YW-150 Resistance Type Differential Pressure Transmitter

● Product Overview:

The YW-150 piezoresistive differential pressure transmitter uses a silicon piezoresistive pressure core as the signal measurement element. The amplification circuit is located inside the stainless steel shell. The differential pressure to be measured acts on both ends of the transmitter. By taking advantage of the piezoresistive effect of semiconductor silicon materials, the conversion of differential pressure to electrical signals is achieved. The product has undergone computer automatic testing and has undergone temperature compensation of zero point and sensitivity over a wide temperature range through the laser trimming process. It complies with the relevant national standards and specifications for pressure sensors and is produced in accordance with the "Enterprise Standard for Pressure Sensors" of our company and the ISO9001:2015 quality management system specifications.

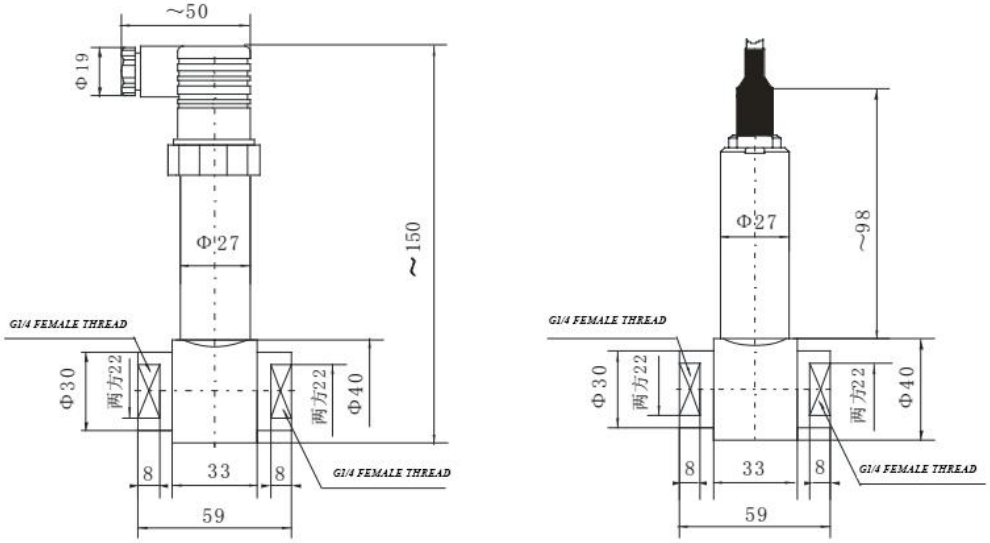
● Product Features:

The stainless steel sealed structure design, with a protection level of IP65;
Impact-resistant, vibration-resistant, corrosion-resistant;
After temperature compensation and aging screening, the performance is stable and reliable;
The parts in contact with the medium are all made of stainless steel, and the interface forms are diverse;

● Application Fields:

Differential pressure measurement of non-corrosive gases and liquids for 316L stainless steel.
Differential pressure, liquid level, flow measurement and control, etc. in fields such as aviation, aerospace, automobiles, medical equipment, etc.
The industries of petroleum, chemical engineering, etc.
It is applied to the measurement of air pressure and flow velocity in industrial processes, and in measurement systems such as dry gas.

● Shape Structure: (Unit: mm)



● Technical Parameters:

Measuring range	0~7kPa▪ ▪ ▪2MPa	
Overload pressure	Twice the FS	
Interface and shell	Stainless steel	
Sealing ring	Fluororubber	
Output signal	4 - 20 mA DC, 0/1 - 5/10 V DC	
Protection level	IP65	
Installation thread	Multiple specifications are available for selection	
Power supply	8~30V DC (Note: 0/1~10V output power supply range: 12~30V DC)	
Ambient temperatur	- 10℃ to 80℃	
Reference relative humidity	≤80%	
Reference atmospheric pressure	86KPa～106KPa	
Accuracy Not e ①	±0.5% (maximum)	
Long-term stability	±0. 1% FS/year (typical)	±0.2% FS/year (maximum)
Note: The precision includes nonlinear, repeatability, pressure hysteresis and other three indexes, and according to therelevant national standards, the 0.01%FS precision pressure detection equipment was calibrated.		

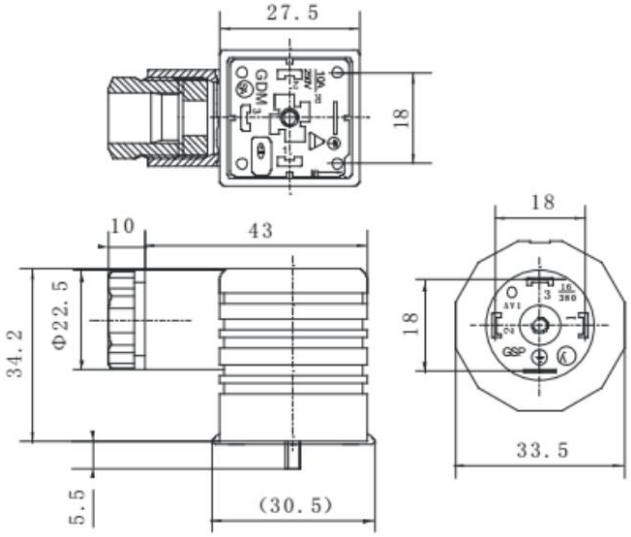
● Electrical connection

Connection definition of the connector

Pin	2- line	3- line
1	Power positive (+V)	Power positive (+V)
2	Power negative (0V/+OUT)	Power negative (0V/+OUT)
3	Empty	Output positive (+OUT)

Cable connection definition

Wire color	2- line	3- line
Black	Power positive (+V)	Power positive (+V)
Red	Power negative (0V/+OUT)	Output positive (+OUT)
White	Empty	Public terminal (GND)



● Model Selection Guide

YW-150	Model: Resistance pressure differential transmitter			
	Measuring range		Measurement range	
	[0~X]kPa or MPa X:Actual measurement range		0～7kPa▪ ▪ ▪2MPa	
		Code	Output signal	
		E	4 - 20 mA DC	
		F	1 - 5 V DC	
		J	0 - 5V DC	
		W	1 to 10 volts direct current	
		V	0 - 10V DC	
			Code	Additional functions
			B1	Output of connector connection
			B2	Cable connection output line length: 1.5m
			C2	G1/4 external thread pressure interface
			C5	M20×1.5external thread pressure connection,face seal
YW-150-［0～7］KPa -E- B1C2				Complete specification and model

● Model Selection Prompt:

1.To ensure the safe and reliable operation of the transmitter, it is recommended to install a three-way valve group between the measured point and the transmitter to ensure that the measured medium is applied slowly and evenly to the positive and negative pressure chambers of the differential pressure transmitter.

2.The grounding of the shielding wire of the cable requires judgment by the engineering technicians of the customer based on the actual application environment. If there is a reliable ground wire, it should be connected to the shielding. If there is no good grounding network, it should not be connected to the shielding to prevent the introduction of interference sources and cause circuit damage.

3.During installation, it is recommended to keep the pressure interfaces at both ends horizontal to minimize the impact of the installation position on the product.

4.Special installations, special structures or electrical performances, etc. (Please contact us: jayna@xinyiyb.com)