

HASTELLOY® Pressure Transmitter



In semiconductor production processes, various halogen series reactive and corrosive special gases are used such as HBr and HCl. These gases generate corrosive product by reacting with small amount of water attached to inner surface of stainless steel of pressure sensor or gas filter used in gas supply piping system. This corrosive product generates particle and causes process contamination of semiconductor process. Pureron has developed PC-600 series pressure sensor for corrosive special gas application using HASTELLOY® which has far superior corrosion resistance than stainless steel SUS316L.

High Corrosion Resistance

- HASTELLOY® having far superior corrosion resistance than stainless steel SUS316L against the halogen series reactive, corrosive special gases such as HBr and HCl used for gas contacting area. Electrochemical polishing also applied effective against corrosive special gas.

High Accuracy / High Reliability

- High accuracy and high reliability with 0.25% maximum deviation from best fit line affected by linearity, hysteresis repeatability.

Wide Measurement Range

- Wide pressure range available; gauge pressure 0 to 172.4KPa (1.76kgf/cm²) to 20,684KPa (210.9kgf/cm²), absolute pressure from 0 to 2,586 torr. Vacuum draw available as option.

Long Lifetime

- Cycle duration test, 1,000,000 times or more, conducted in each range.

Output

- Output selectable 4 to 20mA or 0 to 5V connectable with various panel meters and programmable controllers.

Specification

Model	PSI	Gauge Pressure ※						Absolute Pressure		
		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%		

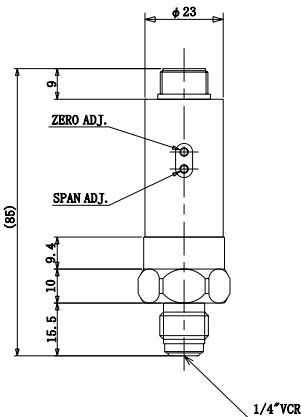
※For gauge pressure type, output reference can be set to vacuum (-100KPa) as option. Specify when you order.

Overload Pressure	Full Scale ×2
Storage Temperature	-40 to 85°C (no power distribution)
Guaranteed Temperature	0 to 70°C
Temperature Drift	±0.05% FS/°C
External Leakage	2×10 ⁻¹¹ Pa·m ³ /sec
Gas (Fluid) Contacting Area	HASTELLOY®
Joint	1/4" VCR®, Swagelok®, and others

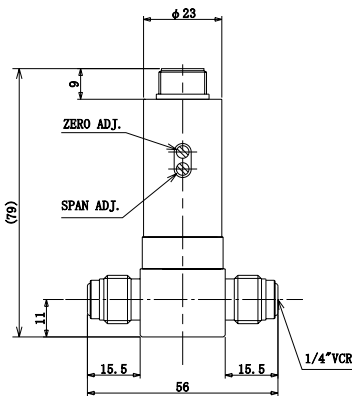
Model	604	605
Excitation (Power Supply) Voltage	DC 12 to 26V	DC 12 to 26V
Signal Output	4 to 20mA	0 to 5V
Span	16mA ± 0.16mA	5V ± 0.5V
Offset	4mA ± 0.4mA	0V ± 0.1V

Dimensional Outline Drawings

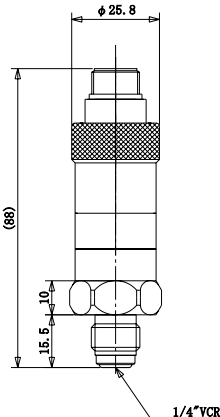
PC-604A-VR-[Pressure Range]-M



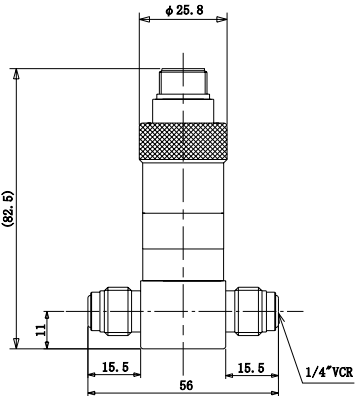
PC-604T-VR-[Pressure Range]-M



PC-605A-VR-[Pressure Range]-M



PC-605T-VR-[Pressure Range]-M



Pressure
Sensor

How to Order

Signal Output	Piping Connection	Shape of Joint	Pressure Range	Figuration of Screw	Output Standard
PC - 604 A - VR - 100G - M - CT - V					
604 : 4 to 20mA 605 : 0 to 5V	A : Straight T : T Angle	VR : 1/4"VCR® SW : 1/4"Swagelok®	M : Male Screw (Standard) F : Female Screw	Blank : Atmosphere Pressure V : Vacuum ※ Gauge pressure type only.	
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			

● Connection cable separately

●Connection cable separately available (see P. 84)

※Specification is subject to change without notice.