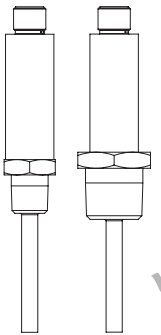
prosense®

XTP Series Temperature Transmitter Probes



RoHS 2002/95/EC

c UL us

CE

ProSense Temperature Transmitter Probes			
Part Number	*Measuring Range**	*Thread Size*	*Length*
XTP25N-030-N40140F	-40 to 140°F (-40 to 60°C)	1/4" MNPT	30mm
XTP25N-050-N40140F			50mm
XTP25N-100-N40140F			100mm
XTP25N-150-N40140F			150mm
XTP50N-030-N40140F		1/2" MNPT	30mm
XTP50N-050-N40140F			50mm
XTP50N-100-N40140F			100mm
XTP50N-150-N40140F			150mm
XTP25N-030-0300F	0 to 300°F (-17.8 to 148.9°C)	1/4" MNPT	30mm
XTP25N-050-0300F			50mm
XTP25N-100-0300F			100mm
XTP25N-150-0300F			150mm
XTP50N-030-0300F		1/2" MNPT	30mm
XTP50N-050-0300F			50mm
XTP50N-100-0300F			100mm
XTP50N-150-0300F			150mm
XTP25N-030-0100C	0 to 100°C (32 to 212°F)	1/4" MNPT	30mm
XTP25N-050-0100C			50mm
XTP25N-100-0100C			100mm
XTP25N-150-0100C			150mm
XTP50N-030-0100C		1/2" MNPT	30mm
XTP50N-050-0100C			50mm
XTP50N-100-0100C			100mm
XTP50N-150-0100C			150mm

* Transmitter probes are factory configured and ready for use out of the box. If changes are desired, transmitter probes can be re-configured. See Programming section of these instructions.

XTP product insert Rev. 1
71341491

Installation

1 Safety Instructions

1.1 Designated use

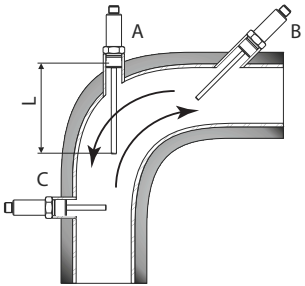
- The device is a compact temperature transmitter probe for the acquisition and conversion of temperature input signals for industrial temperature measurement.

1.2 Installation, commissioning, operation

- The device must only be installed, connected and commissioned by qualified and authorized staff (e.g. electrical technicians) strictly adhering to the instructions contained in this manual, the applicable norms, legal regulations and certificates (depending on the application).
- These authorized staff members must have read and understood this manual and follow the instructions it contains.
- Damaged devices must not be put into operation and they must be labeled as defective.

1.3 Operational safety

- The device is safely built and tested according to state-of-the-art technology and has left the factory in perfect condition in regards to technical safety. The applicable regulations and European standards have been taken into account.
- Please observe the technical data on the nameplate!
- The device must only be powered by a power supply unit with a limited energy electric circuit in accordance with IEC 31010-1: "SELV or Class 2 circuit".
- Due to its design, the device is not repairable. When later disposing of the device, please observe local regulations.



Pipe installation of the XPS Series

- A: On angle brackets
- B: In smaller pipes, inclined
- C: Perpendicular to the direction of flow
- L = Insertion Length

1. Seal the process connection with Teflon tape before you screw in the device.
2. Install the device before the process application is started.

Minimum insertion length
Lmin = 30mm (1.18 in)

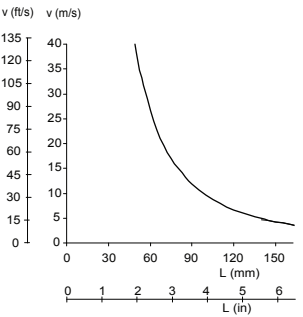
Temperature limits

Max. Ambient Temperature	*Max. Process Temperature*
Up to 25°C (77°F)	150°C (302°F)
Up to 40°C (104°F)	135°C (275°F)
Up to 60°C (140°F)	120°C (248°F)
Up to 85°C (185°F)	100°C (212°F)

Process pressure limits

- 1450 psig (100bar) maximum

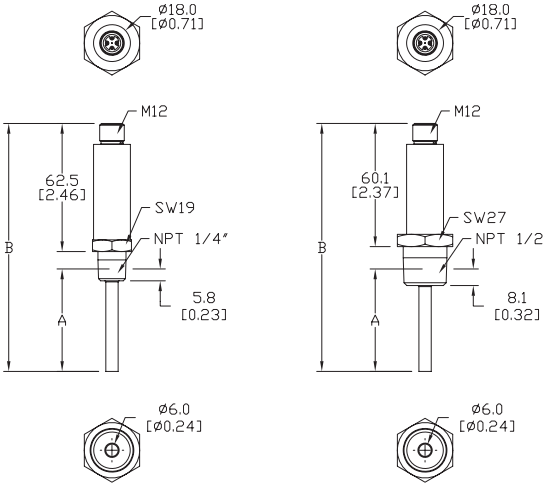
Maximium flow velocity based on insertion length



L Insertion length, during flow
v Flow velocity
Medium water at T = 50 °C (122 °F)

Dimensions

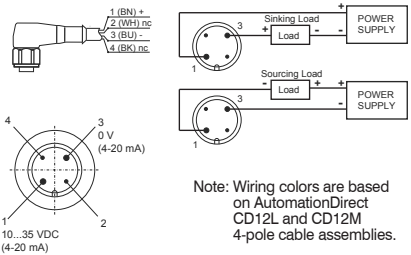
mm [inches]



XTP25 Series Units **XTP50 Series Units**

Dimensions	
A	***B***
1.18 in [30mm]	3.98 in [101mm]
1.97 in [50mm]	4.76 in [121mm]
3.94 in [100mm]	6.73 in [171mm]
5.91 in [150mm]	8.70 in [221mm]

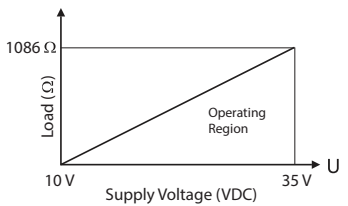
Wiring



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

To prevent damage to the device do not overtighten the M12 plug

Load Impedance



RLmax = ($V_{powersupply}$-10V) / 0.023 A (current output)

e.g. (24V - 10V) / 0.023A = 608Ω

Programming

Transmitter probes are factory configured and ready for use out of the box. If changes are desired, transmitter probes can be re-configured using the XT-SOFT programming software, available as a free download at www.automationdirect.com, an XT-USB configuration cable and an XT-M12 adapter (purchased separately).

Settable Parameters			Factory Settings
Standard Settings	Measuring unit	°C/°F	Part number dependent
	Measuring range (start and end values)	-50 to 150°C (-58 to 302°F) maximum range	Part number dependent
Expanded Settings	Fault condition reaction	≤ 3.6 mA or ≥ 21.0 mA	≥ 21mA
	Output	4-20 mA or 20-4 mA	4-20 mA
	Filter	0...8s	0s
	Offset	-9.9 to +9.9°C (-17.8 to 17.8°F)	0.0
	Measurement point identification/TAG	8 alpha-numeric digits	Test
Service Functions	Password (Release Code)	4 numeric digits	0000
	Output simulation drives output to a fixed value	on/off	off

XT-SOFT PC Configuration Software