# Low Cost, Compact, Local Indicating Temperature Transmitter



2-wire Loop-powered

Model: AW-T-11,12

RTD & Thermocouple Input
Front attached display
Cost effective
LED 3-digits local display
High accurate, durable & reliable
Wide measuring ranges
Excellent accuracy & long term stability
All stainless steel construction
The transmitter converts RTD & T/C inputs

to an analog signal for direct interface with indicators, recorders, controllers, PLC & DCS systems can be used for a wide range of applications in process control, automatic machinery and hydraulic or pneumatic system design.

## **GENERAL DESCRIPTION**

AW-T-11 series Compact & low cost digital temperature transmitters have been designed an advanced device for measuring temperature and used on Resistance temperature detector or Thermocouple assembly to provide a 4~20mA transmission output signal. A compact design and 3 digit LED local display make it easy to control and monitoring process.

It is a cost effective solution for all temperature measurement. Numerous configurations for measurement in many different mediums are offered. Generally the transmitter produces a linear 4~20mA output carried on a 2-wire system and optional voltage output can also be available.

# **TECHINCAL DATA**

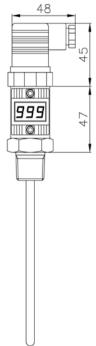
Input						
Element Type	RTD Pt 100 ohm					
Out-diameter	3.2, 4.8, 6.4, 8, 10mm					
Output						
Output Signal	4~20mA DC, 2-wire					
	1~5V, 0~10V DC, 3-wire(Optional)					
Local Display	3 Digits, 7-segment digital LED					
Electrical Specification						
Electrical Connection	AW-T-11: 4-pin L-plug, DIN 43 650, IP65					
	AW-T-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 miliseconds					
Adjustment	Within 10% of full scale					
Performance Specification						
Accuracy	±0.2% FSO					
Non-linearity	±0.10% FSO typical					
Repeatability	±0.05% FSO typical					
Hysteresis	±0.05% FSO typical					
Long-term Stability	±0.3% FSO over 6 months					
Ambient Temperature Limit	-20~80℃					
Ambient Humidity Limit	5~100% R.H					
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					
	Probe : Stainless steel 316					
	Display cover : Polycarbonite					
Enclosure Rate	IP65					

Note) More information for process connection & mounting types, please refer to the page No.28

### **DIMENSION**

## **AW-T-11**

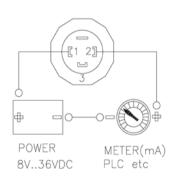




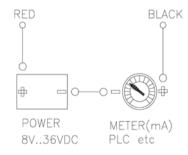


2-wire system

4-pin L-plug, DIN 43 650

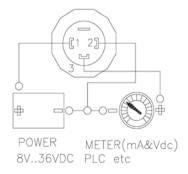


Flying lead

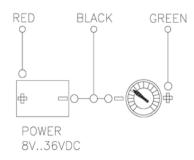


## 3-wire system

4-pin L-plug, DIN 43 650

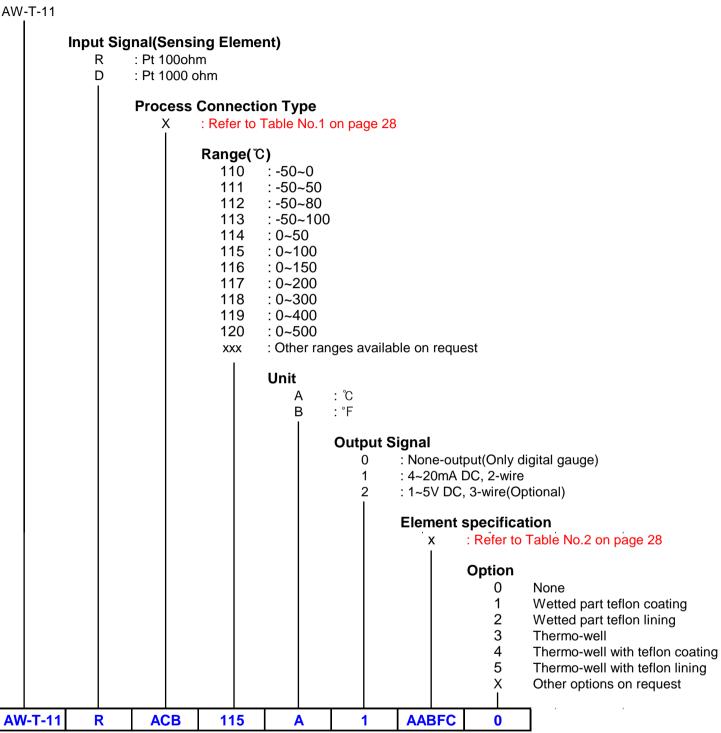


Flying lead



#### ORDERING INFORMATION

#### Model



Note 1) Other ranges are available on request.

Note 2) Please make details, if you need Thermo-well assembly according to Table No.3 on page 29

Specifications subject to change without notice.

**Table No.1 For Process Connection** 

1	'st character	2'nd character			3'rd character				
N	Mounting type		Connection size			С	Connection type		
Code	Туре	Code	Size		Code	Type	Code	Type	
Α	Fixed thread	Α	1/4"	8A	Α	PF	F	JIS10K RF	
В	Nipple	В	3/8"	10A	В	PT	G	JIS10K FF	
С	Union & nipple	С	1/2"	15A	С	NPT	Н	JIS20K RF	
D	Comp.fitting	D	3/4"	20A	D	UNF	I	JIS20K FF	
Е	Flange	Е	1"	25A	E*	C.F	J	JIS30K RF	
F	None	F	11/4"	32A			K	JIS30K FF	
	-		11/2"	40A			L	ANSI 150# RF	
		Н	2"	50A			М	ANSI 150# FF	
		I	21/2"	65A			N	ANSI 300# RF	
		J	3"	80A	O ANSI			ANSI 300# FF	
		K	4"	100A	]		Р	ANSI 600# RF	
					•		Q	ANSI 600# FF	

Note E\*: Compression fitting

Other process connection available on request

**Table No.2 For Element specification** 

	Ţ		1						
1'st character		2'nd character		3'rd character		4'th character		5'th character	
Element		Material		Grade		Out-diameter(mm)		Probe length(mm)	
Code	Element	Code	Material	Code	Class	Code	Diameter	Code	Length
Α	Single	Α	316 SS	Α	0.4 / A	Α	1.0	Α	50
В	Double	В	Inconel	В	0.75 / B	В	1.6	В	75
						С	2.3	С	100
						D	3.2	D	150
						Е	4.8	Е	200
						F	6.4	F	250
						G	8.0	G	300
						Н	10.0	Н	500
						I	12.0		750
						J	14.0	J	1000
						K	15.0	K	1500
						L	17.3	L	2000
M 21.7									2500
Note : Special length available on request							N	3000	
								0	3500
								Р	4000