# Handy Manometer

## Characteristics

- Usability and convenience are pursued by palm top design.
- Easily viewable large 3 & 1/2 digits LCD display
- Three types of pressure range are available.
- Compound gauge pressure (GPH-S), compound gauge pressure low range (GPH-V) and absolute pressure (GPH-B) indication models are selectable depending on the applications.
- User-friendly with helpful functions; Zero point adjustment, indication retention and auto-power-off functions
- \*zero point adjustment function is not equipped with absolute pressure type.
- Analog output function is equipped, too.
- Low power consumption design
- Using commercially available dry-cell batteries (AAA battery x 2 pcs.), last about 1000 hours.
- \*The Manometer does not come with batteries.

# Model designation (Example)



(1) **GPH**: Handy Manometer

(2) Pressure range

Code	V	S	В
Pressure range	-100~100kPa	-100~1,000kPa	0~100kPa abs
	Compound gauge pressure (Low range)	Compound gauge pressure	Absolute pressure

#### (3) Port type and size

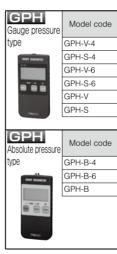
Code	4	6	No code
Tube dia. (mm)	ø4 straight push-in fitting	ø6 straight push-in fitting	M5x8 female thread without push-in fitting

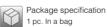
\* When a push-in fitting in other size than ø4 or ø6 straight push-in fitting (Model code in standard pushin fitting series: PC4-M5/PC6-M5), please select a fitting from our fitting series with M5 male thread.

# Specification

Model		GPH-V	GPH-S	GPH-B		
Туре		Compound gauge pressure (Low range)	Compound gauge pressure	Absolute pressure		
Rated pressure rate		-100~100kPa	-100~1,000kPa	0~100kPa abs		
Max. pressure		<b>200</b> kPa	<b>1,500</b> kPa	200kPa abs		
Indication system		3 & 1/2 digit LCD				
Resolution		1 digit				
Function		Zero point adjustment*1, Indication retention, Offset*1Auto-power-off				
Display accuracy		±0.5%F.S. ±2digit (at 77°F/25°C)				
Display accuracy		<b>±1.0</b> %F.S. <b>±2</b> digit		<b>±2.0</b> %F.S. <b>±2</b> digit		
		(at 77±77°F/25±25°C)		(at 77±77°F/25±25°C)		
Admitted media		Air, non-corrosive gas		Air, non-corrosive gas, and liquid(**)		
				(SUS316 should not be corroded)		
Operating temperature		<b>32~122°F (0~50°C) (No freezing)</b>				
Operating humidity		15~85%RH or below (No dew condensation)				
Driving power		<b>3</b> VDC, <b>2</b> x AAA dry cell (*²)				
Pressure port		M5x0.8 female thread				
Protective structure		IP40 (IEC standard) (*3)				
Siz	ze	55mm(W)×16.9mm(D)×1100mm(H)				
Weight		Approx. <b>100</b> g				
Battery life		Approx.1000 hours				
>	Power supply	5±0.5VDC, max. 5mA, External supply (Equipped batteries are not allowed.				
Analog outpu	Output voltage	-1.000~1.000∀	-0.100~1.000∨	0.000~1.000∀		
outpu	Output	. 10>/ //Within in dia ation atom		adard)		
<u> </u>	accuracy	±10mV (Within indication standard)				
Standard		Instruction manual, Inspection report		Instruction manual, Inspection		
attachment				report, Protective cover		

- \* 1 GPH-B does not have zero point adjustment and offset
- \* 2 Batteries are not included. Please prepare dry cell batteries (manganese or alkaline) for use.
- \* 3 When analog output function is used, protective structure is out of specification.
- \* 4 Admitted media: Air, non-corrosive gas, and liquid for GPH-B is accepted only used with ø4 or ø6 straight pushin fitting. When other fitting is used, the above said media is not acceptable and select one with female M5x8 thread from our fitting series according to the media





### **Detailed Safety Instructions**

Before using PISCO products, be sure to read "Safety Instructions" and "Common Safety Instructions for Products in This Catalog" on page 13-16 and "Common Safety Instructions for Pressure Sensors" on page 49

- AWarning: 1. The product is not explosion-proof. Do not use the product in designated areas where explosion-proof specification is requires

  - 3. The product is designated for measurement of intended articles and does not features control functions that ensure security such as prevention of accidents

- ⚠Caution : 1. The admitted media for GPH-V/S is air and non-corrosive gases. Use of product with water or corrosive fluids may cause product trouble. The admitted media for GPH-B are gases and liquids which do not corrode SUS316. Use of corrosive media may cause injury or product trouble. Furthermore, since the product is not explosion -proof, never use if for flammable gases

  - 2. Measuring pressure should be within the pressure range as stated in specifications. Applying pressure exceeding the max. pressure rating may cause product trouble.

    3. Do not enter foreign materials into the pressure port. Entering foreign material inside the product may cause product trouble or air leakage. If there is a possibility of entering foreign material into the port, use the product with a filter.
  - 4. Pay attentions to the possibilities of accidents caused by the strap.
  - When the product is used with the strap, do not swing around the product on purpose by holding the strap. It may cause unexpected accidents, injury or damage on the product. In the use of the product, grip the body part firmly.
  - 5. Do not give external shock to the product. External shock such as hitting or dropping may cause product trouble
  - 6. When installing a fitting to the pressure port, the tightening torque should be set at around 1N·m.
  - 7. When analog output function is used, pay attentions to prevent accidental application of voltage or signal to CAL terminal by faulty wiring. Applying CAL terminal may cause troubles. Do not lose battery cover.
  - 8. Protective cover material is silicone rubber. Use of liquid media which corrodes the silicone rubber is not allowed. Protective cover protects the product body from liquid leakage at installing or detachment of fittings or tubes
  - 9. Periodical maintenance should be conducted. Before actual use, make sure the operation is normal. Unexpected troubles prevent to indicate proper values or impair the roduct performance.
  - 10. Do not dismantle or modify the product, Improper dismantling or modification may hamper normal operation, Furthermore, user-dismantled or modified products will not be covered by the warranty.
  - . Do not use the batteries other than manganese or alkaline AAA dry cells to prevent troubles.
  - 12. Place the batteries in the correct position. Make sure the direction of a battery. Wrong insertion of batteries may burst the batteries or cause battery leakage, and then cause trouble on the product or accidents. When the product is not used for long time, make sure to remove the batteries to prevent battery leakage and store the product.
  - 13. Wipe off the product with soft cloth when necessary. In order to remove substances attached on the product, soak the cloth into diluted neutral detergent, squeeze it wipe off the substances with that cloth, and finally finish cleaning with dried cloth. When cleaning, do not enter the neutral detergent into the pressure port or the product. Foreign substances into the product may cause trouble the product.
  - 14. Protective cover should be stored at a dark place under room temperature and humidity. Exposure to ultra violet ray may deteriorate or discolor the product.