

SMART DIFFERENTIAL PRESSURE TRANSMITTER

Special Features:

- Temperature Compensated
- HART Communication
- 90° Horizontal Tilt Display
- Explosion Proof with Intrinsic Safety
- Display of Pressure, Temperature and Current
- 0 - 100% Bar Graph Indication
- Zero Transfer, Range Setting Through Keypad



Overview:

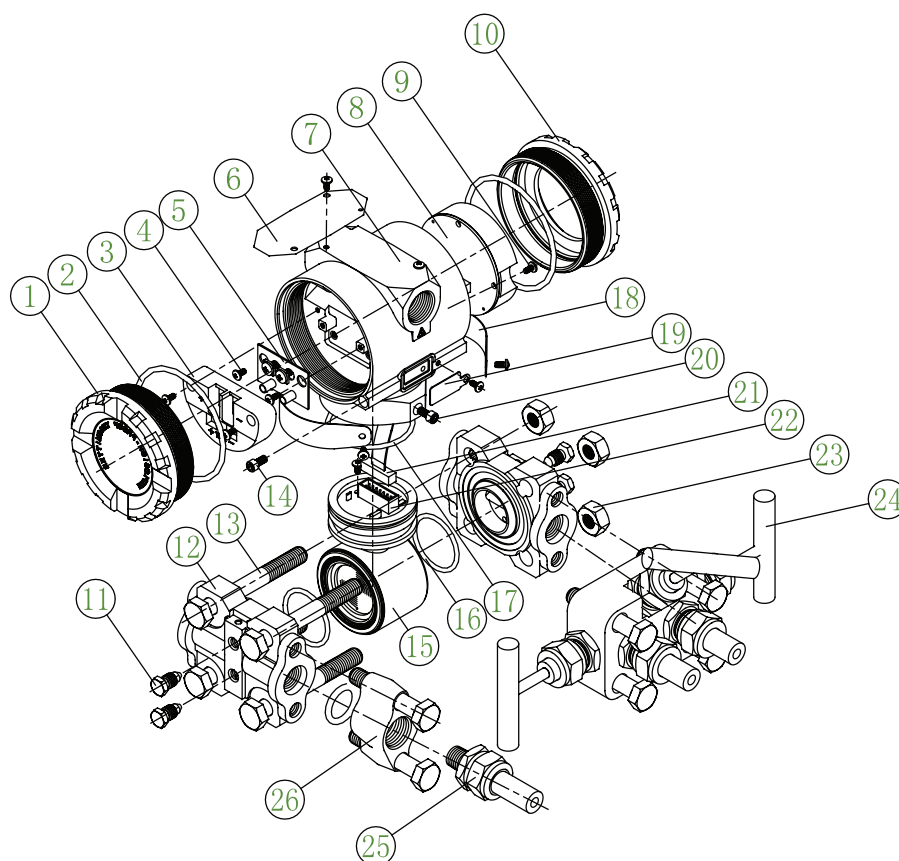
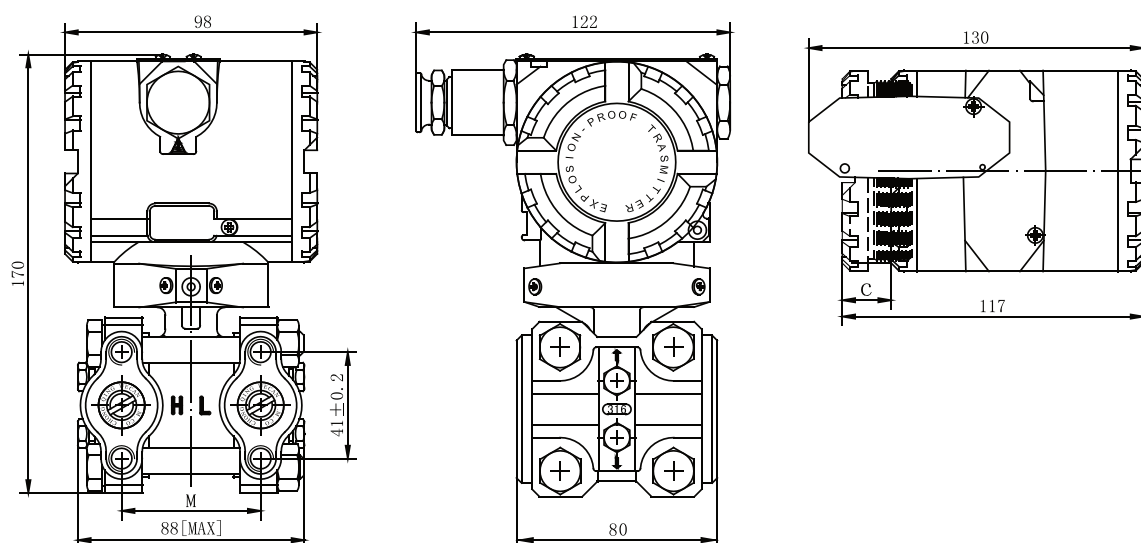
Omicron's APR2000 SMART DP differential pressure transmitter provides a kind of reliable measuring way. It is used for measuring differential pressure (or pressure), level, density of liquid, gas or steam and convert the value of above into current signal output or digital protocol output. The pressures are directly applied to the isolating diaphragm that provide isolation and resistance against process fluid corrosion. Being microprocessorbased, the electronic circuit is extremely versatile and accurate. Combined with the sensor precision, it provides a high accuracy and high rangeability. Transmitter performance is improved by continuous monitoring of the temperature and corresponding compensation. A local display permits easy reading of data.

Performance Specifications:

Media Compaibility	:	Liquids, Gases and Steam
Measuring Ranges	:	10mbar ~ 400 bar
Output Signal	:	4 - 20mA, 2 Wire, HART Superimposed
Power Supply	:	12 - 45V DC
Operating Temperature	:	-40 ~ 125 °C; Optionally available upto 350 deg C with Impulse Tubing
Operating Humidity	:	5 ~ 95% RH
Standard Accuracy	:	0.075% of F.S
Optional Accuracy	:	0.06% of F.S
Premium Accuracy	:	0.04% of F.S,
Zero & Span Setting	:	Onboard Keypad
Range Setting	:	Onboard Keypad
Process Connection	:	1/4" NPT(F)
Static Pressure	:	40 bar, 100 bar, 250 bar and 320 bar
Zero Elevation	:	On Site through Onboard Keypad
Zero Suppression	:	On Site through Onboard Keypad
Units Available	:	kPa, inH2O, mHg, ftH2O, mmH2O, mmHg, psi, bar, mbar, Pa, MPa
Enclosure Housing	:	Die cast Aluminium
Mounting	:	Mounting Bracket for 2" Pipe
Fill Fluid	:	Silicon DC 200 / 704
Diaphragm	:	AISI 316LSS / Monel / Hastalloy C / Tantalum
Flange / Adaptor	:	AISI 316LSS / Monel / Hastalloy C / Carbon Steel
Drain / Vent	:	AISI 316LSS / Monel / Hastalloy C
Wetted O-Ring	:	Viton / Buna N
Seal O-Ring	:	Viton / Buna N
Bolts, Nuts	:	AISI316SS / Carbon Steel

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⚙️ Dimensions:



01	Cover removal	02	O-ring	03	Wiring terminals cover	04	Mounting bolts of circuit board	05	Thunder-proof wiring circuit board
06	Name plate	07	Housing body	08	Meter head	09	Mounting bolts of meter head	10	Meter head cover
11	Drain/vent valve	12	Template	13	Bolts M10	14	Cover lock bolt	15	Sensor
16	O-ring	17	O-ring	18	Position code plate	19	Zero alignment plate	20	Housing body lockup bolt
21	Parallel wires	22	Circuit board	23	Nut M10	24	Integrated 3-valve group (optional)	25	Welded connector (optional)
26	Flange (optional)								

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HOW TO ORDER

Basic Model:

APR2000D

Differential Pressure Range:

2

2	0 ~ 0.125 - 1.5 kPa
3	0 ~ 1.5 - 7.5 kPa
4	0 ~ 6.5 - 40.0 kPa
5	0 ~ 35.0 - 200.0 kPa
6	0 ~ 135.0 - 1000 kPa
7	0 ~ 345.0 - 2000 kPa
8	0 ~ 1170 - 6890 kPa
9	0 ~ 3450 - 20680 kPa
0	0 ~ 6890 - 41370 kPa

Output:

S

E	4 - 20mA DC
S	4 - 20mA DC, 2 Wire, HART Superimposed

Material of Construction:

22

	Flange	Drain / Vents	Diaphragm
22	AISI 316 SS	AISI 316 SS	AISI 316LSS
23	AISI 316 SS	AISI 316 SS	Hastealloy C
24	AISI 316 SS	AISI 316 SS	Monel
25	AISI 316 SS	AISI 316 SS	Tantalum
33	Hastealloy C	Hastealloy C	Hastealloy C
35	Hastealloy C	Hastealloy C	Tantalum
44	Monel	Monel	Monel

Options:

B3

M1	0 - 100% Analogue Indicator
M3	4 1/2 LCD Display
B1	2" Pipe Mounting, Angle Bracket
B2	Wall Mounting, Angle Bracket
B3	2" Pipe Mounting, Carbon Steel

Ordering Example:

APR2000D-5S-22-M3-B3