

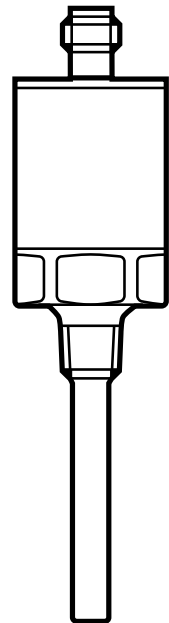
pro^senseTM

by  **AUTOMATIONDIRECT**.com

Installation Instructions Temperature transmitter

TTD25N-20-0300F-H
TTD25N-20-0100C-H

704488 / 00 01 / 2009



1 Functions and features

The temperature transmitter detects the current system temperature and converts it into an analog output signal (4 ... 20 mA).

- Measuring range:

TTD25N-20-0300F-H	-17,8...148,9 °C / 0...300 °F
TTD25N-20-0100C-H	0...100 °C / 32...212 °F

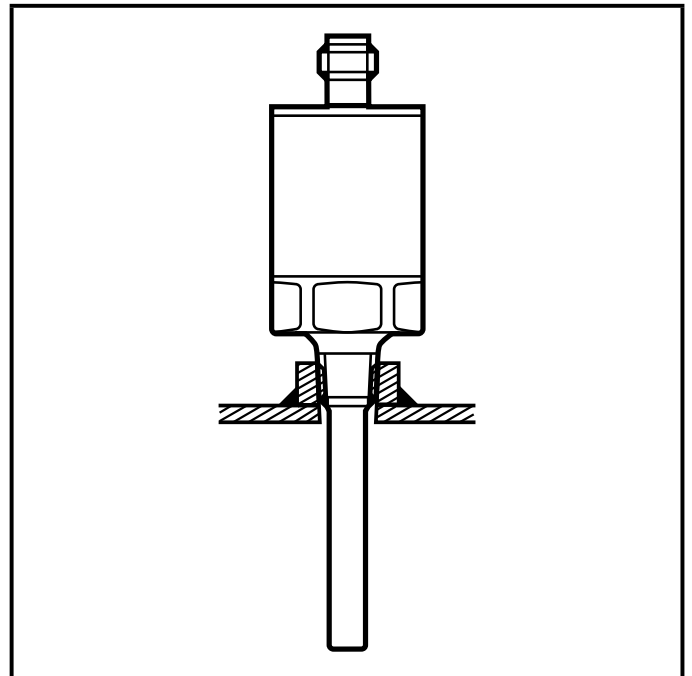
- Measuring element: Pt1000 to DIN EN 60751, class A

2 Installation



Before mounting and removing the unit: ensure that no medium can leak at the process connection.

- ▶ Insert the unit in a 1/4" NPT process connection.
Minimum installation depth: 15 mm (0.6 inch).
- ▶ Tighten firmly. Tightening torque: max. 25 Nm (18 ft-lbs).



3 Electrical connection



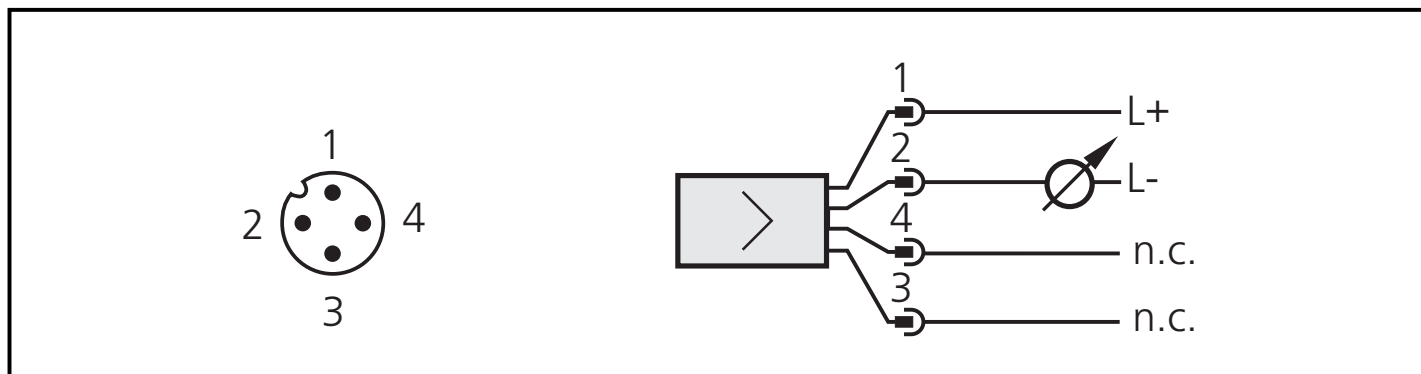
The unit must be connected by a suitably qualified electrician.

The national and international regulations for the installation of electrical equipment must be observed.

Voltage supply to EN50178, SELV, PELV.

Referring to UL: For use on a low voltage circuit with overcurrent protection in accordance with UL873 Tab. 28.1 or $I_{max} = 100/U_b$ (U_b = voltage of the circuit).

- ▶ Disconnect power.
- ▶ Connecting the unit as follows:



Cable Assembly Wiring Colors:

Pin 1 - Brown

Pin 2 - White

Pin 3 - Blue

Pin 4 - Black

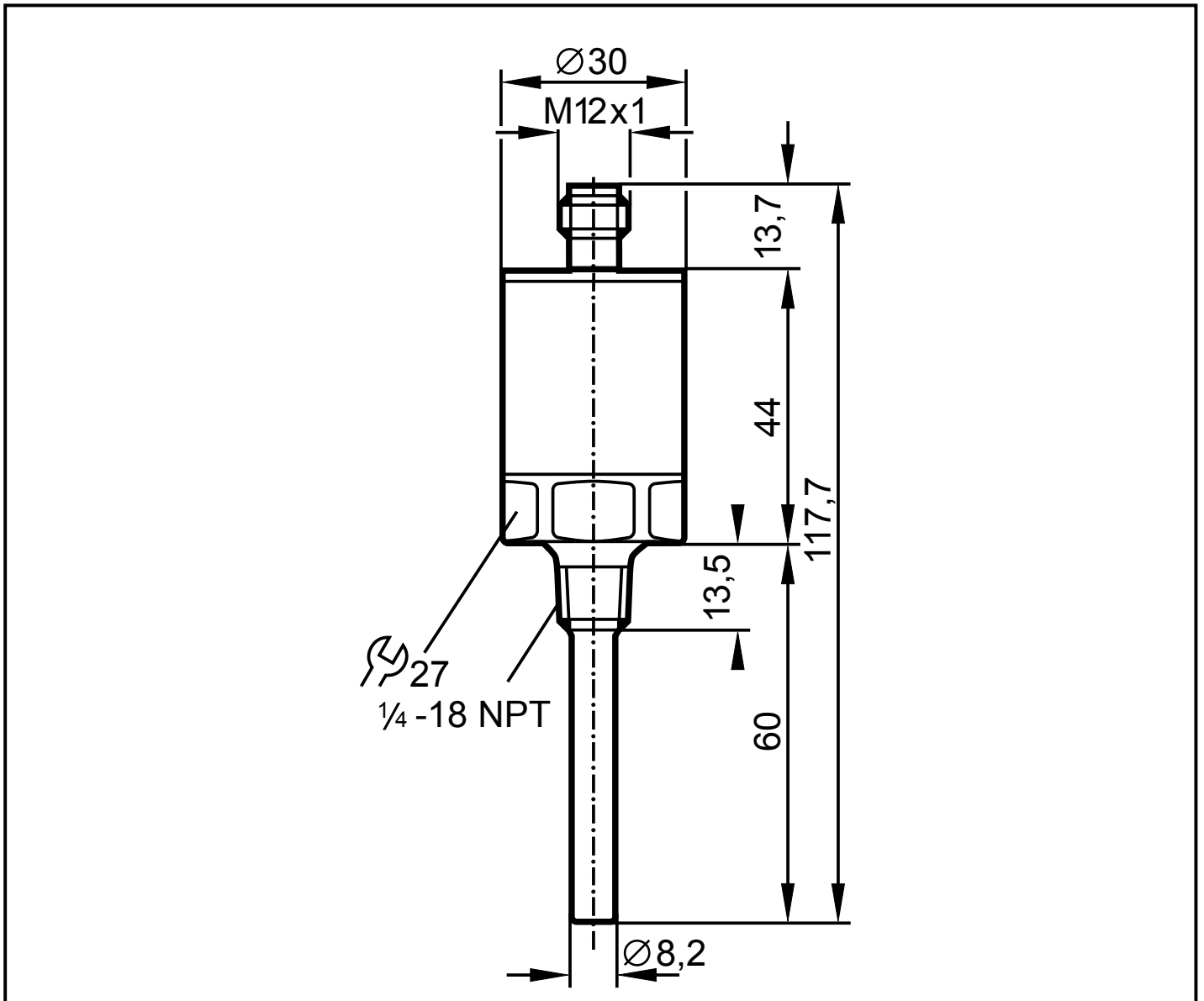
n.c. = not connected

Note: wiring colors are based on AutomationDirect CD12L and CD12M 4-pole cable assemblies.

Available cable assemblies:

- CD12L-0B-020-A0
- CD12L-0B-020-C0
- CD12M-0B-070-A1
- CD12M-0B-070-C1
- CDP12-0B-010-AA
- CDP12-0B-030-AA
- CDP12-0B-010-BB
- CDP12-0B-030-BB

4 Scale drawing



Dimensions are in millimeters (25.4 mm = 1 inch)

5 Technical data

Operating voltage [V]	10 ... 30 DC
Reverse polarity protection / overload protection	
Analog output	4 ... 20 mA
Max. load [Ω]	$(U_b - 9.6 \text{ V}) \times 50$; 720 at $U_b = 24 \text{ V}$
Measuring range	
- TTD25N-20-0100C-H	0...100 °C / 32...212 °F
- TTD25N-20-0300F-H	-17.8...148.9 °C / 0...300 °F
Measuring element.....	1 x Pt1000 to DIN EN 60751, class A
Accuracy	
- TTD25N-20-0100C-H	$\pm 0.3 \text{ °C} / 0.5 \text{ °F}$
- TTD25N-20-0300F-H	$\pm 0.4 \text{ °C} / 0.7 \text{ °F}$
Resolution.....	$< 0.02 \text{ °C} / 0.035 \text{ °F}$
Dynamic response (according to DIN EN 60751) [s].....	T05 = 1 / T09 = 3
Housing material	stainless steel (316S12); stainless steel (304S15); stainless steel (303S22); PA
Materials (wetted parts)	stainless steel (316S12)
Ambient temperature [°C/°F]	-25...70/-13...158
Storage temperature [°C/F]	-40..100/-40...212
Pressure rating [bar].....	300
Protection.	IP 68 / IP 69K
Protective class	III
Insulation resistance [$M\Omega$]	> 100 (500 V DC)
Shock resistance [g]	50 (DIN / IEC 68-2-27, 11ms)
Vibration resistance [g]	20 (DIN / IEC 68-2-6, 10 - 2000 Hz)
EMC	
EN 61000-4-2 ESD:	4 / 8 KV
EN 61000-4-3 HF radiated:	10 V/m
EN 61000-4-4 Burst:	2 KV
EN 61000-4-5 Surge:.....	1 KV
EN 61000-4-6 HF conducted:.....	10 V

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