

GENERAL

ALIADP ADP9000 series is a digital differential pressure transmitter designed for industrial pressure measurement applications.

The ADP9000 can be configured to provide integrated solutions for a broad range of pressure and flow measurement applications.

FEATURES

- Updating time of output current in 200 ms
- Improved performance, increased accuracy and greater stability
- Two years stability of 0.2%
- 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
- Flow display is available

STANDARD SPECIFICATION

- Process Fluid : Liquid, Gas or Vapor
- Application : Differential Pressure, Gauge Pressure, Absolute Pressure
- Measuring Range : 0 - 0.16 kPa ~ 0 - 1.0 kPa (Minimum)
: 0 - 4.0 MPa ~ 0 - 20.0 MPa (Maximum)
- Turndown Ratio : 100 : 1
- 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/Adapter : Stainless Steel 304 / Stainless Steel 316
 - Drains/Vents : Stainless Steel 304 / Stainless Steel 316
 - Diaphragm : Stainless Steel 316L / Hastelloy B / Hastelloy C / Monel / Tantalum
 - Wetted O-Ring : 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
- Protection Class : IP67 (Standard)
: Intrinsically Safe EEx ia IIC T5 (Standard)
: Explosion proof Ex D IIB T5



- Display : 5 Digits programmable & 0-100% Bargraph
Flow rate : 5 digit
- Display Unit : Standard 22 different engineering unit
5 Digits programmable for special unit
- Keypad : 3 internal keys for programming and output setting
- Current Output : 4 - 20 mA 2 wires with Hart signal (Compatible)
Load : $R_{ohm} = (V_{dc} - 9) * 50$
- Power Supply : 9 - 36 VDC
- Damping : 0 - 32 seconds
- Response Time : 100 mS
- Mounting : Bracket on 2" Pipe
- Humidity Limit : 0 to 100% Relative Humidity
- Zero Calibration : Automatic zero calibration by press-button
- Cable Entry : M20 Conduit Threads / 1/2" NPT (Female)
- Temperature Effect : +/- 0.18% ~ +/- 0.5% 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 Connection : 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



ALIA GROUP INC.

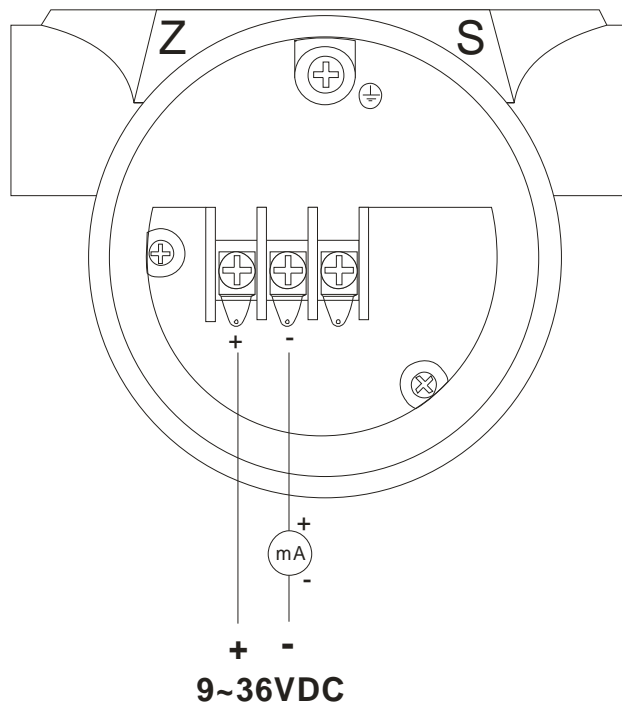
113 Barksdale Professional Center, Newark, DE 19711, USA
TEL : + 1 - 302 - 213 - 0106 FAX : + 1 - 302 - 213 - 0107

URL : www.alia-inc.com
E-mail : alia@alia-inc.com
ADP9000V1.2.0.r3.A4.en

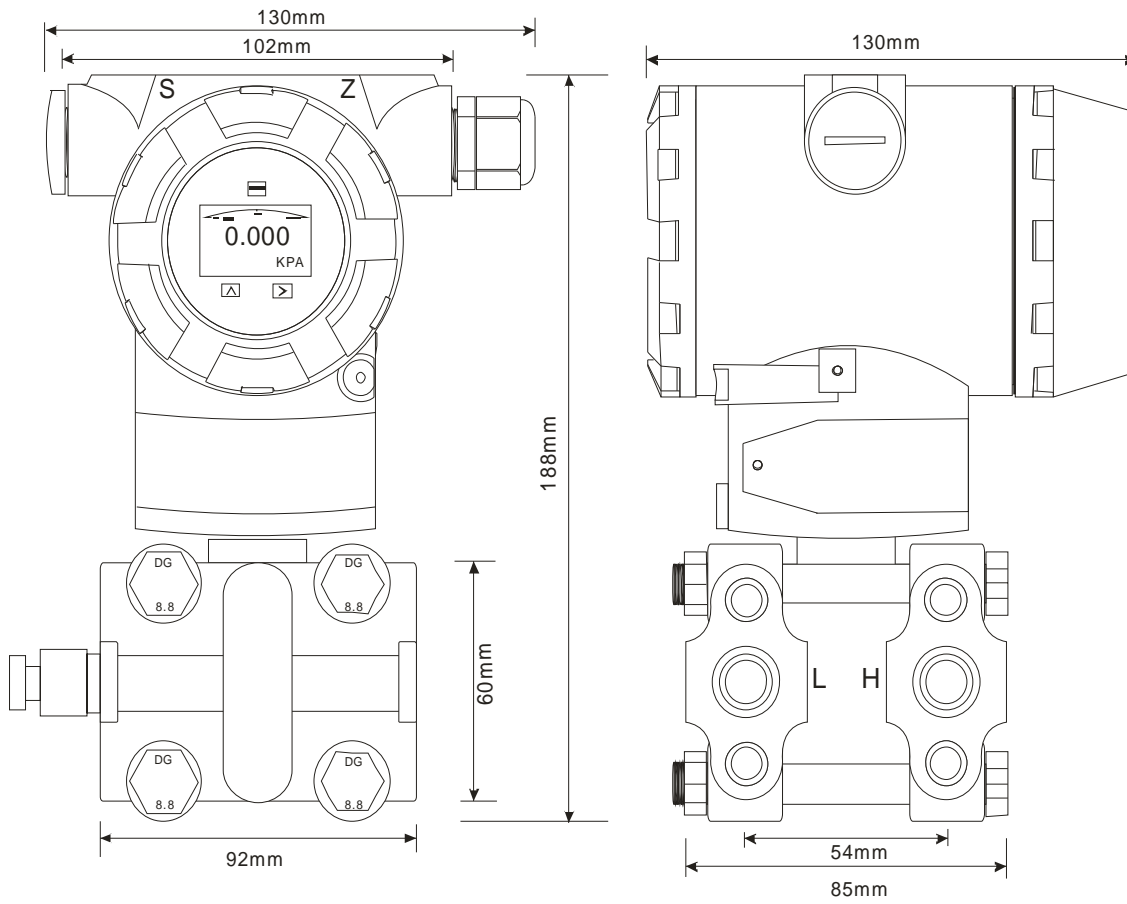
MEASURING RANGE

Range Code	Pressure Range				Transmitter		
	Low Range	High Range	Low Range	High Range	Differential Pressure	Gauge Pressure	Absolute Pressure
2	0 - 0.16 kPa	0 - 1.0 kPa	0 - 16.32 mmH2O	0 - 102.0 mmH2O	◆	◆	
	0 - 1.6 mbar	0 - 10 mbar	0 - 0.6423 InH2O	0 - 4.015 InH2O			
	0 - 0.023 psi	0 - 0.145 psi	0 - 0.001 Kg/cm2	0 - 0.010 Kg/cm2			
3	0 - 1.0 kPa	0 - 6.0 kPa	0 - 102.0 mmH2O	0 - 611.82 mmH2O	◆	◆	
	0 - 10 mbar	0 - 60 mbar	0 - 4.015 InH2O	0 - 24.088 InH2O			
	0 - 0.145 psi	0 - 0.87 psi	0 - 0.010 Kg/cm2	0 - 0.061 Kg/cm2			
4	0 - 6.0 kPa	0 - 40 kPa	0 - 611.82 mmH2O	0 - 4078 mmH2O	◆	◆	◆
	0 - 60 mbar	0 - 400 mbar	0 - 24.088 InH2O	0 - 160.6 InH2O			
	0 - 0.87 psi	0 - 5.802 psi	0 - 0.061 Kg/cm2	0 - 0.408 Kg/cm2			
5	0 - 40 kPa	0 - 200 kPa	0 - 4.079 MH2O	0 - 20.39 MH2O	◆	◆	◆
	0 - 400 mbar	0 - 2000 mbar	0 - 160.6 InH2O	0 - 802.9 InH2O			
	0 - 5.802 psi	0 - 29.0 psi	0 - 0.408 Kg/cm2	0 - 2.039 Kg/cm2			
6	0 - 160 kPa	0 - 1000 kPa	0 - 16.32 MH2O	0 - 101.97 MH2O	◆	◆	◆
	0 - 1.6 bar	0 - 10 bar	0 - 642.3 InH2O	0 - 4014 InH2O			
	0 - 23.21 psi	0 - 145 psi	0 - 1.632 Kg/cm2	0 - 10.197 Kg/cm2			
7	0 - 400 kPa	0 - 2500 kPa	0 - 40.79 MH2O	0 - 254.9 MH2O	◆	◆	◆
	0 - 4.0 bar	0 - 25 bar	0 - 1605 InH2O	0 - 10036 InH2O			
	0 - 58.02 psi	0 - 362.6 psi	0 - 4.079 Kg/cm2	0 - 25.49 Kg/cm2			
8	0 - 1.6 MPa	0 - 8.0 MPa	0 - 163.1 MH2O	0 - 815.76 MH2O		◆	
	0 - 16 bar	0 - 80 bar	0 - 6423.4 InH2O	0 - 32117 InH2O			
	0 - 232.1 psi	0 - 1160.3 psi	0 - 16.32 Kg/cm2	0 - 81.578 Kg/cm2			
9	0 - 4.0 MPa	0 - 20 MPa	0 - 407.9 MH2O	0 - 2039.4 MH2O		◆	
	0 - 40 bar	0 - 200 bar	0 - 16059 InH2O	0 - 80292.6 InH2O			
	0 - 580.2 psi	0 - 2901 psi	0 - 40.79 Kg/cm2	0 - 203.94 Kg/cm2			

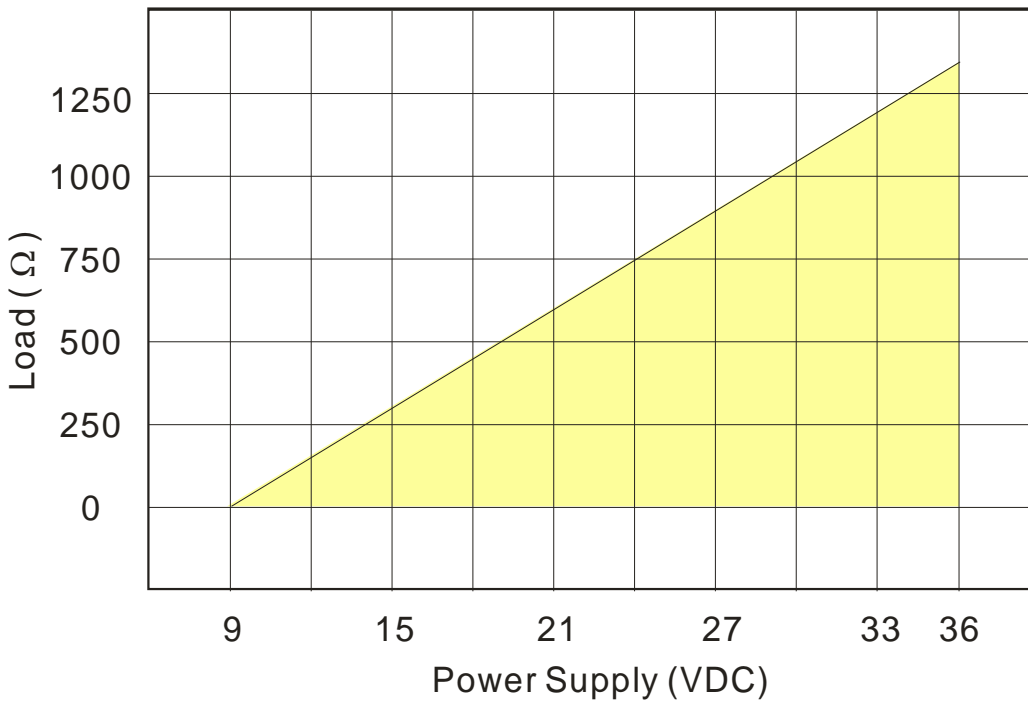
WIRING DIAGRAM



➤ DIMENSIONS



➤ Supply Voltage VS Loop Load



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 - 0.16 (0.01) kPa ... 0 - 1.0 kPa (Type D/G)
	3												0 - 1.0 (0.06) kPa ... 0 - 6.0 kPa (Type D/G)
	4												0 - 6.0 (0.4) kPa ... 0 - 40 kPa
	5												0 - 40 (2.0) kPa ... 0 - 200 kPa
	6												0 - 160 (10.0) kPa ... 0 - 1000 kPa
	7												0 - 400 (25.0) kPa ... 0 - 2500 kPa
	8												0 - 1.6 (0.08) MPa ... 0 - 8.0 MPa (Type G)
	9												0 - 4.0 (0.20) MPa ... 0 - 20 MPa (Type G)
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												Buna-N
	V												Viton
	P												PTFE
Fill Fluid	N												Silicone
	F												Fluorine
Process Connection	-N												1/4" - 18 NPT
	-A												1/2" - 14 NPT(with Adapter)
	-Z												Other
Cable Entry	N												M20 Conduit Threads
	P												1/2" NPT(Female)
	Z												Other
Maximum Pressure Limit	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 (Compatible)
	-ZZ												Others