

Precision digital pressure gauge

Model PY803G

Applications

- Precision pressure measurement
- Pressure test
- Maintenance and service facilities
- Calibration service companies and service industry
- Field gauge calibration

Special features

- Measuring ranges : -1 ... 25,00 bar and also vacuum and absolute and differential pressure measuring ranges are available
- Accuracy: up to 0.02 % F.S(incl. calibration certificate)
- Temperature-compensated in the range of -10...+50°C[14...122°F]
- 9 switchable pressure units
- LCD, 6 digit, with background lighting



PY 803G digital pressure gauge

Description

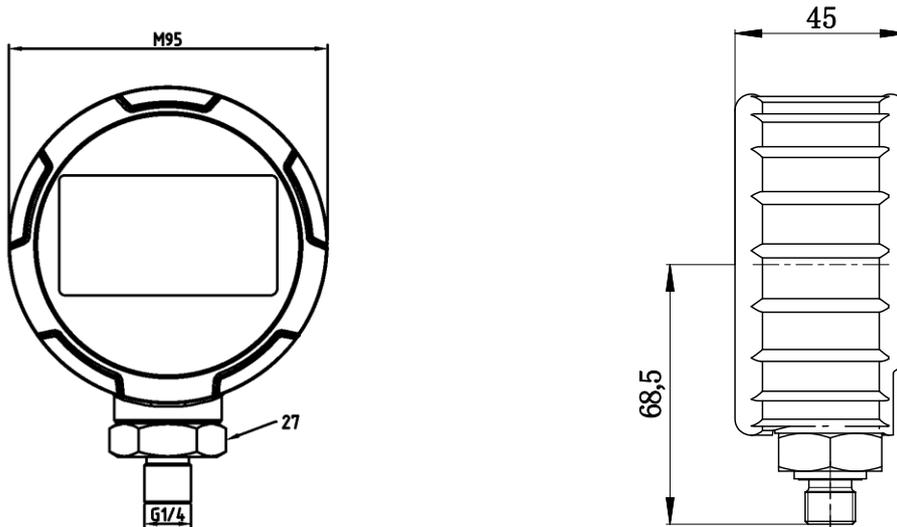
PY 803G precision digital pressure gauge is suitable for field and laboratory application. It can be used for precision pressure measurement and field gauge calibration etc. PY803G is an ideal substitution for precision pointer pressure gauge.

The measurement rate can be selected by the user as required. Standard applications typically use three measurements per second. Battery life of 8,000 hours in conventional mode. Clear display bar graph with max pointer function, min/max function for immediate access and automatic saving of min and max pressures.

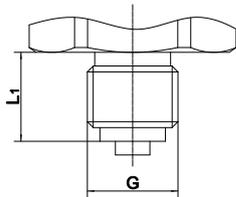
Specifications

Basic information	
Pressure types	
Gauge pressure	-1 ... 25,00 bar
vacuum and +/- measuring pressure	-0.25... 0.25 bar to -1 ... 100 bar
Accuracy	0.02%FS , 0.025 %FS , 0.05 % FS , 0.1 % FS
Temperature compensation	-10...50 °C
Measuring rate	Max. 10 /s
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
Power supply	
Auto-off function	Selectable switch-off time 5 minutes
Battery type	3x 1.5 V AA and 9vdc external adapter power supply
Battery operation	8,000 h
Interface	RS 232 port
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

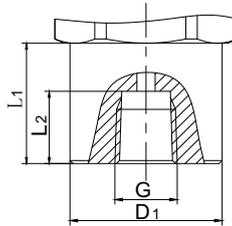
Overall dimensions(mm)



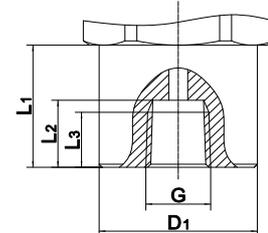
Process connections



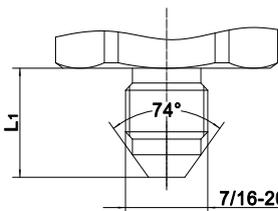
G	L ₁	Standard
G1/4 B	13	EN 837
G3/8 B	16	
G1/2 B	20	
M20×1.5	20	



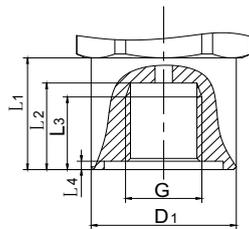
G	D ₁	L ₁	L ₂	Standard
NPT1/8	Φ25	20	12	ANSI/ASME B1.20.1
NPT1/4	Φ25	20	14	
NPT1/2	Φ25	25	19	



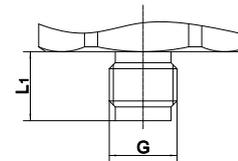
G	D ₁	L ₁	L ₂	L ₃	Standard
G1/8	Φ25	20	10	7.5	EN 837
G1/4	Φ25	20	13	10	



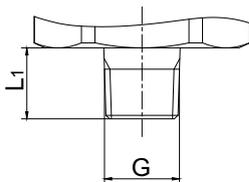
G	L ₁	Standard
7/16-20 UNF-74° cone	14	SAE J514 E



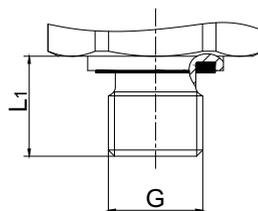
G	D ₁	L ₁	L ₂	L ₃	L ₄	Standard
G1/4	Φ25	20	15.5	13	1.5	ISO 1179-1



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(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

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 803G	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
Example order number		PY803G-A005-VP1(-14.5...14.5)psi-1/4NPT		