

GENERAL

ALIADP The 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 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



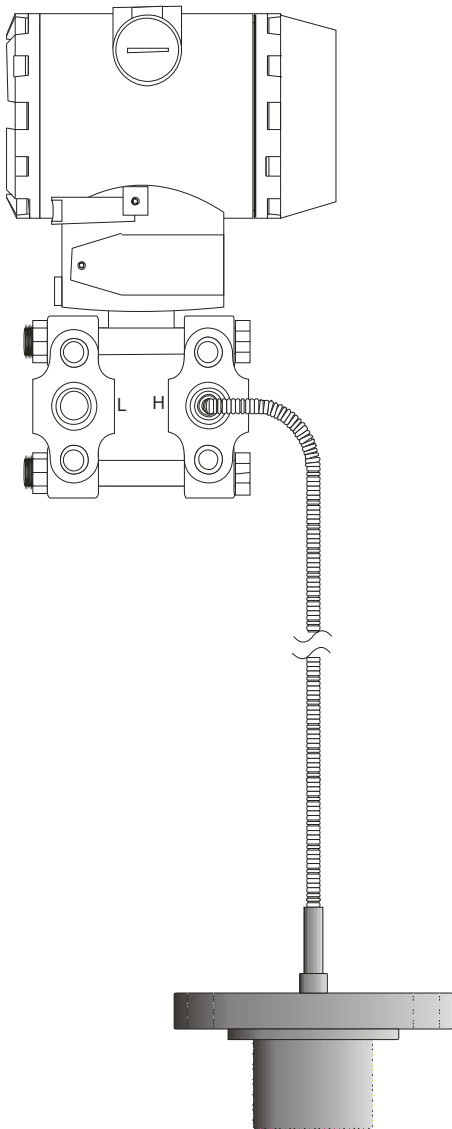
STANDARD SPECIFICATION

- Process Fluid : Liquid, Gas, 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
 - : PTFE-coated Tantalum Diaphragm
 - Capillary : Stainless Steel with PVC coating
- Flange Size : 40 mm, 50 mm, 80 mm, 100 mm
- : 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 : APT8000 only
 - One-sided Capillary : APT8000 / ADP9000 / ADP9000L
 - Two-sided Capillaries : ADP9000 only
- Capillary Length : 1.0-10 m
- Max. Temperature
 - Direct-Mount : -20~80 °C
 - Remote Diaphragm : -40~280 °C
- Max. Pressure : 8.0 MPa
- Fill Fluid and Maximum Temperature
 - Silicone Oil (Max. Temperature 130 °C)
 - HT Silicone Oil (Max. Temperature 280 °C)
 - Fluorine Oil (Max. Temperature 160 °C)
 - Vegetable Oil (Max. Temperature 130 °C)
- Ambient Temperature : +/-0.18%~+/-0.5% 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

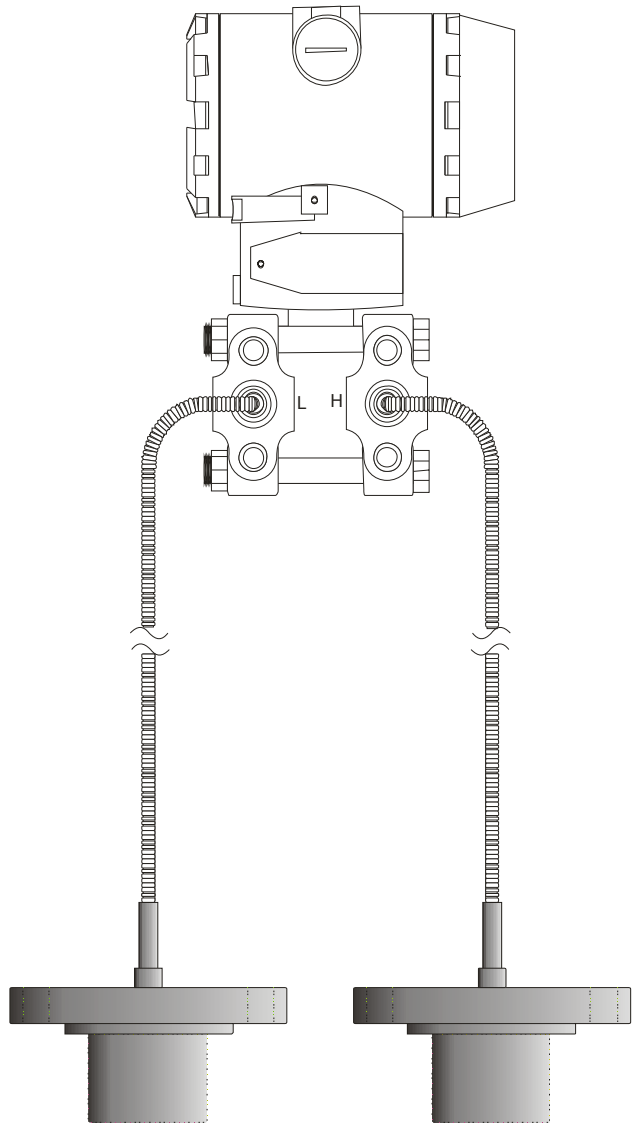


MEASURING RANGE & MAX. STATIC PRESSURE

Direct-Mount Diaphragm	Min. Range	Max. Range	Min. Range	Max. Range	Max. Static Pressure
Pressure Transmitter APT8000 with DD Series	0-10 kPa	0-100 MPa	0-1019.7 mmH ₂ O	0-10197 mH ₂ O	100 MPa
	0-100 mbar	0-1000 bar	0-40.15 inH ₂ O	0-401463 inH ₂ O	
	0-1.45 psi	0-14504 psi	0-0.1 kgf/cm ²	0-1020 kgf/cm ²	
Remote Diaphragm Seal	Min. Range	Max. Range	Min. Range	Max. Range	Max. Static Pressure
Pressure Transmitter APT8000 with D1 Series	0-6.0 kPa	0-8.0 MPa	0-611.82 mmH ₂ O	0-815.76 mH ₂ O	8.0 MPa
	0-60 mbar	0-80 bar	0-24.088 inH ₂ O	0-32117 inH ₂ O	
	0-0.87 psi	0-1160.3 psi	0-0.061 kgf/cm ²	0-81.578 kgf/cm ²	
Differential Pressure Transmitter ADP9000 with D1 / D2 Series	0-6.0 kPa	0-8.0 MPa	0-611.82 mmH ₂ O	0-815.76 mH ₂ O	8.0 MPa
	0-60 mbar	0-80 bar	0-24.088 inH ₂ O	0-32117 inH ₂ O	
	0-0.87 psi	0-1160.3 psi	0-0.061 kgf/cm ²	0-81.578 kgf/cm ²	
Level Transmitter ADP9000L with D1 Series	0-6.0 kPa	0-8.0 MPa	0-611.82 mmH ₂ O	0-815.76 mH ₂ O	8.0 MPa
	0-60 mbar	0-80 bar	0-24.088 inH ₂ O	0-32117 inH ₂ O	
	0-0.87 psi	0-1160.3 psi	0-0.061 kgf/cm ²	0-81.578 kgf/cm ²	

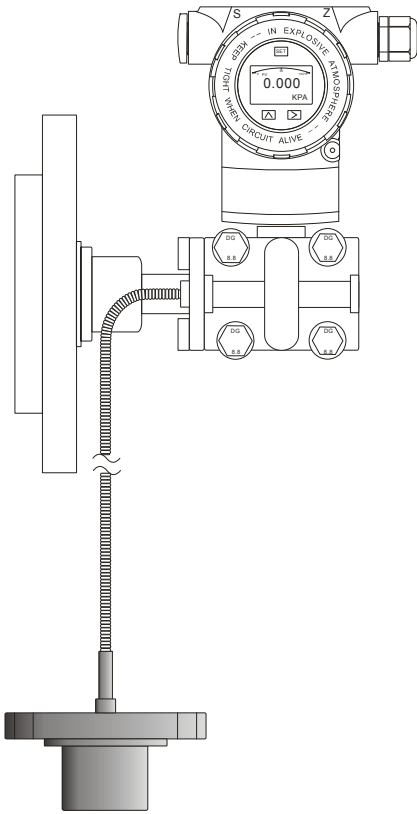


ADP9000 with D1 Series

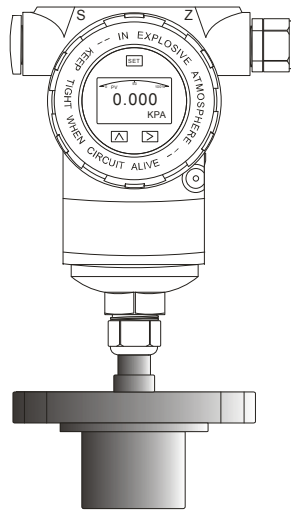


ADP9000 with D2 Series

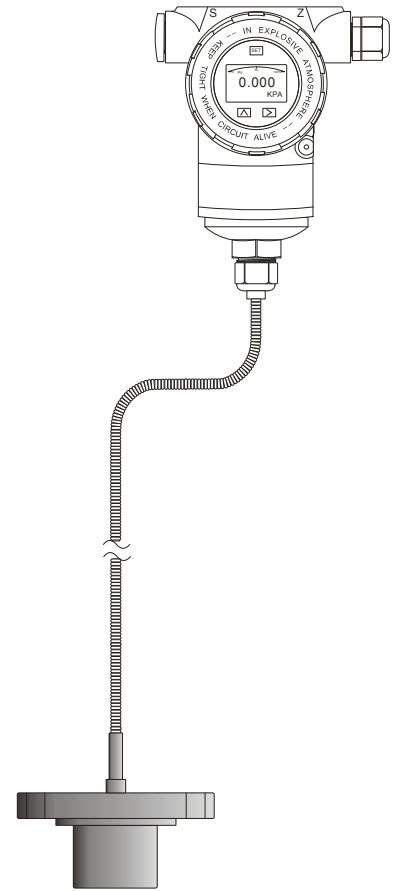
DIMENSIONS



ADP9000L with D1 Series



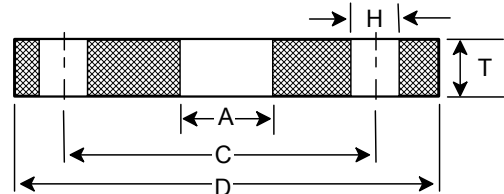
APT8000 with DD Series



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 PN10	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" (Diaphragm Diameter If Extended: 38 mm)
	2										2" (Diaphragm Diameter If Extended: 48 mm)
	3										3" (Diaphragm Diameter If Extended: 66 mm)
	4										4" (Diaphragm Diameter If Extended: 89 mm)
Diaphragm Extension Length	0										Flush Diaphragm
	2										2" (50 mm)
	4										4" (100 mm)
	6										6" (150 mm)
Diaphragm Material	N										Stainless Steel 316L
	B										Hastelloy B
	C										Hastelloy C
	T										Tantalum
	P										PTFE-coated Tantalum Diaphragm (PTFE Thickness: 40 µm)
	Z										Other
Flange Material	N										Carbon Steel
	4										Stainless Steel 304
	6										Stainless Steel 316
	Z										Other
Fill Fluid	-N										Silicone Oil (Max. Temperature 130 °C)
	-S										HT Silicone Oil (Max. Temperature 280 °C)
	-F										Fluorine Oil (Max. Temperature 160 °C)
	-V										Vegetable Oil (Max. Temperature 130 °C)
Capillary Length	NN										Direct-Mount
	01-10										1-10 m
Option	-N										None
	-W										Oil-free and Water-free Treatment