

PRESSURE TRANSMITTERS

Pressure Measurement

LT SMART TRANSMITTER - AT3051

& Monitoring



DESCRIPTION

AT3051 LT Smart Transmitter is a digital flange pressure level transmitter designed for industrial level measurement applications. The AT3051 can be configured to provide integrated solutions for a broad range of pressure and level measurement applications.

TECHNICAL FEATURES

Process fluid	Liquid
Application	Liquid Level, Differential Pressure
Stability	+/-0.15% of URL for 2 years
Working temperature	-40 to +250°C
Max. pressure	40 MPa (dependant on flange rating)
Material	
- Flange / adapter	Carbon Steel / Stainless Steel 304 /Stainless Steel 316
- Diaphragm	Stainless Steel 316L / Hastelloy C / Monel / Tantalum
- Bolts & nuts	Carbon Steel / Stainless Steel 316
- Name / tag plate	Stainless Steel 304 / Stainless Steel 316
- Converter housing	Low copper cast aluminum alloy with polyurethane, light blue paint
- Fill fluid	Silicone / High Temperature Silicone Fluorine Oil
Protection class	IP67 (Standard)
	Intrinsically safe type, Flameproof (Exd IIC T4~T6)
	Explosion proof Ex D IIB T5
	Intrinsically safe (Exia IIC T4~T6)
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 (Compatible)
Load	Rohm=(Vdc-9)*50
Power supply	9 - 36 VDC

FEATURES

- ✓ Updating time of output current in 200 ms
- ✓ Improved performance, increased accuracy and greater stability
- ✓ Two years stability of 0.15%
- ✓ 0.1% accuracy
- ✓ 4-20 mA output plus direct digital HART communication
- ✓ Automatic zero calibration by simply pressing a button
- ✓ Explosion proof and weather proof

I-SYSTEM MEASUREMENT
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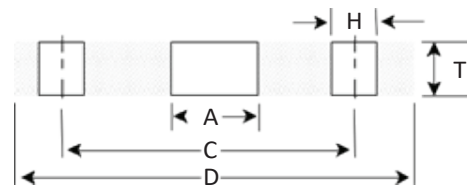
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12-2021 I-SYSTEM 301036

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FLANGE TABLE

Flange Style	Dimension of Flange			Bolt	
	C	D	T	H	NO
1-1/2" JIS 10K	105	140	16	19	4
2" JIS 10K	120	155	16	19	4
3" JIS 10K	150	185	18	19	8
4" JIS 10K	175	210	18	19	8
1-1/2" JIS 20K	105	140	16	19	4
2" JIS 20K	120	155	16	19	4
3" JIS 20K	160	200	20	23	8
4" JIS 20K	185	225	22	23	8
1-1/2" JIS 40K	120	160	24	23	4
2" JIS 40K	130	165	26	19	8
3" JIS 40K	170	210	32	23	8
4" JIS 40K	205	250	36	25	8
1-1/2" ANSI 150#	98.6	127	18	15.7	4
2" ANSI 150#	120.7	152.4	19	19.1	8
3" ANSI 150#	152.4	190.5	24	19.1	8
4" ANSI 150#	190.5	228.6	24	19.1	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

Flange Style	Dimension of Flange			Bolt	
	C	D	T	H	NO
DN40 PN10	110	150	18	18	4
DN50 PN10	125	165	20	18	4
DN80 PN10	160	200	24	18	8
DN100 PN 10	180	220	20	18	8
DN40 PN16	110	150	18	18	4
DN50 PN16	125	165	20	18	4
DN80 PN16	160	200	24	18	8
DN100 PN16	180	220	24	18	8
DN40 PN25	110	150	18	18	4
DN50 PN25	125	165	20	18	4
DN80 PN25	160	200	24	18	8
DN100 PN25	190	235	24	22	8
DN40 PN40	110	150	22	18	4
DN50 PN40	125	165	24	18	4
DN80 PN40	160	200	24	18	8
DN100 PN40	190	235	24	22	8



MODEL SELECTION

Model	Level Transmitter	AT3051LT	X	X	X	X	X	X	X	X	X	X
Measurement Range	0~7.5 kpa	3										
	0~37.4 kpa	4										
	0~186.8 kpa	5										
	0~690 kpa	6										
	0~2068 kpa	7										
Output	4-20mA, HART Protocol, Linear Output	S										
Diaphragm Material / Fill Fluid	Stainless Steel 316L Silicone Oil	2										
	Hastelloy C (range>3Kpa) Silicone Oil	3										
	Tantalum (range>3Kpa) Silicone Oil	T										
	Stainless Steel 316L Fluorine Oil	A										
Drain Hole	Back of process flange or none	B										
	Process flange side upper	U										
	Process flange side lower	L										
Wetted O-Ring Material	Buna-N (NBR)	7										
	Viton (FKM) (Temperature ≥-20°C)	6										
	Low Temperature Viton (FKM-GFLT)	5										
Process Connection	2" ANSI 150#	C										
	2" ANSI 300#	D										
	3" ANSI 150#	E										
	DN50 PN1.6MPa	Q										
	DN80 PN1.6MPa	S										
	DN100 PN1.6MPa	U										
	Customize	W										
Flange Diaphragm Material	Stainless steel 316L	A										
	Hastelloy C	B										
	Tantalum	C										
	PFA coating	E										
	F46 coating	F										
Fill Fluid (High pressure side)	Silicone Oil	A										
	Fluorine Oil	C										
Optional	Intrinsically safe type, Flameproof (Exd IIC T4~T6)	d										
	Intrinsically safe (Exia IIC T4~T6)	i										
	LCD display	M3										
	Stainless steel drain valve or screw (2pcs)	D1										
	1/2" NPT female waist flange (2sets)	C1										
	1/2" NPT-M20*1.5-Ø14 pressure pipe (2sets)	C12										
	M20*1.5 male thread T joint (2sets)	C2										
	M20*1.5 T joint -Ø14 Pressure pipe (2sets)	C21										
	Degreasing treatment	K1										

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