

## Low Cost, Programmable, Local Indicating Pressure Transmitter

**2-wire Loop-powered**

**Model : AW-P-10**

**Compact field case**

**Programmable digital pressure transmitter**

**Variable functions**

**Range turn-down**

**High performance & cost effective**

**Extremely corrosion resistant**

**Wide Measuring Ranges**

**LED 4-digits Local display**

**A wide range of application in ;**

**Standard hydraulic & pneumatic equipments**

**Process control**

**Machine tools & automatic machinery**

**Servo valves & drives**

**Chemical & petrochemical industries**

**Air & gas compressors**



### GENERAL DESCRIPTION

AW-P-10 series Microprocessor based digital pressure transmitter has been designed as an advanced device for measuring pressure of gases and liquids in industrial applications. It is extremely versatile and suitable for measuring static pressure. A compact field case and 4 digit LED local display make it easy to control process and adjust the value for measuring range, damping, zero & span. The built-in ceramic measuring cell is highly corrosion resistant, stable and has an excellent price / performance ratio. Thanks to their high natural frequency and the rugged construction, AW-P-10 withstands high shock & vibration.

They are available as absolute and relative pressure types with either 2-wire current or 3-wire voltage output. The pressure to be measured acts without transmitting liquid fill on a stable, corrosion resistant ceramic measuring cell. Piezoresistive resistors are attached to the cell and connected in a Wheatstone bridge configuration. The output signal of the bridge is converted into a standardized current or voltage signal.

## TECHINCAL DATA

### Input

Measuring Principle	Piezoresistive Ceramic Pressure Cell
Pressure Reference	Gauge, Absolute, Vacuum & Compound
Measuring Ranges(bar)	Gauge : 0~1, 2, 3, 4, 5, 8, 10, 15, 20, 25, 35, 50, 100, 200, 350 Absolute : 0~1, 2, 5, 10, 20, 50, 100, 200, 350, 400 Vacuum : -1~0 Compound : -1~1, 2, 3, 5, 10, 20, 35, 50, 100, 200, 350, 400 Note : Other ranges are available on request
Over Pressure Limit	1.5 × Full scale without damage

### Output

Output Signal	4~20mA DC, 2-wire 1~5V DC, 3-wire(Optional)
Local Display	4 Digits, 7-segment digital LED

### Electrical Specification

Electrical Connection	Weather-proofed field case
Conduit Connection	1/2"PF,Female
Excitation Voltage	18~36V DC
Load Resistance max. @24V	500 ohm at 24V
Influence Of Excitation	0.01% FSO/V
Reverse Polarity	Protected
Response Time	≤1.5 milliseconds
Adjustment	10 : 1 Range turn-down

### Performance Specification

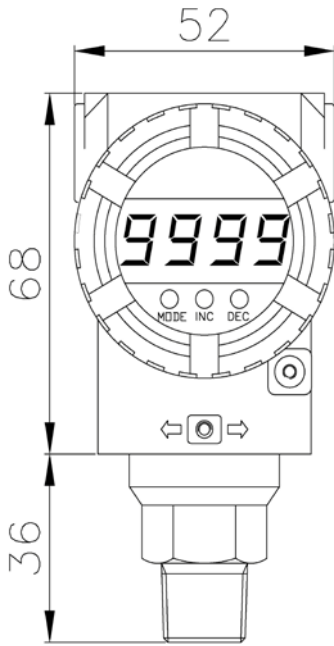
Accuracy	±0.5% FSO
Non-linearity	±0.20% FSO typical
Repeatability	±0.20% FSO typical
Pressure Hysteresis	±0.050% FSO typical
Long-term Stability	±0.3% FSO over 6 months
Operation Temperature Range	-40~125 °C
Compensated Temperature Range	0~70 °C

### Physical Specification

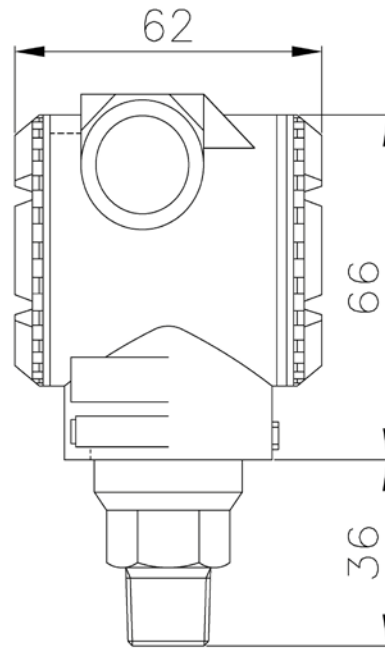
Process Connection	Thread Type : PT, NPT, PF Thread Size : 1/4", 3/8", 1/2" Other connections available such as JIS, ANSI, DIN Flange
Process Media	Gases & liquids compatible with Stainless steel 316 & Ceramic Al <sub>2</sub> O <sub>3</sub> , 96%
Materials	Field case : ALDC Wetted parts : Stainless steel 316 Diaphragm : Ceramic Al <sub>2</sub> O <sub>3</sub> , 96%
Enclosure Rate	IP65

## DIMENSION

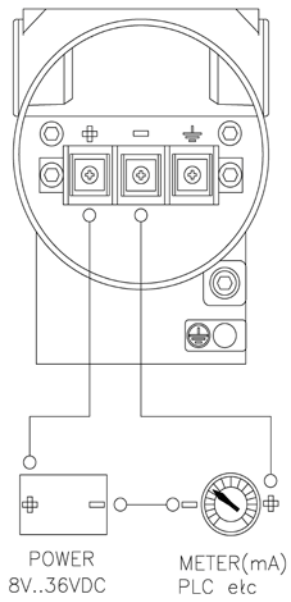
### Front View



### Side View



## Electrical Connection



# ORDERING INFORMATION

## Model

AW--P-10

### Pressure Reference

- R : Gauge pressure
- A : Absolute pressure
- V : Vacuum
- C : Compound pressure

### Process Connection Type

- A : NPT
- B : PT
- C : PF
- X : Other types of connection available on request

### Process Connection Size

- 1 : 1/4"
- 2 : 3/8"
- 3 : 1/2"
- X : others on request

### Range

- |     |         |     |          |
|-----|---------|-----|----------|
| 113 | : -1~0  | 126 | : -1~1   |
| 114 | : 0~1   | 127 | : -1~2   |
| 115 | : 0~2   | 128 | : -1~5   |
| 116 | : 0~5   | 129 | : -1~10  |
| 117 | : 0~10  | 130 | : -1~15  |
| 118 | : 0~15  | 131 | : -1~20  |
| 119 | : 0~20  | 132 | : -1~25  |
| 120 | : 0~25  | 133 | : -1~35  |
| 121 | : 0~35  | 134 | : -1~50  |
| 122 | : 0~50  | 135 | : -1~100 |
| 123 | : 0~100 | 136 | : -1~250 |
| 124 | : 0~250 | 137 | : -1~350 |
| 125 | : 0~350 |     |          |

### Unit

- A : kgf/cm<sup>2</sup> or mmHg+kgf/cm<sup>2</sup>
- B : mmHg
- C : bar
- D : psi
- E : Mpa
- F : Kpa
- X : Other calibration unit available on request

### Output Signal

- 0 : None-output(Only digital gauge)
- 1 : 4~20mA DC, 2-wire
- 2 : 1~5V DC, 3-wire(Optional)

### Option

- 1 : None
- x : Sealed diaphragm,  
Refer to data sheet No.0416

AW-P-10	R	B	3	117	A	1	X
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Note 1) Other ranges are available on request.

Note 2) Please mark "abs." for absolute pressure.

Specifications subject to change without notice.