



# TS-SPyyy2X Transmitter Series

Strap-On Temperature Transmitters, Nema 4X

## Overview

Single-point strap-on temperature transmitter that incorporates a precision platinum RTD encapsulated in a stainless steel probe. All probes provide excellent heat transfer and fast response, and they resist moisture penetration. Provides a high-accuracy signal with excellent long-term stability, low hysteresis, and fast response.



## Applications

- Used for measuring temperature on supply and return hot water pipes in heating systems.
- Incorporated in chillers to monitor temperature gradients.
- Used in heat exchangers and air handling units to provide temperature sensing for control of heating/cooling coils.

## Features & Benefits

- Economical
- Ease of installation
- Probes made of corrosion-resistant 304 stainless steel
- Accurate temperature monitoring for increased comfort
- Transmitters are hermetically sealed

## Accessories

### Calibration Certificate

TS-NIST	Calibration Certificate
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Note: Calibration certificates must be purchased at the time of purchasing the relative sensors.

# Model Selection

		TS-	SP	C04	2X	002	R1
Mounting Style	SP = Strap-on, probe						
Control Signal Output	C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC						
Enclosure	2X = Plastic enclosure, Nema 4X						
Probe Length	002 = 2"						
Temperature Range	R1 = 0° - 35°C (32° - 95°F) R2 = 0° - 50°C (32° - 122°F) R3 = 0° - 100°C (32° - 212°F) R4 = -50° - 50°C (-58° - 122°F)						

# Product Specifications

## Environmental

Operating Temperature \_\_\_\_\_ -40°C to 85°C; -40°F to 185°F  
Storage Temperature \_\_\_\_\_ -40°C to 85°C; -40°F to 185°F  
Ambient Humidity \_\_\_\_\_ 0 to 95% Non-condensing

## Transmitter/Sensor/Probe

Transmitter Accuracy \_\_\_\_\_ ±0.1% of span, including linearity  
Temperature Sensor Type<sup>1</sup> \_\_\_\_\_ 1000Ω Platinum RTD  
Sensor Accuracy \_\_\_\_\_ ±0.3°C (±0.54°F) @ 0°C (32°F)  
Output Signal \_\_\_\_\_ 4-20mA current loop,  
0-5 Vdc, or 0-10 Vdc  
Probe Sensing Range \_\_\_\_\_ -20 to 105°C (-4 to 221°F)  
Probe Dimension \_\_\_\_\_ 6.35 mm (0.25") Diameter  
Probe Material \_\_\_\_\_ Aluminum Plate with compressible foam backing

## Enclosure

Material \_\_\_\_\_ Grey ABS Type: UL94-V0; IP65 (NEMA 4X)  
Shipping Weight \_\_\_\_\_ 0.60lbs (0.2727kg)

## Electrical

Minimum Loop Current \_\_\_\_\_ 2 mA nominal (occurs with shorted sensor)  
Maximum Loop Current \_\_\_\_\_ 22.5 mA nominal (occurs with open sensor)  
Maximum Loop Load \_\_\_\_\_ >600Ω  
4-20 mA Loop Power Supply \_\_\_\_\_ 15-35 Vdc or 22-32 Vac  
0-5 Vdc Power Supply \_\_\_\_\_ 10-35 Vdc or 10-32 Vac  
0-10 Vdc Power Supply \_\_\_\_\_ 15-35 Vdc or 15-32 Vac  
Maximum Current (Voltage) \_\_\_\_\_ 5 mA nominal  
Input Voltage Effect \_\_\_\_\_ Negligible over specified operating range  
Maximum Output (Voltage) \_\_\_\_\_ Limited to <5.5 Vdc for 0-5 Vdc,  
<10.5 for 0-10 Vdc  
Protection Circuitry \_\_\_\_\_ Reverse voltage protected and output limited  
RFI Rejection \_\_\_\_\_ Good RFI rejection of normal frequencies  
Wire Material \_\_\_\_\_ PVC Insulated, parallel bonded  
(Type 2, 100 Plat. Uses FT4)  
Wire Length \_\_\_\_\_ 1.524 m (5')

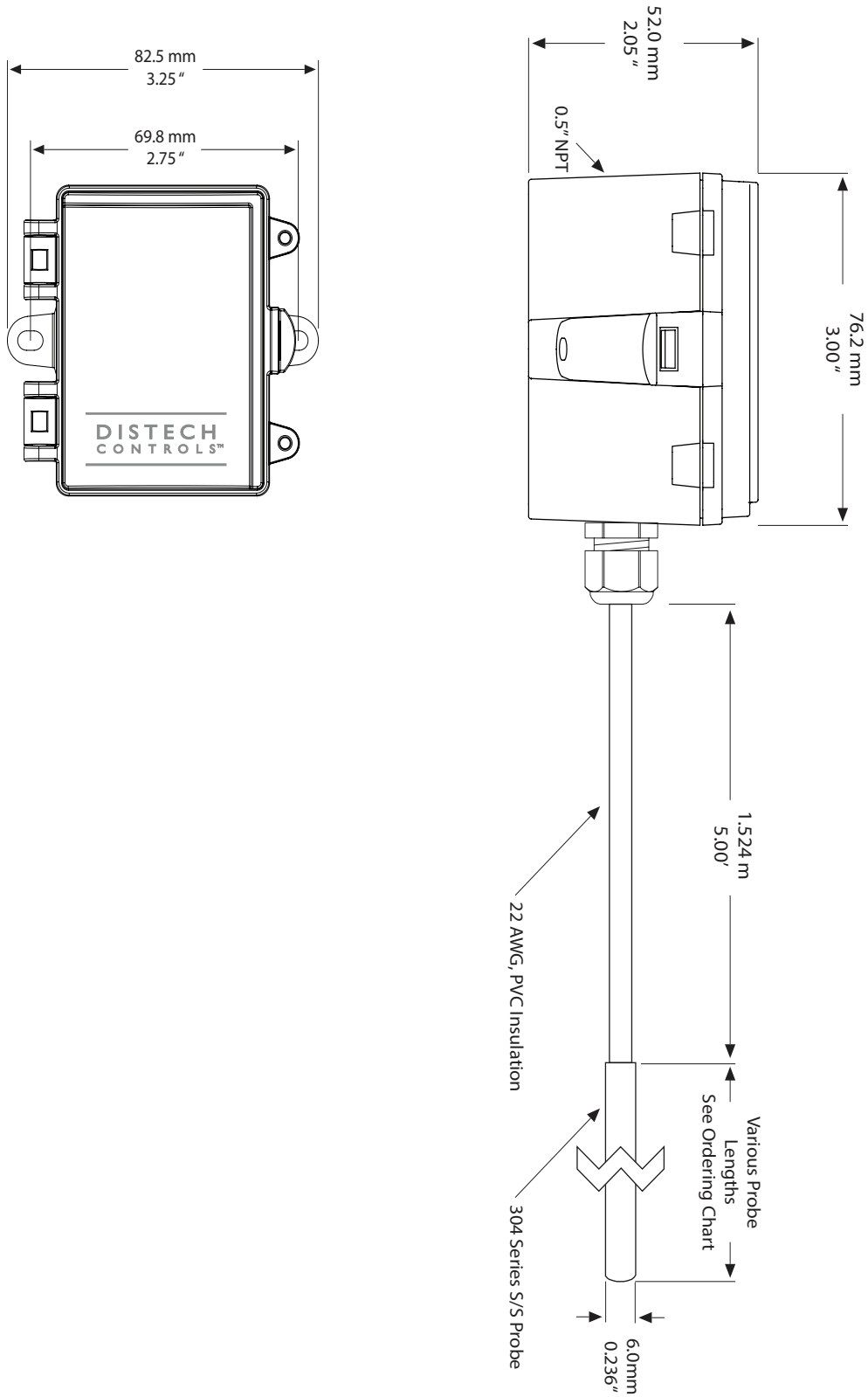
## Agency Approvals

Material<sup>2</sup> \_\_\_\_\_ UL94-V0



1. Temperature sensor type stated is standard. Other temperature sensor types are available.
2. All materials and manufacturing processes comply with the RoHS directive

# Dimensions



Specifications subject to change without notice.

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