ALIADP

Smart Differential Pressure Transmitter

Model ADP9000 Series

GENERAL

ALIADP ADP9000 series is a digital differential pressure transmitter designed for industrial pressure measurement applications. The ADP9000 offer Configurations for Differential, gas, absolute pressure and vacuum liquid-Level measurements including integrated solutions for pressure, level and flow.

FEATURES

- Updating time of output current in 200 ms
- Improved performance, increased accuracy, greater stability
- Two Years stability of 0.2%
- 0.075% accuracy
- Parameter setting by the use of local keypad
- 4-20 mA output plus direct digital HART communication
- Automatic zero calibration by press button
- Explosion proof and weather proof housing

SPECIFICATION

- Process Fluid : Liquid, Gas of Vapor
- Application : Differential Pressure, Gauge Pressure, Absolute Pressure
- Measuring Range : 0 - 0.125 Kpa ~ 0 - 1.5 Kpa (Minimum)
  : 0 - 4.0 Mpa ~ 0 - 25.0 Mpa (Maximum)
- Turn Down Ratio : 1 : 100
- Accuracy : +/- 0.075% of span
- Stability : +/-0.15% of URL for 2 years
- Working Temperature : -25 to +95 °C
- Max. Pressure : 40 Mpa
- Material
  - Flange/Adapters : Stainless Steel 304 / Stainless Steel 316
  - Drains/Vents : Stainless Steel 304 / Stainless Steel 316
  - Diaphragms : Stainless Steel 316L / Hastelloy B / Hastelloy C / Monel / Tantalum
  - Wetted O-Rings : Buna N / Viton / PTFE
  - Bolts & Nuts : Carbon Steel / Stainless Steel 316
  - Mounting Bracket : Carbon steel / Stainless Steel 304 / 316
  - Name / Tag Plate : Stainless Steel 304 / Stainless Steel 316
  - Converter Housing : Low copper cast aluminum alloy with polyurethane, light blue paint
  - Fill Fluid : Silicone / Fluorine Oil
- Enclosure : IP67 (Standard)
  : Intrinsically Safe EEx ia IIC T5 (Standard)
  : Explosion proof Ex D IIB T5
- Display : 5 Digits programmable & 0-100% Bargraph
- Display Unit : Standard 22 engineering unit
  5 Digits programmable for special unit
- Keyboard : 3 keys from internal for Programming and output setting
- Current Output : 4 - 20 mA 2 wires with Hart Signal
  Load : Rohm=(Vdc-9)*50
- Power Supply : 9 - 36 VDC
- Damping Adjustment : 0 - 32 Second
- Response Time : 200 mS
- Mounting : Bracket on 2" Pipe
- Humidity Limits : 0 to 100% Relative Humidity
- Turn on Time : 2 Seconds with minimum damping
- Zero calibration : Automatic zero calibration by press buttor
- Electrical Connections : M20 Conduit Threads / 1/2" NPT(Female)
- Temperature Effect : +/-0.18% of span per 20 °C
- Vibration Effect : +/-0.05% of URL per g to 200 Hz in any axis
- EMI/RFI Effect : Follow SAMA PMC 33.1 from 20 to 1000 MHz and for field strengths up to 30 V/m
- Process connections : 1/4 - 18 NPT
  : 1/2 - 14 NPT(with Adapter)
- Ambient Temperature : -25 to +80 °C
- Dimensions : 102 mm (W) * 188 mm (H) * 130 mm (D)
- Weight : 3.5 Kg

CE

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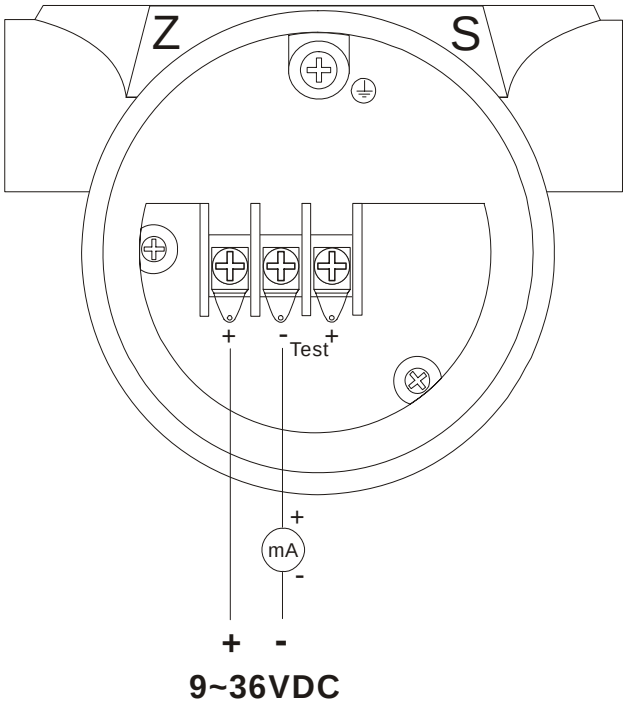
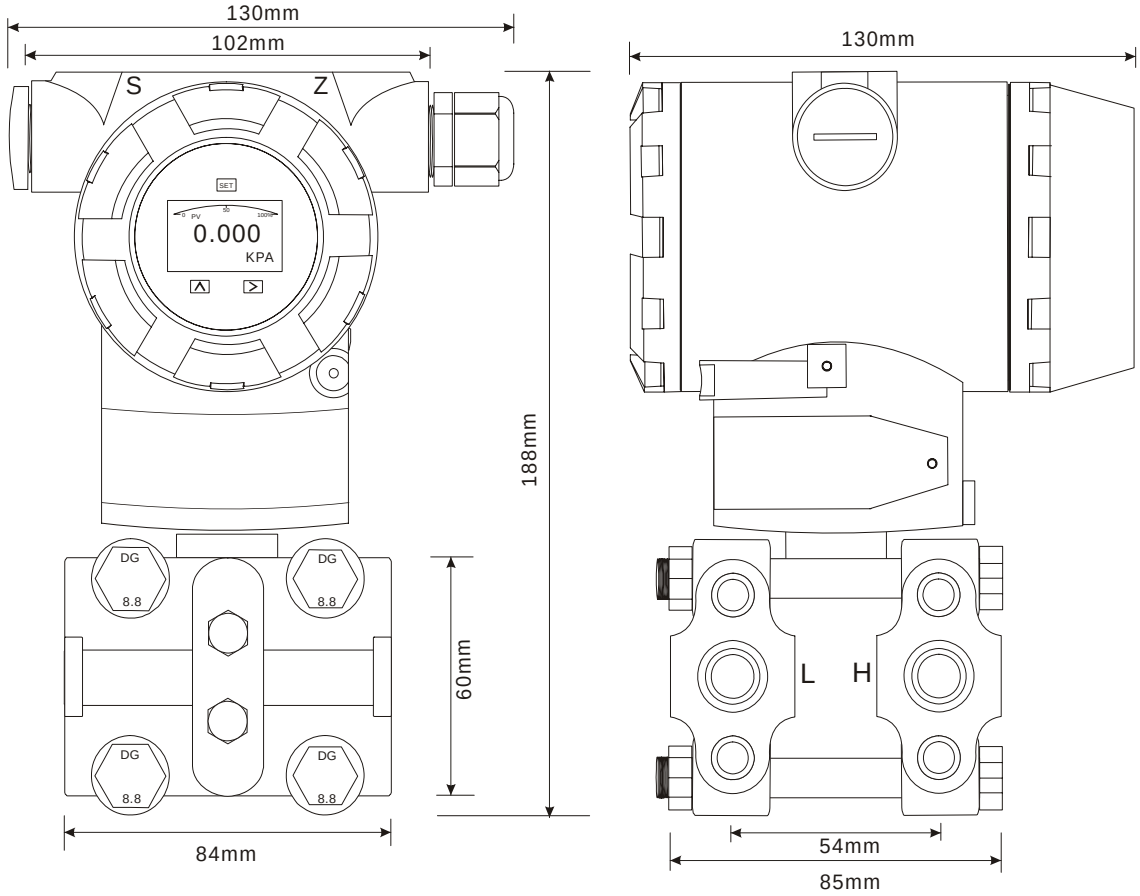
MEASURE RANGE

Range Code	Pressure Range				Transmitter		
	Low Range	High Range	Low Range	High Range	Differential Pressure	Gauge Pressure	Absolute Pressure
2	0 - 0.125 Kpa	0 - 1.5 Kpa	0 - 12.75 mmH2O	0 - 153.0 mmH2O	◆	◆	
	0 - 1.250 mbar	0 - 15 mbar	0 - 0.5018 InH2O	0 - 6.022 InH2O			
	0 - 0.018 psi	0 - 0.218 psi	0 - 0.001 Kg/cm2	0 - 0.015 Kg/cm2			
3	0 - 1.3 Kpa	0 - 7.5 Kpa	0 - 132.6 mmH2O	0 - 764.8 mmH2O	◆	◆	
	0 - 13 mbar	0 - 75 mbar	0 - 5.219 InH2O	0 - 30.11 InH2O			
	0 - 0.189 psi	0 - 1.088 psi	0 - 0.013 Kg/cm2	0 - 0.076 Kg/cm2			
4	0 - 6.2 Kpa	0 - 37 Kpa	0 - 632.2 mmH2O	0 - 3773 mmH2O	◆	◆	◆
	0 - 62 mbar	0 - 370 mbar	0 - 24.89 InH2O	0 - 148.5 InH2O			
	0 - 0.899 psi	0 - 5.366 psi	0 - 0.063 Kg/cm2	0 - 0.377 Kg/cm2			
5	0 - 30 Kpa	0 - 180 Kpa	0 - 3.059 MH2O	0 - 18.35 MH2O	◆	◆	◆
	0 - 300 mbar	0 - 1800 mbar	0 - 120.4 InH2O	0 - 722.6 InH2O			
	0 - 4.351 psi	0 - 26.11 psi	0 - 0.306 Kg/cm2	0 - 1.835 Kg/cm2			
6	0 - 117 Kpa	0 - 690 Kpa	0 - 11.93 MH2O	0 - 70.36 MH2O	◆	◆	◆
	0 - 1.170 Bar	0 - 6.900 Bar	0 - 469.7 InH2O	0 - 2770 InH2O			
	0 - 16.97 psi	0 - 100.1 psi	0 - 1.193 Kg/cm2	0 - 7.036 Kg/cm2			
7	0 - 350 Kpa	0 - 2000 Kpa	0 - 35.69 MH2O	0 - 203.9 MH2O	◆	◆	◆
	0 - 3.5 Bar	0 - 20 Bar	0 - 1405 InH2O	0 - 8029 InH2O			
	0 - 50.76 psi	0 - 290.1 psi	0 - 3.569 Kg/cm2	0 - 20.39 Kg/cm2			
8	0 - 1.17 Mpa	0 - 6.8 Mpa	0 - 119.3 MH2O	0 - 693.4 MH2O	◆	◆	◆
	0 - 11.70 Bar	0 - 68 Bar	0 - 4697.1 InH2O	0 - 27299 InH2O			
	0 - 169.7 psi	0 - 986.3 psi	0 - 11.93 Kg/cm2	0 - 69.34 Kg/cm2			
9	0 - 4.0 Mpa	0 - 25 Mpa	0 - 407.9 MH2O	0 - 2549 MH2O	◆	◆	◆
	0 - 40 Bar	0 - 250 Bar	0 - 16059 InH2O	0 - 100366 InH2O			
	0 - 580.2 psi	0 - 3626 psi	0 - 40.79 Kg/cm2	0 - 254.9 Kg/cm2			

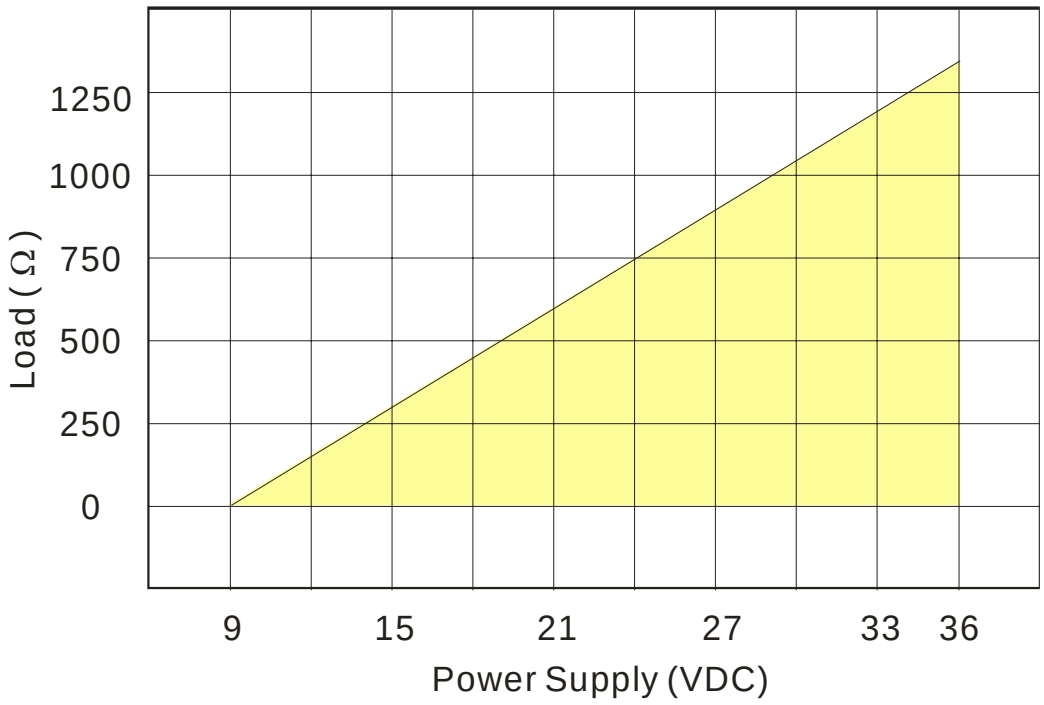
ELECTRICAL CONNECTION



DIMENSIONS



Supply & Load Requirements



Model Selection Guide

ADP9000 Series													
Example:ADP9000-D3-CNS-6NF-NNN-EX/S6													
ADP9000-	X	X	-X	X	X	-X	X	X	-X	X	X	-XX	Description
Type	D												Differential pressure transmitter
	G												Gauge pressure transmitter
	A												Absolute pressure transmitter
Pressure Range		2											0 - 0.125 (0.015) Kpa ... 0 - 1.5 Kpa (Type D/G)
		3											0 - 1.3 (0.075) Kpa ... 0 - 7.5 Kpa (Type D/G)
		4											0 - 6.2 (0.37) Kpa ... 0 - 37 Kpa
		5											0 - 30 (1.8) Kpa ... 0 - 180 Kpa
		6											0 - 117 (6.9) Kpa ... 0 - 690 Kpa
		7											0 - 350 (20) Kpa ... 0 - 2000 Kpa
		8											0 - 1.17 (0.068) Mpa ... 0 - 6.8 Mpa
		9											0 - 4.0 (0.25) Mpa ... 0 - 25 Mpa
Diaphragm Material			-N										Stainless Steel 316L
			-B										Hastelloy B
			-C										Hastelloy C
			-P										Monel
			-T										Tantalum
Process Flanges, Drain/Vent valve Material				N									Stainless Steel 304
				S									Stainless Steel 316
Bolts / Nuts Material					N								Carbon Steel
					S								Stainless Steel 316
Mounting Bracket Material						-N							Carbon Steel
						-4							Stainless Steel 304
						-6							Stainless Steel 316
Wetted O-ring Material							N						Burn-N
							V						Viton
							P						PTFE
Fill Fluid								N					Silicone
								F					Fluorine
Process Connections									-N				1/4" - 18 NPT
									-A				1/2" - 14 NPT(with Adapter)
									-Z				Other
Electrical Connections										N			M20 Conduit Threads
										P			1/2" NPT(Female)
										Z			Other
Maximum Pressure Limits											N		4 MPa
											1		6.4 MPa
											2		16 MPa
											3		40 MPa
Option												-NN	None
												-EX	Explosion proof Ex D IIB T5
												-S6	Stainless Steel 316 Name Plate and Tag Plate
												-HT	Hart Signal
												-ZZ	Others