

**Compact,
Programmable,
Local Indicating Pressure Transmitter**

PE 05.21

2-wire Loop-powered

Model : AW-P-21, 22



Front attached display

Compact design

High accurate, durable & reliable

Wide Measuring Ranges

High accurate, durable & reliable

Wetted part all stainless steel construction

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

GENERAL DESCRIPTION

AW-P-21 series Compact & low cost digital pressure transmitters are a signal conditioned, media-isolated high precision device that can be used for wide variety of applications. A compact design and 3 digit LED local display make it easy to control process and monitor the process value at site.

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 through thin corrosion resistant stainless steel 316L diaphragm on a piezoresistive silicon measuring element. The transmitting medium of pressure is oil. The measuring element contains diffused piezoresistive resistors which are connected into a Wheatstone bridge. The output signal of the bridge is temperature compensated and converted into a standardized current or voltage output signal.

TECHINCAL DATA

Input

Measuring Principle	Piezoresistive Silicon Pressure Cell
Pressure Reference	Gauge, Absolute, Vacuum & Compound
Measuring Ranges(bar)	Gauge : 0~0.1, 0.2, 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, 400 Note : Other ranges are available on request
Over Pressure Limit	3 x Full scale without damage

Output

Electrical Connection	AW-P-21 : 4-pin L-plug, DIN 43 650, IP65 AW-P-22 : Flying lead with PG 9 connector
Local Display	3 Digits, 7-segment digital LED

Electrical Specification

Electrical Connection	Weather-proofed field case 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	Within 10% of full scale

Performance Specification

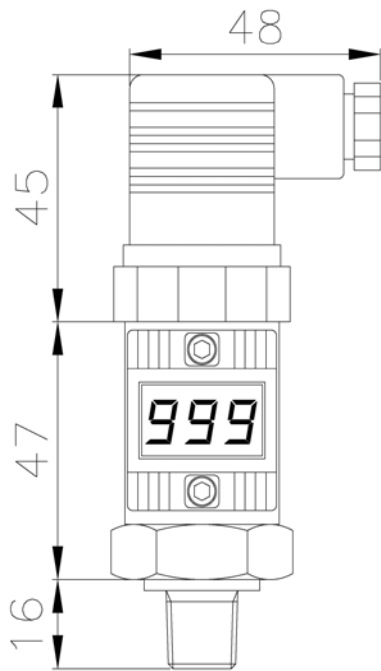
Accuracy	±0.2% FSO
Non-linearity	±0.100% FSO typical
Repeatability	±0.015% FSO typical
Pressure Hysteresis	±0.010% FSO typical
Long-term Stability	±0.3% FSO over 6 months
Operation Temperature Range	-40~125℃
Compensated Temperature Range	0~82℃

Physical Specification

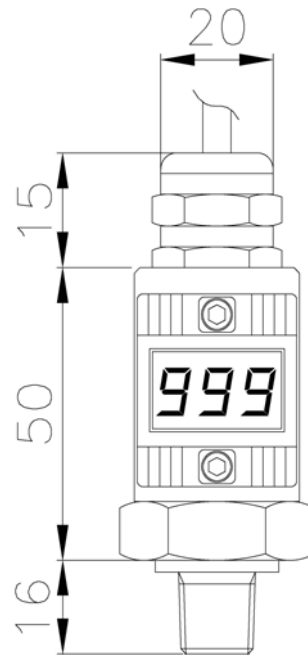
Process Connection	Thread Type : PT, NPT, PF Thread Size : 1/4", 3/8", 1/2" Other connections available such as JIS, ANSI, DIN Flange
Process Media	Gases & liquids compatible with Stainless steel 316
Materials	Case : Stainless steel 316 Wetted parts : Stainless steel 316 Diaphragm : Stainless steel 316L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

DIMENSION

AW-P-21



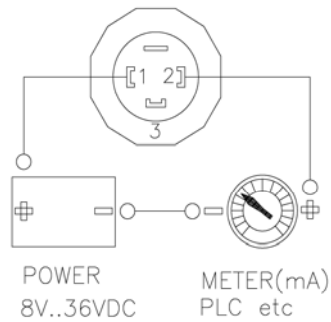
AW-P-22



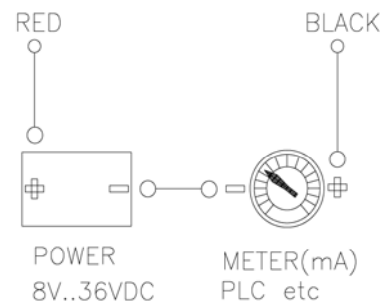
Electrical Connection(wiring)

2-wire system

4-pin L-plug, DIN 43 650

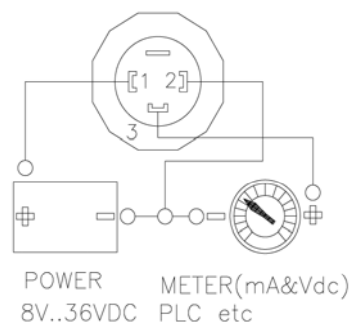


Flying lead

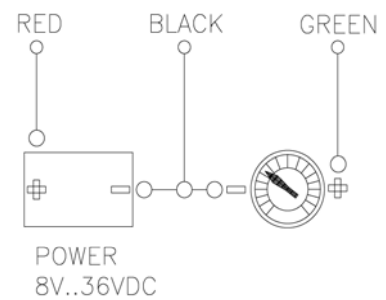


3-wire system

4-pin L-plug, DIN 43 650



Flying lead



ORDERING INFORMATION

Model

AW-P-21 : 4-pin L-plug, DIN 43 650, IP65

AW-P-22 : 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"

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 : 0~50

123 : 0~100

124 : 0~250

125 : 0~350

126 : -1~1

127 : -1~2

128 : -1~5

129 : -1~10

130 : -1~15

131 : -1~20

132 : -1~25

133 : -1~35

134 : -1~50

135 : -1~100

136 : -1~250

137 : -1~350

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-21	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.