

## AST 40 Series

“-50...+200°C Measuring Range, 15-300 mm Immersion Length, Analog or RTD Output”



- Selectable measuring range from -50 to +200 °C
- Resistant up to 600Bar
- Immersion length options ranging from 15 mm to 300 mm
- 0-20 mA, 4-20mA, 0-5V, 0-10V, 1-5V, 0.5-4.5V analog output or RTD (PT100, PT1000) output options
- G1/4, G1/2, NPT1/4, NPT1/2, M14x1, M20x1,5 etc. process connection options
- Aluminum alloy housing
- Easy installation and use

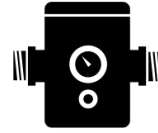
The AST 40 serie head type temperature transmitter is designed for precise temperature measurement of liquid and gaseous media in the range of -50 to +200 °C.

The detection principle is based on the variation of the electrical resistance of the conductor with temperature. The resistance signal receiving from the RTD element is converted into various analog output signals (4-20 mA, 0-10V etc.) and integrated into automation systems.

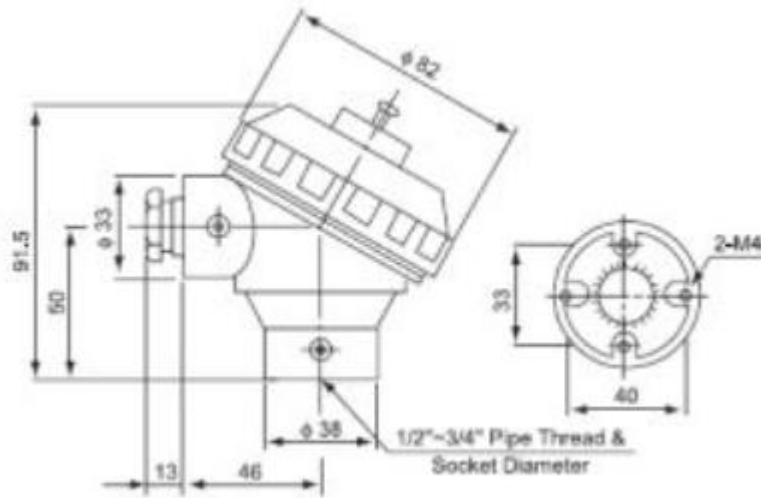
It has a wide range of user-selectable specifications such as measuring range, process connection type, immersion length, output signal, connector type etc.

## APPLICATIONS

- Machines
- Tanks
- Boilers
- Gas and liquid fluids
- Surface temp. measurement
- Ambient temp. measurement



## MECHANICAL DIMENSIONS (mm)



## TECHNICAL SPECIFICATIONS


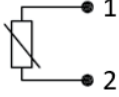
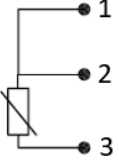
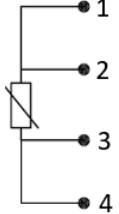
<b>Sensor</b>	PT100, PT1000 (Class B EN60751)
<b>Measuring range</b>	-50 ... +200 °C / -58 ... +392 °F
<b>Max. working pressure</b>	600 Bar
<b>Linearity</b>	±%0.1 FS
<b>Response time</b>	2 sn
<b>Output</b>	2 wire 4-20mA std. 3 wire 4-20mA, 0-20mA 0-5V, 1-5V, 0-10V 2 wire RTD, 3 wire RTD, 4 wire RTD
<b>Load</b>	2 wire : 250Ω 3 wire : 1K
<b>Supply voltage</b>	12 - 30 VDC
<b>Current consumption</b>	2 wire : ≤20 mA @24VDC 3 wire : <30 mA @24VDC
<b>Reverse polarity protection</b>	Yes
<b>Short circuit protection</b>	Yes
<b>Overload protection</b>	Yes
<b>Electrical connection</b>	Terminal
<b>Process Connection (E)</b>	G1/4, G1/2, NPT1/4, NPT1/2, M14x1, M20x1,5 (Optional others)
<b>Immersion length (L)</b>	Optional between 15 mm ... 300 mm
<b>Immersion Diameter (D)</b>	8 mm
<b>Material</b>	Head: Aluminum alloy Immersion pipe: 304 Stainless steel
<b>Operating temp. (head)</b>	-40°C ... +85°C
<b>Protection</b>	IP65

## ELECTRICAL CONNECTION

### AST-40 TRANSMITTER CONNECTION DIAGRAM

Transmitter Type	2-wire 4-20mA		3-wire 0-5V, 0-10V, 1-5V, 0-20mA, 4-20mA	
RTD Type	2-wire PT100 Connection	3-wire PT100 Connection	2-wire PT100 Connection	3-wire PT100 Connection
Connection				

RTD (1xPT100 & 1xPT1000) Connection

<p><b>Connection</b></p>	
<p><b>2-Wire</b></p>	
<p><b>3- Wire</b></p>	
<p><b>4- Wire</b></p>	

## ORDER CODE

### 1-Model

AST40

### 2- Temperature Range

Selectable from -50 to +200 °C

### 3- Immersion Length

015: 15mm	160: 160mm
025: 25mm	200: 200mm
050: 50mm	250: 250mm
100: 100mm	300: 300mm

### 4- Immersion Pipe Diameter

8: 8 mm

### 5- Sensor Type

PT100 (available in analog or RTD output model)

PT1000 (available in only RTD output model)

### 6- Output Signal

V : 0-10VDC	A: 4-20mA (2-wire)	RTD2 : 1xPT100 or 1xPT1000 (2- wire)
V1: 0-5VDC	A0: 0-20mA (3-wire)	RTD3 : 1xPT100 or 1xPT1000 (3- wire)
V3 : 0.5-4.5VDC	A7: 4-20mA (3-wire)	RTD4 : 1xPT100 or 1xPT1000 (4- wire)
V5 : 1-5VDC		

### 7- Process Connection

G1/4 : G1/4	NPT1/2 : NPT1/2
G1/2 : G1/2	M14 : M14x1
NPT1/4 : NPT1/4	M20 : M20X1,5

\* Optional others

**Sample Order Code:** AST40 -40...+500 015 8 PT100 V G1/4

## BY PRODUCTS



### EPA Series Measurement and Control Devices

[48x48mm model EPA 100](#)

[74x74mm model EPA 200](#)

[96x48mm model EPA 300](#)