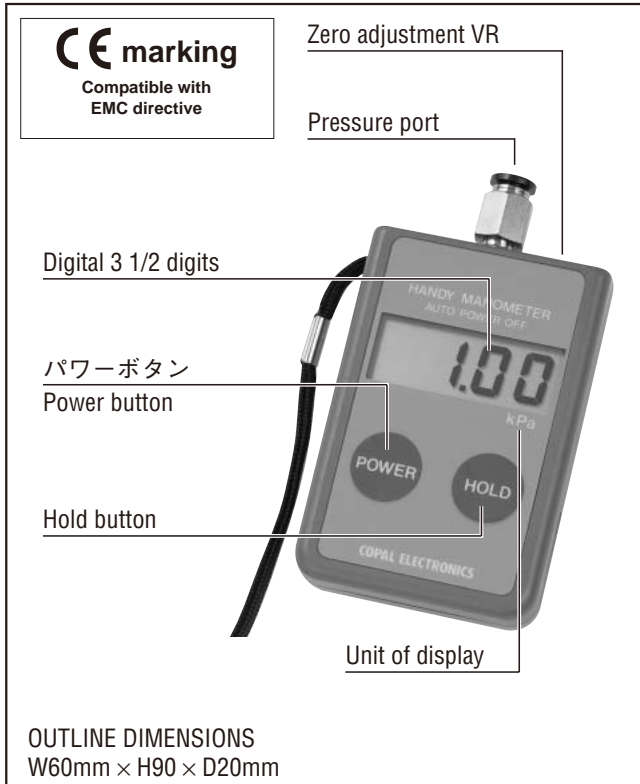


PG-100

HANDY MANOMETER



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 - 100 - 102 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

※ Please refer to the LIST OF MODEL NUMBERS when placing orders.

PG-100 PRESSURE GAUGES

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)

STANDARD SPECIFICATIONS

<Pa version>

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °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 | °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 | | M 5 female | | | | |
| | Net weight | g | 約85 Approx. 85 | | | | |
| | Power | | Lithium battery DC3.6 V 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 | ± 0.5 %F.S. ± 2 counts (at 25 °C ± 5 °C) | | | | |
| | Thermal error | ZERO maximum | ± 0.1 %F.S./°C ± 2 counts | ± 0.05 %F.S./°C ± 2 counts | | | ± 0.1 %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. | | | | | |

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

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 | | M 5 female | | |
| | Net weight | g | Approx. 100 | | |
| | Power | | Lithium batteryDC3.6 V Battery life 3000 h minimum | | |
| | Display | No. of digits | 3 1/2 | | |
| Display element | | LCD | | | |
| Rated display range | | - 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. | | | | |

STANDARD SPECIFICATIONS

<Non SI unit version>

● Unless otherwise specified, the specs are defined at an ambient temperature of 25 ± 5 °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 | °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 | | M 5 female | | | | | |
| | Net weight | g | Approx. 100 | | | | | |
| | Power | | Lithium battery DC3.6 V 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 | ± 0.5 %F.S. ± 2 counts (at 25 °C ± 5 °C) | | | | | |
| Thermal error | | ZERO | maximum | ± 0.1 %F.S./°C ± 2 counts | ± 0.05 %F.S./°C ± 2 counts | | | ± 0.1 %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. | | | | | | |

※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).

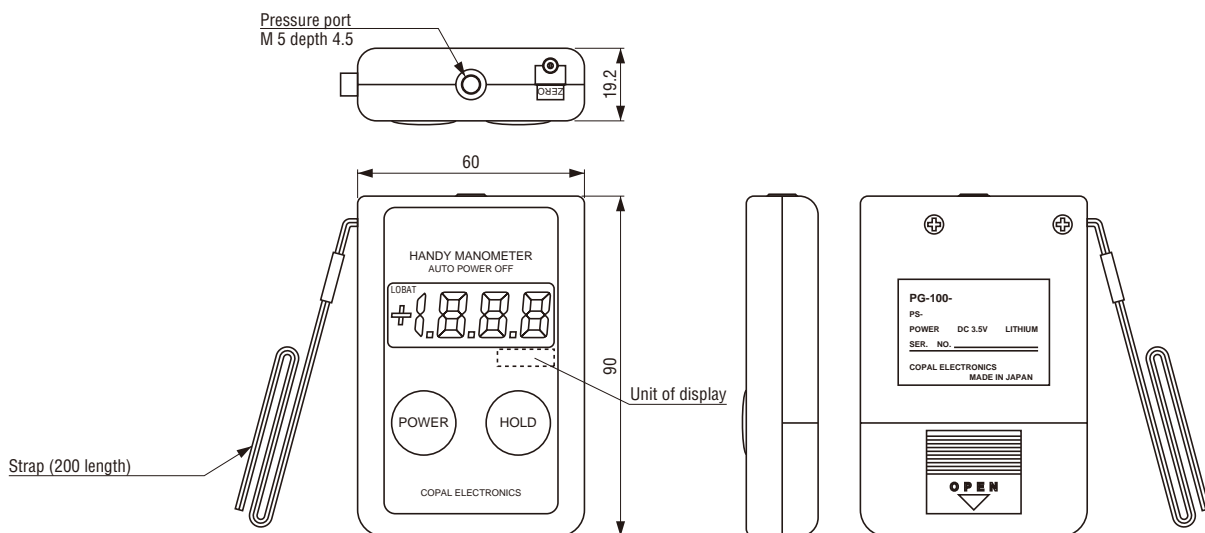
PG-100 PRESSURE GAUGES

ENVIRONMENTAL CHARACTERISTICS

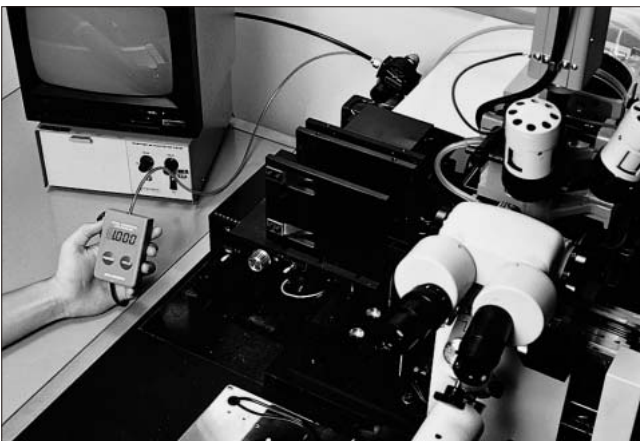
| Test item | Test conditions (At 25 ± 5 °C) | Permissible change |
|---------------------|--|--|
| Vibration | Amplitude 1.5 mm P-P, 10 ~ 55 Hz, 3 directions for 2 hours each (packed) | Indicating accuracy: ± 1 %F.S. maximum |
| Shock | 98.1 m/s ² , 3 directions for 3 times each (packed) | |
| Pressure 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)



EXAMPLE OF APPLICATIONS



▲ Measurement of air pressure for a automatic machinery.



▲ Measurement of source pressure from a compressor.