

3351 Series Differential Pressure Transmitter



GENERAL

DIFA 3351DP/GP series is a digital differential pressure transmitter designed for industrial pressure measurement applications.

The AT3051 can be configured to provide integrated solutions for a broad range of pressure and flow measurement applications.

FEATURES

Updating time of output current in 90 ms ,Improved performance, increased accuracy and greater stability

Two years stability of 0.15% 0.1% accuracy Parameter setting by keypad directly

4-20 mA output plus direct digital HART communication

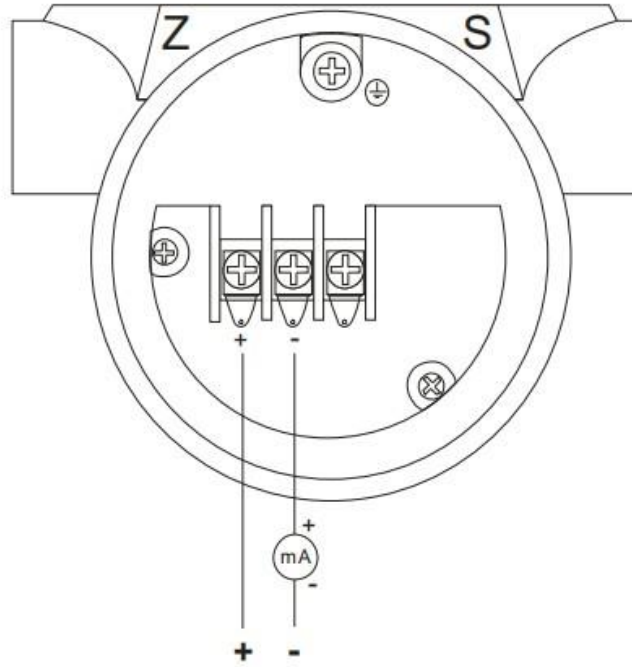
Automatic zero calibration by press-button Explosion proof and weather proof housing

STANDARD SPECIFICATION

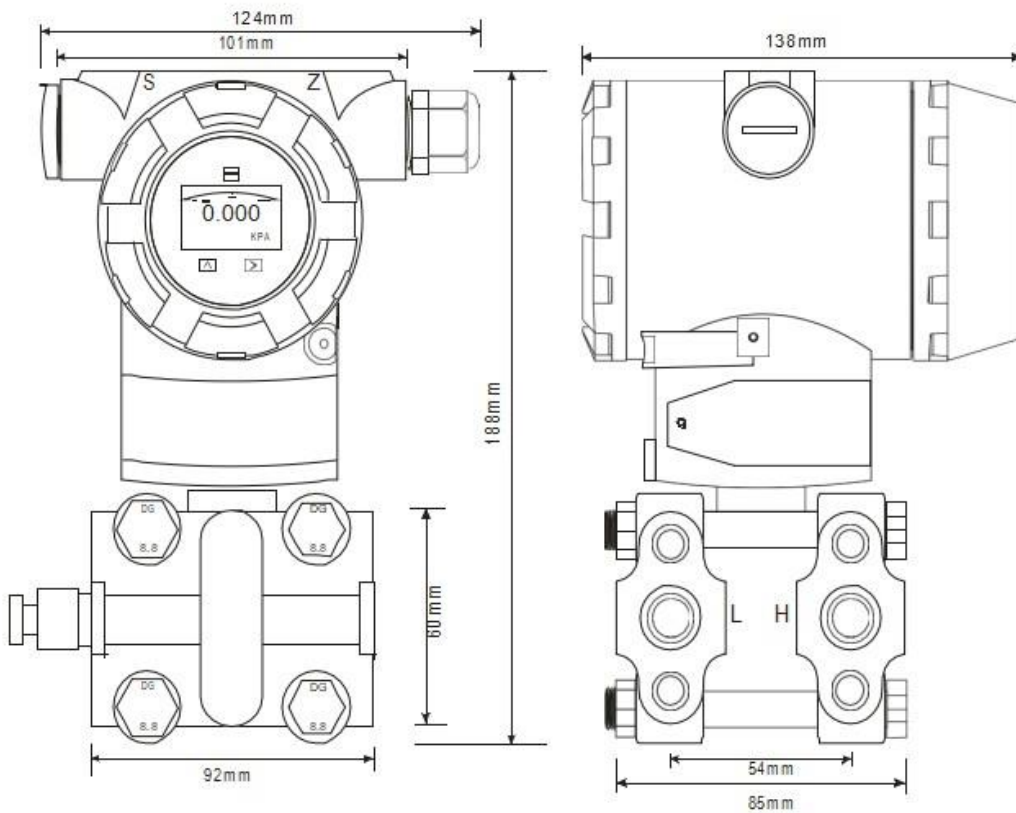
Process Fluid	Liquid, Gas or Vapor
Application	Absolute Pressure, Gauge Pressure, Differential Pressure
Measuring Range	0 - 0.16 kPa ~ 0 - 1.0 kPa (Minimum) 0 - 4.0 MPa ~ 0 - 20.0 MPa (Maximum)
Accuracy	+/- 0.1% of span
Stability	+/-0.15% of URL for 2 years
WorkingTemperature	-25 to +95 °C
Max. Pressure	40 MPa
Material(1)	Flange/Adapter : Stainless Steel 304 / Stainless Steel 316
Material(2)	Drains/Vents : Stainless Steel 304 / Stainless Steel 316
Material(3)	Diaphragm : Stainless Steel 316L / Hastelloy B / Hastelloy C / Monel / Tantalum
Wetted O-Ring	Buna N / Viton / PTFE
Bolts & Nuts	Carbon Steel / Stainless Steel 316
Mounting Bracket	Carbon steel / Stainless Steel 304 / 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 / Fluorine Oil
Protection Class	IP65 (Standard) Intrinsically Safe EEx ia IIC T5 (Standard) Explosion proof Ex D IIB T5

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 - 32 VDC
Damping	0 - 32 seconds
Response Time	200 mS
Mounting	Bracket on 2" Pipe
Humidity Limit	0 to 100% Relative Humidity
Turn on Time	2 Seconds with minimum damping
Zero Calibration	Automatic zero calibration by press-button
Cable Entry	M20 Conduit Threads / 1/2" NPT (Female)
Temperature Effect	+/-0.18% ~ +/-0.5% of span per 20 °C
Vibration Effect	+/-0.05% of URL per g to 200 Hz in any axis
EMI/RFI Effect	Follow SAMA PMC 33.1 from 20 to 1000 MHz
ProcessConnection	1/4" - 18 NPT /1/2" - 14 NPT(with adapter)
Ambient	-25 to +80 °C
Dimensions	102 mm (W) * 188 mm (H) * 130 mm (D)
Weight	3.5 Kg

WIRING DIAGRAM



DIMENSIONS



MODEL SELECTION GUIDE

Item	Code	Specification
DF3051DP		Differential Pressure Transmitter
DF3051GP		Gauge Pressure Transmitter
Measurement Range	2	0-0.1~1.5 Kpa
	3	0~7.5 Kpa
	4	0~37.4 Kpa
	5	0~186.8 Kpa
	6	0~690 Kpa
	7	0~2068 Kpa
	8	0~6890 Kpa
Output	9	0~20680 Kpa
	S	4-20mA, HART Protocol, Linear output
Diaphragm Material / Fill Fluid	J	4-20mA, HART Protocol, Square root output(Range≥5kpa)
	2	Stainless Steel 316L Silicone Oil
Drain hole	3	Hastelloy C(range >3Kpa) Silicone Oil
	A	Stainless Steel 316L Fluorine oil
Wetted O-ring Material	B	Back of process flange or none
	U	Process flange side upper
Process Connection	L	Process flange side lower
	7	Buna-N (NBR)
	6	Viton (FKM) (Temperature ≥-20°C)
Maximum Pressure Limit	5	Low Temperature Viton (FKM-GFLT)
	H	1/4" NPT F
Cable Entry	1	14 Mpa(4Mpa for range 2)
	3	25 Mpa
	5	32 Mpa
Mounting Bracket	1	M20*1.5 or 1/2"NPT
	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)
B06	Tube-type Flat Bracket (stainless steel)	
Optional	d	Intrinsically safe type, Flameproof (Exd IIC T4~T6)
	i	Intrinsically safe (Exia IIC T4~T6)
	M5	LCD display
	D1	Stainless steel drain valve or screw (2pcs)
	C1	1/2" NPT female waist flange (2sets)
	C12	1/2" NPT-M20*1.5-Φ14 pressure pipe (2sets)
	C2	M20*1.5 male thread T joint (2sets)
	C21	M20*1.5 T joint -Φ14 pressure pipe (2sets)
K1	Degreasing treatment	