

Remote Diaphragm Seal Level Transmitter

AT3051RD Series

■ DESCRIPTION

AT3051RD series is a diaphragm seal product, which designed for the high-viscosity/ granular/ high-temp./ high-corrosivity situation. RD series diaphragm seal assembles pressure /DP transmitter to form direct-mount /capillary-connections style.

■ TECHNICAL DATA

The maximum temperature comes up to 280 °C
 Multiple connection modes - Flange style / Tri-Clamp style
 Multiple diaphragms/alternative connection material
 It can be used for fill fluid for food industry
 Extreme hot and cold temperature
 Stainless Steel with PVC coating capillary
 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
Measuring Range	0 - 2068 Kpa
Material	Flange : Carbon Steel Stainless Steel 304 Stainless Steel 316 Diaphragms : Stainless Steel 316L Hastelloy C Tantalum PTFE-coated Tantalum Diaphragm Capillary : Stainless Steel with PVC Coating
Flange Size	40mm, 50mm, 80mm, 100mm 1-1/2", 2", 3", 4"
Process Connection	Flange, Tri-clamp
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", 4", 6"

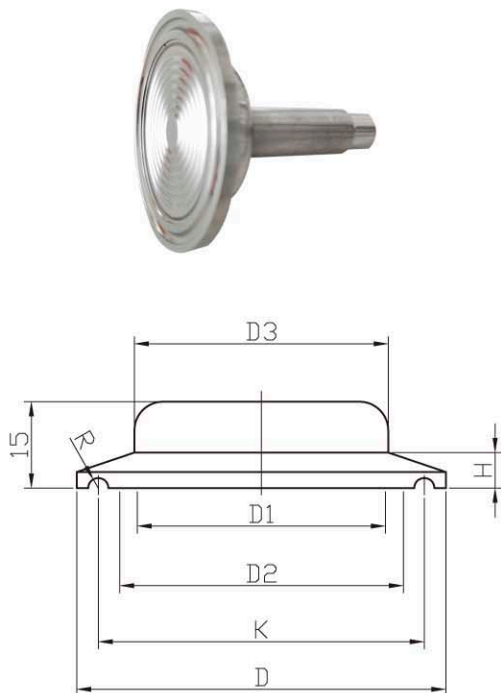
Installation Style	Direct-mount One-sided Capillary Two-sided Capillaries
Capillary Length	1.0 M~10 M
Max. Temperature	Direct-Mount : -20 to 80 °C Remote Diaphragm : -40 to 280 °C
Max. Pressure	8.0MPa
Fill Fluid and Maximum	Silicone Oil(Max. Temperature 130 °C)
Temperature	HT Silicone Oil(Max. Temperature 280 °C) Fluorine Oil(Max. Temperature 160 °C)
Ambient Temperature	+/-0.18% ~ +/-0.5% of Span Per 20 °C Effect
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
Stability	+/-0.2% of URL for 2 Years
Accuracy	+/-0.1% of Span

Diaphragm Level Transmitter

MODEL SELECTION

Item	Code	Specification
AT3051RD		Remote Level Transmitter
Measurement Range	3	0~7.5 Kpa
	4	0~37.4 Kpa
	5	0~186.8 Kpa
	6	0~690 Kpa
	7	0~2068 Kpa
Output	S	4-20mA, HART Protocol, Linear Output
Cable Entry	1	M20*1.5
	2	1/2" NPT
Mounting Bracket	B00	None
	B01	Tube-type Curved Bracket (Carbon Steel)
	B02	Wall Mounting Bracket (Carbon Steel)
	B03	Tube-type Flat Bracket (Carbon Steel)
	B04	Tube-type Curved Bracket (Stainless Steel)
	B05	Wall Mounting Bracket (Stainless Steel)
Optional	d	Intrinsically Safe Type, Flameproof (Exd IIC T6 Gb)
	i	Intrinsically Safe (Exia IIC T6 Ga)
	M3	LCD Display
	K1	Degreasing Treatment

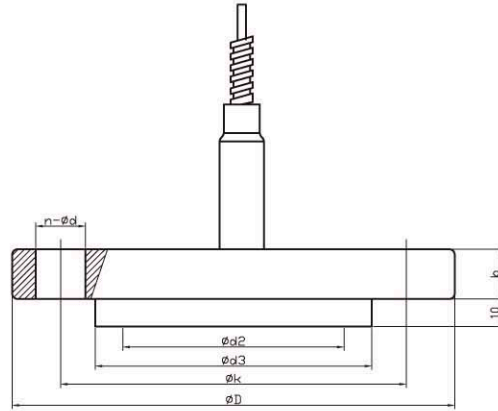
1199SCW TRI CLAMP TYPE



Process Connection	A	DN10~DN32
	B	DN40
	C	DN50
	D	DN65
Flange Material	1	Stainless Steel
Fill Fluid (High Pressure Side)	A	Silicone Oil
	C	Fluorine Oil
Capillary Length	0	0m
	1	3m
	2	5m
	3	7m
	4	10m
Capillary Protective Sleeve	5	Customized
	n	No Capillary
	A	Capillary with PVC Sleeve
	B	Capillary without PVC Sleeve

Diaphragm Level Transmitter

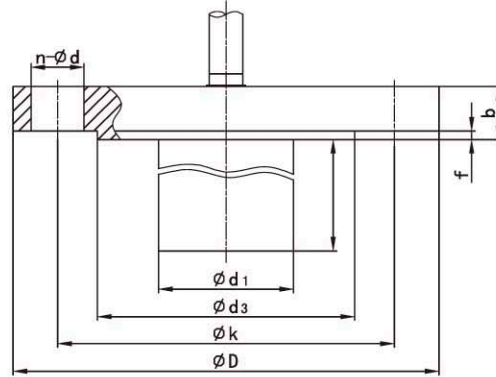
■ 1199FFW FLAT FLANGE TYPE



Process Connection	C	2" ANSI 150#
	D	2" ANSI 300#
	J	2" ANSI 600#
	E	3" ANSI 150#
	F	3" ANSI 300#
	K	3" ANSI 600#
	G	4" ANSI 150#
	H	4" ANSI 300#
	Q	DN50 PN16
	R	DN50 PN40
	M	DN80 PN16
	S	DN80 PN25
	T	DN80 PN40
	N	DN100 PN16
	U	Customized
	Flange Diaphragm Material	A
B		Hastelloy C
C		Tantalum
D		Titanium
E		Monel
F		PTFE Coating
G		F46 Coating
H		Gold-plated
Flange Material	1	Stainless Steel
Fill Fluid(High Pressure Side)	A	Silicone Oil
	B	High Temperature Silicone Oil
	C	Fluorine Oil
Capillary Length	0	0m
	1	3m
	2	5m
	3	7m
	4	10m
	5	Customized
Capillary Protective Sleeve	n	No Capillary
	A	Capillary with PVC Sleeve
	B	Capillary without PVC Sleeve

Diaphragm Level Transmitter

■ 1199EFW INSERT TUBE TYPE



Process Connection	C	2" ANSI 150#
	D	2" ANSI 300#
	J	2" ANSI 600#
	E	3" ANSI 150#
	F	3" ANSI 300#
	K	3" ANSI 600#
	G	4" ANSI 150#
	H	4" ANSI 300#
	Q	DN50 PN16
	R	DN50 PN40
	M	DN80 PN16
	S	DN80 PN25
	T	DN80 PN40
	N	DN100 PN16
	U	Customized
	Flange Diaphragm Material	A
B		Hastelloy C
Flange Material	1	Stainless Steel
Fill Fluid(High Pressure Side)	A	Silicone Oil
	B	High Temperature Silicone Oil
	C	Fluorine Oil
Insert Tube Length	1	50mm
	2	100mm
	3	150mm
Capillary Length	0	0m
	1	3m
	2	5m
	3	7m
	4	10m
	5	Customized
Capillary Protective Sleeve	n	No Capillary
	A	Capillary with PVC Sleeve
	B	Capillary without PVC Sleeve