

Pressure Transmitter

Model PY101

Applications

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

Special features

- Measuring ranges : -1 ...2500 bar
- Accuracy: up to 0.25 % F.S
- Integrated chip, wide voltage supply
- Compact structure, easy to install
- High anti-interference capability, lightning protection
- Current limit, voltage limit, reverse connection protection



PY 101 Pressure Transmitter

Description

PY 101 Pressure Transmitter is a compact, precision designed, highly integrated structure with full digital temperature compensation and calibration. Suitable for a variety of pressure monitoring and measurement in general industrial settings.

PY 101 can measure gauge, absolute and mixed pressures. Anti-interference, overload and shock resistance, small temperature drift, high stability. In the realization of high reliability at the same time, also has a very high cost-effective.

Specifications

Basic information	
Pressure types	
Pressure ranges	-0.1 ... 2,500 bar
Accuracy	0.2%FS , 0.5 % FS
Start-up time	2 seconds, no need to warm up
Long-term stability	±0.8% F.S/year
Temperature coefficient	0.3% /10°C (within -40~85°C, the zero point and the range combined)
Power supply	10~36VDC
Analog output	<ul style="list-style-type: none"> ■ 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	304
Ambient conditions	-20...70°C with air humidity ≤95%r.h.
Weight	250 g

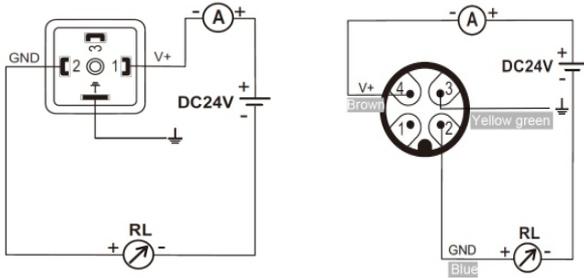
Electromagnetic Compatibility

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 field strength 50Hz,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

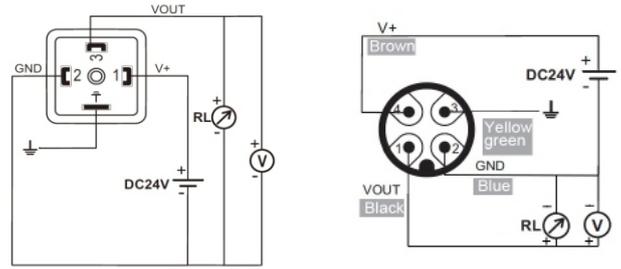
Note: Performance level A, normal performance within the limits of the technical specifications;
Performance level B, temporary reduction or loss of functionality or performance, but self-recovering, with no change in the actual operating conditions, storage and its data.

Wire

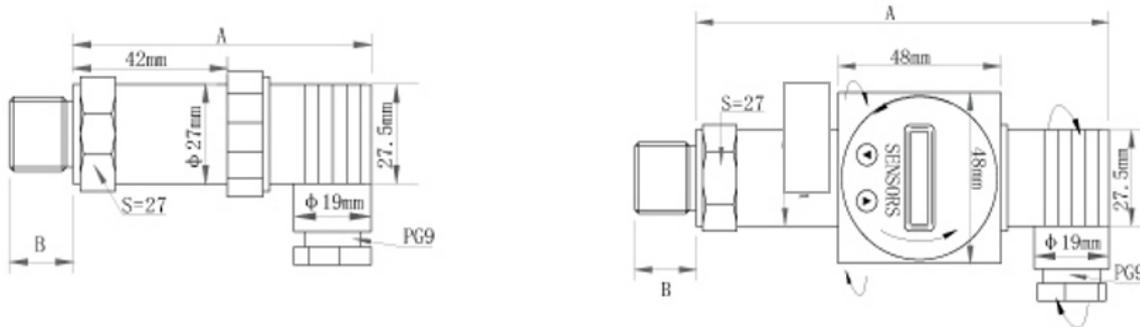
2-wire 4mA ~ 20mA Output



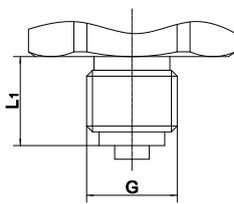
3-wire Voltage Output



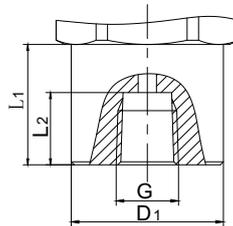
Dimension (Unit: mm)



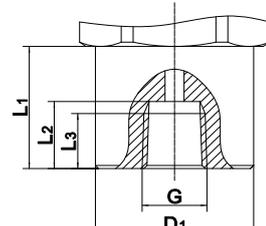
Process connections (Unit: mm)



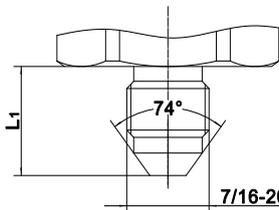
G	L ₁	Standard
G1/4 B	13	EN 837
G3/8 B	16	
G1/2 B	20	
M20×1.5	20	



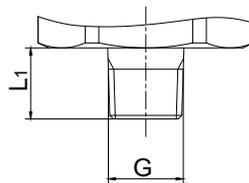
G	D ₁	L ₁	L ₂	Standard
NPT1/8	Φ25	20	12	ANSI/ASME B1.20.1
NPT1/4	Φ25	20	14	
NPT1/2	Φ25	25	19	



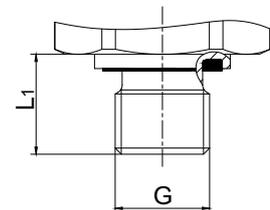
G	D ₁	L ₁	L ₂	L ₃	Standard
G1/8	Φ25	20	10	7.5	EN 837
G1/4	Φ25	20	13	10	



G	L ₁	Standard
7/16-20 UNF-74° cone	14	SAE J514 E



G	L ₁	Standard
NPT1/8	10	ANSI/ASME B1.20.1
NPT1/4	13	
NPT1/2	19	
R1/4	13	ISO 7
R3/8	15	
R1/2	19	



G	L ₁	Standard
G1/4 A	14	ISO 1179-2
G3/8 A	14.5	
G1/2 A	17	
M12×1.5	14	ISO 9974-2
M14×1.5	14	
M20×1.5	16.5	

Measuring ranges, gauge pressure

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
GP0.16	0...0.16	0.5	Gas/Liquid	4X
GP 0.25	0...0.25	0.5	Gas/Liquid	4X
GP 0.4	0...0.4	0.5	Gas/Liquid	3X
GP 0.6	0...0.6	0.5	Gas/Liquid	3X
GP 1	0...1	0.25(0.5)	Gas/Liquid	3X
GP 1.6	0...1.6	0.25(0.5)	Gas/Liquid	3X
GP 2.5	0...2.5	0.25(0.5)	Gas/Liquid	3X
GP 4	0...4	0.25(0.5)	Gas/Liquid	3X
GP 6	0...6	0.25(0.5)	Gas/Liquid	3X
GP 10	0...10	0.25(0.5)	Gas/Liquid	3X
GP 16	0...16	0.25(0.5)	Gas/Liquid	3X
GP 25	0...25	0.25(0.5)	Gas/Liquid	3X
GP 40	0...40	0.25(0.5)	Gas/Liquid	3X
GP 60	0...60	0.25(0.5)	Gas/Liquid	3X
GP 100	0...100	0.25(0.5)	Gas/Liquid	3X
GP 160	0...160	0.25(0.5)	Gas/Liquid	3X
GP 250	0...250	0.25(0.5)	Gas/Liquid	3X
GP 400	0...400	0.25(0.5)	Gas/Liquid	3X
GP 600	0...600	0.25(0.5)	Gas/Liquid	3X
GP 1000	0...1000	0.25(0.5)	Gas/Liquid	3X
GP 1600	0...1600	0.25(0.5)	Gas/Liquid	2X
GP 2000	0...2000	0.25(0.5)	Gas/Liquid	1.5X
GP 2500	0...2500	0.25(0.5)	Gas/Liquid	1.5X

Measuring ranges, absolute pressure

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
AP 0.25	0...0.25	0.25(0.5)	Gas	4X
AP 0.4	0...0.4	0.25(0.5)	Gas	3X
AP 0.6	0...0.6	0.25(0.5)	Gas	3X
AP 1	0...1	0.25(0.5)	Gas	3X
AP 1.6	0...1.6	0.25(0.5)	Gas	3X
AP 2.5	0...2.5	0.25(0.5)	Gas	3X
AP 4	0...4	0.25(0.5)	Gas	3X
AP 6	0...6	0.25(0.5)	Gas	3X
AP 10	0...10	0.25(0.5)	Gas	3X

Measuring ranges, vacuum and +/- measuring ranges

Overview pressure ranges				
Type	pressure ranges(bar)	Accuracy (± of full scale value)	media	Burst Pressure
VP -0.25	-0.25...0.25	0.25(0.5)	Gas/Liquid	3X
VP -0.4	-0.4...0.4	0.25(0.5)	Gas/Liquid	3X
VP -0.6	-0.6...0.6	0.25(0.5)	Gas/Liquid	3X
VP 0	-1...0	0.25(0.5)	Gas/Liquid	3X
VP0.6	-1...0.6	0.25(0.5)	Gas/Liquid	3X
VP 1	-1...1	0.25(0.5)	Gas/Liquid	3X
VP 1.6	-1...1.6	0.25(0.5)	Gas/Liquid	3X
VP 2.5	-1...2.5	0.25(0.5)	Gas/Liquid	3X
VP 4	-1...4	0.25(0.5)	Gas/Liquid	3X
VP 6	-1...6	0.25(0.5)	Gas/Liquid	3X
VP 10	-1...10	0.25(0.5)	Gas/Liquid	3X

Measuring ranges,differential pressure

Order code				
Model	Accuracy	Pressure ranges	Output	Process connection
PY 101	A025(0.25%F.S) A050(0.5%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 PY101-A050-GP10(0...10)bar-A-1/4NPT PY 101 with 1/4NPT, 0.5%F.S, 4-20 mA, 0...10bar				