Micro Differential Pressure Transmitter
Model PY301

Applications

- Dust collector/ Boiler negative pressure
- Velocity measurement/ Leak detection
- Clean room/ HVAC
- Power plant air pressure/ Damper control

Special features

- Measuring ranges : -2.5 ...0... 100 mbar
- Accuracy: up to 0.1 % F.S
- Range migration function, range migration ratio of 10:1
- With EEPROM non-volatile memory is not afraid of power outages loss of data
- Eliminate the influence of the sensor installation position

PY 301 Pressure Transmitter

Description

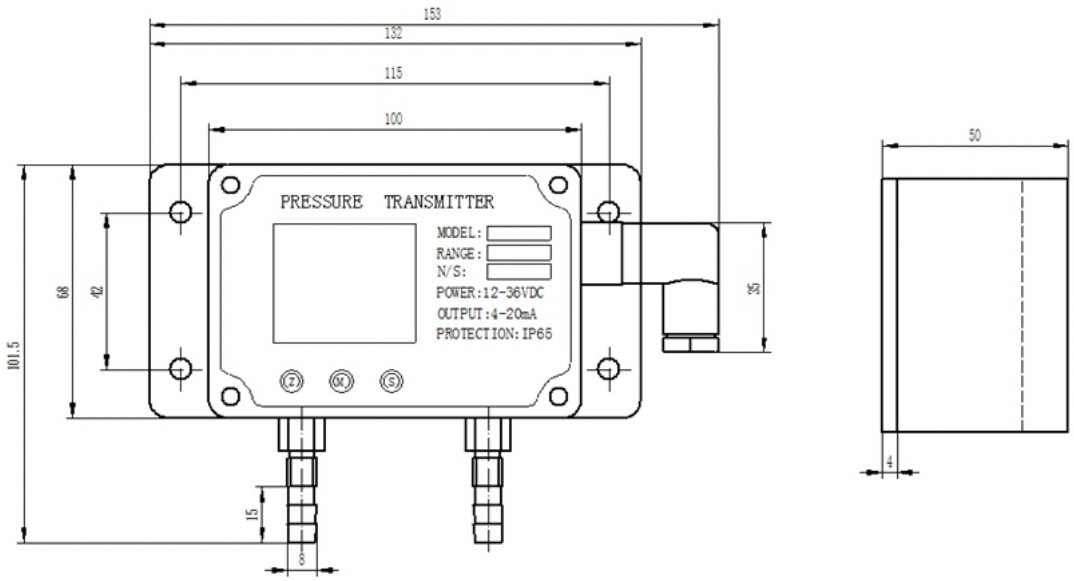
P Y301 Intelligent Micro Differential Pressure Transmitter is characterized by high accuracy, high stability and strong anti-interference ability. Adopting temperature compensation, the measurement accuracy in the range of 0°C～50°C is not affected by temperature. It is mainly used for air micro differential pressure measurement of boiler negative pressure, HVAC, air velocity measurement, leakage detection, clean room, power plant air pressure, dust collector, and damper control.

- Damping adjustable, less affected by dynamic pressure
- Full-point compensation correction function
- Output current correction
- Display of the main variable unit can be selected
- Output current open-square, the direction of the choice of the function
- Self-diagnostic and fault output alarm function

Specifcations

Basic information	
Pressure types	
Pressure ranges	Measurement method and range depend on the applicability of the sensor. Do not exceed the upper and lower measurement limits of the sensor when the range is migrated. Minimum:0~60Pa Maximum:0~2bar
Accuracy	0.1%FS , 0.2 % FS , 0.5 % FS
Temperature compensation	-10...50 °C
Response Time	0.1~1.6 seconds (depending on range and range ratio) Additional Adjustable Time Constant:0~32 seconds
Long-term stability	0.1% F.S/year, depending on the range stability index will be different
Temperature coefficient	±0.02% F.S/°C (in -40~85°C, zero and range combined)
Power supply	12~45VDC
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
Parameter setting	Panel touch key digital setting, parameter setting value is permanently saved after power failure, parameter setting value password locking
Units	
Pressure	bar ,mbar, Pa, kPa, MPa, PSI, kg/cm², mmH2O, mmHg, inHg
Display	
Type	White backlight, 5-digit LCD digital display, adjustable decimal digits
Functions	Pressure Measurement, Overpressure Indication 120 % of Full Scale Pressure (F.S)
electrical connection	Hirschmann connector, waterproof connector optional
Process connection	
Thread	Ø8 Pagoda Fitting
Material	Brass
Housing	
Dimensions	Ø 153 mm, D=50 mm H=101mm with protection cap
protective cover	Gray Silicone Protective Case
Ambient conditions	-20...70°C with air humidity ≤95%r.h.
Weight	250 g

Overall dimensions(mm)



Measuring ranges,differential pressure

Overview pressure ranges				
Type	pressure ranges(mbar)	Accuracy (± of full scale value)	media	Burst Pressure
DP2.5	-2.5...0...2.5	0.1(0.2,0.5,1)	Gas	5X
DP 10	-10...0...10	0.1(0.2,0.5,1)	Gas	4X
DP 20	-20...0...25	0.1(0.2,0.5,1)	Gas	3X
DP 30	-30...0...30	0.1(0.2,0.5,1)	Gas	4X
DP 50	-50...0...50	0.1(0.2,0.5,1)	Gas	4X
DP 70	-70...0...70	0.1(0.2,0.5,1)	Gas	4X
DP 100	-100...0...100	0.1(0.2,0.5,1)	Gas	4X

Order code					
model	**Accuracy**	**Pressure ranges**	**Unit**	**Output**	**Process connection**
PY 301	A010(0.1%F.S) A020(0.2%F.S) A050(0.5%F.S) A100(1%F.S)	Table of reference measuring ranges	bar psi inH2O kg/cm² kPa mbar mmHg mmH2O inHg Pa	A: 4～20mA DC B: 0～10 mA DC C: 1～5V DC D: 0～5V DC	Ø8 Pagoda Fitting Other
Example order number **PY301-A020-DP10(-10...10)mbar-A-N- Ø8 Pagoda Fitting** Py301 with Ø8 Pagoda Fitting, 0.2%F.S, 4-20 mA, -10...10mbar					