VP7 Series

Overview

The VP7 series flat-membrane pressure transducer/transmitter, which connector and housings are made of stainless steel, has strong corrosion resistance and long-term stability. Sensors in a wide temperature range has temperature compensation, which ensure the technical parameters in well. Variety of connector types and wiring modes, can be the maximum to meet the customer requirement. Widely used in the field of viscous liquid test and control such as food, beverage, pharmaceutical and other health industries, and painting, dyestuff, coating, spraying equipment and other decoration industries, and washing, paper making, mud, asphalt and other industries.

HART protocol and RS485 Serial Communication broad are optional. And Option to match the measurement & control instruments or circuit module made by our company.

Applications

- Food, beverage, pharmaceutical industry
- Painting, dyestuff, coating industry
- Washing, paper making, mud, asphalt
- Spraying equipment
- Crude oil pipeline detection



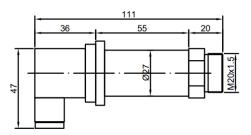
Series

■ Specifications

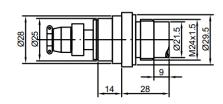
Pressure range	-0.1 to 200MPa			
Accuracy	±0.1%FS, ±0.25%FS, ±0.5%FS,±1.0%FS optional			
	Transducer: +5~12Vdc;			
Power supply	Transmitter: +24Vdc, +12Vdc, +5Vdc			
Output	0/0.5/1.0-4.0/4.5/5.0V(3 wires), 4-20mA(2 or 3 wires)			
loading Capacity(Transmitter)	Current output model ≤500 Ω; Voltage output model ≥100k Ω			
zero temp. coefficient	±0.5%FS			
FS temp. coefficient	±1.0%FS			
Compensation temperature	-10℃~70℃			
Operation temperature	-20°C~75°C, ≤ 85%RH			
Storage temperature	-40°C~85°C, ≤ 95%RH			
Safe overpressure	150%			
limit overpressure	200%			
Temperature drift	±0.02%FS/°C			
Long-term stability	±0.2%FS/year			
Housing	316L Stainless steel			

Note: Specification based on 25 $^{\circ}\mathrm{C}$

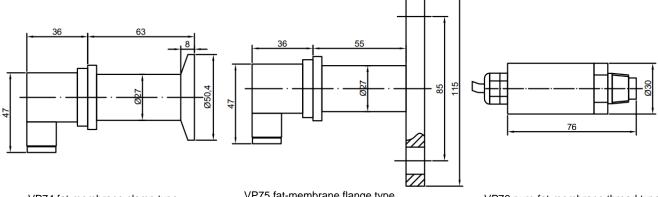
■ Mechanical Specifications(Only for reference)



VP71 Corrugated fat- membrane thread type



VP72: indent fat-membrane thread type



VP74 fat-membrane clamp type

VP75 fat-membrane flange type

VP76 pure fat-membrane thread type

VP7 Series

■ Connection

Pressure transducer

Red/2#: Excitation(Power) positive E+; Black/4#: Excitation(Power) negative E-; Green/1#: Signal output positive S+;

White/3#: Signal output negative S-; Gray/5#:Cable shield

Pressure transmitter

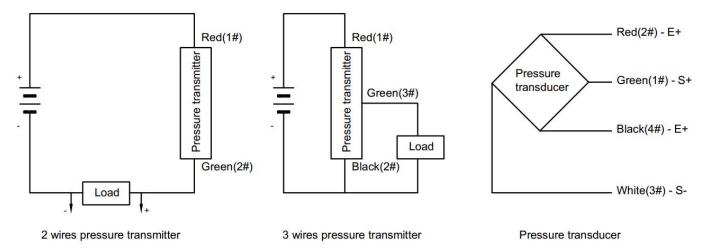
For two wires:

Red/1#: Power positive E+; Green/2#: Output current Iout

For three wires:

Red/1#: Power positive E+; Black/2#: GND; Green/3#: Output current Iout or Voltage Vout

• The wiring diagram as below:



■ Order

VP7		- 🗆	- 🗆	- 🗆	
Flat-membrane pressure series	Output	Pressure range	Mounting	Wiring	Additional function
VP71: Corrugated fat- membrane thread type VP72: indent fat-membrane thread type VP74: fat-membrane clamp type VP75:fat-membran e flange type VP76: pure fat-membrane thread type	0: mV(4 wires for Transducer) 1: 4-20mA(2 wires) 2: 4-20mA(3 wires) 3: 0-5V(3 wires) 4: 1-5V(3 wires) 5: 0.5-4.5V(3 wires) 7: discrete output 8: discrete output(Voltage) 9: custom	(Mpa, Kpa, Pa, Bar, PSI, Kg/cm2)	Standard screw thread Ex.:M20x1.5, G1/2 or Cutting sleeve dim. Ex.:CD50 or flange dim. Ex.:DN25	P1: Cable waterproof seal P2: Hirschmann connector P3: Aviation connector(Steel) P4: Mini Hirschmann connector P5:Aviation connector(Aluminium) P6: 2088 transmitter housing P7: BP2-1 armoredcable connector	A1: 1.0%FS A2: 0.5%FS A3: 0.25%FS A4: 0.1%FS V1: 24Vdc V2:12Vdc V3: 5Vdc V4: ± 12Vdc D1: LED indicator D2: LCD indicator D3: dial indicator D4: 0-100% indicator(bar code) SI: Intrinsically explosion- proof (ia II CT4) SS: Isolation explosion-proof(d II BT4) HT: Hart protocol R4: RS485 Y: Custom requirement

Example:

VP710-20Mpa-M24'1.5-P3A2 – VP7 series: Pressure rage 0-20Mpa, stainless steel housing, Ø27x15, output mV(4 wires for transducer), M24x1.5 installation, aviation connector, accuracy 0.5%FS.

Note: If the user has special requirement, please feel free to contact our company