

11301-RD

Remote Diaphragm Seal Smart Transmitter

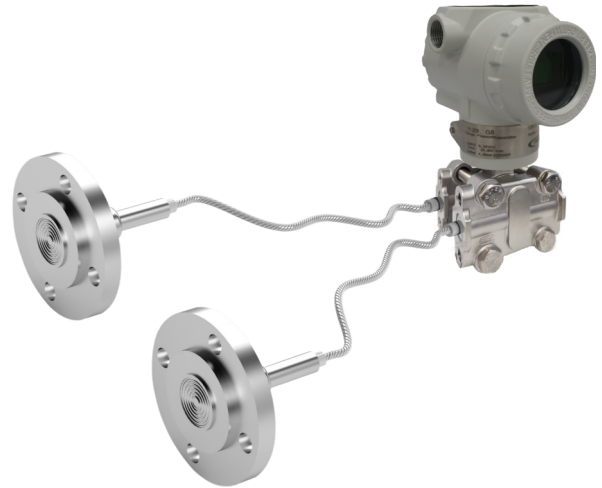
GENERAL

11301-RD series a diaphragm seal product, which designed for the high-viscosity / granular / high-corrosivity situation.

11301-RD series a diaphragm seal assemblies Alia pressure / DP transmitter to from direct-mount / capillary-connection 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 industrial
- 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, increase accuracy and great stability

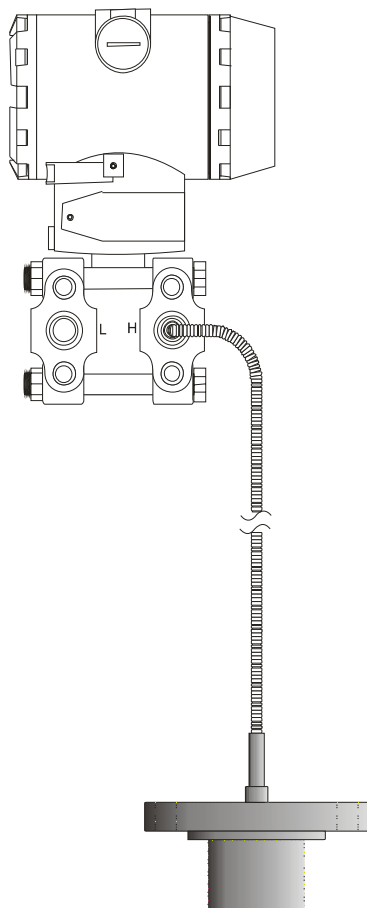


STANDARD SPECIFICATION

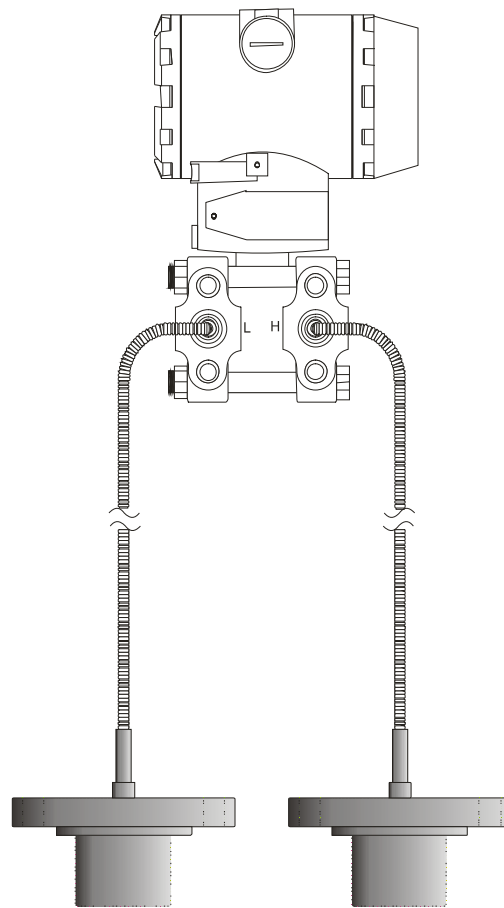
- Process Fluid: Liquid, Gas or Vapor
- Application: Liquid Level, Differential Pressure, Gauge Pressure, Absolute Pressure
- Material:
 - Flange: Carbon Steel / Stainless Steel 304 / 316
 - Diaphragm: Stainless Steel 316L / Hastelloy B / Hastelloy C / Tantalum / PTFE-coated Tantalum Diaphragm
 - Capillary: Stainless Steel with PVC coating
- Flange Size: 1.1/2", 2", 3", 4"
- Process Connection: Flange
- Flange Rating:
 - ANSI 150# / ANSI 300# / ANSI 600#
 - JIS 10K / JIS 20K / JIS 40K
 - DIN PN10 / PN16 / PN25 / PN40
 - Tri Clamp (DIN32676 / ISO2852)
- Protection Class: IP66 (Standard)
Intrinsically Safe Exia IIC T6 Ga
Explosion proof Exd IIC T6 Gb
- Extension Length: 2", 3", 4"
- Accuracy: +/- 0.1% of Span
- Stability: +/- 0.15% of URL for 2 years
- Installation Style:
 - Direct-mount: RD
 - One-sided Capillary: RD1
 - Two-sided Capillary: RD2
- Capillary Length: 1.0 M ~ 10 M
- Max. Temperature:
 - Direct-Mout: -20 to 80° C
 - Remote Diaphragm: -40 to 280° C
- Max. Pressure: 8MPA
- Fill Fluid and Maximum:
 - Silicone (Max. Temperature 130° C)
 - HT Silicone (Max. Temperature 280° C)
 - Fluorine (Max. Temperature 160° C)
 - Vegetable Oil (Max. Temperature 130° C)
- Ambient Temperature (Electronic circuits): -25 to +80 °C
- Ambient Temperature Effect: +/-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
- 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
Load: Rohm = (Vdc-9)*50
- Power Supply : 9 - 36 VDC
- Damping : 0 - 32 seconds
- Cable Entry : M20 Conduit Threads / 1/2" NPT (Female)

MEASURING RANGE

Range Code	Range Limits	
	Min. Span	Max. Span
4	0 ~ 3.7 KPa	0 ~ 37.4 KPa
	0 ~ 381 mmH2O	0 ~ 3813.7 mmH2O
	0 ~ 37 mbar	0 ~ 374 mbar
5	0 ~ 18 KPa	0 ~ 186.8 KPa
	0 ~ 1904 mmH2O	0 ~ 19048 mmH2O
	0 ~ 186 mbar	0 ~ 1868 mbar
6	0 ~ 69 KPa	0 ~ 690 KPa
	0 ~ 7036 mmH2O	0 ~ 70360 mmH2O
	0 ~ 690 mbar	0 ~ 6900 mbar
7	0 ~ 206 KPa	0 ~ 2068 KPa
	0 ~ 21 mH2O	0 ~ 210.9 mH2O
	0 ~ 2.06 bar	0 ~ 20.68 bar

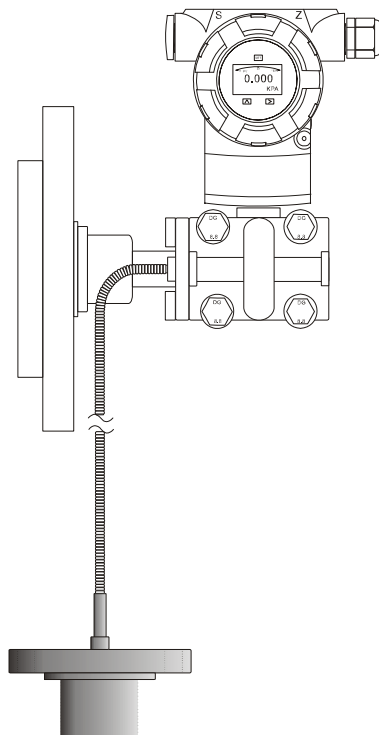


RD1 Series

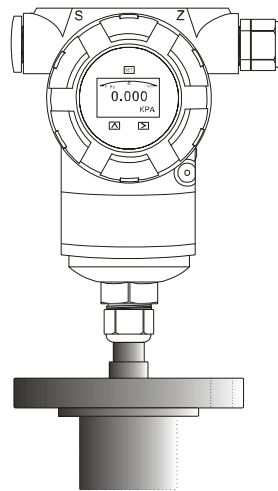


RD2 Series

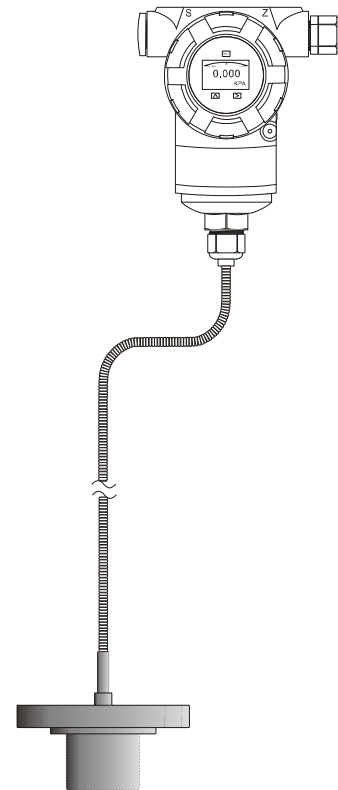
➤ DIMENSIONS



RD1 Series



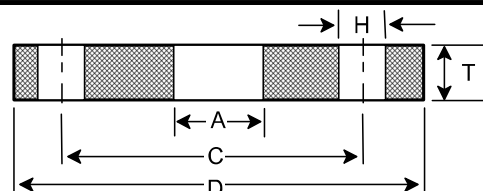
RD Series



RD1 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

11301-RD Series											↙ Range; See page 2
Example: 11301-RD2-(4)-A30N6-SL3H1.5-N											
11301-	x-	x	x	x	x	x	-x	xx	-x	Description	
Installation Style	RD-										Direct-mount
	1-										One-sided Capillary Connects Remote Diaphragm Seal
	2-										Two-sided Capillaries Connect Remote Diaphragm Seal (RD2 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										PTFE-coated Tantalum Diaphragm (PTFE Thickness:40µm)
	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



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