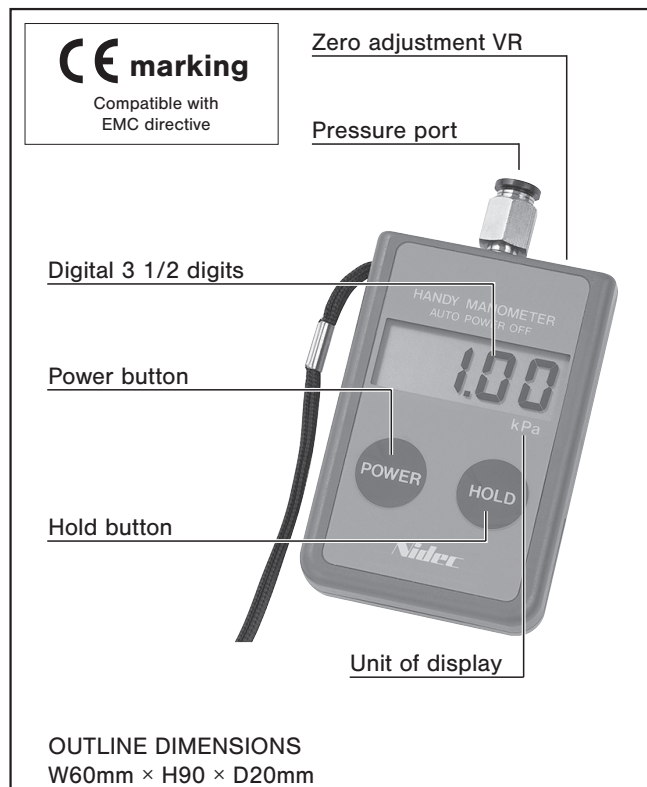


HANDHELD DIGITAL MANOMETER

PG-100



FEATURES

- **Excellent stability**
Pressure-sensitive element of semiconductor chip and circuit technology guarantees excellent temperature compensation.
- **Super long battery life**
A 3.6 V lithium battery incorporated has the long life to last over 3000 hours.
- **Automatic power off**
Automatic power off function works in approximately 3 minutes, which minimizes battery waste.
- **Handy size and easy one hand operation**
- **Easy reading with a large LCD display**
No reading error because of digital display with the holding function.
- **Meet EMC standard**
EN 55011 (EMI)
EN 50082-1 (EMS)

MODEL NUMBER DESIGNATION

P G - 1 0 0 - 1 0 2 G P

Series name

Rated pressure range

101 : 0 ~ 9.81 kPa {0 ~ 0.1 kgf/cm²} 0 ~ 10 kPa (When displayed in the unit of Pa)
 102 : 0 ~ 98.1 kPa {0 ~ 1 kgf/cm²} 0 ~ 100 kPa (When displayed in the unit of Pa)
 103 : 0 ~ 981 kPa {0 ~ 10 kgf/cm²} 0 ~ 1 MPa (When displayed in the unit of Pa)

Pressure reference

G : Gauge
 GH : Gauge
 VH : Gauge (Vacuum)
 AH : Absolute
 GP : Gauge
 Pa unit display
 GMP : Gauge
 (103 type only)
 Pa unit display
 RP : Gauge (Compound pressure)
 Pa unit display
 VP : Gauge (Vacuum)
 Pa unit display
 AP : Absolute
 Pa unit display

PG-100 HANDHELD DIGITAL MANOMETER

LIST OF MODEL NUMBERS

<Pa version>

Pressure reference	Gauge				Absolute
Rated pressure range kPa	0 ~ 10	0 ~ 100	0 ~ 1000	0 ~ - 100	100 kPa abs
Unit of display	kPa				
Part number	PG-100-101GP	PG-100-102GP	PG-100-103GP	PG-100-102VP	PG-100-102AP
Unit of display	MPa				
Part number			⊕ PG-100-103GMP		

The GMP version, marked ⊕ is manufactured upon receipt of order basis.

<Compound pressure version>

Pressure reference	Gauge		
Rated pressure range kPa	- 10 ~ 10	- 100 ~ 100	- 100 ~ 1000
Unit of display	kPa		
Model number	PG-100-101RP	PG-100-102RP	PG-100-103RP

<Non SI unit version>

Pressure reference	Gauge					Absolute
kPa {kgf/cm ² } Rated pressure range	0 ~ 9.81 {0 ~ 1000 mmH ₂ O}	0 ~ 98.1 {0 ~ 1}	0 ~ 981 {0 ~ 10}	0 ~ - 98.1 {0 ~ - 735 mmHg}	0 ~ 98.1 {0 ~ 735 mmHg}	0 ~ 98.1 kPa abs {0 ~ 735 mmHg abs}
Unit of display	mmH ₂ O	kgf/cm ²		mmHg		
Part number	⊕ PG-100-101G	⊕ PG-100-102G	⊕ PG-100-103G	⊕ PG-100-102VH	⊕ PG-100-102GH	⊕ PG-100-102AH

☐: Not available

※ Verify the above model numbers when placing orders.

Marked ⊕ is manufactured upon receipt of order basis.

<Option>

- The soft carrying case for PG-100 – Order item: PG-100 soft carrying case (Useful for when carrying out and keeping.)
- DC3.6 V lithium battery – Order item: Lithium battery (The battery is an expendable item. The first one is provided with the unit.)



The soft carrying case for PG-100 (Option)

PG-100

HANDHELD DIGITAL MANOMETER

STANDARD SPECIFICATIONS

〈Pa version〉

● Unless otherwise specified, the specs are defined at an ambient temperature of $25 \pm 5 \text{ }^\circ\text{C}$.

Item		PG-100					
General specifications	Pressure reference	Gauge				Absolute	
	Model number	101GP	102GP	103GP 103GMP	102VP	102AP	
	Rated pressure range	kPa	10	100	1000	- 100	100 kPa abs
	Maximum pressure	kPa	20	200	1500	200	200 kPa abs
	Break-down pressure	kPa	50	500	2000	500	500 kPa abs
	Operating temp. range	$^\circ\text{C}$	0 ~ 50				
	Compensated temp. range	$^\circ\text{C}$	0 ~ 50				
	Operating humidity	% RH	35 ~ 85 (No condensation)				
	Storage temp.	$^\circ\text{C}$	- 20 ~ 70 (Atmospheric pressure, humidity 65 %RH maximum)				
	Pressure medium		Non-corrosive gases				
	Pressure port		M5 female				
	Net weight	g	Approx. 85				
	Power		3.6 VDC lithium battery Battery life 3000 h minimum				
Display	No. of digits	3 1/2					
	Display element	LCD					
	Rated display range	※	0.00 ~ 10.00	00.0 ~ 100.0	000 ~ 1000 .000 ~ 1.000 (MPa)	00.0 ~ - 100.0	00.0 ~ 100.0 (kPa abs)
	Display cycle		Approx. 3 times/s				
	Display accuracy	maximum	$\pm 0.5 \text{ \%F.S.} \pm 2 \text{ counts (at } 25 \text{ }^\circ\text{C} \pm 5 \text{ }^\circ\text{C)}$				
	Thermal error	ZERO maximum	$\pm 0.1 \text{ \%F.S./}^\circ\text{C} \pm 2 \text{ counts}$	$\pm 0.05 \text{ \%F.S./}^\circ\text{C} \pm 2 \text{ counts}$			$\pm 0.1 \text{ \%F.S./}^\circ\text{C} \pm 2 \text{ counts}$
		SPAN	$\pm 0.05 \text{ \% Reading/}^\circ\text{C} \pm 2 \text{ counts}$				
Resolution		1 count					
Additional function		Auto power off (3 min), Display hold, Battery replacement display					
Accessories		Attachments : Half union (for a tube of ϕ 6 O.D.), and Barb fitting (for a tube of ϕ 4 I.D.), one piece each.					

※ The value out of rated pressure range can be displayed, but the accuracy is not guaranteed.

PG-100

HANDHELD DIGITAL MANOMETER

STANDARD SPECIFICATIONS

〈Compound pressure version〉

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °C.

Item		PG-100			
General specifications	Pressure reference	Gauge			
	Model number	101RP	102RP	103RP	
	Rated pressure range	kPa - 10 ~ 10	- 100 ~ 100	- 100 ~ 1000	
	Maximum pressure	kPa 20	200	1500	
	Break-down pressure	kPa 50	500	2000	
	Operating temp. range	°C	0 ~ 50		
	Compensated temp. range	°C	0 ~ 50		
	Operating humidity	% RH	35 ~ 85 (No condensation)		
	Storage temp.	°C	- 20 ~ 70 (Atmospheric pressure, humidity 65 %RH maximum)		
	Pressure medium		Non-corrosive gases		
	Pressure port		M5 female		
	Net weight	g	Approx. 100		
	Power		3.6 VDC lithium battery Battery life 3000 h minimum		
Display	No. of digits	3 1/2			
	Display element	LCD			
	Rated display range(KPa: Compound pressure)	- 10.00 ~ 10.00	- 100.0 ~ 100.0	- 100 ~ 1000	
	Display cycle	Approx. 3 times/s			
	Display accuracy (at 25 °C ± 5 °C)	± 1 %F.S. ± 2 counts	± 0.5 %F.S. ± 2 counts		
	Thermal error	ZERO maximum	± 0.1 %F.S./°C ± 2 counts	± 0.05 %F.S./°C ± 2 counts	
		SPAN	± 0.05 % Reading/°C ± 2 counts		
Resolution	1 count				
Additional function	Auto power off (3 min), Display hold, Battery replacement display				
Accessories	Attachments : Half union (for a tube of ϕ 6 O.D.), and, Barb fitting (for a tube of ϕ 4 I.D.), one piece each.				

PG-100

HANDHELD DIGITAL MANOMETER

STANDARD SPECIFICATIONS

〈Non SI unit version〉

● Unless otherwise specified, the specs are defined at an ambient temperature of $25 \pm 5 \text{ }^\circ\text{C}$.

Item		PG-100						
General specifications	Pressure reference	Gauge					Absolute	
	Model number	101G	102G	103G	102VH	102GH	102AH	
	Rated pressure range kPa {kgf/cm ² }	9.81 {1000 mmH ₂ O}	98.1 {1}	981 {10}	- 98.1 {- 735 mmHg}	98.1 {735 mmHg}	98.1 kPa abs {735 mmHg abs}	
	Maximum pressure kPa {kgf/cm ² }	19.6 {2000 mmH ₂ O}	196 {2}	1471 {15}	196 {1471 mmHg}		196 kPa abs {1471 mmHg abs}	
	Break-down pressure kPa {kgf/cm ² }	49.0 {5000 mmH ₂ O}	490 {5}	1961 {20}	490 {3678 mmHg}		490 kPa abs {3678 mmHg abs}	
	Operating temp. range $^\circ\text{C}$	0 ~ 50						
	Compensated temp. range $^\circ\text{C}$	0 ~ 50						
	Operating humidity % RH	35 ~ 85 (No condensation)						
	Storage temp. $^\circ\text{C}$	- 20 ~ 70 (Atmospheric pressure, humidity 65%RH maximum)						
	Pressure medium	Non-corrosive gases						
	Pressure port	M5 female						
	Net weight g	Approx. 100						
	Power	3.6 VDC lithium battery Battery life 3000 h minimum						
Display	No. of digits	3 1/2						
	Display element	LCD						
	Rated display range	000 ~ 1000 mmH ₂ O	.000 ~ 1.000 kgf/cm ²	0.00 ~ 10.00 kgf/cm ²	000 ~ - 735 ※ 1 mmHg	000 ~ 735 ※ 1 mmHg	000 ~ 735 ※ 1 mmHg	
	Display cycle	Approx. 3 times/s						
	Display accuracy maximum	$\pm 0.5 \text{ \%F.S.} \pm 2 \text{ counts (at } 25 \text{ }^\circ\text{C} \pm 5 \text{ }^\circ\text{C)}$						
	Thermal error	ZERO maximum	$\pm 0.1 \text{ \%F.S./}^\circ\text{C} \pm 2 \text{ counts}$	$\pm 0.05 \text{ \%F.S./}^\circ\text{C} \pm 2 \text{ counts}$				$\pm 0.1 \text{ \%F.S./}^\circ\text{C} \pm 2 \text{ counts}$
		SPAN	$\pm 0.05 \text{ \% Reading/}^\circ\text{C} \pm 2 \text{ counts}$					
Resolution	1 count							
Additional function	Auto power off (3 min), Display hold, Battery replacement display							
Accessories	Attachments : Half union (for a tube of ϕ 6 O.D.), and Barb fitting (for a tube of ϕ 4 I.D.), one piece each.							

※ 1 Measurement can be made up to “- 760 mmHg” for 102VH and up to “760 mmHg” for 102GH and 102AH (Accuracy not guaranteed beyond the rated pressure).

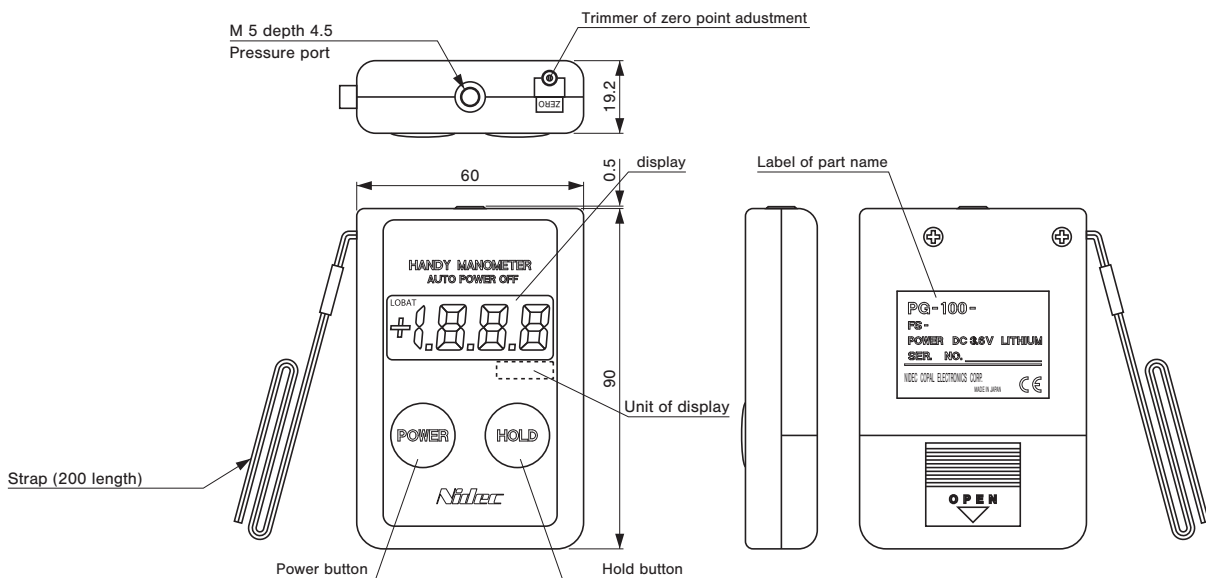
PG-100 HANDHELD DIGITAL MANOMETER

ENVIRONMENTAL CHARACTERISTICS

Test item	Test conditions (At 25 ± 5 °C)	Permissible change
Vibration	Amplitude 1.5 mm P-P, 10 ~ 55 Hz, 3 directions for 2 hours each (packed)	Indicating accuracy: ± 1 %F.S. maximum
Shock	98.1 m/s ² , 3 directions for 3 times each (packed)	
Pressure cycling	0 ~ Rated pressure, 10 ⁶ cycles	
Moisture resistance	40 °C, 90 ~ 95 %RH, 240 hrs.	
EMC	EMI: EN 55011 Group 1, class B EMS: EN 50082-1 (1992)	

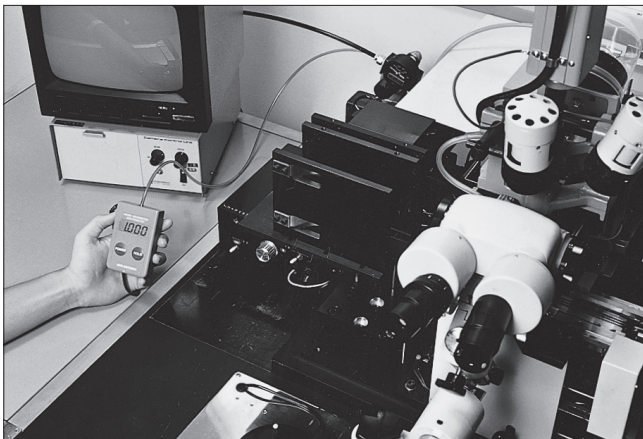
OUTLINE DIMENSIONS

Unless otherwise specified, tolerance : ± 0.5 (Unit: mm)



Note) The lithium battery is in compliance with the EU directives.

EXAMPLE OF APPLICATIONS



▲ Measurement of air pressure for a automatic machinery.



▲ Measurement of source pressure from a compressor.