

ANP340 Adaptive Pressure Transmitter



Description

ANP340 Adaptive Pressure Transmitter is a high-precision and high stability pressure measurement product independently designed and produced by our company. It uses a silicon piezoresistive sensor with a stainless steel isolation diaphragm, combined with a dedicated digital circuit. With signal amplification, linear correction, anti-interference, surge protection, and other signal processing, it is an integrated product that outputs standard industrial signals.

Specifications

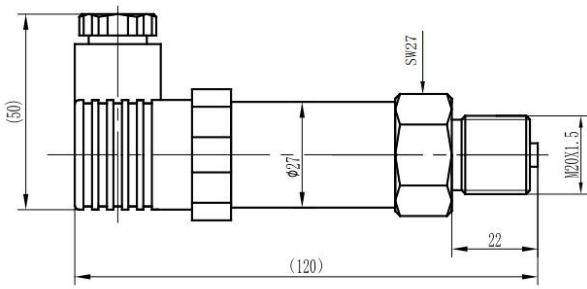
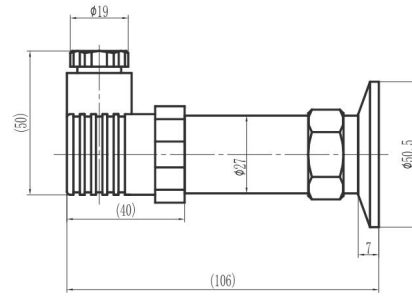
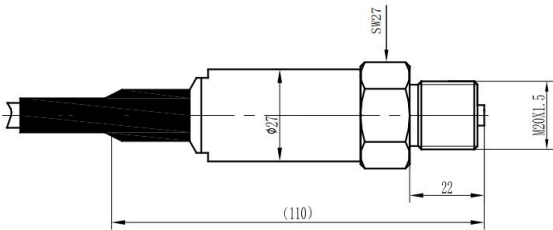
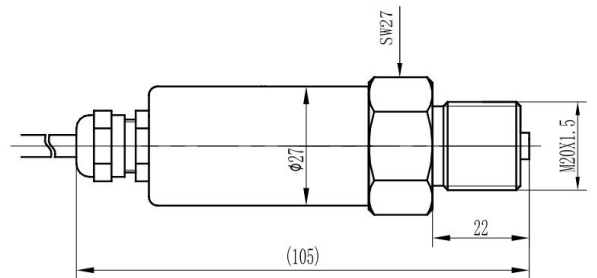
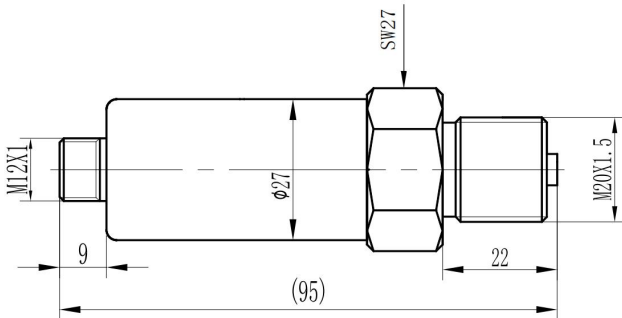
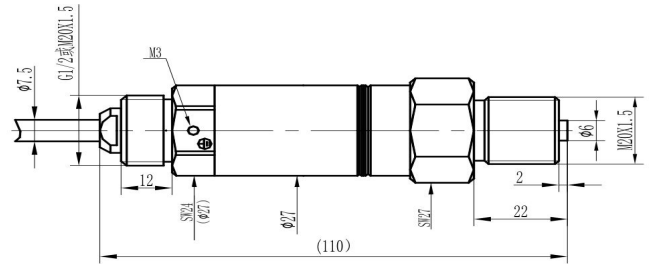
Range	-100kPa...0kPa ~ 10kPa...3.5MPa (Gauge Pressure)	
	0kPa ~ 70kPa...35MPa (Absolute Pressure)	
	0kPa ~ 3.5MPa...100MPa (Sealed Gauge Pressure)	
Overload	2times of URL pressure or 110MPa (Take Min.)	
Pressure Type	Gauge Pressure, Absolute Pressure, Sealed Gauge pressure	
Output Signal	2-wire 4 ~ 20mA DC; power supply 10~28VDC	
	3-wire 0 ~ 5VDC; power supply 10~28VDC	
	3-wire 1 ~ 5VDC; power supply 10~28VDC	
	3-wire 0.5 ~ 4.5VDC; power supply 10~28VDC or 5±0.1VDC	
Accuracy	±0.25% FS ±0.5% FS (Typical)	
	±0.2%FS/ year	
Long-term Stability	±0.2%FS/ year	
Zero Thermal Drift	< 100KPa ±0.05%FS/°C	
	≥ 100KPa ±0.03%FS/°C	
Span Thermal Drift	< 100KPa ±0.05%FS/°C	
	≥ 100KPa ±0.03%FS/°C	
Operating Temp.	-30°C~ 80°C (plug) -10°C~ 70°C (cable)	
	-40°C~ 60°C (Intrinsically safe explosion-proof)	
	-20°C~ 60°C (Flameproof type)	
Storage Temp.	-40°C~ 120°C (plug) -20°C~ 85°C (cable)	
Load Resistance(Ω)	current output: ≤ (supply voltage -10V) /0.02A (Ω)	
	≥ 10KΩ	
Insulation Resistance	100MΩ@250VDC	
Protection Class	IP65 (B1、B3、B4)	IP68 (B2)
Explosion proof Level	Exia IIC T6 Ga Exdb IIC T6 Gb	
Electrical Connection	4-core plug or cable (Typically 1m, or customized)	
Sealing Ring	FKM	
Medium	Compatible with FKM	

Features

1. Short-circuit protection, reverse polarity protection
2. Anti interference and surge protection
3. Intrinsically safe products that meet the requirements of Exia II CT6Ga in accordance with the national GB3836.4 GB3836.1 standard
4. Explosion proof product, meeting the requirements of Exdb II CT6Gb in accordance with national GB3836.2-2021 and GB3836.1-2021 standards
5. Multiple output signals of voltage and current
6. Stable and reliable performance
316L stainless steel isolation diaphragm, integrated design
7. Can measure gauge pressure, absolute pressure, and sealing reference pressure

Applications

1. Petrochemical industry
2. Measurement and Control technology
3. Hydraulic and pneumatic fields

Size (mm)

B1 4-core plug /IP65

B1 4-core plug /IP65 (P1 Flat Film)

B2 cable /IP68

B3 cable /IP65

B4 M12x1 4-core plug /IP65

B2 cable /IP66(Flameproof type)
Electrical Connections

B1 plug	2-wire	3-wire	
	1	V+	V+
	2	0V/OUT+	GND
	3	-	OUT+

B1 plug	2-wire	3-wire	
	1/brown	V+	V+
	2/white	-	GND
	3/blue	0V/OUT+	OUT+

B2/B3 cable	2-wire	3-wire
red	V+	V+
black	0V/OUT+	GND
white	-	OUT+

Selection Guide

Specification	Code	Description			Note
Model No.	ANP340	Adaptive Pressure Transmitter			
Range	[0~X kPa/MPa]	X: Actual Range Range : -100kPa...0kPa ~ 10kPa...100MPa			Negative pressure is selected based on actual range
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Power Supply	V1	24VDC			
	V2	12VDC			
	V3	5±0.1V DC			Output types only support E5 and E8
	V4	3.3±0.1V DC			Output types only support E8
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Output Signal	E1	4 ~ 20mADC			
	E2	1 ~ 5VDC			
	E3	0 ~ 5VDC			
	E5	0.5 ~ 4.5VDC			
	E8	0.5 ~ 2.5VDC			
	-				
Pressure Connection	C1	M20×1.5 External thread, end face sealing			
	C2	M20×1.5 External thread, water line sealing			
	C3	G1/2 External thread, end face sealing			
	C4	G1/4 External thread, end face sealing			
	P1	Clamp Type, Φ50.5mm flat Film			range≤ 10MPa, explosion-proof unavailable
	P2	G1/2 External thread, flat film			range≤ 40MPa, explosion-proof unavailable
	P3	M20×1.5 External thread, flat film			range≤ 40MPa, explosion-proof unavailable
	-				
Wiring Method	B1	Hesmann four core plug-in			
	B2	Cable outlet			Φ7.5mm PE cable length 1m customizable
	B3	Cable outlet			Φ5mm PVC cable length 1m customizable
	B4	M12×1 four core plug-in			Φ 5mm PVC cable length 2m, straight plug, customizable
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Material		isolation Diaphragm	Interface	Housing	
	M1	SS 316L	SS 304	SS 304	SS: Stainless Steel
	M2	SS 316L	SS 316L	SS 304	
	M3	SS 316L	SS316L	SS 316L	
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Pressure Type	G	Gauge Pressure			-100kPa...0kPa ~ 10kPa...3.5MPa
	A	Absolute Pressure			0kPa ~ 70kPa...35MPa
	S	Sealed Gauge Pressure			0kPa ~ 3.5MPa...100MPa
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Additional Options	D2	4-digit LED digital display			Power supply 15~28VDC
	D3	5-digit LCD digital display			Power supply 15~28VDC
	Ei	Intrinsically safe explosion-proof type			Output type E1 only
	Ed	Flameproof type			B2 cable only, Outlet thread M20 × 1.5 and G1/2, default M20 × 1.5, G1/2 to be noted

Note:

- For special needs, please contact our company;
- For 5V DC/3.3V DC power supply products, if the cable is connected to the outgoing line, the cable length must be less than 20m;
- D2 and D3 meter heads only support output type E1, optional for non explosion-proof products;
- Flameproof product outlet thread M20 × 1.5 and G1/2, default to M20 × 1.5, G1/2 to be noted.

Selection Example: ANP340[0 ~ 1MPa]-V1-E1-C1-B1-M1-G