

Model PHP

Pressure Transducer for Precision Measurements

Description

The PHP digital pressure transducer is a high accuracy and performance for precision pressure measurement component that uses either RS-232 to communicate with host computer and analog output. The PHP have a excellent small temperature error below 0.025% in the range of -10~50°C. The communication S/W is included in delivery.

Features

- ▶ VDC, mA Analog output
- ▶ RS232 Digital output
- ▶ Measuring range 0~150MPa
- ▶ 0.035%FS accuracy
- ▶ Gauge and absolute measurement
- ▶ Stainless steel media-wetted materials

Applications

- ▶ Measurement and test benches
- ▶ Calibration technology
- ▶ Laboratories
- ▶ Plant construction and machine building

Specifications



Range

0 ~ 100kPa ... 150MPa(Gauge)
-100kPa ~ 0 ~ 100kPa ... 150MPa(Gauge)
0 ~ 100kPa ... 70MPa(Absolute)

Performance

Accuracy	±0.035%FS(RSS)
Thermal Effect on Zero	±0.025%FS
Thermal Effect on Span	±0.025%FS
Long-term Stability	±0.05%FS/year
Compensated Temperature Range	-10 ~ 50°C
Operating Temperature Range	-20 ~ 80°C

Electrical

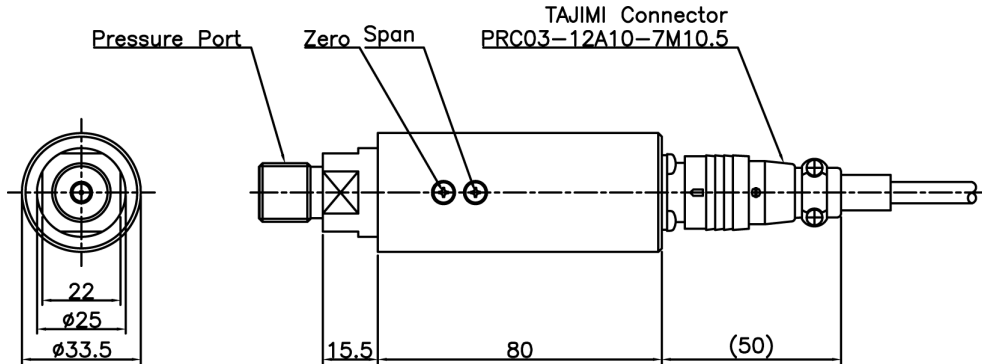
Excitation	11 ~ 32VDC
Analog Output	0~5VDC, 1~5VDC, 0~10VDC, 4~20mA(3Wire)
Digital Output	RS232(19200, 8, n, 1)
Electrical Connection	TAJIMI Connector

Physical

Proof Pressure	X1.5 or 150MPa, Whichever is less.
Burst Pressure	X2 or 150MPa, Whichever is less.
Vibration	49.1m/s ² {5G}, 10~500Hz
Shock	490m/s ² {50G}
Pressure port	R(PT)1/8", G(PF)1/8", R(PT)1/4", G(PF)1/4", R(PT)3/8", G(PF)3/8"
Media-Wetted Materials	Stainless Steel 316L, Viton (>70MPa : Stainless Steel 303, Titanium 87% Alloy)
Weight	Connector type : Approx. 270g (Sensor Only)

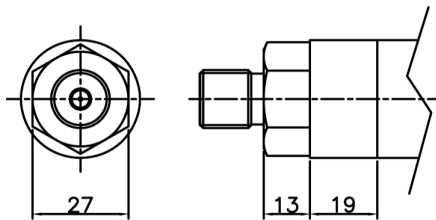
Dimension

► ≤ 70MPa



Pin No.	Wire Color	Connections
A	White	GND
B	Red	Excitation ⊕
C	Shield	FG
D	Green	Analog Output ⊕
E	Yellow	TXD
F	Black	GND
G	Blue	RXD

► > 70MPa



Ordering Information

Model Name	PHP C 0100 R D T G	Type of Pressure Measurement
		G : Gauge J : Absolute
Output		Connecting Methods
C : 0~5V, RS232 E : 1~5V, RS232 J : 0~10V, RS232 G : 4~20mA(3Wire), RS232		T : TAJIMI Connector
Pressure Range		Pressure port
XXXX : Pressure CXXX : Compound Pressure		A : R(PT)3/8" E : PT1/2" B : G(PF)3/8" Q : PF1/2" C : R(PT)1/4" G : PT1/8" D : G(PF)1/4" H : PF1/8"
		Pressure Unit
		R : kPa M : MPa B : bar K : kgf/cm ² P : psi H : mmHg I : inchHg T : Torr D : mmH ₂ O C : cmH ₂ O N : inchH ₂ O