DATASHEET

Pressure

Pressure Transmitter
For Air Conditioning and Refrigeration Industry
Model PWP311

Applications

- HVAC System
- Air Conditioning System
- Compressor
- Refrigeration unit
- Pipeline system
- Air source heat pump
- Automation control

Pressure transmitter PWP311

Features

- Compact size
- Particularly cost-effective
- Excellent quality and proven technology
- Long service life
- Temperature compensation at 0~50℃
- Electromagnetic compatible

Description

PWP311 pressure transducer is suitable to be used in pressure transmitter for water-cooled units, refrigerators, air conditioning and refrigeration systems. This transmitter uses a highly reliable imported ceramic piezoresistive pressure sensor.

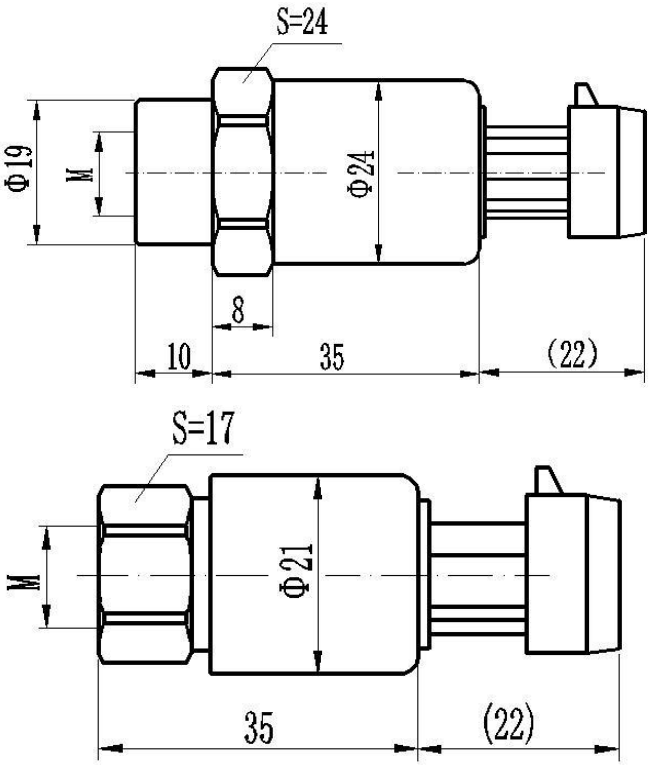
PWP311 pressure transmitters have gone through careful design, component selection, process verification and solidification, cyclic loading and stress relief, aging, and environmental simulation testing to ensure the stability and reliability of each product. This bestseller can tolerate up to 10 million load cycles with almost constant precision.

To be proven as the excellent performance for many solutions worldwide. OEM&ODM is available. Come to us to know more.

Specifications

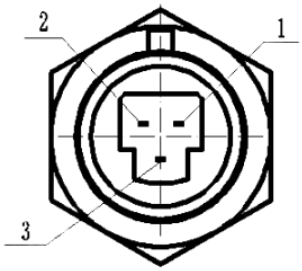
Model	PWP311
Pressure Type	Relative (gauge) /Absolute pressure
Pressure Range	-0.1MPa～0MPa …5MPa
Safe Overload	200%FS
Burst Pressure	300%FS
Electrical Connection	Packard Connector
IP Rating	IP65
Accuracy	±0.5%FS at 25℃
Signal Output & Power Supply	4-20mA(2 wires) 12-30VDC / 0.5-4.5V(3 wires) 5VDC / 0-5V(3 wires) 8-24VDC / 0-10V(3 wires) 12-30VDC
Response Time	≤3ms (10%~90%)
Medium Compatible	R12, R22, and other refrigerants
Load Resistance(2 wires)	R≤(U-10)/0.02-RD (U: Power supply, RD: Internal resistance in the cable)
Total current consumption	Current signal(2wires): Max about 23mA Voltage signal(3wires): <5mA
Non-linear (%FS)	≤0.4
Hysteresis (%FS)	≤0.1
Repeatability (%FS)	≤0.1
Long-term Stability (%FS/year)	≤0.5
Zero Temp Drift (%FS/℃)	≤0.05
Working Temp.	-40℃~+80℃
Storage Temp.	-40℃~+85℃
Vibration Environment	10g (@10Hz~2000Hz)
Impact Resistance	100g/11ms
Service Life	>10 million load cycles (within measurement range)
EMC Standard	EN IEC 61326-1:2021; EN IEC 61326-2:2021

Dimensions and Drawings



*Unit:mm. Above is typical structures. Other structures and dimensions can be customized.

Electrical Connection

Packard Connector				
	Terminal	Color	Current(2wires)	Voltage(3wires)
	1	Red	Vcc	Vcc
	2	Green	Iout	GND
	3	Yellow	/	Vout

How to Order

Example Part Number: 311[10]BGT1S2C1A2M3000

Model No.	PWP311	311
Pressure Range	-0.1MPa～0MPa …40MPa Directly write in []	[10]
Pressure Units	B=bar P=Psi K=kPa M=MPa	B
Pressure Type	G= Gauge/Relative A=Absolute N=Negative	G
Signal Output	T1=4-20mA(2wires) T2=0-5V(3wires) T3=0-10V(3wires) T4=0.5-4.5V(3 wires) T0=Customized	T1
Power Supply	S1=8-24VDC S2=12-30VDC S3=5VDC S0=Customized	S2
Pressure Connection	C1=7/16-20UNF female C2=G1/4" male C3=G1/4" female C4=1/4"NPT male C5=1/4"NPT female C6=1/8"NPT male C7=G1/2"male C8=1/2" NPT male C9=M20x1.5 male C0=Customized	C1
Accuracy	A1=1.0%F.S. A2=0.5%F.S.	A2
Housing Material	M3=Brass(Typical) M1=SUS304 M2=316L	M3
Cable Length	000=Non-cable 001= 1m cable 002= 2m cable ...	000

*Means to order: Pressure transmitter PWP311 with Packard connector, 0~10 bar Gauge, 4-20mA, 12-30VDC, 7/16-20UNF female, 0.5%FS accuracy, brass material, cable length is 0.

You may also Need

Reference Picture	Description	Product
	To connect with pressure transmitter and to have a site indicator of the measured value, have high&low value alarms, record and control.	Display/indicator/controller
	Transmitter integrated with pulsation dampers is to designed for severe medium influences like cavitation, liquid hammer or pressure peaks and offers a reliable pressure measurement, even under harsh environmental conditions.	Pulsation dampers

***Tell us medium / which application / measuring range / working temperature / signal output / what you wanna to realize, our sales engineer will recommend suitable model for you.*