

Output Digital Pressure Gauge Model PY803S

Applications

- High-precision measurement and control
- Precision regulation and process
- Handling Pumps and compressors
- Hydraulics and pneumatics
- Mechanical equipment Refrigeration systems

Special features

- Measuring ranges : -1 ... 25,00 bar
- Accuracy: up to 0.02 % F.S
- 2-wire 4mA~20mA DC current loop signal output
- RS485 communication interface, supports ASCII protocol or modbus protocol
- Passive tuning, range scaling, factory parameter recovery



PY 803S output pressure gauge

Description

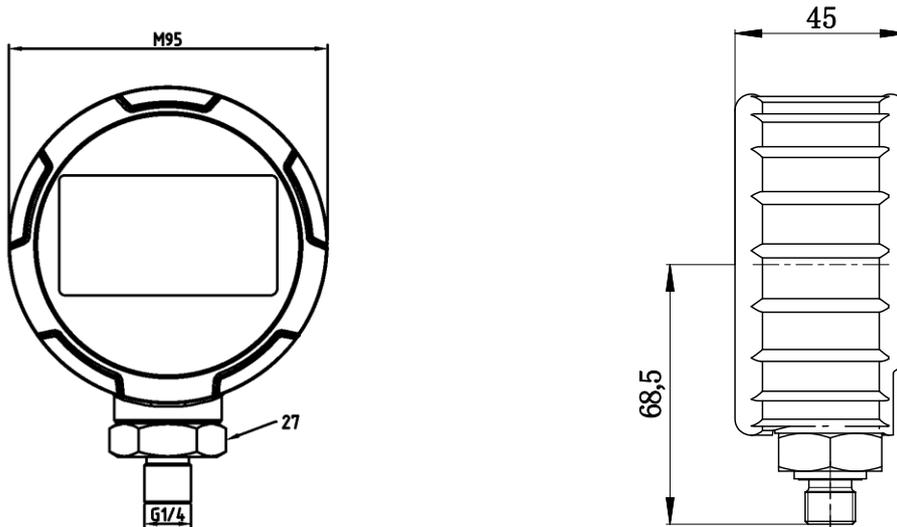
PY803S output digital pressure gauge is in the local display digital pressure gauge on the basis of increasing the communication module can be transmitted out of the remote, with RS485 communication, USB communication, (4 ~ 20) mA current signal and other output modes, with the communication software can be directly communicated with the computer, the detection data for preservation, processing and report output.

Analog output (4~20mA\1-5V\0~10V\0~5V) can be connected to PLC, and the combined accuracy of measurement and output can reach 0.02% F.S. Digital output (RS485) adopts MODBUS protocol, and the user can program by himself according to the protocol.

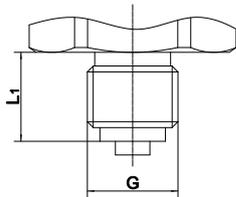
Specifications

Basic information	
Pressure types	
Gauge pressure	-1 ... 2,500 bar
Accuracy	0.02%FS , 0.025 %FS , 0.05 % FS , 0.1 % FS
Temperature compensation	-10...50 °C
Output	
Analog Outputs	<ul style="list-style-type: none"> ■ 4~20mA ■ 4~20mA+HART ■ 1~5VDC ■ 0~5VDC ■ 0~10VDC
Digital Outputs	RS 485
Power supply	10~30VDC
Units	
Pressure	bar ,mbar, Pa, kPa, MPa, PSI, kg/cm ² , mmH ₂ O, mmHg, inHg
Display	
Type	Multifunctional LCD, 6 digit, with background lighting
Functions	Bar Graph, Pressure Units, Pressure Measurement, Min/Max, 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
Housing	
Dimensions	Ø 100 mm, D=37 mm H=132 mm with protection cap
protective cover	Gray Silicone Protective Case
Ambient conditions	-20...70°C with air humidity ≤95%r.h.
Weight	450 g

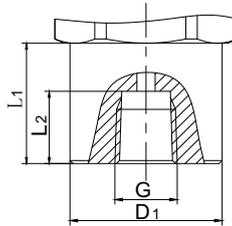
Overall dimensions(mm)



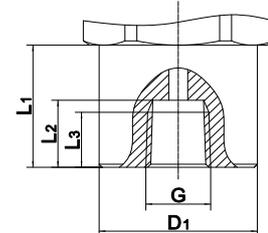
Process connections



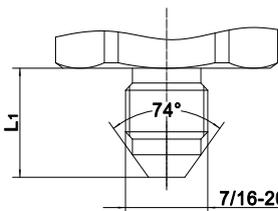
G	L ₁	Standard
G1/4 B	13	EN 837
G3/8 B	16	
G1/2 B	20	
M20×1.5	20	



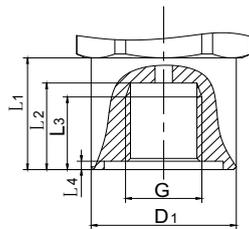
G	D ₁	L ₁	L ₂	Standard
NPT1/8	Φ25	20	12	ANSI/ASME B1.20.1
NPT1/4	Φ25	20	14	
NPT1/2	Φ25	25	19	



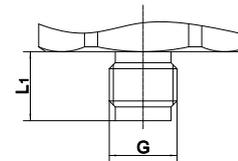
G	D ₁	L ₁	L ₂	L ₃	Standard
G1/8	Φ25	20	10	7.5	EN 837
G1/4	Φ25	20	13	10	



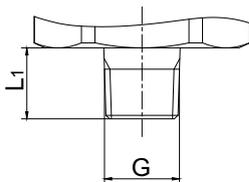
G	L ₁	Standard
7/16-20 UNF-74° cone	14	SAE J514 E



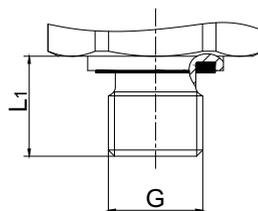
G	D ₁	L ₁	L ₂	L ₃	L ₄	Standard
G1/4	Φ25	20	15.5	13	1.5	ISO 1179-1



G	L ₁	Standard
G1/8 B	10	EN 837



G	L ₁	Standard
NPT1/8	10	ANSI/ASME B1.20.1
NPT1/4	13	
NPT1/2	19	
R1/4	13	ISO 7
R3/8	15	
R1/2	19	



G	L ₁	Standard
G1/4 A	14	ISO 1179-2
G3/8 A	14.5	
G1/2 A	17	
M12×1.5	14	ISO 9974-2
M14×1.5	14	
M20×1.5	16.5	

Measuring ranges, gauge pressure

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
GP0.16	0...0.16	0.05(0.1,0.2)	Gas/Liquid	4X
GP 0.25	0...0.25	0.05(0.1,0.2)	Gas/Liquid	4X
GP 0.4	0...0.4	0.05(0.1,0.2)	Gas/Liquid	3X
GP 0.6	0...0.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 1	0...1	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 1.6	0...1.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 2.5	0...2.5	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 4	0...4	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 6	0...6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 10	0...10	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 16	0...16	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 25	0...25	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 40	0...40	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 60	0...60	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 100	0...100	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 160	0...160	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 250	0...250	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 400	0...400	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 600	0...600	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
GP 1000	0...1000	0.05(0.1,0.2)	Gas/Liquid	3X
GP 1600	0...1600	0.05(0.1,0.2)	Gas/Liquid	2X
GP 2000	0...2000	0.05(0.1,0.2)	Gas/Liquid	1.5X
GP 2500	0...2500	0.05(0.1,0.2)	Gas/Liquid	1.5X

Measuring ranges, absolute pressure

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
AP 0.25	0...0.25	0.05(0.1,0.2)	Gas	4X
AP 0.4	0...0.4	0.05(0.1,0.2)	Gas	3X
AP 0.6	0...0.6	0.05(0.1,0.2)	Gas	3X
AP 1	0...1	0.02(0.05,0.1,0.2)	Gas	3X
AP 1.6	0...1.6	0.02(0.05,0.1,0.2)	Gas	3X
AP 2.5	0...2.5	0.02(0.05,0.1,0.2)	Gas	3X
AP 4	0...4	0.02(0.05,0.1,0.2)	Gas	3X
AP 6	0...6	0.02(0.05,0.1,0.2)	Gas	3X
AP 10	0...10	0.02(0.05,0.1,0.2)	Gas	3X
AP 16	0...16	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
AP 25	0...25	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
AP 40	0...40	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
AP 60	0...60	0.02(0.05,0.1,0.2)	Gas/Liquid	3X

Measuring ranges, differential pressure

Overview pressure ranges				
Type	pressure ranges(mbar)	Accuracy (± of full scale value)	media	Burst Pressure
DP2.5	-2.5...2.5	0.1(0.2)	Gas	5X
DP 10	-10...10	0.05(0.1,0.2)	Gas	4X
DP 20	-20...20	0.05(0.1,0.2)	Gas	3X
DP 50	-50...50	0.02(0.05,0.1,0.2)	Gas	4X
DP 100	-100...100	0.02(0.05,0.1,0.2)	Gas	3X

Measuring ranges, vacuum and +/- measuring ranges

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
VP -0.25	-0.25...0.25	0.05(0.1,0.2)	Gas/Liquid	3X
VP -0.4	-0.4...0.4	0.05(0.1,0.2)	Gas/Liquid	3X
VP -0.6	-0.6...0.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 0	-1...0	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP0.6	-1...0.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 1	-1...1	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 1.6	-1...1.6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 2.5	-1...2.5	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 4	-1...4	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 6	-1...6	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 10	-1...10	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 40	-1...40	0.02(0.05,0.1,0.2)	Gas/Liquid	3X
VP 60	-1...60	0.02(0.05,0.1,0.2)	Gas/Liquid	3X

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	Unit	Process connection	Output
PY 803S	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	1/4NPT 1/2NPT G1/2 M20*1.5 G1/4 Other	OM1: 4~20mA OM2: 4~20mA+HART OV1: 1~5VDC OV2: 0~5VDC OV3: 0~10VDC OR 1: RS485
Example order number		PY810-A005-VP10(-1...10)bar-1/4NPT -OM1			