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℃. 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

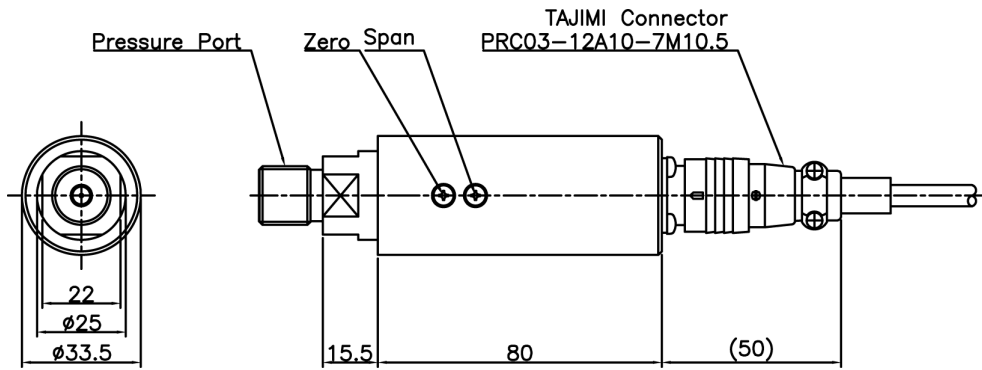|	
Accuracy	±0.035%FS(RSS)
Thermal Effect on Zero	±0.025%FS
Thermal Effect on Span	±0.025%FS
Long-term Stability	±0.05%FS/year
Compensated Temperature Range	-10 ~ 50℃
Operating Temperature Range	-20 ~ 80℃

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

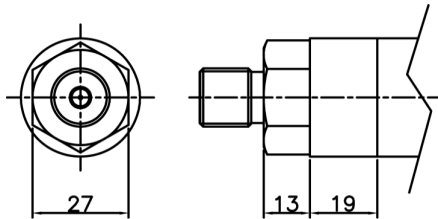|	
Proof Pressure	X1.5 or 150MPa, Whichever is less.
Burst Pressure	X2 or 150MPa, Whichever is less.
Vibration	49.1m/s^2{5G}, 10~500Hz
Shock	490m/s^2{50G}
Pressure port	R(PT)1/8", G(PF)1/8", R(PT)1/4", G(PF)1/4", R(PT)3/8", G(PF)3/8"
Media-Wetted Materials	Stainless Steel 316L, Viton (>70MPa : Stainless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

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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

PHP C 0100 R D T G

Model Name

Output
- C : 0~5V, RS232
- E : 1~5V, RS232
- J : 0~10V, RS232
- G : 4~20mA(3Wire), RS232

Pressure Range
- XXXX : Pressure
- CXXX : Compound Pressure

Type of Pressure Measurement
- G : Gauge
- J : Absolute

Connecting Methods
- T : TAJIMI Connector

Pressure port
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/㎠
P : psi	H : mmHg
I : inchHg	T : Torr
D : mmH2O	C : cmH$_2$O
N : inchH2O	

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