

GENERAL

ALIAPT APT8000 series is a digital pressure transmitter designed for industrial pressure measurement applications. The APT8000 offer configurations for gauge pressure, absolute pressure and vacuum including integrated solutions for industrial applications.

FEATURES

- Updating time of output current in 90 ms
- Improved performance, increased accuracy and greater stability
- Two Years stability of 0.15%
- 0.075% accuracy
- Parameter setting by keypad directly
- 4-20 mA output plus direct digital HART communication
- Automatic zero calibration by press-button
- Explosion proof and weather proof housing

STANDARD SPECIFICATION

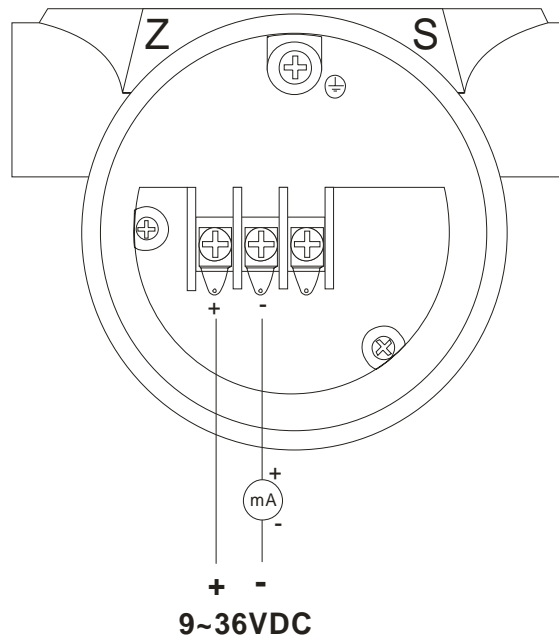
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|-----------------------|---|-------------------------|--|
| ● Process Fluid | : Liquid, Gas or Vapor | ● Display | : 5 Digits programmable & 0-100% bargraph |
| ● Application | : Absolute Pressure, Gauge Pressure, Vacuum | ● Display Unit | : 22 standard different engineering units |
| ● Measuring Range | : 0 - 40.15 InH ₂ O ~ 0 - 120.4 InH ₂ O (Minimum) | ● Keyboard | : 5 Digits programmable for special unit |
| | : 0 - 4641 psi ~ 0 - 10152 psi (Maximum) | ● Current Output | : 3 internal keys for programming and output setting |
| ● Turndown Ratio | : 1 : 100 | ● Load | : 4 - 20 mA 2 wires with Hart Signal |
| ● Accuracy | : +/- 0.075% of span | | : Load : Rohm=(Vdc-9)*50 |
| ● Stability | : +/-0.15% of URL for 2 years | ● Power Supply | : 9 ~ 36 VDC |
| ● Working Temperature | : -13 to +203 °F (-25 to +95 °C) | ● Digital Communication | : Hart Protocol |
| ● Max. Pressure | : 10152 psi | ● Damping | : 0 - 32 Seconds |
| ● Material | | ● Response Time | : 90 mS |
| Connection | : SUS 304 / SUS 316 | ● Mounting | : Direct installation or bracket on 2" Pipe |
| Diaphragm | : SUS 316L / Tantalum | ● Humidity Limit | : 0 to 100% Relative Humidity |
| Housing | : Low copper cast aluminum alloy with polyurethane, light blue paint | ● Turn on Time | : 2 Seconds with minimum damping |
| Name / Tag Plate | : Stainless Steel 304 / Stainless Steel 316 | ● Zero Calibration | : Automatic zero calibration by push-button |
| ● Cable Entry | : M20 Conduit Threads / 1/2" NPT (Female) | ● Ambient Temperature | : -25 to +85 °C |
| ● Process connection | : 1/2" NPT, 1/2" BSP | ● Dimensions | : 4.0" (W) * 6.3" (H) * 5.1" (D) |
| ● Temperature Effect | : +/-0.18% of span per 68 °F | | : 102 mm (W) * 160 mm (H) * 130 mm (I) |
| ● Over Pressure Limit | : 120% of Full Scale | ● Weight | : 2.8 lbs |
| ● Vibration Effect | : +/-0.05% of URL per g to 200 Hz in any axis | ● Protection Class | : IP67 (Standard) |
| ● EMI/RFI Effect | : Follow SAMA PMC 33.1 from 20 to 1000 MHz and for field strengths up to 30 V/m | | : Intrinsically Safe EEx ia IIC T5 (Standard) |
| | | | : Explosion proof Ex D IIB T5 |



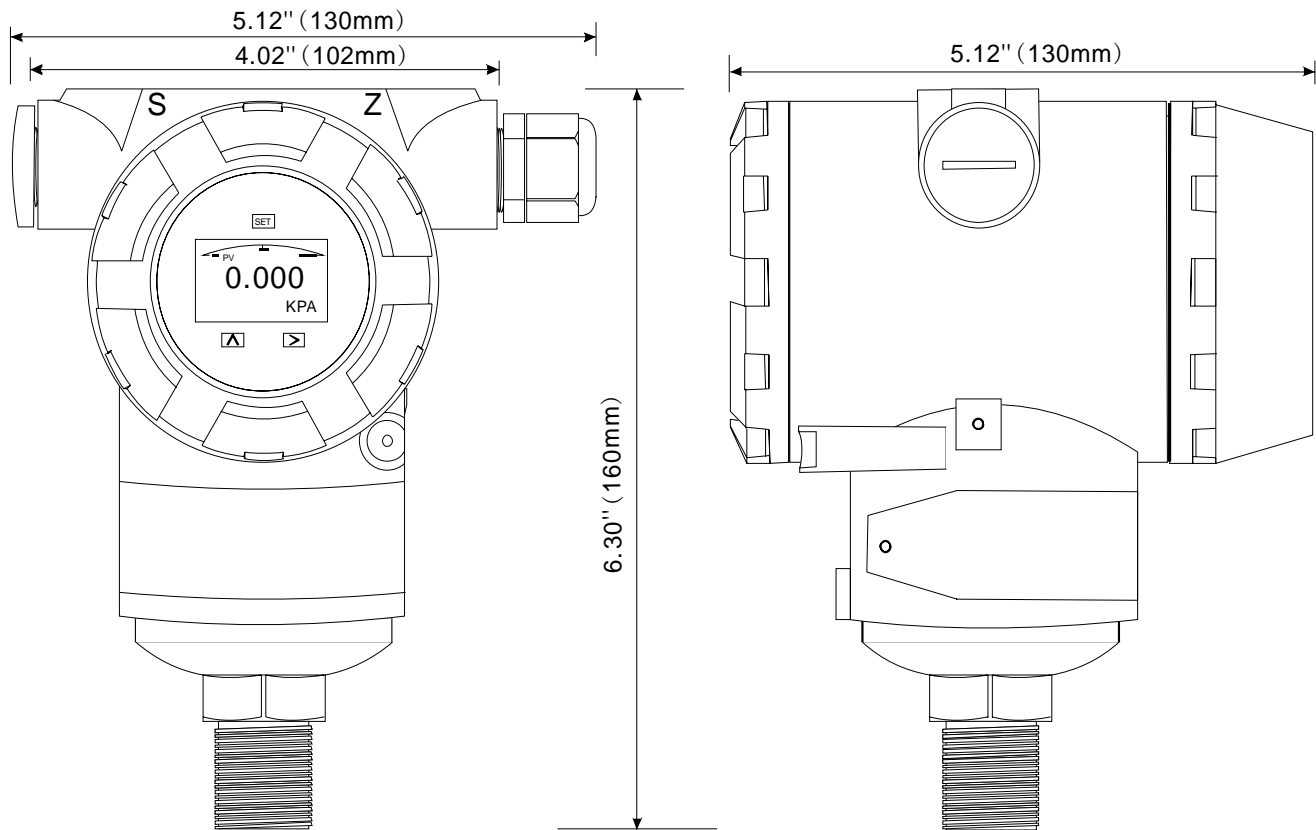
MEASURING RANGE

Range Code	Pressure Range				Transmitter	
	Low Range	High Range	Low Range	High Range	Gauge Pressure	Absolute Pressure
2	0 - 10 Kpa	0 - 30 Kpa	0 - 75.0 mmHg	0 - 225.0 mmHg	◆	◆
	0 - 100 mbar	0 - 300 mbar	0 - 40.15 InH2O	0 - 120.4 InH2O		
	0 - 1.450 psi	0 - 4.351 psi	0 - 0.102 Kg/cm2	0 - 0.306 Kg/cm2		
3	0 - 30Kpa	0 - 100 Kpa	0 - 225.0 mmHg	0 - 750.0 mmHg	◆	◆
	0 - 300 mbar	0 - 1000 mbar	0 - 120.4 InH2O	0 - 401.5 InH2O		
	0 - 4.351 psi	0 - 14.50 psi	0 - 0.306 Kg/cm2	0 - 1.020 Kg/cm2		
4	0 - 100 Kpa	0 - 200 Kpa	0 - 29.5 InHg	0 - 59.0 InHg	◆	◆
	0 - 1000 mbar	0 - 2000 mbar	0 - 401.5 InH2O	0 - 802.9 InH2O		
	0 - 14.50 psi	0 - 29 psi	0 - 1.020 Kg/cm2	0 - 2.039 Kg/cm2		
5	0 - 200 Kpa	0 - 700 Kpa	0 - 59.0 InHg	0 - 206.7 InHg	◆	◆
	0 - 2.0 Bar	0 - 7.0 Bar	0 - 802.9 InH2O	0 - 2810 InH2O		
	0 - 29psi	0 - 101.5 psi	0 - 2.039 Kg/cm2	0 - 7.138 Kg/cm2		
6	0 - 700 Kpa	0 - 1.7 Mpa	0 - 206.7 InHg	0 - 502.0 InHg	◆	◆
	0 - 7.0 Bar	0 - 17.0 Bar	0 - 2810 InH2O	0 - 6825 InH2O		
	0 - 101.5 psi	0 - 246.6 psi	0 - 7.138 Kg/cm2	0 - 17.34 Kg/cm2		
7	0 - 1.7 Mpa	0 - 3.5 Mpa	0 - 502.0 InHg	0 - 1033.5 InHg	◆	◆
	0 - 17.0 Bar	0 - 35.0 Bar	0 - 6825 InH2O	0 - 1.4*10 ⁴ InH2O		
	0 - 246.6 psi	0 - 507.6 psi	0 - 17.34 Kg/cm2	0 - 35.69 Kg/cm2		
8	0 - 3.5 Mpa	0 - 7.0 Mpa	0 - 1033.5 InHg	0 - 2067 InHg	◆	◆
	0 - 35.0 Bar	0 - 70.0 Bar	0 - 1.4*10 ⁴ InH2O	0 - 2.8*10 ⁴ InH2O		
	0 - 507.6 psi	0 - 1015 psi	0 - 35.69 Kg/cm2	0 - 71.38 Kg/cm2		
9	0 - 7.0 Mpa	0 - 32 Mpa	0 - 2067 InHg	0 - 9450 InHg	◆	◆
	0 - 70.0 Bar	0 - 320.0 Bar	0 - 2.8*10 ⁴ InH2O	0 - 1.28*10 ⁵ InH2O		
	0 - 1015 psi	0 - 4641.2 psi	0 - 71.38 Kg/cm2	0 - 326.3 Kg/cm2		
A	0 - 32 Mpa	0 - 70 Mpa	0 - 9450 InHg	0 - 20611 InHg	◆	◆
	0 - 320 Bar	0 - 700.0 Bar	0 - 1.28*10 ⁵ InH2O	0 - 2.8*10 ⁵ InH2O		
	0 - 4641.2 psi	0 - 1.0*10 ⁴ psi	0 - 326.3 Kg/cm2	0 - 713.8 Kg/cm2		

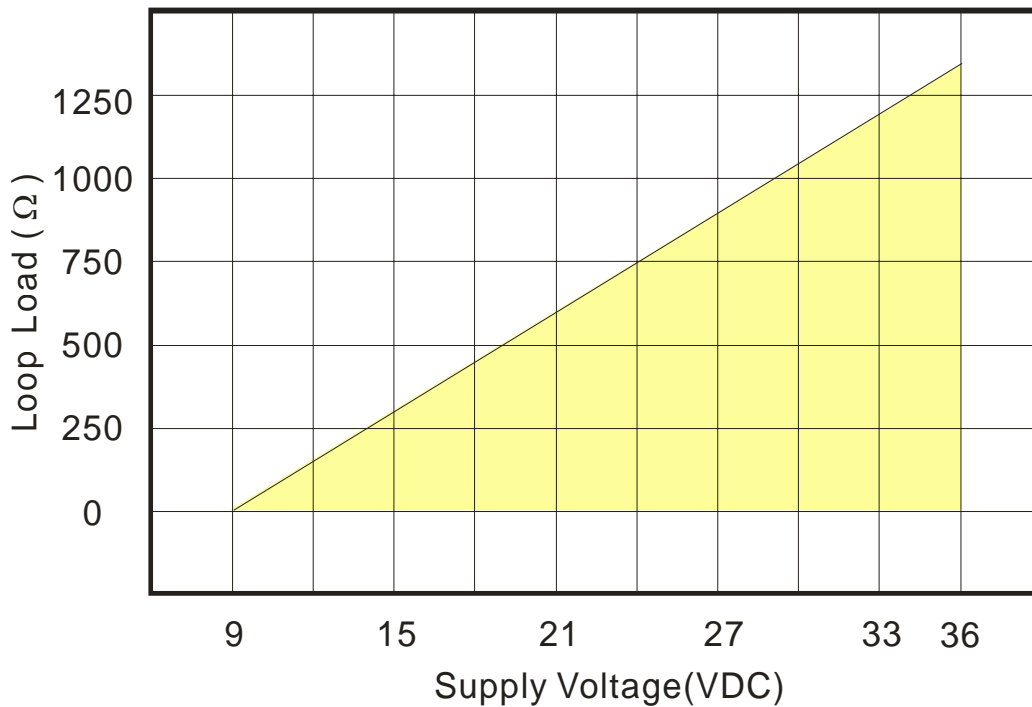
WIRING DIAGRAM



➤ DIMENSIONS



➤ Supply Voltage VS Loop Load



MODEL SELECTION GUIDE

APT8000 Series										
Example: APT8000-G36N-N6NN-NN										
APT8000-	X	X	X	X	-X	X	X	X	-XX	Description
Type	G									Gauge Pressure Transmitter
	A									Absolute Pressure Transmitter
Pressure Range	2									0 - 40.15(1.204)InH2O ... 0 - 120.4 InH2O
	3									0 - 120.4(4.015) InH2O ... 0 - 401.5 InH2O
	4									0 - 14.5(0.29) psi ... 0 - 29.0 psi
	5									0 - 29.0(1.015) psi ... 0 - 101.5 psi
	6									0 - 101.5(2.466) psi ... 0 - 246.6 psi
	7									0 - 246.6(5.076) psi ... 0 - 507.6 psi
	8									0 - 507.6(10.15) psi ... 0 - 1015 psi
	9									0 - 1015(46.412) psi ... 0 - 4641.2 psi
	A									0 - 4641.2(101.526) psi ... 0 - 10152.6 psi
Process Connector Material	N									Stainless Steel 304
	6									Stainless Steel 316
Diaphragm Material	N									Stainless Steel 316L
	T									Tantalum
	Z									Other
Process Connection	-N									1/2" NPT
	-B									1/2" BSP
	-Z									Other
Name Plate Material	N									Stainless Steel 304
	6									Stainless Steel 316
Cable Entry	N									M20 Conduit Threads
	P									1/2" NPT(Female)
	Z									Other
Mounting Bracket Material	N									None
	4									Stainless Steel 304
	6									Stainless Steel 316
Option	-NN									None
	-EX									Explosion Proof Ex D IIB T5
	-HT									Hart Signal
	-ZZ									Others