

GENERAL

ALIADP DNT series is a diaphragm seal product combining APT800NT / ADP900NT / ADP900LNT transmitter, which designed for the high-viscosity/ granular/ high-temp./ high-corrosivity situation. D series diaphragm seal assemblies 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 for 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 and great stability

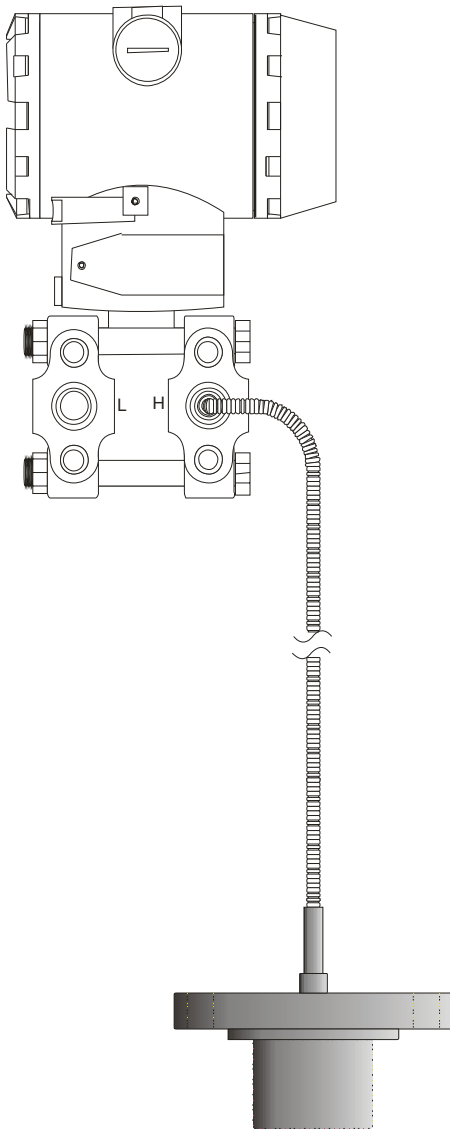


STANDARD SPECIFICATION

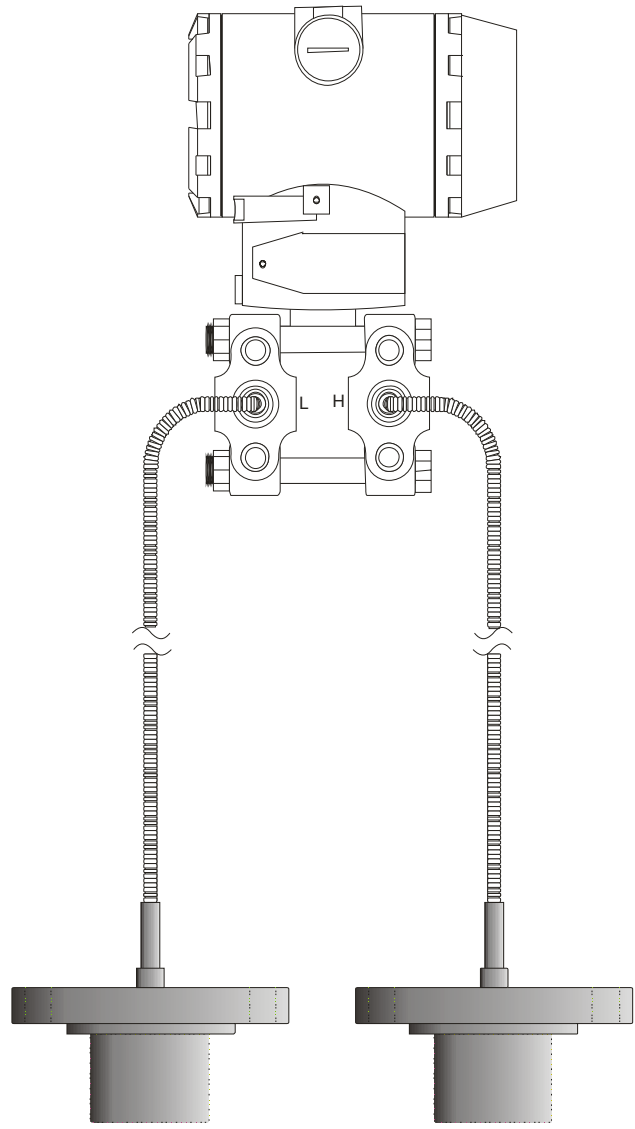
- Process Fluid : Liquid, Gas or Vapor
- Application : Liquid Level, Differential Pressure, Gauge Pressure, Absolute Pressure
- Material
 - Flange : Carbon steel
 - : Stainless Steel 304
 - : Stainless Steel 316
 - Diaphragms : Stainless Steel 316L
 - : Hastelloy B
 - : Hastelloy C
 - : Tantalum
 - : Stainless Steel with PTFE diaphragm
 - Capillary : Stainless Steel with PPC coating
- Flange Size : 40mm, 50mm, 80mm, 100mm
- : 1-1/2", 2", 3", 4"
- Process Connection : Flange
- Flange 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 : APT800NT only
 - One-sided Capillary : APT800NT / ADP900NT / ADP900LNT
 - Two-sided Capillaries : ADP900NT 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 than 1.12 seconds
- Options
 - Water-free Treatment : Wetted parts are water-free treated in manufacturing
 - Oil-free Treatment : Wetted parts are oil-free treated in manufacturing

MEASURING RANGE & MAX. STATIC PRESSURE

Direct-Mount Diaphragm	Min. Range	Max. Range	Min. Range	Max. Range	Max. Static Pressure
Pressure Transmitter APT800NT with DD 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 APT800NT with D1 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 ADP900NT with D1/D2 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 ADP900LNT with D1 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	

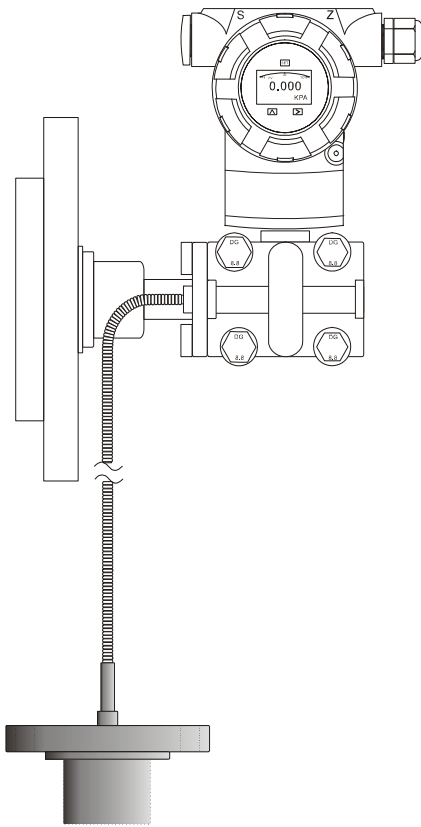


ADP900NT with D1 Serie

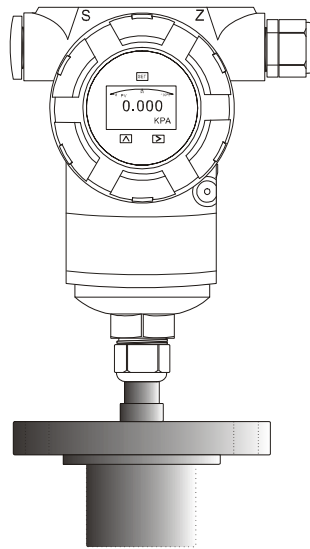


ADP900NT with D2 Series

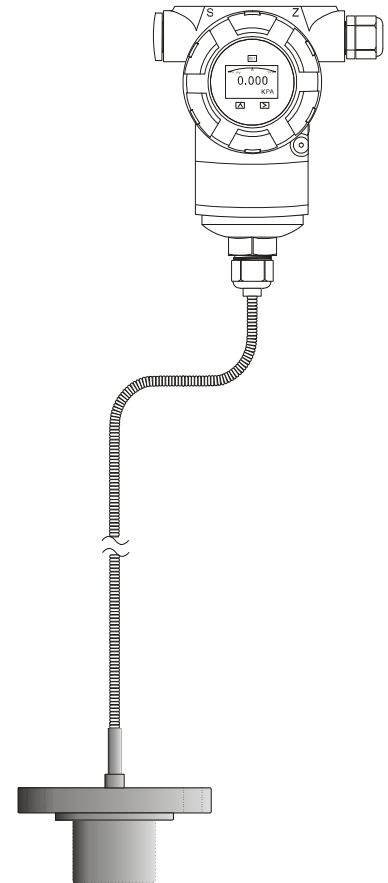
DIMENSIONS



ADP9000L with D1 Series



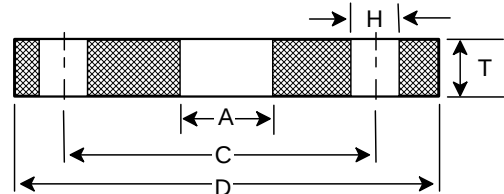
APT8000 with DD Series



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

DNT Series										
Example: DNT2-A22B4-N05-W										
DNT	X-	X	X	X	X	X	-X	XX	-X	Description
Installation Style	D-									Direct-mount (APT800NT Only)
	1-									One-sided Capillary Connects Remote Diaphragm Seal
	2-									Two-sided Capillaries Connect Remote Diaphragm Seal (ADP900NT 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" (Diaphragm Diameter If Extended: 38mm)
	2									2" (Diaphragm Diameter If Extended: 48mm)
	3									3" (Diaphragm Diameter If Extended: 66mm)
	4									4" (Diaphragm Diameter If Extended: 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