

AST 10 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 600 Bar
- Immersion length options ranging from 15 mm to 300 mm
- 0–20 mA, 4–20 mA, 0–5 V, 0–10 V, 1–5 V, 0.5–4.5 V analog output or RTD (PT100, PT1000) output options
- G1/4, G1/2, NPT1/4, NPT1/2, M14x1, M20x1,5 etc. process connection options
- 304 stainless steel housing
- Easy installation and use

The AST 10 series 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 received from the RTD element is converted into various analog output signals (4–20 mA, 0–10 V 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.

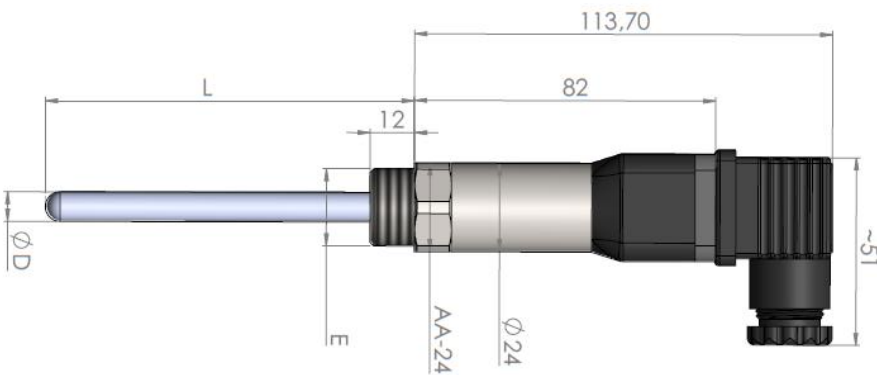
APPLICATIONS

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



MECHANICAL DIMENSIONS (mm)

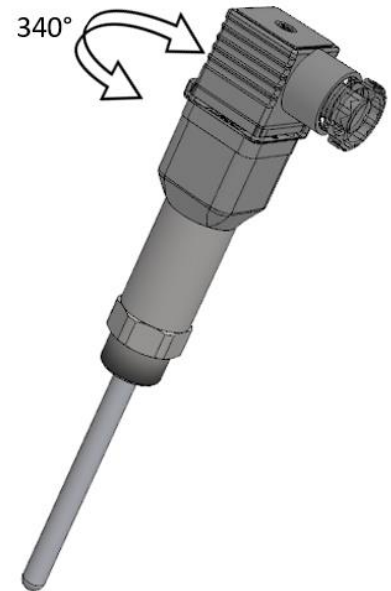
DIN43650-A CONNECTOR



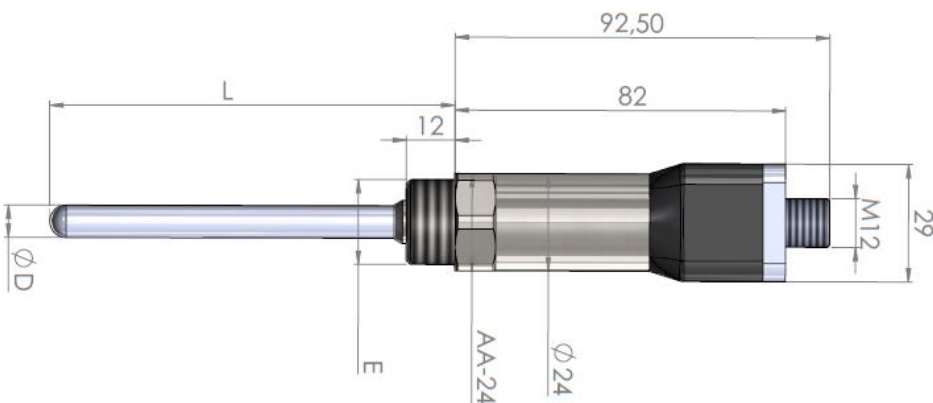
- E:** Process connection
L: Immersion length
ØD: Immersion diameter

* For dimensions, see Technical specifications

The rotation angle of the connector is maximum 340°.



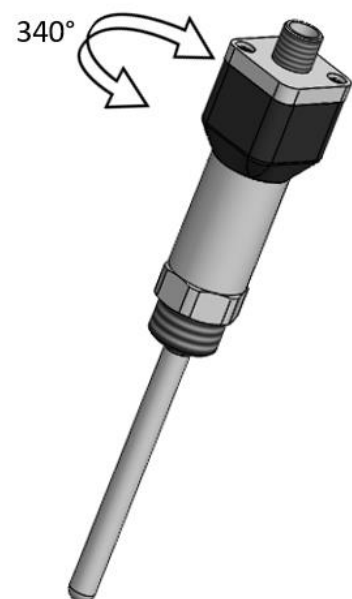
M12 CONNECTOR



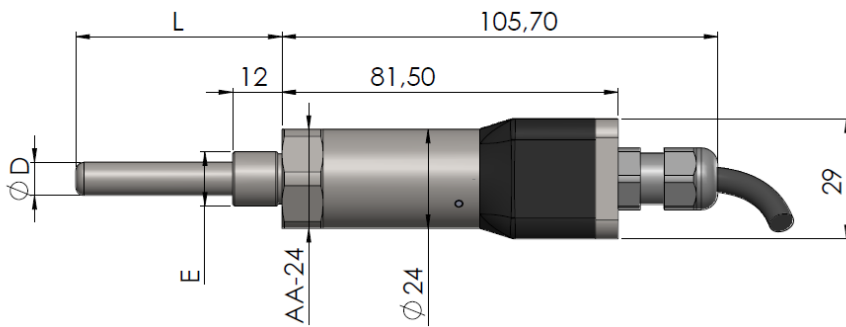
- E:** Process connection
L: Immersion length
ØD: Immersion diameter

* For dimensions, see Technical specifications

The rotation angle of the connector is maximum 340°.



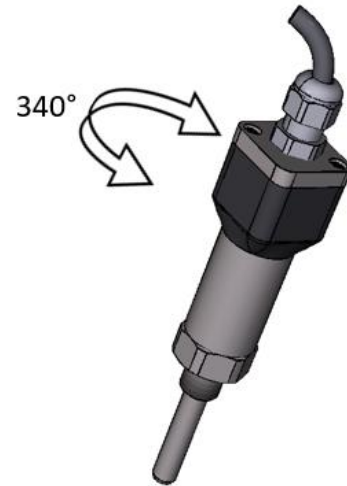
CABLE



E: Process connection
L: Immersion length
ØD: Immersion diameter

* For dimensions, see Technical specifications

The rotation angle of the connector is maximum 340°.

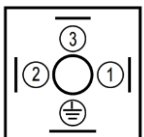
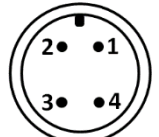



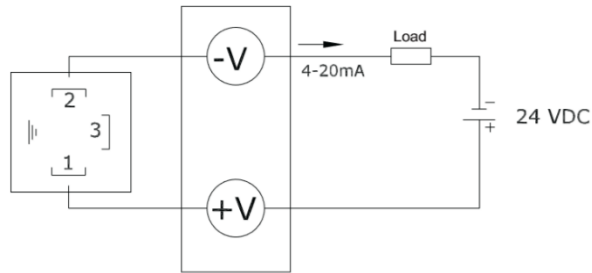
TECHNICAL SPECIFICATIONS

Sensor	PT100, PT1000 (Class B EN60751)
Measuring range	-50...+200 °C / -58...+392 °F
Max. working pressure	600 Bar
Linearity	±%0.1 FS
Response time	2 sn
Output	2 wire 4-20mAstd. 3 wire 4-20mA, 0-20mA 0-5V, 1-5V, 0-10V 2 wire RTD, 3 wire RTD, 4 wire RTD
Load	2 wire : 250Ω 3 wire : 250Ω
Supply voltage	16-30 VDC
Current consumption	2 wire : ≤20mA@24VDC 3 wire : <30mA@24VDC
Reverse polarity protection	Yes
Short circuit protection	Yes
Overload protection	Yes
Electrical connection	DIN 43650-A, M12 Connector, Cable
Process Connection (E)	G1/4, G1/2, NPT1/4, NPT1/2, M14x1, M20x1,5 (Optional others)
Immersion length (L)	Optional between 15 mm...300 mm
Immersion Diameter (D)	8 mm
Material	304 Stainless steel
Operating Temp.	-40°C...+85°C
Storage Temp.	-40°C...+85°C
Protection Class	IP 65

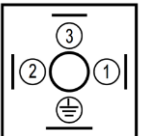
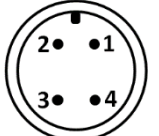

ELECTRICAL CONNECTION

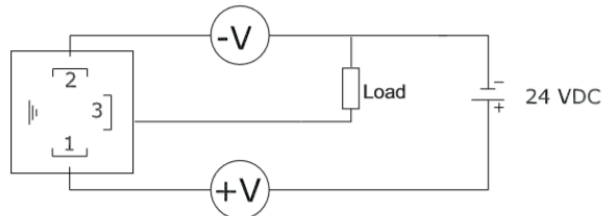
2 Wire 4-20mA Connection

		
DIN43650-A Conn.	M12 4 Pin Male Conn.	Signal
1	1	+16_30 VDC (Supply)
2	2	4-20mA

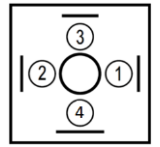
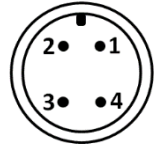
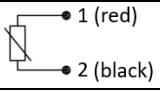
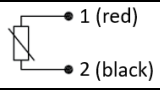
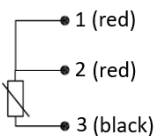
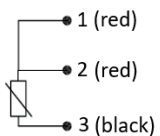
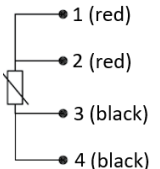
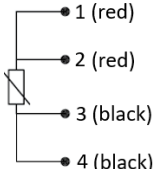


3 Wire 0-5V, 0-10V, 1-5V, 4-20mA, 0-20mA Connection

		
DIN43650-A Conn.	M12 4 Pin Male Conn.	Signal
1	1	+16_30 VDC (Supply)
2	2	GND
3	3	0-5V, 0-10V, 1-5V, 0-20mA, 4-20mA



RTD (1xPT100 & 1xPT1000) Connection

		
	DIN43650-A Connector	M12 4 Pin Male Connector
2-Wire		
3-Wire		
4-Wire		

ORDER CODE

1-Model

AST10

2-Temperature Range

Selectable from -50to +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

8-Electrical Connection

S200: DIN43650-A	S17: M12 4 pin male connector	1M : 1 meters cable
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* Optional others

9-Body Material

E304: 304 Stainless Steel
* Optional others

Sample Order Code: AST10 -20...+1500158PT100 V G1/4 S200 E304

BY PRODUCTS



EPA Series Measurement and Control Devices

[48x48mm model EPA 100](#)

[74x74mm model EPA 200](#)

[96x48mm model EPA 300](#)



[EPD 11 Plug-in Intelligent LCD Display with Alarm For Transmitters](#)