request

Electrical Connection

- 0.156 inch (4mm) sockets
- Over Pressure Warning: 120%

Power

- Battery: Recharge Li-ion polymer battery Li-Battery working time: 80 hours Rechargeable time: 4 hours
- External power: 110V/220V power adapter(DC 9V)

Enclosure

- Case material: Aluminum alloy
- Wetted parts: 316 SS
- Dimension: 114mm diameter X 39mm depth X 180mm height
- Weight: 0.6kg

Communication

RS232 (DB9/F, environmentally sealed)

Accessories (included)

110V/220V external power adapter (DC 9V) 2 pieces 1.5-meter test leads

2 pieces 0.156 inch (4 mm) test hose (for differential pressure gauge only)

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Conventional Pressure Range Selection

P/N	Pressure Range (bar)	Accuracy	Accuracy	Accuracy
DPC100-1	(-1~0)bar	0.02, G	0.05, G	--
DPC100-2	(0~0.16) bar	0.02, G	0.05, G	
DPC100-3	(0~0.25) bar	0.02, G	0.05, G	
DPC100-4	(0~0.4)bar	0.02, G	0.05, G	0.1A
DPC100-5	(0~0.6) bar	0.02, G	0.05, G	
DPC100-6	(0~1)bar	0.02, G	0.05, G	
DPC100-7	(0~1.6)bar	0.02, G	0.05, G	
DPC100-8	(0~2.5) bar	0.02, G	0.05, G	
DPC100-9	(0~4) bar	0.02, G	0.05, G	
DPC100-10	(0~6) bar	0.02, G	0.05, G	
DPC100-11	(0~10) bar	0.02, SG	0.05, SG	
DPC100-12	(0~16) bar	0.02, SG	0.05, SG	
DPC100-13	(0~25) bar	0.02, SG	0.05, SG	
DPC100-14	(0~40)bar	0.02, SG	0.05, SG	
DPC100-15	(0~60)bar	0.02, SG	0.05, SG	
DPC100-16	(0~100)bar	0.02, SG	0.05, SG	
DPC100-17	(0~160)bar	0.02, SG	0.05, SG	
DPC100-18	(0~250)bar	0.02, SG	0.05, SG	
DPC100-19	(0~400) bar	0.02, SG	0.05, SG	
DPC100-20	(0~600) bar	0.02, SG	0.05, SG	
DPC100-21	(0~700) bar	0.02, SG	0.05, SG	
DPC100-22	(0~1000) bar	--	--	0.1,SG
DPC100-23	(0~1600) bar	--	--	0.1,SG
DPC100-24	(0~2500) bar	--	--	0.1,SG

- Remark: Other pressure ranges are available. Contact Factory with specific requirement.
- G=Gauge Pressure; SG=Sealed Gauge Pressure;
- Bottom Connect thread : 1/4NPTM.1/2NPTM.G1/2M,M20*1.5M (Or custom-made)