

Pressure calibrator

Model PY802

Applications

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

Special features

- Pressure ranges : -0.1 ... 25,00 bar ,Accuracy: up to 0.02 % F.S (incl. calibration certificate)
- Current, voltage, and switching measurements, 24V loop power supplies power the transmitter.
- Built-in pressure module, and can be connected to PY 800 intelligent digital pressure module
- Two-point calibration, user-friendly



PY 802 pressure calibrator

Description

PY 802 pressure calibrator can be connected to external digital pressure module, with a full range of pressure measurement, high accuracy DC current, voltage measurement and 24VDC power output function of the instrument. It can be used to calibrate ordinary (precision) pressure gauges, pressure transmitters, pressure regulating valves, pressure switches and real-time pressure measurement, and can debug intelligent pressure transmitters.

- 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	
Pressure ranges	-0.1 ... 2,500 bar
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	1/4NPT, 1/2NPT, G1/2, G1/4,Others can be customized
Material	316L
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(bar)							
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 0.16	0...0.16			0.0001	0.7	0.0001	0.7
GP 0.25	0...0.25			0.0001	0.7	0.0001	0.7
GP 0.4	0...0.4			0.0001	1.2	0.0001	1.2
GP 0.6	0...0.6	0.00001	1.8	0.0001	1.8	0.0001	1.8
GP 1	0...1	0.00001	2	0.0001	2	0.0001	2
GP 1.6	0...1.6	0.00001	3.2	0.0001	3.2	0.0001	3.2
GP 2.5	0...2.5	0.00001	5	0.0001	5	0.0001	5
GP 4	0...4	0.00001	8	0.0001	8	0.0001	8
GP 6	0...6	0.00001	12	0.0001	12	0.0001	12
GP 10	0...10	0.0001	20	0.001	20	0.001	20
GP 16	0...16	0.0001	30	0.001	30	0.001	30
GP 25	0...25	0.0001	50	0.001	50	0.001	50
GP 40	0...40	0.0001	80	0.001	80	0.001	80
GP 60	0...60	0.0001	120	0.001	120	0.001	120
GP 100	0...100	0.001	200	0.01	200	0.01	200
GP 160	0...160	0.001	320	0.01	320	0.01	320
GP 250	0...250	0.001	500	0.01	500	0.01	500
GP 400	0...400	0.001	800	0.01	800	0.01	800
GP 600	0...600	0.001	800	0.01	800	0.01	800
GP 700	0...700	0.001	1000	0.01	1000	0.01	1000
GP 1000	0...1000	0.01	1500	0.1	1500	0.1	1500
GP 1600	0...1600			0.1	2500	0.1	2500
GP 2500	0...2500			0.1	3000	0.1	3000

Measuring ranges, absolute pressure

Overview pressure ranges(bar)							
Type		A002		A005		A010	
Accuracy (± of full scale value)		0.02%		0.05%		0.1%	
		Resolution	max. Overload	Resolution	max. Overload	Resolution	max. Overload
AP 0.25	0...0.25			0.0001	0.7	0.0001	0.7
AP 0.4	0...0.4			0.0001	1.2	0.0001	1.2
AP 0.6	0...0.6			0.0001	1.8	0.0001	1.8
AP 1	0...1	0.00001	2	0.0001	2	0.0001	2
AP 1.6	0...1.6	0.00001	3.2	0.0001	3.2	0.0001	3.2
AP 2.5	0...2.5	0.00001	5	0.0001	5	0.0001	5
AP 4	0...4	0.00001	8	0.0001	8	0.0001	8
AP 6	0...6	0.00001	12	0.0001	12	0.0001	12
AP 10	0...10	0.0001	20	0.001	20	0.001	20
AP 16	0...16	0.0001	30	0.001	30	0.001	30
AP 25	0...25	0.0001	50	0.001	50	0.001	50
AP 40	0...40	0.0001	80	0.001	80	0.001	80
AP 60	0...60	0.0001	120	0.001	120	0.001	120

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 2.5	-2.5...2.5			0.0001	20	0.0001	20
DP 10	-10...10			0.001	20	0.001	20
DP 20	-20...20			0.001	40	0.001	40
DP 50	-50...50	0.0001	100	0.001	100	0.001	100
DP 100	-100...100	0.001	200	0.001	200	0.001	200

Measuring ranges, vacuum and +/- measuring ranges

Overview pressure ranges(bar)							
Type		A002		A005		A010	
Accuracy (± of full scale value)		0.02%		0.05%		0.1%	
		Resolution	max. Overload	Resolution	max. Overload	Resolution	max. Overload
VP -0.25	-0.25...0.25			0.00001	1	0.0001	1
VP -0.4	-0.4...0.4			0.00001	1	0.0001	1
VP -0.6	-0.6...0.6			0.00001	2	0.0001	2
VP 0	-1...0	0.0001	2	0.0001	2	0.0001	2
VP 0.6	-1...0.6	0.00001	2	0.0001	2	0.0001	2
VP 1	-1...1	0.00001	2	0.0001	2	0.0001	2
VP 1.6	-1...1.6	0.00001	3.2	0.0001	3.2	0.0001	3.2
VP 2.5	-1...2.5	0.00001	5	0.0001	5	0.0001	5
VP 4	-1...4	0.00001	8	0.0001	8	0.001	8
VP 6	-1...6	0.00001	12	0.0001	12	0.001	12
VP 10	-1...10	0.0001	20	0.001	20	0.001	20

Note:

The compensation temperature for 0.02 %FS is 20 ± 5 °C. The compensation temperature for 0.05 % FS is 0-50 °C. If the pressure is less than 100 mbar, the measuring medium is Gas. For pressures greater than 100 mbar, the measuring medium is Liquid or Gas.

Order code				
model	Accuracy	Pressure ranges	Unit	Process connection
PY 802	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 Pa	1/4NPT 1/2NPT G1/2 M20*1.5 G1/4 Other
Example order number		PY802-A005-GP4(0...4)bar-1/2NPT		