

## 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

## STANDARD SPECIFICATION

- Process Fluid : Liquid, Gas or 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)
- 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
- 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 : 200 mS
- Mounting : Bracket on 2" Pipe
- Humidity Limit : 0 to 100% Relative Humidity
- Turn on Time : 2 Seconds with minimum damping
- 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.

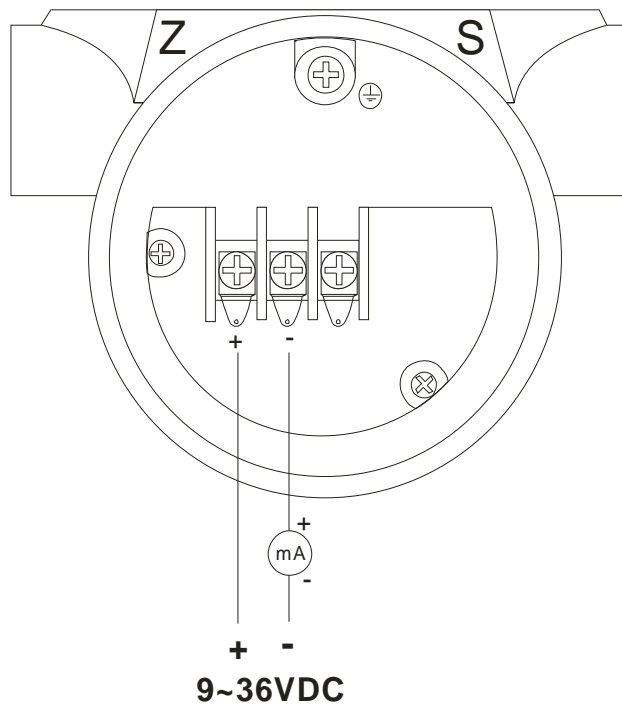
113 Barksdale Professional Center, Newark, DE 19711, USA  
TEL : + 1 - 302 - 213 - 0106 FAX : + 1 - 302 - 213 - 0107

URL : [www.alia-inc.com](http://www.alia-inc.com)  
E-mail : [alia@alia-inc.com](mailto:alia@alia-inc.com)  
ADP9000V1.2.0.r1.A4.en

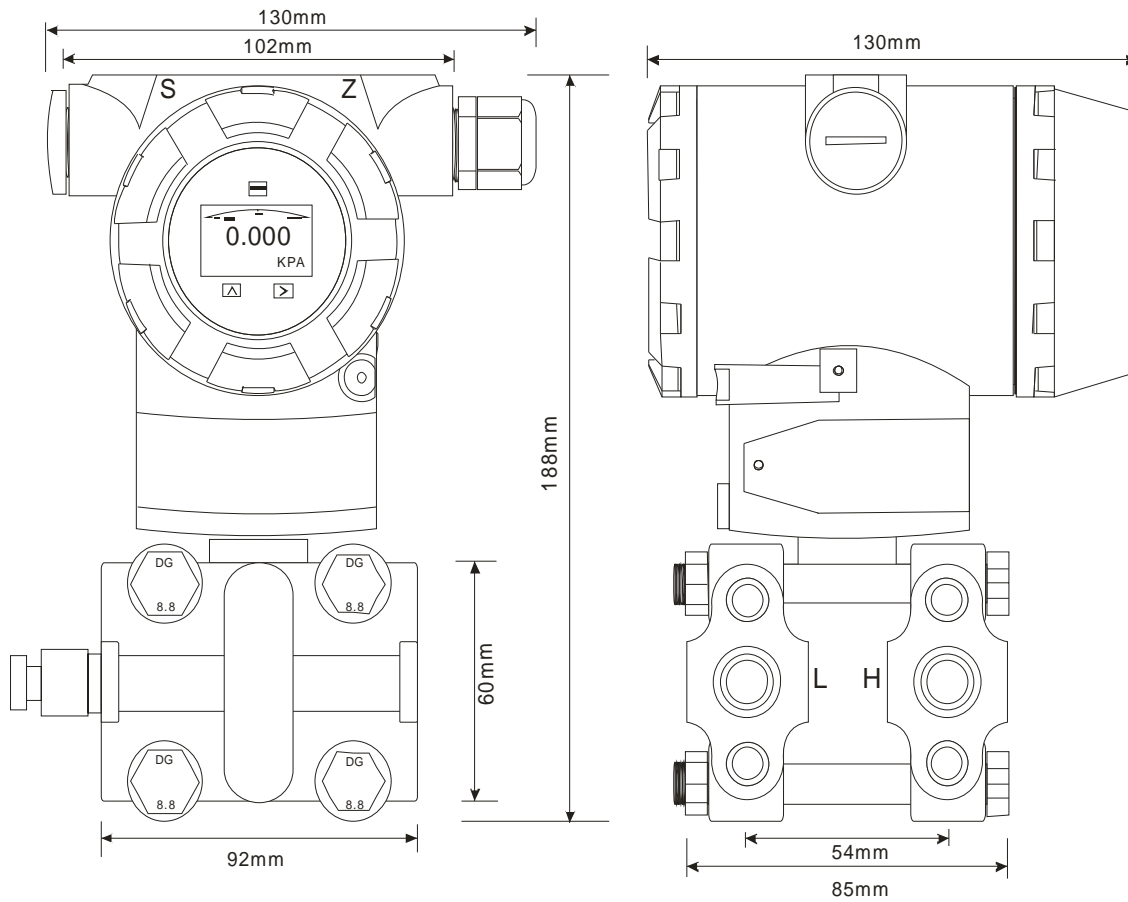
**MEASURING RANGE**

Range Code	Pressure Range				Transmitter		
	Low Range	High Range	Low Range	High Range	Differential Pressure	Gauge Pressure	Absolute Pressure
<b>2</b>	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			
<b>3</b>	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			
<b>4</b>	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			
<b>5</b>	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			
<b>6</b>	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			
<b>7</b>	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			
<b>8</b>	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			
<b>9</b>	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			

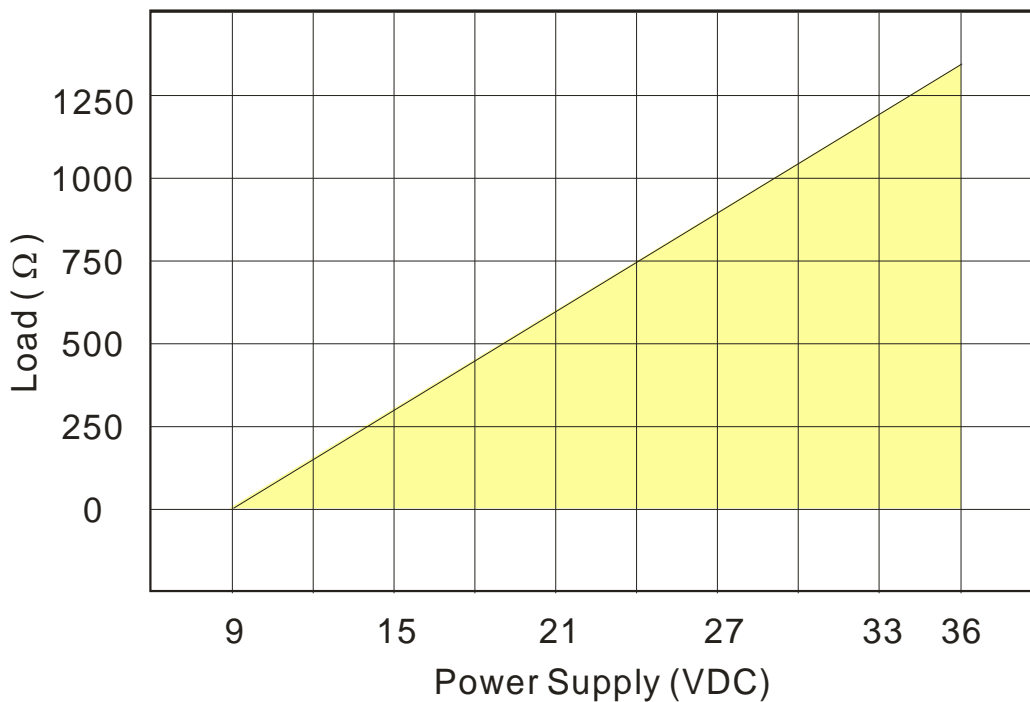
**WIRING DIAGRAM**



**➤ 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 - 0.125 (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												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