

## GENERAL

**ALIADP** D series is a diaphragm seal product combining APT8000 / ADP9000 / ADP9000L transmitter, which designed for the high-viscosity/ granular/ high-temp./ high-corrosivity situation.

D series diaphragm seal assembles Alia pressure/DP transmitter to form direct-mount / capillary-connections style.

## FEATURES

- The maximum temperature comes up to 280 °C
- Multiple connection modes- Flange style / Tri-Clamp style
- Multiple diaphragms/alternative connection material
- Vegetable oil can be used to fill fluid for food industry
- Extreme hot and cold temperature
- Stainless Steel with PPC coating capillary
- IDF Tri-Clamp or union screw connection for food industry
- Oil free treatment & water free treatment
- Fast and dynamic response
- Improved performance, increased accuracy, great stability

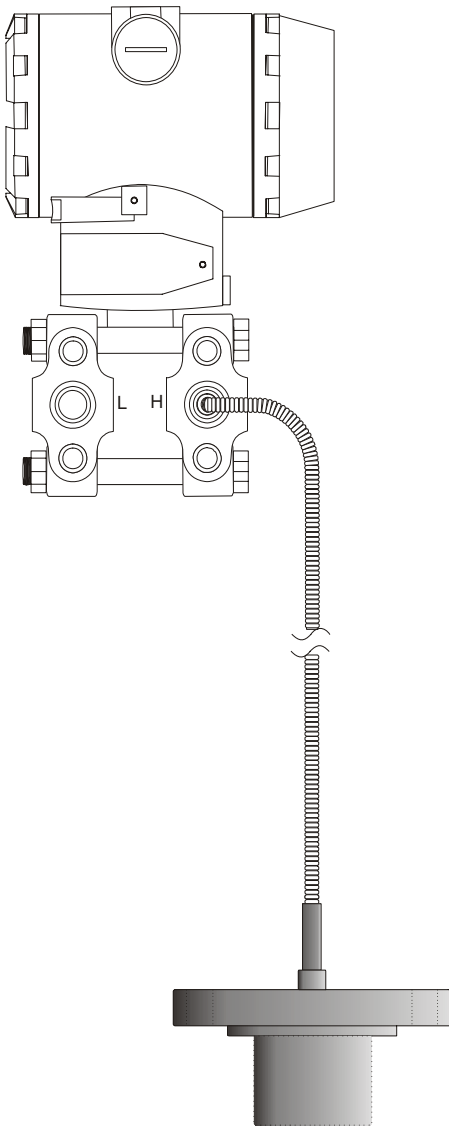
## SPECIFICATION

- Process Fluid : Liquid, Gas or Vapor
- Application : Liquid Level, Differential Pressure, Gauge Pressure, Absolute Pressure
- Material
  - Flange : Carbon steel
  - : Stainless Steel 304
  - : Stainless Steel 316
  - Diaphragms : Stainless Steel 316L
  - : Hastelloy B
  - : Hastelloy C
  - : Tantalum
  - : Stainless Steel with PTFE diaphragm
  - Capillary : Stainless Steel with PPC coating
- Flange Size : 40mm, 50mm, 80mm, 100mm
- : 1-1/2", 2", 3", 4"
- Process connections : Flange
- Flanges rating : JIS 10K / JIS 20K / JIS 40K
- : ANSI 150# / ANSI 300# / ANSI 600#
- : DIN PN10 / PN16 / PN25 / PN40
- : Tri Clamp ( DIN32676 / ISO2852 )
- Extension Length : 2" , 3" , 4"
- Accuracy : +/-0.075% of Span
- Stability : +/-0.15% of URL for 2 years
- Installation Style
  - Direct-mount : APT8000 only
  - One-sided capillary : APT8000 / ADP9000 / ADP9000L
  - Two-sided capillaries : ADP9000 only
- Capillary Length : 1.0 M ~ 10 M
- Max. Temperature
  - Direct-Mount : -20 to 80 °C
  - Remote Diaphragm : -40 to 280 °C
- Max. Pressure : 6.8 Mpa
- Fill Fluid and Maximum Temperature
  - Silicone (Max. Temperature 130 °C)
  - HT Silicone (Max. Temperature 280 °C)
  - Fluorine (Max. Temperature 160 °C)
  - Vegetable Oil (Max. Temperature 130 °C)
- Ambient Temperature Effect : +/-0.18% of span per 20 °C
- Time Response : Less then 1.12 Seconds
- Options
  - Water Free Treatment : Transmitter shipping with water-free wetted parts
  - Oil Free Treatment : Transmitter shipping with oil-free wetted parts

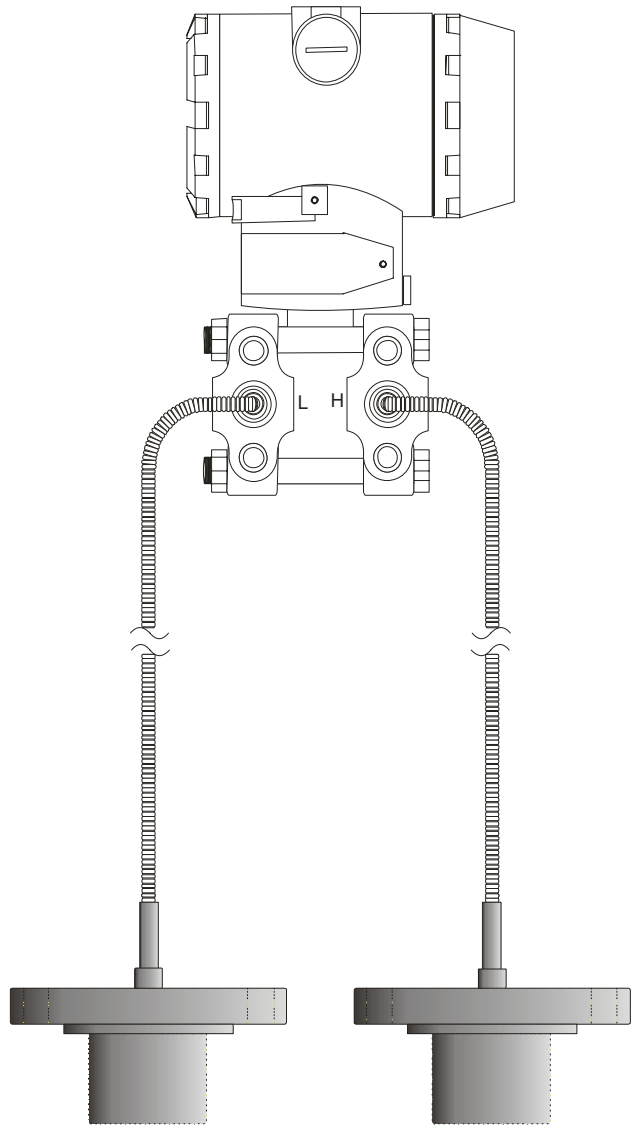


**MEASURE RANGE AND MAX. STATIC PRESSURE**

Direct-Mount Diaphragm	Min. Range	Max. Range	Min. Range	Max. Range	Max. Static Pressure
Pressure Transmitter <b>APT8000</b> with <b>DD</b> Series	0 - 10 Kpa	0 - 100 Mpa	0 - 1019.7 mmH2O	0 - 10197 MH2O	100 Mpa
	0 - 100 mbar	0 - 1000 bar	0 - 40.15 InH2O	0 - 401463 InH2O	
	0 - 1.45 psi	0 - 14504 psi	0 - 0.1 Kg/cm2	0 - 1020 kg/cm2	
Remote Diaphragm Seal	Min. Range	Max. Range	Min. Range	Max. Range	Max. Static Pressure
Pressure Transmitter <b>APT8000</b> with <b>D1</b> Series	0 - 6.2 Kpa	0 - 6.8 Mpa	0 - 632 mmH2O	0 - 693 MH2O	6.8 Mpa
	0 - 62 mbar	0 - 68 Bar	0 - 24.9 InH2O	0 - 27299 InH2O	
	0 - 0.9 psi	0 - 986 psi	0 - 0.06 Kg/cm2	0 - 69.3 Kg/cm2	
Differential Pressure Transmitter <b>ADP9000</b> with <b>D1 / D2</b> Series	0 - 6.2 Kpa	0 - 6.8 Mpa	0 - 632 mmH2O	0 - 693 MH2O	6.8 Mpa
	0 - 62 mbar	0 - 68 Bar	0 - 24.9 InH2O	0 - 27299 InH2O	
	0 - 0.9 psi	0 - 986 psi	0 - 0.06 Kg/cm2	0 - 69.3 Kg/cm2	
Level Transmitter <b>ADP9000L</b> with <b>D1</b> Series	0 - 6.2 Kpa	0 - 6.8 Mpa	0 - 632 mmH2O	0 - 693 MH2O	6.8 Mpa
	0 - 62 mbar	0 - 68 Bar	0 - 24.9 InH2O	0 - 27299 InH2O	
	0 - 0.9 psi	0 - 986 psi	0 - 0.06 Kg/cm2	0 - 69.3 Kg/cm2	

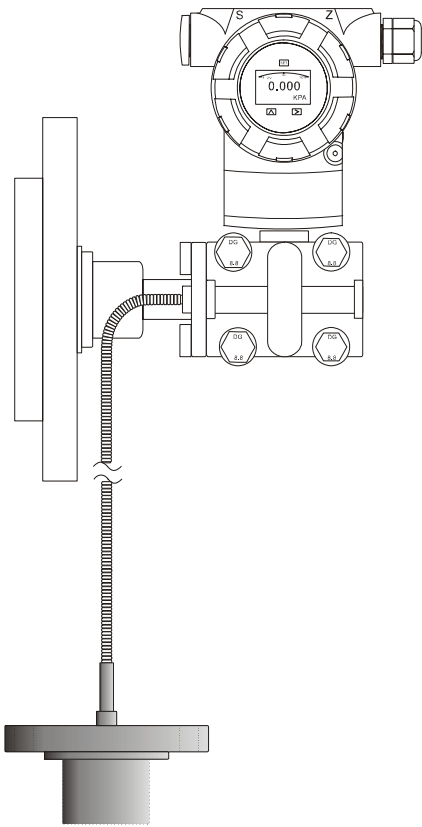


**ADP9000 with D1 Series**

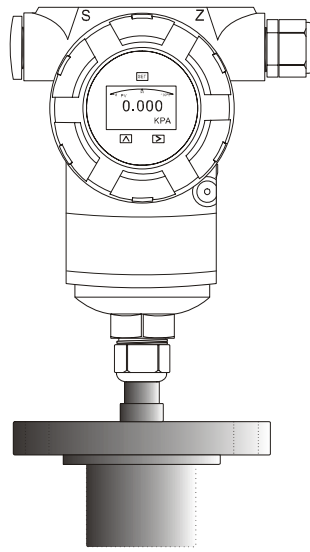


**ADP9000 with D2 Series**

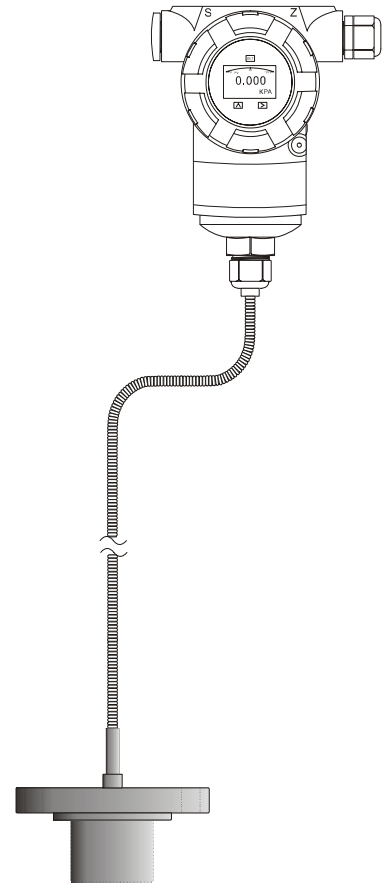
**➤ DIMENSIONS**



**ADP9000L with D1 Series**



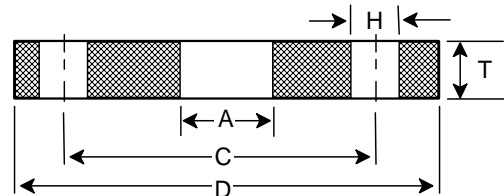
**APT8000 with DD Series**



**APT8000 with D1 Series**

**➤ FLANGE TABLES**

Flange style	Dimension of Flange			Bolt		Flange style	Dimension of Flange			Bolt	
	C	D	T	H	NO		C	D	T	H	NO
1-1/2" JIS 10K	105	140	16	19	4	DN40 PN10	110	150	18	18	4
2" JIS 10K	120	155	16	19	4	DN50 PN10	125	165	20	18	4
3" JIS 10K	150	185	18	19	8	DN80 PN10	160	200	24	18	8
4" JIS 10K	175	210	18	19	8	DN100 PN 10	180	220	20	18	8
1-1/2" JIS 20K	105	140	16	19	4	DN40 PN16	110	150	18	18	4
2" JIS 20K	120	155	16	19	4	DN50 PN16	125	165	20	18	4
3" JIS 20K	160	200	20	23	8	DN80 PN16	160	200	24	18	8
4" JIS 20K	185	225	22	23	8	DN100 PN16	180	220	24	18	8
1-1/2" JIS 40K	120	160	24	23	4	DN40 PN25	110	150	18	18	4
2" JIS 40K	130	165	26	19	8	DN50 PN25	125	165	20	18	4
3" JIS 40K	170	210	32	23	8	DN80 PN25	160	200	24	18	8
4" JIS 40K	205	250	36	25	8	DN100 PN25	190	235	24	22	8
1-1/2" ANSI 150#	98.6	127	18	15.7	4	DN40 PN40	110	150	22	18	4
2" ANSI 150#	120.7	152.4	19	19.1	4	DN50 PN40	125	165	24	18	4
3" ANSI 150#	152.4	190.5	24	19.1	4	DN80 PN40	160	200	24	18	8
4" ANSI 150#	190.5	228.6	24	19.1	8	DN100 PN40	190	235	24	22	8
1-1/2" ANSI 300#	114.3	155.4	24.6	22.4	4						
2" ANSI 300#	127	165.1	26.4	19.1	8						
3" ANSI 300#	168.1	209.6	32.4	22.4	8						
4" ANSI 300#	200.2	254	35.8	22.4	8						



**Model SELECTION GUIDE**

D Series										
Example: D2-A22B4-N05-W										
D	X-	X	X	X	X	X	-X	XX	-X	Description
Installation Style	D-									Direct-mount (APT8000 only)
	1-									One-sided capillary connects remote diaphragm seal
	2-									Two-sided capillaries connect remote diaphragm seal (ADP9000 only)
Process Connection	1									PN10
	2									PN16
	3									PN25
	4									PN40
	A									ANSI 150#
	B									ANSI 300#
	J									JIS 10K
	K									JIS 20K
	L									JIS 40K
	T									Tri-clamp (DIN32676 / ISO2852)
Z									Other	
Flange Size	1									1-1/2" (If Include Extended Diaphragm, Diameter=32mm)
	2									2" (If Include Extended Diaphragm, Diameter=49mm)
	3									3" (If Include Extended Diaphragm, Diameter=64mm)
	4									4" (If Include Extended Diaphragm, Diameter=89mm)
Diaphragm Extension Length	0									Flush Diaphragm
	2									2" (50mm)
	4									4" (100mm)
	6									6" (150mm)
Diaphragm Material	N									Stainless Steel 316L
	B									Hastelloy B
	C									Hastelloy C
	T									Tantalum
	P									Stainless Steel with PTFE diaphragm
	Z									Other
Flange Material	N									Carbon Steel
	4									Stainless Steel 304
	6									Stainless Steel 316
	Z									Other
Fill Fluid	-N									Silicone (Max. Temperature 130 °C)
	-S									HT Silicone (Max. Temperature 280 °C)
	-F									Fluorine (Max. Temperature 160 °C)
	-V									Vegetable Oil (Max. Temperature 130 °C)
Capillary Length	NN									Direct-Mount
	01-10									1 M ~ 10 M
Option	- N									None
	- W									Oil Free and Water Free Treatment