

TA300 – Temperature Transmitter for High Temperature



- ▶ **Measuring range from -50°C...200°C and -200°C...600°C**
- ▶ **Compact design**
- ▶ **Output programmable**
- ▶ **Stainless steel housing**
- ▶ **Process connection selectable**

Hig temperature transmitter TA300 equips with a PT1000 for temperature measuring. Output is processed to standard electrical signal. Metal housing; 0...20mA, 4...20mA, 0...5V, 1...5V, 0...10V output programmable; process connection selectable.



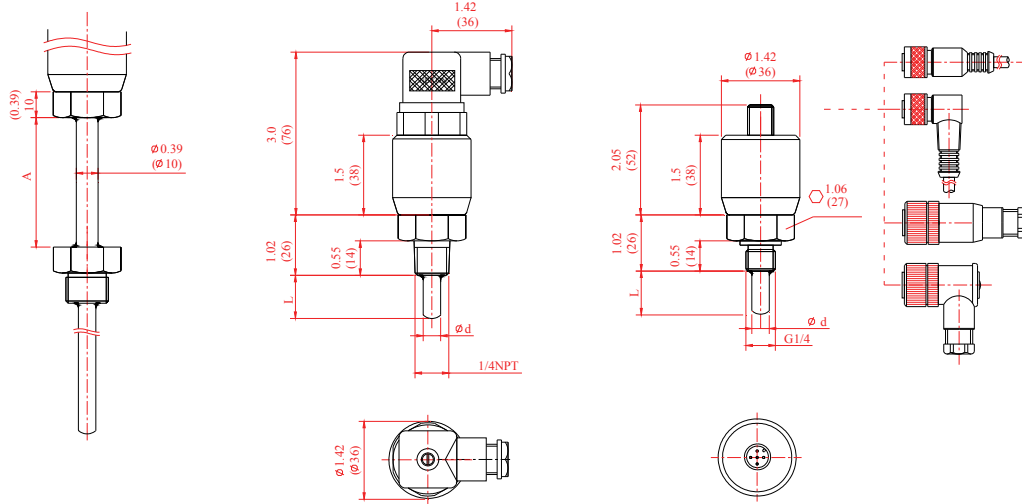
Specifications

Power Supply	
Current Output Model	10...30Vdc
Voltage Output Model	14...30Vdc
Current Consumption	
2-wire	Same as current output (2-wire 4...20mA)
3-wire	≤20mA
2-wire Current Output	
Output	2-wire 4...20mA
Load RA(Ω)	$RA \leq (U_s - 10)V / 0.02A$
Linearity	≤±0.2% of F.S.
3-wire Current Output	
Output	3-wire 4...20mA, 0...20mA
Load RA(Ω)	$RA \leq (U_s - 3)V / 0.02A$
Linearity	≤±0.2% of F.S.
Voltage Analog Output	
Output	3-wire 0...5V, 1...5V, 0...10V
Load RA(Ω)	$RA \geq 5K$
Linearity	≤±0.2% of F.S.
Sensor	PT1000 class A
Accuracy	≤±0.25% of F.S.
Stability(Drift/Year)	≤±0.1% of F.S.
Temperature	
Medium(Measuring Range)	-50...120°C; -50...200°C; -50...400°C; -50...600°C (measuring range customizable)
Ambient/Storage	-40...+85°C
Material	
Housing	304 stainless steel
Wetted Parts	316 stainless steel
Protection Class	IP65(solenoid plug); IP67(M12×1 plug)
Electrical Connection	M12×1 plug; solenoid plug

Applications

- ▶ Circulating water/cooling liquids
- ▶ Hydraulics and pneumatics
- ▶ Oil and Gas
- ▶ Machinery manufacturing
- ▶ Water treatment
- ▶ Construction automation

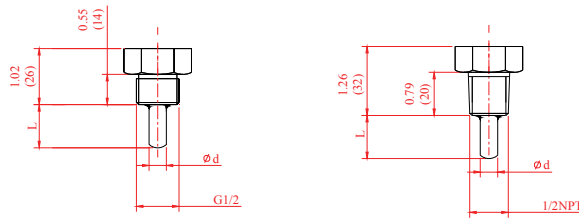
Dimensions in inches (mm)



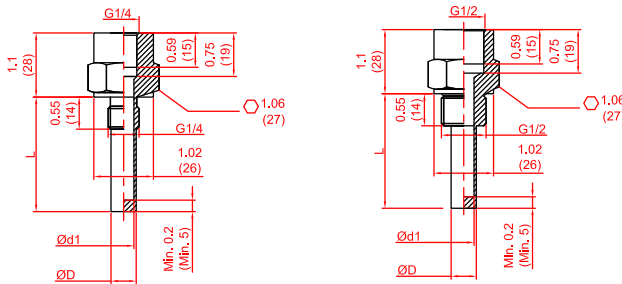
Probe with gooseneck tube for high temperature, apply to:

- TA300...C-50-200
- TA300...C-50-400
- TA300...C-50-600
- TA300...C-200-600

Upper Limit	A	
	inch	mm
100°C	0	0
400°C	1.97	50
600°C	3.94	100



Screw-in thermowell dimensions



d	0.24 (6)	0.31 (8)
d1	0.28 (7)	0.35 (9)
D	0.35 (9)	0.43 (11)

Note: L - customized; d - probe diameter

Wiring

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Order Code

TA :	Temperature transmitter
300 :	Series# - high temperature
Measuring range :	C-50-100= -50...100°C C-50-200= -50...200°C (with gooseneck tube) C-50-400= -50...400°C (with gooseneck tube) C-50-600= -50...600°C (with gooseneck tube) C-200-600= -200...600°C (with gooseneck tube)
Note:	Use FAA-BBBB for Fahrenheit, in which AA, BBBB are lower and upper limit respectively. (customized measuring range acceptable, refer to dimensions for gooseneck tube)

TA	300/	C-50-200/	2/	42	G12M	S	025	D06
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2 :	2-wire
3 :	3-wire
42 :	4...20mA (2-wire or 3-wire)
02 :	0...20mA (only for 3-wire)
05 :	0...5V (only for 3-wire)
15 :	1...5V (only for 3-wire)
01 :	0...10V (only for 3-wire)
Process connection	
G14M :	G1/4 male thread
G12M :	G1/2 male thread
N14M :	1/4"NPT male thread
N12M :	1/2"NPT male thread
S :	M12X1 5-pin plug
H :	Solenoid plug
Probe length L	
025=	25mm (L≤500 mm)
1"=	1 inch (L≤20 inches)
Probe diameter d	
D06=	6mm
D08=	8mm
D1/4"=	1/4 inch
D1/3"=	1/3 inch

Special Order on Request

- ▶ Temperature measuring range
- ▶ Process connection
- ▶ Flange connection for food sanitation requirement
- ▶ Other electrical connection
- ▶ For pressure rating up to 400bar please use the probe diameter D06