DATASHEET

Pressure

Pressure Transmitter
For General Industrial Applications
Model PWP310

Applications

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

Pressure transmitter PWP310 series

Features

- Compact size
- Particularly cost-effective
- Excellent quality and proven technology
- Long service life
- Temperature compensation at 0~50℃
- Pressure ranges in relative (gauge) or absolute from 0 up to 400 bar

Description

PWP310 pressure transducer is suitable for general industrial application scenarios such as environmental protection, medical and health care, air conditioning and refrigeration systems. This transmitter uses a highly reliable imported ceramic piezoresistive pressure sensor.

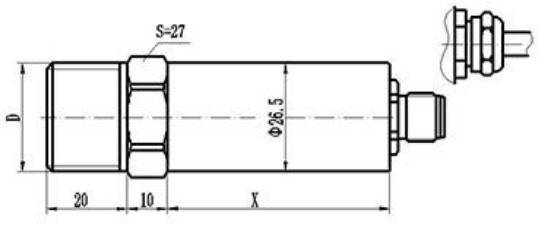
PWP310 pressure transmitters have gone through careful design, component selection, process verification and solidification, cyclic loading and stress relief, aging, and environmental simulation testing to ensure the stability and reliability of each product. This bestseller can tolerate up to 10 million 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.

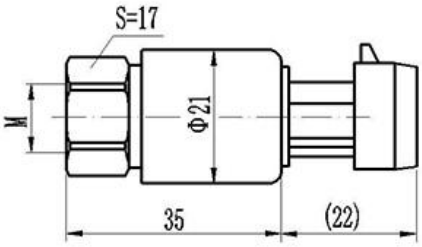
Specifications

Model	PWP310
Pressure Type	Relative (gauge) /Absolute pressure
Pressure Range	-0.1MPa～0MPa …40MPa
Safe Overload	≤200%FS
Burst Pressure	300%FS
Electrical Connection & IP Rating	DIN43650 Hirschmann Connector... IP65 Packard Connector... IP65 Directly outlet cable... IP67 M12*4pins connector... IP67
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	Liquid or air compatible with ceramic and stainless steel or brass material
Load Resistance(2 wires)	R≤(U-10)/0.02-RD (U: Power supply, RD: Internal resistance in the cable)
Total current consumption	Current signal(2 wires): Max about 23mA Voltage signal(3 wires): <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

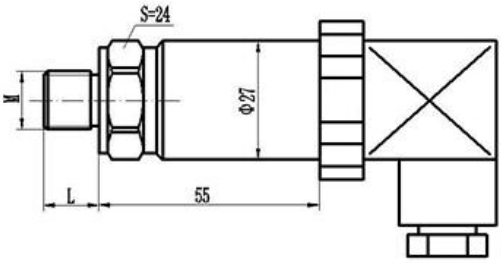
Dimensions and Drawings



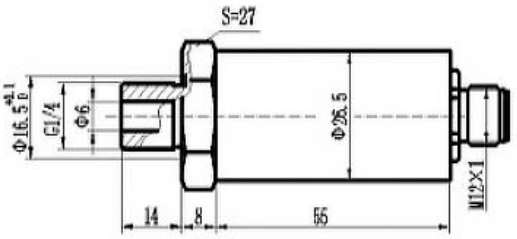
PWP310-C



PWP310-P



PWP310-H

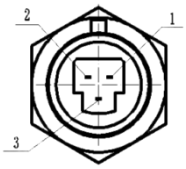
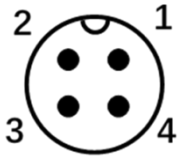


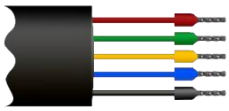
PWP310-M

Unit: mm

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

Electrical Connection

DIN43650 Hirschmann connector					
	Terminal	Current(2wires)	Voltage(3wires)	IIC(4wires)	RS485(4wires)
	1	Vcc	Vcc	/	/
	2	Iout	GND	/	/
	3	/	Vout	/	/
	4	/	/	/	/
Packard Connector					
	Terminal	Current(2wires)	Voltage(3wires)	IIC(4wires)	RS485(4wires)
	1	Vcc	Vcc	/	/
	2	Iout	GND	/	/
	3	/	Vout	/	/
	4	/	/	/	/
M12 4 pins connector					
	Terminal	Current(2wires)	Voltage(3wires)	IIC(4wires)	RS485(4wires)
	1	Vcc	Vcc	Vcc	Vcc
	2	Iout	GND	GND	GND
	3	PE	Vout	SCL	RS485A
	4	/	PE	SDA	RS485B

Directly outlet cable					
	Wire Color	Current(2wires)	Voltage(3wires)	IIC(4wires)	RS485(4wires)
	Red	Vcc	Vcc	Vcc	Vcc
	Green	Iout	GND	GND	GND
	Yellow	/	Vout	SCL	RS485A
	Blue	/	/	SDA	RS485B
	Black	PE	PE	PE	PE

How to Order

Example Part Number: 310H[10]BGT1S2C4A2M1000

Model No.	PWP310	310
Electronic Connection	P=Packard 3 pins connector H=DIN43650 Hirschmann terminal box C=Direct outlet cable M=M12 4pins connector 0=Customized	H
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	C4
Accuracy	A1=1.0%F.S. A2=0.5%F.S.	A2
Housing Material	M1=SUS304(Typical) M2=316L M3=Brass	M1
Cable Length	000=Non-cable 001= 1m cable 002= 2m cable ...	000

*Means to order: Pressure transmitter PWP310 with Hirschmann connector, 0~10 bar Gauge, 4-20mA, 12-30VDC, 1/4”NPT male, 0.5%FS accuracy, SUS304 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.*