

# Datasheet

## Temperature Meter ET300

### Introduction

ET300 equips with a pt1000 and a transmitter, pt1000 is used to sensing the changes of medium temperature, the transmitter will convert the changes to industrial signal and output.

The robust, all-metal construction, standard 4–20mA output, and extensive range of connection options make the ET300 suitable for a vast array of applications.



### Characteristics

Compact design

-58...392°F / -50...200°C

4...20mA output

Easy to install

Stainless steel housing

High repeatability, self-compensation

### Applications

Hydraulic and lubrication system

Cooling system

Heating system

Water supply system

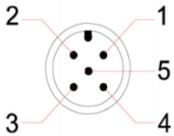
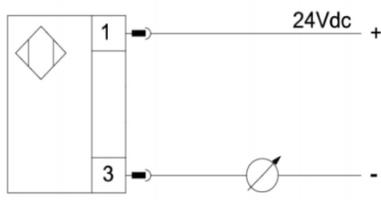
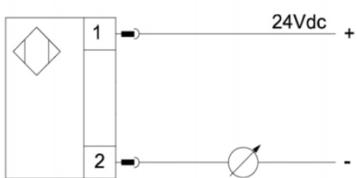
Building automation

Oil and gas

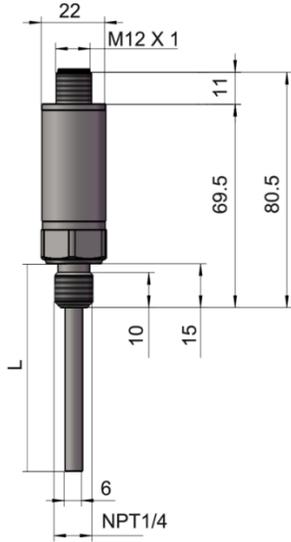
## Specifications

<b>Power</b>	10...30VDC
<b>Current consumption</b>	Same as signal output (4...20mA)
<b>Output</b>	Analog: 2-wire 4...20mA
	Load RA (Ω): $RA \leq (U_s - 10)V / 0.02A$
	Linearity: $\leq 0.5\%$ full span
<b>Sensor</b>	PT1000 Class A
<b>Accuracy</b>	$\leq 0.5\%$ of span
<b>Measuring range (Media temperature)</b>	-58...212°F (-50...100°C)
	-58...302°F (-50...150°C)
	-58...392°F (-50...200°C)
	32...212°F (0...100°C)
	32...302°F (0...150°C)
	32...392°F (0...200°C)
	Other temperature range on request (up to 1112 °F / 600°C)
<b>Ambient temperature</b>	-4...185°F (-20...80°C)
<b>Housing material</b>	Stainless steel 304
<b>Wetted parts material</b>	Stainless steel 316
<b>Protection class</b>	IP65 (mini solenoid valve connector)
	IP67 (M12x1)
<b>Electrical connection</b>	M12 x 1 / mini solenoid valve connector
<b>Process connection</b>	See order code for details
<b>Wiring protection</b>	Reverse polarity, Over-voltage

## Wiring

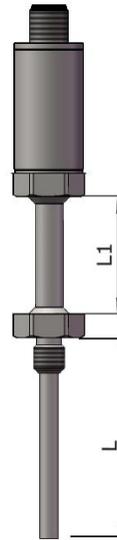
M12 x 1	Wiring									
 <table border="1" style="margin-left: 10px;"> <thead> <tr> <th>Pin</th> <th>Color</th> <th>Signal</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Brown</td> <td>Power +</td> </tr> <tr> <td>3</td> <td>Blue</td> <td>Power -</td> </tr> </tbody> </table>	Pin	Color	Signal	1	Brown	Power +	3	Blue	Power -	
Pin	Color	Signal								
1	Brown	Power +								
3	Blue	Power -								
Mini solenoid valve connector	Wiring									
 <table border="1" style="margin-left: 10px;"> <thead> <tr> <th>Pin</th> <th>Signal</th> </tr> </thead> <tbody> <tr> <td>1</td> <td>Power +</td> </tr> <tr> <td>2</td> <td>Power -</td> </tr> </tbody> </table>	Pin	Signal	1	Power +	2	Power -				
Pin	Signal									
1	Power +									
2	Power -									

**Dimensions in mm**



<b>L</b>
see order code for details

Standard model



High temperature model

Temperature upper limit	L1
750°F (400°C)	50 mm
1100°F (600°C)	100 mm

**Order Code**

Example: ET300-FT1L250MN12

**1. Model**

ET300- Temperature meter

**2. Type**

F Standard model  
S Sanitary model

**3. Measuring range**

T1 -58...212°F (-50...100°C)  
T2 -58...302°F (-50...150°C)  
T3 -58...392°F (-50...200°C)  
T4 32...212°F (0...100°C)  
T5 32...302°F (0...150°C)  
T6 32...392°F (0...200°C)  
Other ranges on request

**5. Probe length L (thread is included, see dimensions)**

L25 25 mm  
L50 50 mm  
L100 100 mm  
L150 150mm  
L250 250mm  
L350 350mm  
Other length on request

**6. Electrical connection**

M 5-pin M12 x 1  
S mini solenoid valve connector

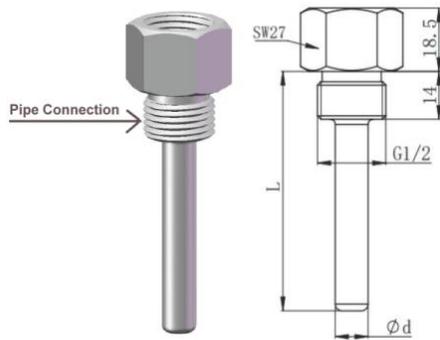
**7. Process connection**

T1 Tri-clamp 1" (for sanitary model)  
T2 Tri-clamp 2" (for sanitary model)  
G14 G1/4" male thread  
G12 G1/2" male thread  
N14 NPT1/4" male thread  
N12 NPT1/2" male thread  
U716 7/16" - 20 UNF  
U38 3/8" - 24 UNF  
Other connections on request

**8. Thermalwell (Optional)**

PG12 G1/2" male thread  
PG14 G1/4" male thread  
PN12 NPT 1/2" male thread  
PN14 NPT1/4" male thread  
Select the thread for pipe connection

## Thermalwell



## Accessory - Welding socket

### 1. Model

TT01- Welding socket

### 2. Thread

- G14 Fitting thread: 1/4" G thread
- G12 Fitting thread: 1/2" G thread
- N14 Fitting thread: 1/4" NPT thread
- N12 Fitting thread: 1/2" NPT thread

