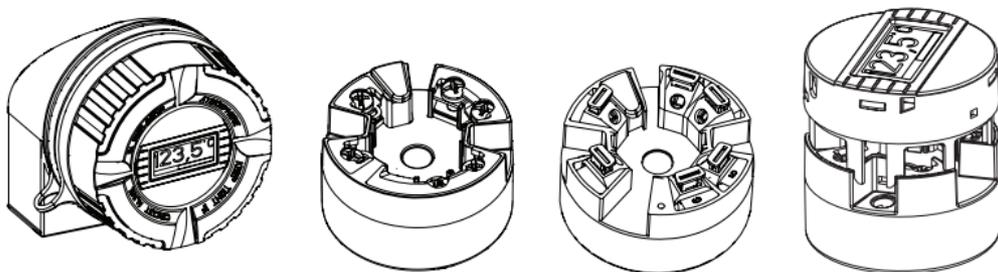


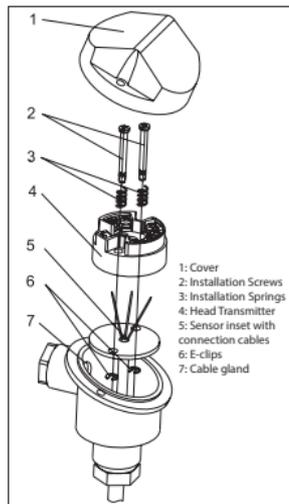
XTH2 Series Head Mounted Universal Temperature Transmitters - Programmable



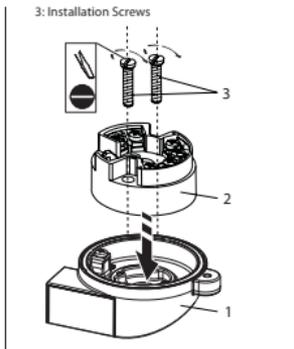
XTH2 Series - Programmable

Installation

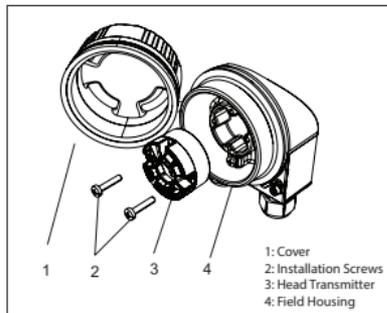
- Transmitter comes with installation screw kit for both North American and European installations
 - Ambient Temperature: -40 to 185°F (-40 to 85°C)
 - Installation area: Field housing; connection head Form B according to DIN 43729
 - Installation angle: No limit
- Note: Max. torque 3/4 pound-feet (1 Nm)



European installation

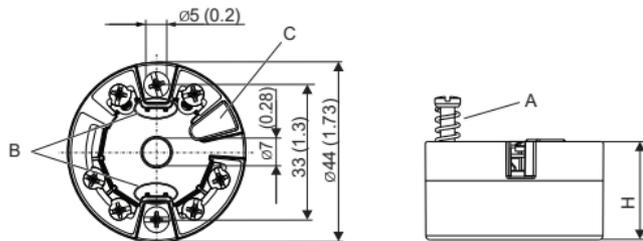


North American installation



Remote Installation of head transmitter into field housing

Dimensions mm [inches]

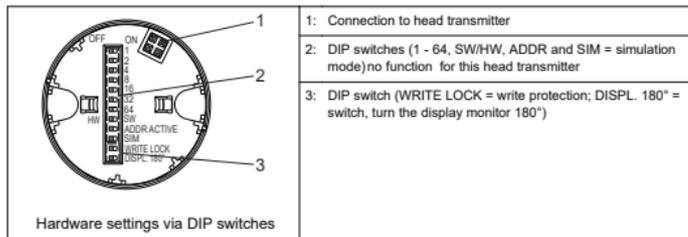
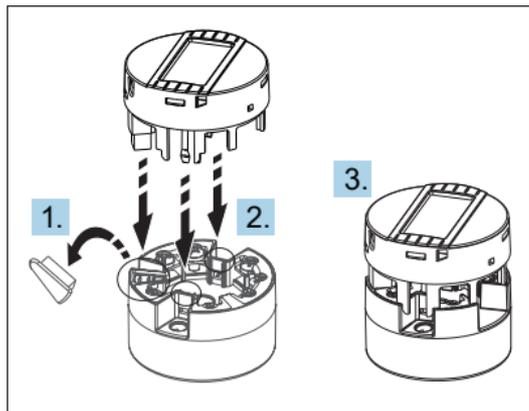


Head transmitter version with screw terminals.
Dimensions in mm (in)

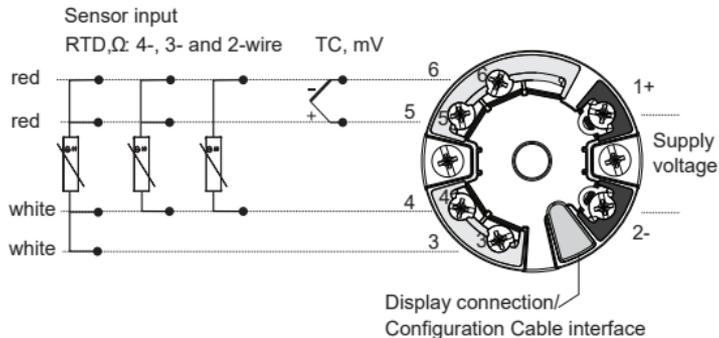
- A - Spring travel $L \geq 5$ mm (not for US - M4 securing screws)
- B - Mounting elements for attachable measured value display
- C - Display connection/ Configuration Cable interface
- H - The height of housing H varies depending on the terminal version:
screw terminals = 24.1 mm (0.95 in)
push-in terminals = 29.1 mm (1.15 in)

Optional Display

XTH2-UNV-DISP Installation & DIP Switches



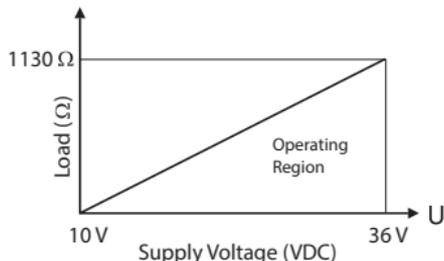
Wiring



Note: In the event of a thermocouple (TC) measurement, a 2-wire Pt100 RTD can be connected to measure the reference junction temperature. This is connected to terminals 4 and 6.

Safety instructions:

- To comply with UL61010-1 unit must be supplied by class 2 power supply.
- Disconnect power before making connections



Load Impedance

$RL_{max} = (V_{powersupply} - 10V) / 0.023A$ (current output) e.g. $(24V - 10V) / 0.023A = 608.7 \Omega$

Shielding

Please take note when installing the head transmitter remotely from the sensor in a field housing: The shield on the 4-20 mA signal output must have the same potential as the shield at the sensor connections. When using grounded thermocouples, shielding of the output 4 to 20 mA cable is recommended. In plants with strong electromagnetic fields, shielding of all cables with a low ohm connection to the transmitter housing is recommended.

Due to the danger of lightning strikes it is recommended that shielded cable be used in installations outside of buildings.

Programming

Transmitter set-up is done using the Field Device Configurator programming software, available as a free download at www.automationdirect.com, and XT-USB configuration cable (purchased separately). The XT-USB configuration cable should be assigned to a windows communication port from COM1 to COM20 to communicate with the universal temperature transmitter.

Note: The following tables show the structure of the Field Device Configurator programming software configuration parameters:

Basic Configuration Parameters

Sensor type (TC or RTD)
Units (°C, °F °K, Ω, mV)
Measurement range start (depends on sensor type)
Measurement range end (depends on sensor type)
Reference junction (internal/external/fixed - TC only)
Failure mode (Min - 3.6 mA, Max 21.5-23 mA)
2-wire compensation (Ω - 2-wire RTD only)

XTH2-UNV product insert Rev. 2

Expert Configuration Parameters

Output (4-20 mA, 20-4 mA)
Damping (0-120 sec)
Offset (°C, °F °K, Ω, mV)
Current trimming (4mA, 20mA)

Please visit www.automationdirect.com for specifications and additional information.



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