

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

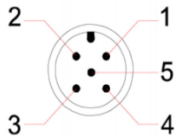
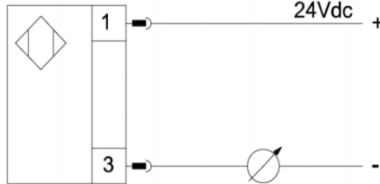
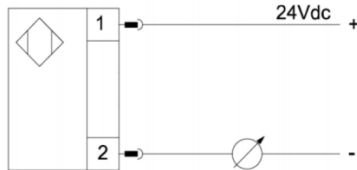
Building automation

Oil and gas

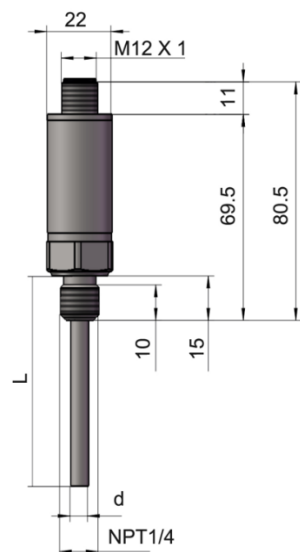
Specifications

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

Wiring

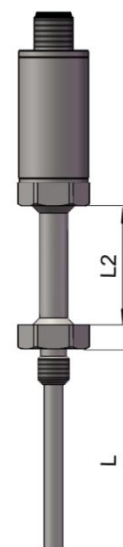
M12 x 1	Wiring									
 <table><thead><tr><th>Pin</th><th>Color</th><th>Signal</th></tr></thead><tbody><tr><td>1</td><td>Brown</td><td>Power +</td></tr><tr><td>3</td><td>Blue</td><td>Power -</td></tr></tbody></table>	Pin	Color	Signal	1	Brown	Power +	3	Blue	Power -	
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Mini solenoid valve connector	Wiring									
 <table><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



Standard model

d	L
6 mm	see order code for details

High temperature model
for medium temperature > 302°F (150°C)

Temperature upper limit	L2
752°F (400°C)	50 mm
1112°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

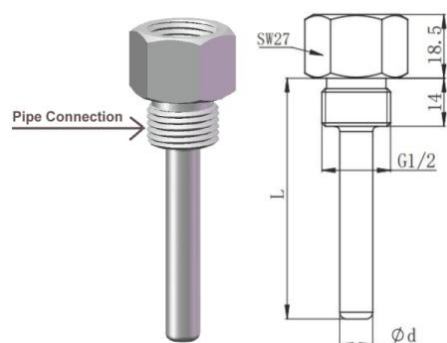
7. Process connection

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

