

GENERAL

ALIAPT APT3100 is a high performance compact pressure transmitter. With a wide range of available measuring ranges, process connections, output signals, and electrical connections. It features high stability, strong reliability and anti-interference.

The model APT3100 for general industrial applications is the ideal solution for customers with demanding measuring requirements.

FEATURES

- Dedicated high-performance ASIC regulating circuit
- Short response time
- Measuring ranges from 0-0.1~0-600 bar
- Output signal: 4-20 mA (2-Wire) or 1-5 VDC
- High accuracy of +/-0.45% of span
- Compact size to meet the needs of small space applications
- Multiple configurations to choose from for the best solution

STANDARD SPECIFICATION

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| <ul style="list-style-type: none"> ● Process Fluid : Liquid, Gas, Vapor ● Application : Absolute Pressure, Gauge Pressure, Vacuum ● Measuring Range : 0-0.1~0-600 bar ● Accuracy : +/-0.45% of span ● Non-Linearity : ≤0.2% of span (BFSL) ● Non-Repeatability : ≤0.05% of span ● Stability : ≤+/-0.2% of URL for 1 year ● Working Temperature : -40~85 °C ● Compensation Temp. : -10~70 °C ● Temp. Effect of zero <ul style="list-style-type: none"> Ranges≤0.25 bar : ≤0.4% FS / 10K Ranges>0.25 bar : ≤0.2% FS / 10K ● Temp. Effect of span : ≤0.2% FS / 10K ● Over Pressure Limit : 250% of Full Scale ● Vibration Resistance : 20 g (20-2000 Hz) per IEC 60068-2-6 ● Shock Resistance : 100 g (10 ms) ● EMI / RFI Effect : Follow SAMA PMC 33.1 from 20-1000 MHz and for field strengths up to 30 V/m ● Ambient Temperature : -20~70 °C ● Humidity Limit : 0-95% Relative Humidity ● Process Connection : G1/4" (Standard)
M12x1.5, 1/4"-18 NPTM, 1/8"-27 NPTM, 7/16"-20 UNF (Female) etc. (Option) ● Pressure Port : 3.0 mm | <ul style="list-style-type: none"> ● Response Time : ≥1 ms ● Output Response Time : ≤8 ms ● Current Output : 4-20 mA (2-Wire)
Load : ≤ (VDC-9) / 0.02A ● Voltage Output : 1-5 VDC (3-Wire)
Load : > 5000 ohm ● Power Supply : 9-32 VDC ● Material <ul style="list-style-type: none"> Connection : Stainless steel 304 Diaphragm : Stainless steel 316L Body : Stainless steel 304 Fill Fluid : Silicone Oil Wetted O-ring (inside) : Viton Seal Gasket (outside) : NBR ● Electrical Connector <ul style="list-style-type: none"> Cable Outlet : 2/3-Cable, Standard Outlet Cable 0.5 m Packard : 3-Pin, Standard Outlet Cable 1 m DIN EN175301-803A : 3-Pin, PG9, Without Outlet Cable M12x1 : 4-Pin, Standard Outlet Cable 1.5 m ● Protection Class <ul style="list-style-type: none"> : IP54 (Packard) : IP65 ● Intrinsically Safe : Ex ia IIC T6 (Standard) ● Weight : Approx. 80 g |
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➤ DIMENSIONS

DIN EN175301-803A		M12x1		Cable Outlet		Packard	
4-20mA(2-Wire)	1-5VDC(3-Wire)	4-20mA(2-Wire)	1-5VDC(3-Wire)	4-20mA(2-Wire)	1-5VDC(3-Wire)	4-20mA(2-Wire)	1-5VDC(3-Wire)
Pin1: VCC Pin2: GND Pin3: N/A	Pin1: VCC Pin2: GND Pin3: Output	Pin1: VCC Pin2: GND	Pin1: VCC Pin2: GND Pin3: Output	Red: VCC Black: GND	Red: VCC Black: GND Yellow: Output	Pin1: VCC Pin2: GND Pin3: N/A	Pin1: VCC Pin2: GND Pin3: Output

➤ MEASURING RANGE

Range Code	Pressure Range	Range Code	Pressure Range	Range Code	Pressure Range	Range Code	Pressure Range
0	0-0.1 bar	5	0-1 bar	A	0-10 bar	F	0-100 bar
1	0-0.16 bar	6	0-1.6 bar	B	0-16 bar	G	0-160 bar
2	0-0.25 bar	7	0-2.5 bar	C	0-25 bar	H	0-250 bar
3	0-0.4 bar	8	0-4 bar	D	0-40 bar	J	0-400 bar
4	0-0.6 bar	9	0-6 bar	E	0-60 bar	K	0-600 bar

➤ MODEL SELECTION GUIDE

APT3100 Series						
Example: APT3100-G9NN-NNNNN						
APT3100-	X	X	X	X	-XXXXX	Description
Type	G					Gauge Pressure Transmitter
	A					Absolute Pressure Transmitter * Note 1
Pressure Range	0-K					Please see MEASURING RANGE
Electrical Connector	N					L-connector DIN EN175301-803A (Without Outlet Cable)
	M					180° Round connector M12x1 (Standard Outlet Cable 1.5 m)
	R					90° Round connector M12x1 (Standard Outlet Cable 1.5 m)
	C					Cable outlet (Standard Outlet Cable 0.5 m)
	P					Packard IP54 (Standard Outlet Cable 1 m)
Output	N					4-20 mA (2-Wire)
	V					1-5 VDC (3-Wire)
Process Connection					-NNNNN	G1/4" (Standard)
					-XXXXX	1/4"-18 NPTM, M12x1.5, 7/16"-20 UNF etc. (With Adapter)

● **Note 1: Absolute Pressure Transmitter only for range code 5-B**