

High Accuracy Pressure Sensor



PC-302 series is high accuracy pressure sensor of $\pm 0.25\%$ at full scale. Gauge or absolute pressure types are available with high temperature option. Dedicated digital panel meter (Lo/Hi 2-stage digital strain gauge meter) is available as display device.

Wide Range of Measurement

- Variety of pressure range from 172KPa to 20,684KPa.

High Accuracy

- High accuracy pressure detection 0.25% or less with linearity, hysteresis and repeatability all included (100PSIG or more).

Wide Temperature Range

- Temperature insensitive design for strain gauge detecting pressure allowing wide temperature range operation. Temperature range expandable by selecting high temperature option.

High Corrosion Resistance

- Electrochemical polished SUS316L used for gas contacting area realizing high corrosion resistance against various corrosive medias.

Long Lifetime

- Robust construction, pressure detecting diaphragm processed with sensor body.

Specification

Model	Gauge Pressure ※							Absolute Pressure		
	PSI	25G	50G	100G	200G	500G	3000G	15A	25A	50A
Pressure Range	KPa	0 to 172.4	0 to 344.7	0 to 689.5	0 to 1,378.9	0 to 3,447.3	0 to 20,684	0 to 103.4	0 to 172.4	0 to 344.7
	kgf/cm ²	0 to 1.76	0 to 3.52	0 to 7.03	0 to 14.06	0 to 35.16	0 to 210.9	-	-	-
	torr	-	-	-	-	-	-	0 to 776	0 to 1,293	0 to 2,586
Accuracy (% Full Scale)		±0.5%			±0.25%			±0.5%		

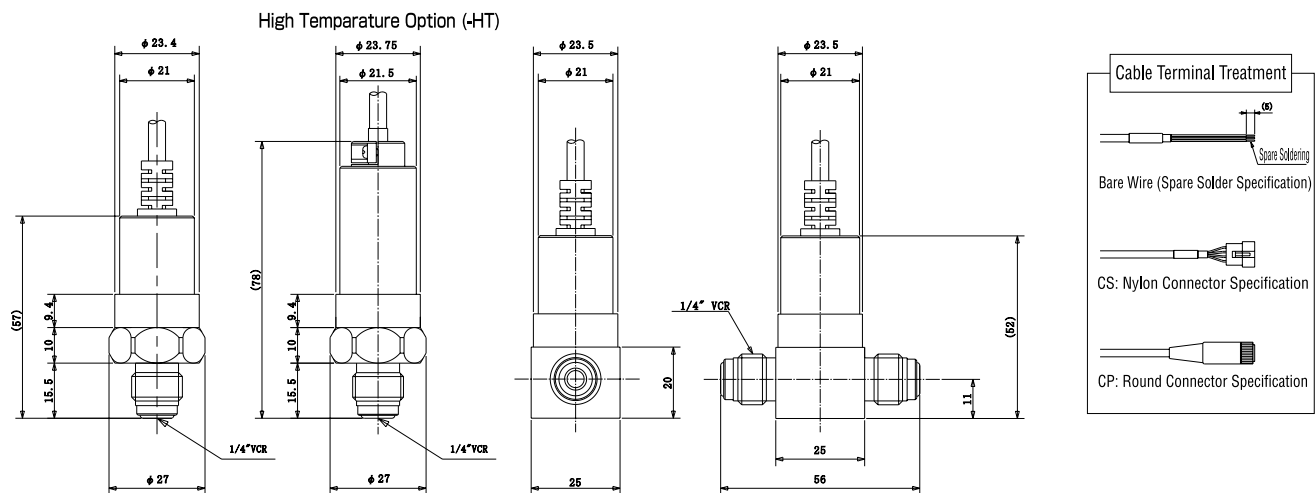
※ Gauge pressure type applicable for coupled usage.

Overload pressure	Full Scale ×2
Excitation (Power Supply) Voltage	DC 5V (MAX 6V)
Storage Temperature	-57 to 93°C (High temperature option: -57 to 120°C) (no power distribution)
Guaranteed Temperature	-1 to 71°C
Temperature Drift	±0.05% FS/°C
Signal Output	100mV (20mV/V) ※50mV (10mV/V) for 25G/50G
Span	100mV ± 15mV ※50mV ± 15mV for 25G/50G
Offset	0mV ± 10mV
External Leakage	2 × 10 ⁻¹¹ Pa · m ³ /sec
Gas (Fluid) Contacting Area	Body: SUS316L (electrochemical polishing) Diaphragm part: SUS316L
Joint	1/4" VCR®, Swagelok®, UJR®, and others

Dimensional Outline Drawings

PC-302A-VR-[Pressure Range]-M

PC-302T-VR-[Pressure Range]-M



How to Order

PC - 302 **A** - **VR** - **100G** - **M** - **HT** - **CS**

Piping Connection: A : Straight, T : T Angle

Shape of Joint: VR : 1/4"VCR®, SW : 1/4"Swagelok®, UR : 1/4"UJR®

Pressure Range:

25G	: 0 to 172.4KPa
50G	: 0 to 344.7KPa
100G	: 0 to 689.5KPa
200G	: 0 to 1,378.9KPa
500G	: 0 to 3,447.3KPa
3000G	: 0 to 20,684KPa
15A	: 0 to 103.4KPa
25A	: 0 to 172.4KPa
50A	: 0 to 344.7KPa

Figuration of Screw: Blank : Standard, HT : High Temperature Option

High Temperature Option: M : Male Screw (Standard), F : Female Screw

Cable Terminal Treatment: Blank : Bare Wire (Spare Solder Specification), CS : Nylon Connector Specification, CP : Round Connector Specification

※Standard length 50cm

● Extension cable separately available (see P. 85)

※ Specification is subject to change without notice.