

AP25 Ultra-wide High and Low Temperature Pressure Transmitter

Description:

AP25 series high temperature pressure transmitters are all stainless steel structures, and imported high temperature resistant pressure sensors are used as signal measurement sensitive components. The pressure of the measured medium is transmitted to the sensor through the heat dissipation structure on the transmitter, and the sensor probe can be at -65°C below zero. And long-term reliable work at high temperature of 400°C , this product is widely used in liquid and vapor pressure measurement and control industries in high temperature fields.

Features:

- ◎ Fluid measurement in high temperature field
- ◎ Steam pressure measurement and control
- ◎ Boiler pressure control
- ◎ Thermal unit

Applications:

- ◎ Heat dissipation structure design, can withstand medium and high temperature
- ◎ A variety of pressure interface options, cost-effective
- ◎ High comprehensive precision and wide operating temperature range
- ◎ Optional integrated digital display head



Performance Parameter

Measuring Range	0~100KPa...100MPa	
Overload Capability	2 times full-scale pressure (max.150MPa),	
Burst Pressure	4xFS($\leq 150\text{MPa}$)	
Durability	$>1 \times 10^7$ cycle (P:10~90%FS)	
Pressure Type	Gauge / Absolute	
Measuring medium	Gas or liquid compatible with Titanium/silicon	
Response time	$\leq 5\text{ms}$	
Resolution	0.01%FS	
Accuracy (linear,hysteresis, repeatability)	Typical: $\pm 0.5\%FS$	Maximum: $\pm 1\%FS$
Nonlinear	Typical: $\pm 0.25\%FS$	Maximum: $\pm 0.5\%FS$
Hysteresis + Repeatability	Typical: $\pm 0.15\%FS$	Maximum: $\pm 0.2\%FS$
Long-term stability	Typical: $\pm 0.15\%FS/\text{year}$	Maximum: $\pm 0.2\%FS/\text{year}$
Zero temperature drift	Typical: $\pm 0.02\%FS/^{\circ}\text{C}$	Maximum: $\pm 0.03\%FS/^{\circ}\text{C}$
Sensitivity temperature drift	Typical: $\pm 0.02\%FS/^{\circ}\text{C}$	Maximum: $\pm 0.03\%FS/^{\circ}\text{C}$

Environmental Conditions

Medium Temperature	$-65 \sim 400^{\circ}\text{C}$
Ambient Temperature	$-40 \sim 80^{\circ}\text{C}$
Compensation Temperature	$-10 \sim 70^{\circ}\text{C}$
Vibration resistance	$\pm 20\text{g}$ IEC 60068-2-6
Impact resistance	1000g/1ms IEC 60068-2-27
EMC	EN61000-6
Shell Protection	Plug type(IP65); Cable type(IP67) Compliance IEC 60529 standard
Certification	CE

Electrical Specifications

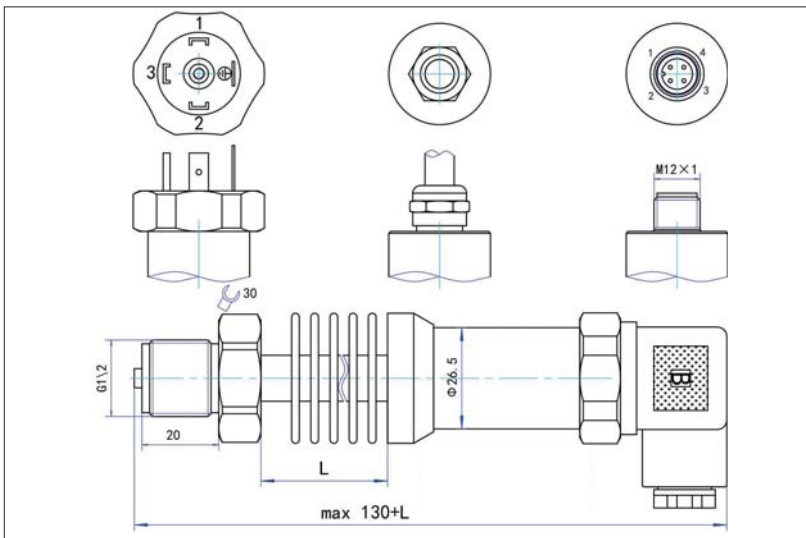
Code	Standard signal (with short circuit protection)	Supply voltage with polarity protection	Power supply -Current	Load(R)	Output Impedence
A1	4~20mA	DC 9~30V	Max.25mA	$R \leq (U-9)/0.02\Omega$	
V1	1~5V DC	DC 9~30V	8mA	$R \geq 50\text{k}\Omega$	$< 2\text{k}\Omega$
V2	0~5 V DC	DC 9~30V	8mA	$R \geq 50\text{k}\Omega$	$< 2\text{k}\Omega$
V3	0.5~4.5V DC	DC 9~30V	8mA	$R \geq 50\text{k}\Omega$	$< 2\text{k}\Omega$
V4	0.5~4.5V DC	DC 5 \pm 0.25V	8mA	$R \geq 50\text{k}\Omega$	$< 2\text{k}\Omega$

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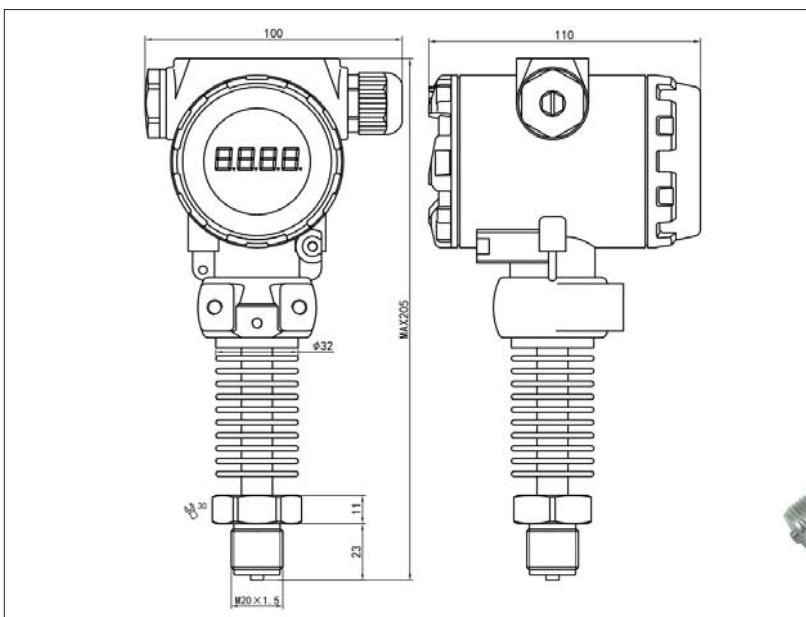
Material

Interface and housing	Stainless Steel 304L, customizable
Sensor Diaphragm	Titanium/Silicon

Size and Outline



Heatsink length (only for reference) mm				
Temperature	150°C	200°C	300°C	400°C
L	24	33	58	83



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Electrical Connections

Description	PG7 Grand lock head outlet 1m Shielded cable	A type HSM plug	M12x1 Aviation plug Straight out or Corner out 1m unshielded cable
Code	W1	W2	W3 / W4
Diagram			
Protection Grade	IP67	IP65	IP65
Ambient Temperature	-40 ~ 85°C	-40 ~ 85°C	-40 ~ 85°C
Current output wiring definition	RED:V+ / BLUE:OUT+	1#:V+ / 2#:OUT+	BROWN (1#) :V+ / BLUE (3#) :OUT+
Voltage output wiring definition	RED:V+ / BLUE:OUT+ YELLOW:GND	1#:V+ / 2#:OUT+ 3#:GND	BROWN (1#) :V+ / BLUE (3#) :OUT+ BLACK (4#) :GND
Current output wiring diagram			
Voltage output wiring diagram			

Ordering Information

AP25	G	025B	A1	F1	W2
Model	Pressure type	Pressure Range	Output	Thread size	Electrical connection
AP25	G=Gauge A=Absolute	001B=1bar GVA 002B=2bar GVA 004B=4bar GVA 010B=10bar GVA 016B=16bar GVA 025B=25bar GVA 035B=35bar GVA 040B=40bar GVA 060B=60bar 100B=100bar 250B=250bar 400B=400bar 600B=600bar 01kB=1000bar	A1=4~20mA V1=1~5V V2=0~5V V3=0.5~4.5V (8~30VDC supply) V4=0.5~4.5V (5VDC supply) V5=RS485 V6= Customized	F1=M20x1.5 male F2= G ¼ male F3= ¼ NPT male F0= Customized	W1= Straight Out 1m cable W2=A type HSM plug W3=M12 corner out 1m W4=M12 Straight Out 1m W0= Customized

Model example: **AP25G025BA1F1W3**

Range: 0~25bar,Gauge; Output: 4~20mA; Accuracy: ±0.5%FS typical; Supply: 9~30V DC
Pressure Connection: M12x1 corner out 1m

Remarks:

It can be customized if the order quantity exceeds a certain amount. Please contact the sales engineers for details

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