Diferential Pressure Transmitter
Model PY103

Applications

- Refrigerating System
- Hydraulic Pressure & Pneumatic Device
- Measurement & Control
- Mechanical Equipment
- Pump & Compressor
- Pharmaceutic

Special features

- Measuring ranges : 0 ...35 bar
- Accuracy: up to 0.05 % F.S
- Full solid-state isolation
- Resistant to static pressure up to 200bar
- Standard G1/4 female thread interface
- Suitable for differential pressure measurement of liquids, gases and other media

PY 103 Pressure Transmitter

Description

PY 103 differential pressure sensor is a differential pressure sensitive element encapsulated in a stainless steel all-welded structure housing with G1/4 female threads for both positive and negative chamber pressure connections.

It can be mounted on the measuring pipe through the G1/4 female thread pressure interface or connected through the pilot tube, using the cable lead way. Widely used in industrial process control, flow measurement, medical instrumentation, aerodynamic measurement, hydraulic and pneumatic equipment and other fields.

Specifcations

Basic information	
Pressure types	
Pressure ranges	0 … 0.35 … 35 bar
Accuracy	0.05%FS , 0.1%FS , 0.2 % FS
Start-up time	2 seconds, no need to warm up
Temperature compensation	-10…60 °C
Long-term stability	±0.1% F.S/year
Temperature coefficient	0.01% /10°C (within -40~85°C, the zero point and the range combined)
Power supply	10~36VDC
Analog output	■ 4～20mA DC (Load resistance ≤750Ω) ■ 0～10 mA DC (Load resistance ≤1.5KΩ) ■ 1～5V DC (Load resistance ≥250K) ■ 0～5V DC (Load resistance ≥250K)
Overpressure	5bar or 3×FS, whichever is smaller
electrical connection	Hirschmann connector, waterproof connector optional
Thread	1/4NPT, 1/2NPT, G1/2, G1/4,Others can be customized
Material	316L
Ambient conditions	-20…70°C with air humidity ≤95%r.h.
Weight	250 g

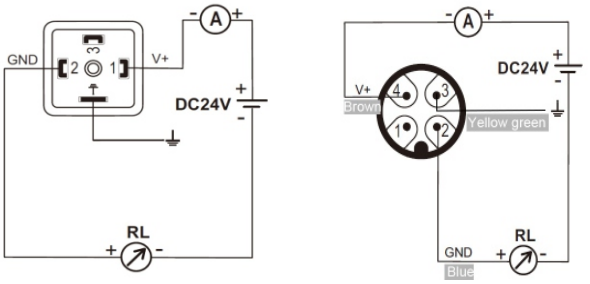
Electromagnetic Compatibility

Code	Test Item	Standard	Test Condition	Performance Class
1	Electrostatic Discharge Immunity	IEC 61000-4-2	6kV(Contact), 8kV(Air)	B
2	Radio-frequency Field	IEC 61000-4-3	10V/m;80MHz ~ 6GHz; 80%AM(1kHz)	A
3	Power Frequency Magnetic Field	IEC 61000-4-8	Stable sustained magnetic feld strength50Hz,60Hz,100A/m	A
4	Immunity of Electrical Fast Pulse Group	IEC 61000-4-4	±2kV; 5/50 Tr/Tk ns, 5kHz	A
5	Surge Immunity	IEC 61000-4-5	±2kV; 1.2/50(8/20) Tr/Th us	B
6	RF Induction Conduction Anti-harassment	IEC 61000-4-6	10V(150kHz ~ 80MHz); 80%AM(1kHz)	A

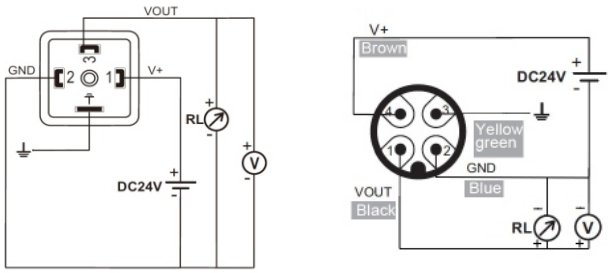
Note: Performance level A, normal performance within the limits of the technical specifications;
Performance level B, temporary reduction or loss of functionality or performance, but self-recovering, with no change in the actual operating conditions, storage and its data.

Wire

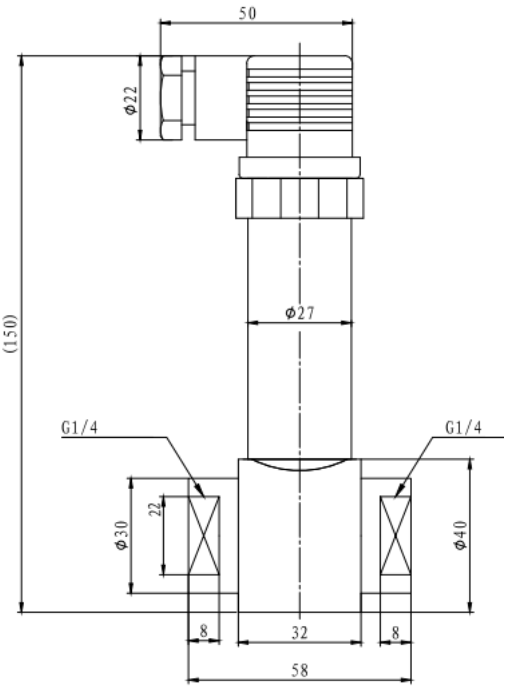
2-wire 4mA ~ 20mA Output

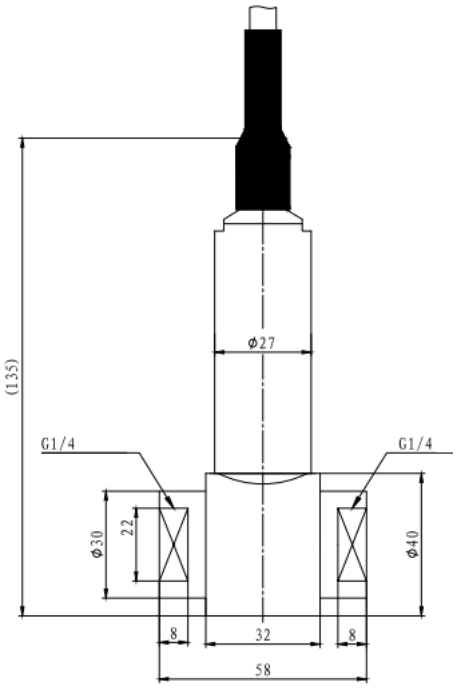


3-wire Voltage Output

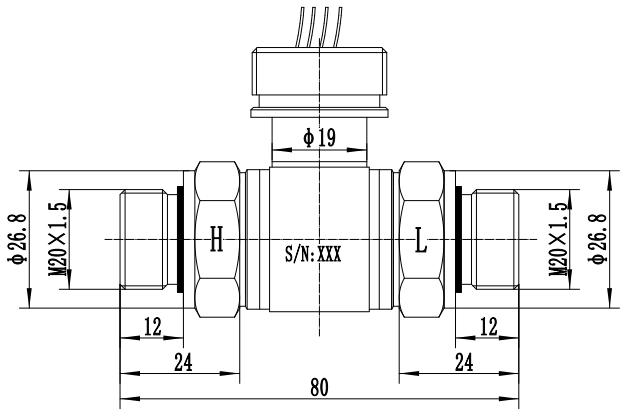


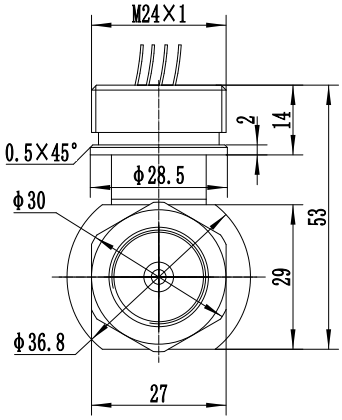
Dimension (Unit: mm)





Process connections (Unit: mm)





Measuring ranges,gauge pressure

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
GP0.16	0...0.16	0.05(0.1,0.2)	Gas/Liquid	4X
GP 0.25	0...0.25	0.05(0.1,0.2)	Gas/Liquid	4X
GP 0.4	0...0.4	0.05(0.1,0.2)	Gas/Liquid	3X
GP 0.6	0...0.6	0.05(0.1,0.2)	Gas/Liquid	3X
GP 1	0...1	0.05(0.1,0.2)	Gas/Liquid	3X
GP 1.6	0...1.6	0.05(0.1,0.2)	Gas/Liquid	3X
GP 2.5	0...2.5	0.05(0.1,0.2)	Gas/Liquid	3X
GP 4	0...4	0.05(0.1,0.2)	Gas/Liquid	3X
GP 6	0...6	0.05(0.1,0.2)	Gas/Liquid	3X
GP 10	0...10	0.05(0.1,0.2)	Gas/Liquid	3X
GP 16	0...16	0.05(0.1,0.2)	Gas/Liquid	3X
GP 25	0...25	0.05(0.1,0.2)	Gas/Liquid	3X
GP 35	0...35	0.05(0.1,0.2)	Gas/Liquid	3X

Order code				
Model	**Accuracy**	**Pressure ranges**	**Output**	**Process connection**
PY 103	A005(0.05%F.S) A010(0.1%F.S) A020(0.2%F.S)	Table of reference measuring ranges	A: 4～20mA DC B: 0～10 mA DC C: 1～5V DC D: 0～5V DC	1/4NPT 1/2NPT G1/2 M20*1.5 G1/4 Other
Example order number **PY103-A010-GP10(0...10)bar-A-1/4NPT** PY 101 with 1/4NPT, 0.1%F.S, 4-20 mA, 0...10bar				