

Intelligent Micro Differential Pressure Calibrator Model PY801W

Applications

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

Special features

- Pressure ranges : $\pm 5\text{mbar}$... 400 mbar ,Accuracy: up to 0.02 % F.S (incl. calibration certificate)
- Current, voltage, and switching measurements, 24V loop power supplies power the transmitter.
- Temperature-compensated in the range of $-10\dots+50^{\circ}\text{C}$ [$14\dots122^{\circ}\text{F}$]
- 9 switchable pressure units
- LCD, 6 digit, with background lighting
- Built-in HART hand manipulator



PY 801W Intelligent Pressure Calibrator

Description

PY 801W Intelligent Micro differential pressure calibrator with HART protocol, a single range, full scale pressure measurement, high accuracy DC current, voltage measurement and the 24VDC power output function instrument. Can be used to verify the ordinary (precision) pressure gauge, pressure transmitter, pressure regulating valves, pressure switches and pressure of real-time measurement, and can debug the HART smart pressure transmitter.

- Current Measured functions:
0~25.0000mA ,
Accuracy: $\pm 0.02\%RD + 0.003\%F.S$
- Voltage Measured functions:
0~25.0000VDC ,
Accuracy: $\pm 0.02\%RD + 0.003\%F.S$
- Switch Measured functions:
on/off, case the switch comes with voltage, range(1~12)V
- Power output:
24vdc $\pm 0.5v$, Max. Output Current:
50mA, Protect Current: 120mA

Specifications

Basic information	
Pressure types	
Gauge pressure	0 ... 400 mbar
Differential pressure	±5mbar to ±400mbar
Accuracy	0.02%FS , 0.025 %FS , 0.05 % FS , 0.1 % FS
Temperature compensation	-10...50 °C
Units	
Pressure	bar ,mbar, Pa, kPa, MPa, PSI, kg/cm ² , mmH ₂ O, mmHg, inHg
Electrical Measured functions	
Current	0~25.0000mA ,Accuracy: ±0.02%RD+0.003%F.S
Voltage	0~25.0000VDC ,Accuracy: ±0.02%RD+0.003%F.S
Switch	on/off, case the switch comes with voltage, range(1~12)V
Power output	24vdc±0.5v, Max. Output Current: 50mA, Protect Current: 120mA
Display	
Type	Multifunctional LCD, 6 digit, with background lighting
Functions	Bar Graph, Pressure Units, Pressure Measured Value, Current/Voltage/Switching, Current/Voltage Units, Overpressure Indication 120 % of Full Scale Pressure (F.S)
Process connection	
Thread	4mm quick plug to connect 4mm hose
Power supply	
Battery type	Rechargeable lithium-ion battery ,Operating time: 80 hours
Charging time	3 hours
External power supply	110V/220V power adapter (DC 9V)
Interface	RS 232 port
Housing	
Dimensions	Ø 114 mm, D=39mm H=180 mm with protection cap
Ambient conditions	-20...70°C with air humidity ≤95%r.h.
Weight	600 g

Measuring ranges, gauge pressure

Overview pressure ranges(mbar)							
Type		A002		A005		A010	
Accuracy (± of full scale value)		0.02%		0.05%		0.1%	
		Resolution	max. Overload	Resolution	max. Overload	Resolution	max. Overload
GP 5	0...5			0.0001	30	0.0001	30
GP 10	0...10			0.0001	30	0.0001	30
GP 20	0...20			0.0001	60	0.0001	60
GP 50	0...50	0.00001	300	0.0001	300	0.0001	300
GP 100	0...100	0.00001	300	0.0001	300	0.0001	300
GP 200	0...200	0.00001	1000	0.0001	1000	0.0001	1000
GP 400	0...400	0.00001	1000	0.0001	1000	0.0001	1000

Measuring ranges,differential pressure

Overview pressure ranges(mbar)							
Type		A002		A005		A010	
Accuracy (± of full scale value)		0.02%		0.05%		0.1%	
		Resolution	max. Overload	Resolution	max. Overload	Resolution	max. Overload
DP 5	-5...5			0.0001	30	0.0001	30
DP 10	-10...10			0.0001	30	0.0001	30
DP 20	-20...20			0.0001	60	0.0001	60
DP 50	-50...50	0.00001	300	0.0001	300	0.0001	300
DP 100	-100...100	0.00001	300	0.0001	300	0.0001	300
DP 200	-200...200	0.00001	1000	0.0001	1000	0.0001	1000
DP 400	-400...400	0.00001	1000	0.0001	1000	0.0001	1000

Order code

Order code				
model	Accuracy	Pressure ranges	Unit	Process connection
PY 801W	A002(0.02%F.S) A005(0.05%F.S) A010(0.1%F.S)	Table of reference measuring ranges	bar psi MPa kg/cm ² kPa mbar mmHg mmHO inHg Pa	4mm quick plug Other
Example order number PY801W-A005-DP10(-10...10)mbar-4mm quick plug PY 801W with Ø4 quick plug, 0.05%F.S, -10...10mbar				