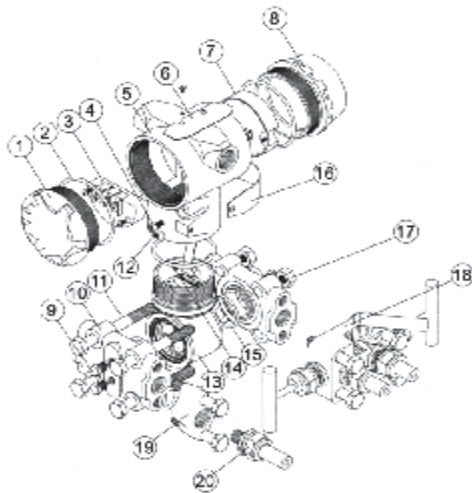


Model JYB-3151

Smart Differential Pressure Transmitter



DESCRIPTION



Model JYB-3151 is a smart differential pressure transmitter with isolating membrane. Each unit is constructed of stainless steel for durability in dry rugged environments. Both gas and liquid pressure overloads of up to 50% over capacity are safely accepted. The transmitter uses our proprietary current output with wide temperature compensation. This design references the primary pressure sensing diaphragm to the atmosphere, and provides a stable zero regardless of the transducer environment.

PRESSURE MEASUREMENT

Supply Voltage	DC 24V(12~45VDC), Intrinsic safety explosion prevention must be powered by corresponding safety grid.(24VDC; 12VDC without loading; more than 16VDC with LCD display.)
Operating Range	Any zero based full scale from 100psi(5 bar) to 5000psi (350bar)
Over Pressure	Two times for the full scale
Output Signal	Current two-wire 4mA to 20mA (Load < 500Ω);
Pressure Media	Fluids compatible with 316 stainless steel and Hastelloy C276 (NACE compatible grades)

FEATURES

- 0.0015 % FS/°F temperature effect
- $\pm 0.075 \sim \pm 0.1\%$ FS accuracy
- 2 psig to 5000 psig range
- True gage or absolute
- 4 to 20 mA output
- Isolated double wall construction
- Enhanced temperature stability,
- CE Certification

PERFORMANCE SPECIFICATIONS

Accuracy for Linear output	$\pm 0.075 \sim \pm 0.1\%$ FS, including Linear, variation of rate, repetitive composite inaccuracy.
Extraction output	$\pm (0.2\%$ of standard measuring range + he upper limit of 0.5 plus)
Response	<100ms
Long Term Stability	<0.1% FS per year
Normal Working Environment	Working : -20 to 80°C Storage: -40~+104°C Humidity : 0~90% RH Atmospheric pressure : 86~106kPa
Preventing explosion working environment	Temperature : -20~+40°C Humidity : 5~95% RH Atmospheric pressure : 86~106kPa The parameter of Intrinsic safety product's safety fence $U_o \leq 28r$ DC, $I_o \leq 30mA$, $P_o \leq 0.84$

ELECTRICAL CONNECTION

Code	1(Red)	2(Black)	3
II	supply +	supply -	Test

PHYSICAL CONNECTION

Pressure Connection	G1/4 female with Option B screw-in adaptor
Electrical Connection	M12×1.5 Bayonet plug (IP67) DIN43650 Plug/Socket (IP65)

Model JYB-3151

Smart Differential Pressure Transmitter

ORDERING CODES

JYB-3151		
0	Subpressure	
1	Psig(the pressure difference static pressure is 0.4MPa for measuring range which code are 1 and 2.	
2	absolute pressure (measuring range≥100kPa, accuracy is 0.5% when measuring range is from 30kPa to 98kPa)	
3	pressure difference static pressure 2.5MPa	
4	pressure difference static pressure 4 MPa	
5	pressure difference static pressure 6.4 MPa	
6	pressure difference static pressure 16 MPa	
7	pressure difference static pressure 25 MPa	
8	pressure difference static pressure 32 MPa	
9	pressure difference static pressure 40 MPa	
1	0-0.06~0.3kPa	
2	0-0.25~1.5kPa	
3	0-1.2~8kPa	
4	0-6~40kPa	
5	0-30~180kPa	
6	0-160~1000kPa	
7	0-400~2500kPa	
8	0-1600~8000kPa	
9	0-4000~25000kPa	
0	0-7000~40000kPa	
0	Standard type	
1	One plane flange	
2	Double plane flange	
3	One insert flange	
4	Double insert flange	
5	One plane and one insert flange	
S1	With HART communications	
S2	Senior intelligence(total digital sensor, configure co- mmunications keyboard)(standard configuration)	

$$\text{Accuracy} = 0.05 + 0.05 \left(\frac{\text{Rated measure range}}{\text{Setup range} - \text{zero offset}} \right) \% \text{F.S}$$

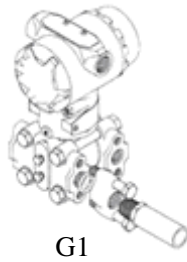
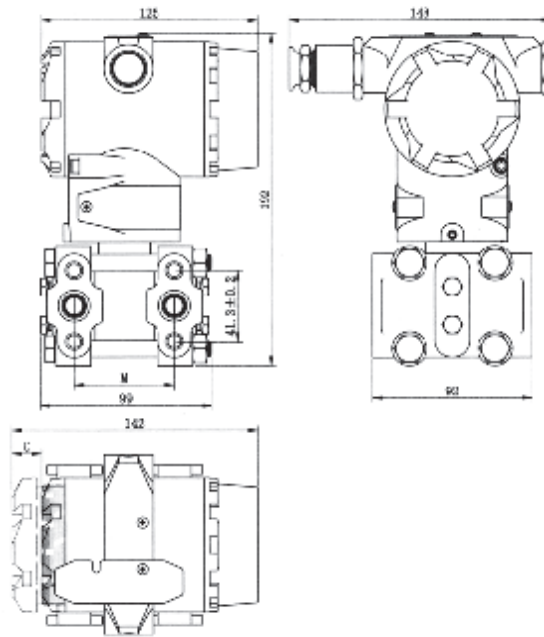
Enclosure and material code

Code	Explanation			
M3	Digital LCD display			
E1	Common cable terminal			
E2	explosion prevention cable terminal			
B1	Pipe shape Winding bracket			
B2	Plane shape Winding bracket			
B3	Pipe shape plane bracket			
D1	the valve of exhaust gas/liquid of flange's side on the top			
D2	the valve of exhaust gas/liquid of flange's side on the bottom			
G1	Waist shape flange			
G2	Welded pipe shape's terminal			
G3	Incorporated three-valve bank			
i	Intrinsic safety			
d	Isolating explosion			
G	≤200°C (high temperature silicon oil)			
Standard type	Anticorrosive material	Structure material		
		Flange terminal	Exhaust gas/liquid valve	isolating membrane
	F12	carbon steel	316	316L
	F13	carbon steel	Hastelloy C	Hastelloy C-276
	F14	carbon steel	monel	Monel K-500
	F15	carbon steel	316L	tantalum
	F22	316L	316L	316L
	F23	316L	316L	Hastelloy C-276
	F24	316L	316L	Monel K-500
	F25	316L	316L	tantalum
	F26	316L	316L	Hastelloy B-2
	F33	Hastelloy C	Hastelloy C	Hastelloy C-276
	F35	Hastelloy C	Hastelloy C	tantalum
	F44	monel	monel	Monel K-500
F47	monel	monel	3YC25	

Note: 1.M3,F22 are standard configuration.

2.all above explosion prevention product were certificated following GB3836,1-2000,GB3836,4-2000 by national quality examination department for explosion prevention product.

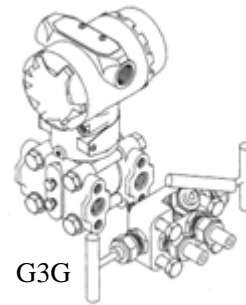
MOUNTING DIMENSION



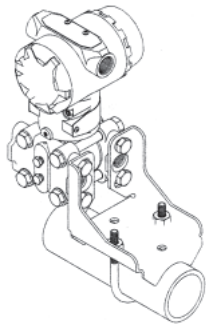
G1



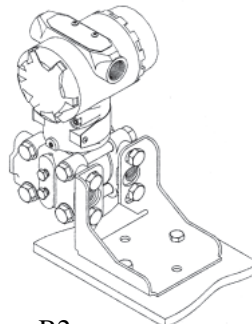
G2



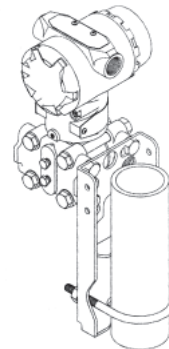
G3G



B1



B2



B3

