

**Compact,
Low Cost,
Flush Mounted,
Local Indicating Pressure Transmitter**



2-wire Loop-powered

Model : AW-P-41, 42

Flush ceramic diaphragm
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 ;
Food & beverage process controls
Chemical industry
Machinery for paint, ink, resin & dough process
Cosmetic & pulp industries
Pharmaceuticals



GENERAL DESCRIPTION

AW-P-41 series Compact digital pressure transmitter with flush ceramic diaphragm is perfectly suitable for measuring static pressure in sticky and high viscous liquids in industrial applications.

They incorporate a fully temperature compensated cell which is highly corrosion resistant, a strong and durable flush mounted diaphragm. A compact design and 3 digit LED local display make it easy to control process and monitor the process value at site. 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 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 Absolute : 0~1, 2, 5, 10, 20, 35 Vacuum : -1~0 Compound : -1~1, 2, 3, 5, 10, 20, 35 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, 0~10V DC, 3-wire(Optional)
Local Display	3 Digits, 7-segment digital LED

Electrical Specification

Electrical Connection	AW-P-41 : 4-pin L-plug, DIN 43 650, IP65 AW-P-42 : 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

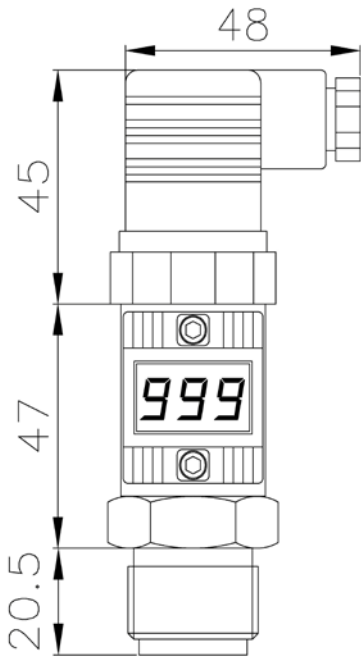
Accuracy	±0.5% FSO
Non-linearity	±0.20% FSO typical
Repeatability	±0.20% FSO typical
Pressure Hysteresis	±0.050% FSO typical
Long-term Stability	±0.3% FSO over 6 months
Operation Temperature Range	-40~125°C
Compensated Temperature Range	0~70°C

Physical Specification

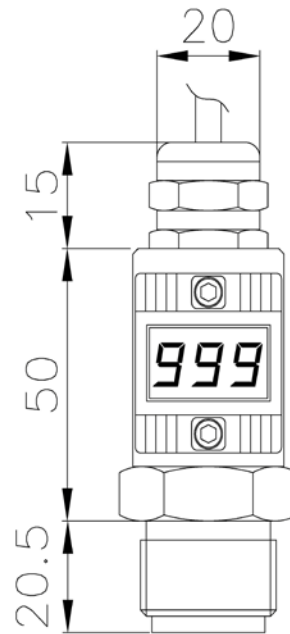
Process Connection	Thread Type : PT, NPT, PF Thread Size : 3/4", 1", 1 1/2" Other connections available such as JIS, ANSI, DIN Flange
Process Media	Gases & liquids compatible with Stainless steel 316 & Ceramic Al ₂ O ₃ , 96%
Materials	Field case : ALDC Wetted parts : Stainless steel 316 Diaphragm : Ceramic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

DIMENSION

AW-P-41



AW-P-42

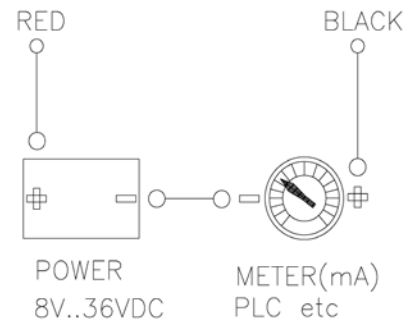
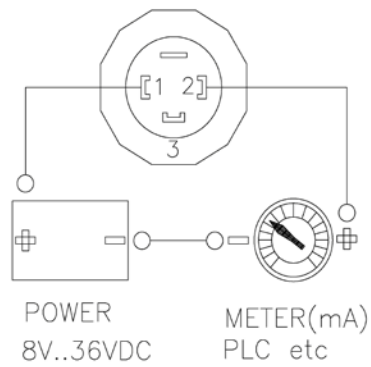


Electrical Connection(wiring)

2-wire system

4-pin L-plug, DIN 43 650

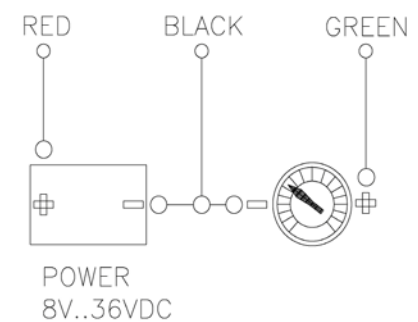
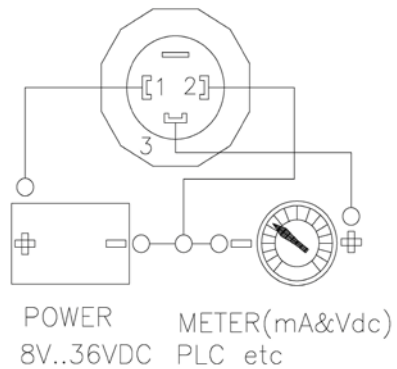
Flying lead



3-wire system

4-pin L-plug, DIN 43 650

Flying lead



ORDERING INFORMATION

Model

AW-P-41 : 4-pin L-plug, DIN 43 650, IP65

AW-P-42 : 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 : 3/4"

2 : 1"

3 : 1 1/2"

X : others on request

Range

110 : -1~0

111 : 0~0.1

112 : 0~0.2

113 : 0~0.5

114 : 0~1

115 : 0~2

116 : 0~5

117 : 0~10

118 : 0~15

119 : 0~20

120 : 0~25

121 : 0~35

122 : -1~1

123 : -1~2

124 : -1~5

125 : -1~10

126 : -1~15

127 : -1~20

128 : -1~25

129 : -1~35

Unit

A : kgf/cm² or mmHg+kgf/cm²

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-41	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.