

## Low Cost, Compact, Local Indicating Pressure Transmitter

- Front attached display**
- Cost effective**
- High corrosion resistant**
- Compact design**
- High accurate, durable & reliable**
- Wide Measuring Ranges**
- LED 3-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**



**2-wire Loop-powered**  
**Model : AW-P-11,12**



### GENERAL DESCRIPTION

AW-P-11, 12 series Compact 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 design and 3 digit LED local display make it easy to control process and monitor the process value at site. 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, the transmitters withstand 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 Silicon Ceramic Cell
Pressure Reference	Gauge, Absolute, Vacuum & Compound
Measuring Ranges(bar)	Gauge : 0~0.5, 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 Note : Other ranges are available on request
Over Pressure Limit	1.5 x Full scale without damage

### Output

Output Signal	4~20mA DC, 2-wire 1~5, 0~10V DC, 3-wire(Optional)
Local Display	3 Digits, 7-segment digital LED

### Electrical Specification

Electrical Connection	AW-P-11 : 4-pin L-plug, DIN 43 650, IP65 AW-P-12 : Flying lead with PG 9 connector
Excitation Voltage	10~36V DC
Load Resistance max.@24V	750 ohm at 24V
Influence Of Excitation	0.01% FSO/V
Reverse Polarity	Protected
Response Time	≤2 milliseconds
Adjustment	Within 10% of full scale

### Performance Specification

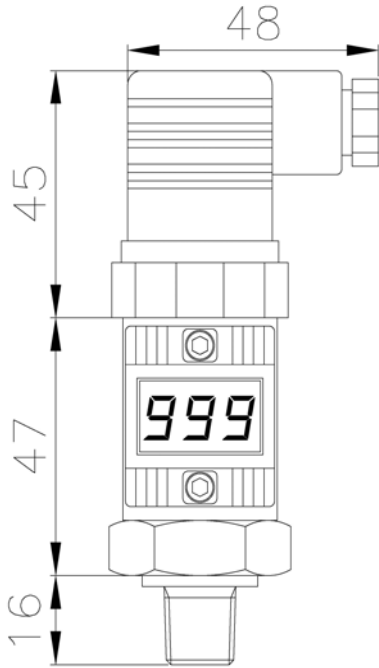
Accuracy	±0.5% FSO
Non-linearity	±0.20% FSO typical
Repeatability	±0.20% FSO typical
Pressure Hysteresis	±0.050% FSO typical
Long-term Stability	±0.3% FSO over 6 months
Operation Temperature Range	-40~125 °C
Compensated Temperature Range	0~70 °C

### Physical Specification

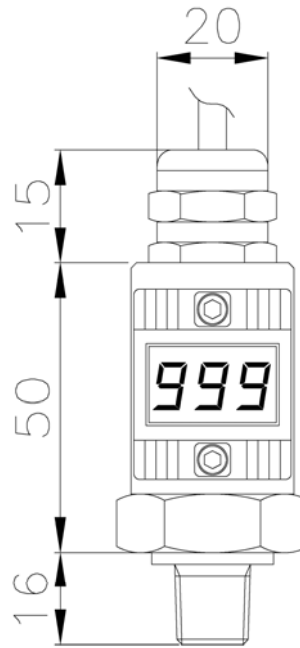
Process Connection	Thread Type : PT, NPT, PF Thread Size : 1/4", 3/8", 1/2" Other connections available such as JIS, ANSI, DIN Flange
Process Media	Gases & liquids compatible with Stainless steel 316 & Ceramic Al <sub>2</sub> O <sub>3</sub> , 96%
Materials	Case : Stainless steel 316 Wetted parts : Stainless steel 316 Diaphragm : Ceramic Al <sub>2</sub> O <sub>3</sub> , 96% Display cover : Polycarbonate
Enclosure Rate	IP65, 67

## DIMENSION

AW-P-11



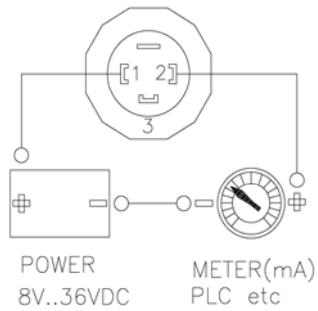
AW-P-12



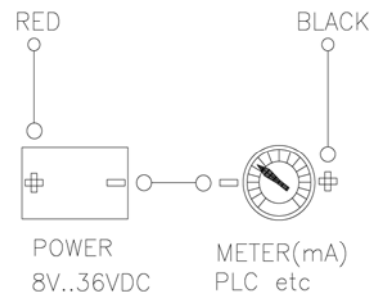
## Electrical Connection(wiring)

### 2-wire system

4-pin L-plug, DIN 43 650

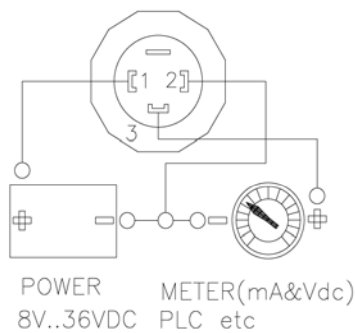


Flying lead

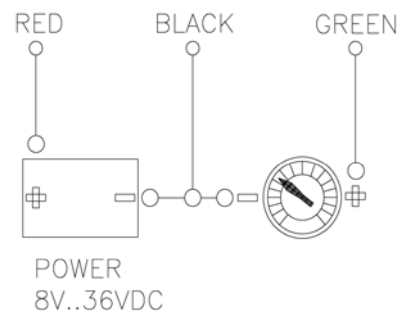


### 3-wire system

4-pin L-plug, DIN 43 650



Flying lead



## ORDERING INFORMATION

### Model

AW-P-11 : 4-pin L-plug, DIN 43 650, IP65

AW-P-12 : Flying lead, 1.5m, IP67

### 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

- |     |         |     |          |
|-----|---------|-----|----------|
| 110 | : -1~0  | 126 | : -1~1   |
| 111 | : 0~1   | 127 | : -1~2   |
| 112 | : 0~2   | 128 | : -1~5   |
| 113 | : 0~5   | 129 | : -1~10  |
| 114 | : 0~10  | 130 | : -1~15  |
| 115 | : 0~15  | 131 | : -1~20  |
| 116 | : 0~20  | 132 | : -1~25  |
| 117 | : 0~25  | 133 | : -1~35  |
| 118 | : 0~35  | 134 | : -1~50  |
| 119 | : 0~50  | 135 | : -1~100 |
| 120 | : 0~100 | 136 | : -1~250 |
| 121 | : 0~250 | 137 | : -1~350 |
| 122 | : 0~350 |     |          |
| 123 | : 0~400 |     |          |

### 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-11	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.