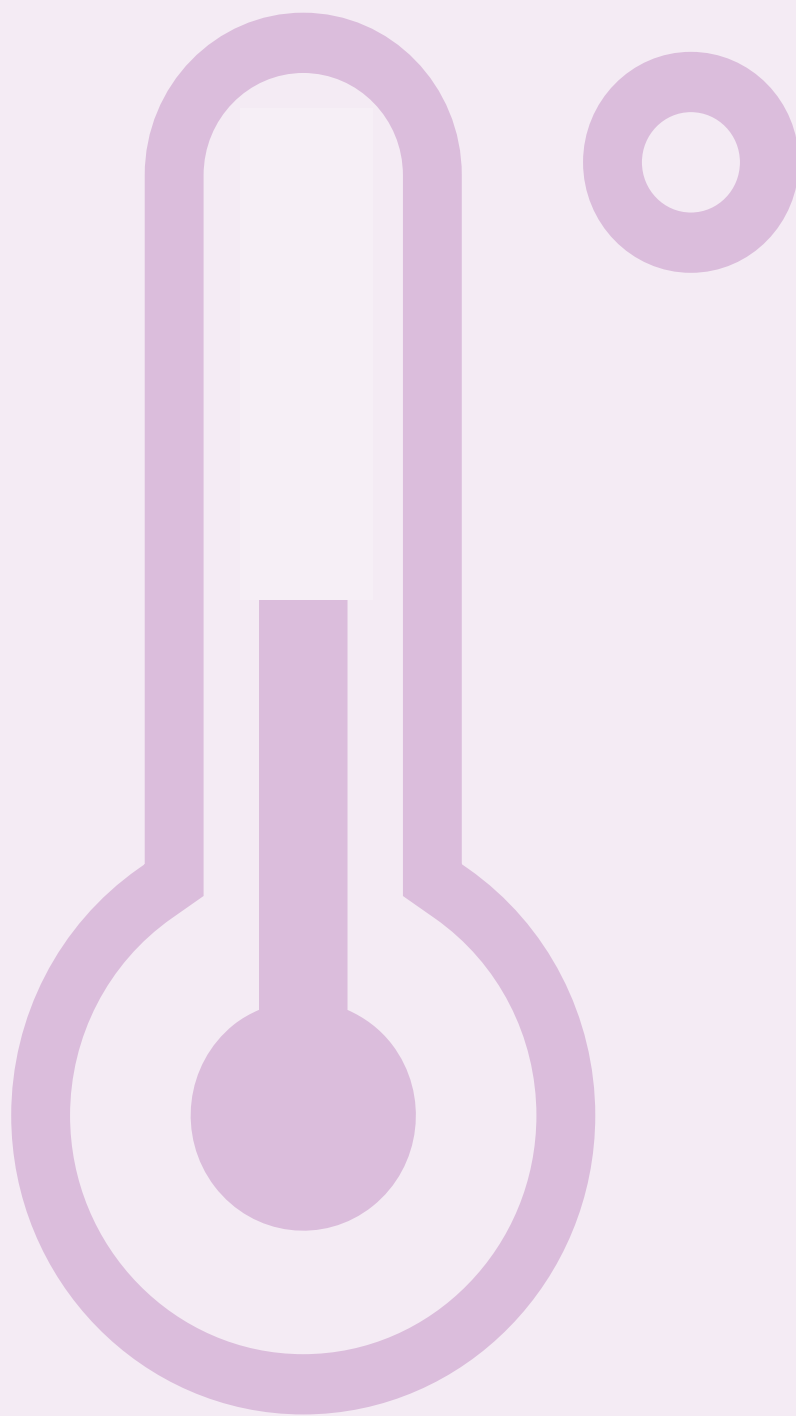




# Temperature Sensing

- Room Temperature Sensors
- Immersion Temperature Sensors
- Outdoor Temperature Sensors
- Averaging Temperature Sensors
- Duct Temperature Sensors
- Surface Temperature Sensors

Temperature sensors are fundamental to any BAS where occupant comfort is paramount. Our full line of temperature sensors and transmitters are used for air, liquid and solid surfaces and are available with a variety of temperature sensor types, enclosures and form factors.





# Allure™ EC-Sensor Series Room Temperature Sensors

The Allure EC-Sensor series are versatile room temperature sensors. All Allure EC-Sensor models possess an integrated temperature sensor for precision local temperature sensing.

## Specifications

Operating Temperature	0°C to 50°C 32°F to 122°F
Storage Temperature	-20°C to 70°C; -4°F to 158°F
Relative Humidity	0 to 90% non-condensing
LAN Access Jack (Except for EC-Sensor-T model)	Audio jack, 1/8" (3.5mm)
Temperature Sensing Type	10KΩ Type II Thermistor (10kΩ @ 25°C; 77°F)
Range	0°C to 50°C; 32°F to 122°F
Accuracy	±0.5°C; ±0.9°F
Enclosure Material and Colour	ABS type PA-765A, Off-White
Dimensions	4.62" x 3.29" x 1.58" (117mm x 84mm x 40mm)
Shipping Weight	0.4lbs (0.18kg)

## Model Selection

* PDITE-SENSORTX0	Space temperature sensor (no communication jack). Sold in bulk pack of 10 units
* PDITE-SENSORX0	Space temperature sensor with communication jack
* PDITE-SENSOROX0	Space temperature sensor with override and communication jack
* PDITE-SENSORSX0	Space temperature sensor with setpoint cool/warm and communication jack
* PDITE-SENSORSOX0	Space temperature sensor with setpoint cool/warm, w/override and communication jack
* PDITE-SENSORSOFX0	Space temperature sensor with setpoint cool/warm, override, fan speed selection and communication jack



## Applications

- Precise temperature monitoring
- Allows occupant setpoint adjustment, fan speed selection, and system override initiation and status indication
- Provides a local area network service access point

## Features & Benefits

- Slim, compact style, and clean lines are well received by architects and building owners.
- Onboard Local Area Network (LAN) jack is accessible without removing the cover to allow quick access to the network for commissioning or troubleshooting controllers (except for the Allure EC-Sensor-T).
- For people working outside of core hours, an occupancy control extends normal system operating hours for continued comfort while saving energy when possible. Occupancy status is shown with a LED indicator.
- Fan speed selector for improved personal comfort with the Allure EC-Sensor-SOF model.
- Accurate temperature monitoring while some models have setpoint override for increased individual comfort.



\* Items stocked at Distech Controls HQ





# TS-RMP Sensor Series

## Stainless Steel Plate Temperature Sensors

The TS-RMP series is a single gang, blank stainless steel wall plate that incorporates a precision temperature sensor used to monitor room temperatures where additional security is required. These sensors can be flush mounted directly to a single gang electrical box or directly to a wall. Insulating foam is adhered to the back of the wall plate to provide a thermal barrier from internal wall temperatures.

### Applications

- Used for measuring temperature of rooms
- Used in areas that are subject to damage or vandalism

### Features & Benefits

- Economical
- Sensors are hermetically sealed
- Proven long stability and performance
- Wall plate made of corrosion resistant 304 stainless steel
- Accurate temperature monitoring for increased comfort

### Specifications

Operating Temperature	-20°C to 50°C -4°F to 122°F
Storage Temperature	-20°C to 50°C -4°F to 122°F
Relative Humidity	0 to 95% Non-condensing
Material	304 Stainless Steel
Dissipation Factor	2.2 mW/K
Max Power @ 25°C (77°F)	75 mW
Thermal Time Constant	Less than 10s
Type	10kΩ, type 2, NTC thermistor
Accuracy	±0.2°C ±0.36°F
Dimensions (overall)	4.5" x 2.75" x 0.1875" (114.3 x 69.85 x 4.76)

### Model Selection

* TS-RMPX	Stainless steel plate temperature sensor
TS-RMPS	Stainless steel plate temperature sensor with tamper proof screws







# TS-D2X Sensor Series

## Duct/Immersion Temperature Sensors, Nema 4X

TS-D2X Series all-purpose temperature sensors provide precision temperature sensing for ducts. When combined with a TS-TW series S/S thermowell, they can be used to measure liquid temperature in pipes. The TS-D2X single-point temperature sensor uses a precision sensor encapsulated in a 6.00 mm (0.236") OD, a 304-series stainless steel probe, and it is available in various lengths. All probes provide excellent heat transfer, fast response and resistance to moisture penetration.

### Specifications

Operating Temperature	-20°C to 105°C; -4°F to 221°F
Storage Temperature	-20°C to 105°C; -4°F to 221°F
Relative Humidity	0 to 95% Non-condensing
Shipping Weight	0.20lbs (0.091kg)
Probe Dimension	6.35 mm (0.25") Diameter
Dissipation Factor	2.2mW/K (Thermistor)
Max Power @ 25°C (77°F)	75mW (Thermistor)
Thermal Time Constant	Less than 10s (Thermistor)
Sensor Type	10kΩ NTC thermistor, Type 2
Accuracy	±0.2°C; ±0.36°F
Probe Sensing Range	-20 to 105°C (-4 to 221°F)



### Applications

- Used for measuring temperature on: supply and return ducts, supply and return hot water pipes of heating systems, domestic hot water tanks and piping, and supply and return lines in chillers
- 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

### Accessories



#### Thermal Joint Compound

TS-JC2	Thermal Joint Compound, 2 oz (60ml) Jar
TS-JC5	Thermal Joint Compound, 5 oz (150ml) Tube
TS-JC8	Thermal Joint Compound, 8 oz Jar (240ml)

#### Thermowells

* TS-TWN30402	50mm (2") 304 SS well, NPT
* TS-TWN30404	100mm (4") 304 SS well, NPT
* TS-TWN30406	150mm (6") 304 SS well, NPT
TS-TWN30408	200mm (8") 304 SS well, NPT
TS-TWN31602	50mm (2") 316 SS well, NPT
TS-TWN31604	100mm (4") 316 SS well, NPT
TS-TWN31606	150mm (6") 316 SS well, NPT
TS-TWN31608	200mm (8") 316 SS well, NPT

### Features & Benefits

- Economical
- Ease of installation
- Sensors are hermetically sealed
- Proven long stability and performance
- Probes made of corrosion-resistant 304 stainless steel
- Accurate temperature monitoring for increased comfort



## Build Your Duct/Immersion Temperature Sensor

TS- D XX 002	
Mounting Style	D = Duct / Immersion
Enclosure	XX = No enclosure 2X = Plastic enclosure, Nema 4X
Probe Length	002 = 2" (50mm) 004 = 4" (100mm) 006 = 6" (150mm) 008 = 8" (200mm) 012 = 12" (300mm) 018 = 18" (450mm)



Items stocked at Distech Controls HQ  
 TS-D2X002 TS-D2X004 + Wells from above  
 TS-D2X006 TS-D2X008  
 TS-D2X012 TS-D2X018





# TS-AC2X Sensor Series Copper Duct Averaging Temperature Sensors, Nema 4X

The TS-AC2X Series Sensors are duct averaging temperature sensors. These devices provide precision temperature sensing for mixed-air ducts. The duct averaging sensor incorporates numerous sensors inside a copper tube. It acts as a single sensor, averaging any temperature change across the sensors. The copper tube is bendable to a radius of 4" (2.5cm) and can crisscross a duct or plenum to average out temperature stratification. The enclosure contains pre-formed 1/2" (12.5mm) knockouts for conduit connections. The sensors are conformal-coated to protect the sensing elements against moisture migration..

## Applications

- Used for measuring temperature on supply and return air ducts
- Incorporated in chillers to monitor temperature gradients

## Features & Benefits

- Economical
- Ease of installation
- Wide selection of thermistor curves
- Proven long stability and performance
- Adaptable to most duct sizes
- Available in various lengths

## Specifications

Operating Temperature	-20°C to 60°C; -4°F to 140°F
Storage Temperature	-20°C to 60°C; -4°F to 140°F
Relative Humidity	0 to 95% Non-condensing
Enclosure	Grey ABS; Type: UL94-V0; IP65 (NEMA 4X)
Shipping Weight	0.60lbs (0.2727kg)
Dissipation Factor	2.2mW/K (Thermistor)
Max Power @ 25°C (77°F)	75 mW (Thermistor)
Thermal Time Constant	Less than 10s (Thermistor)
Type	10kΩ NTC thermistor, Type 2
Accuracy	±0.2°C; ±0.36°F



## Accessories

### Rubber Tube Clamps

TS-C00025	Rubber tube clamp for duct averaging temperature sensor 1/4" (6.35mm)
TS-C0003125	Rubber tube clamp for duct averaging temperature sensor 5/16" (8mm)
TS-C000375	Rubber tube clamp for duct averaging temperature sensor 3/8" (9.5mm)



## Build Your Copper Duct Averaging Temperature Sensor

		TS-	AC	XX	002
Mounting Style	AC = Duct averaging, flexible copper probe				
Enclosure	2X = Plastic enclosure, Nema 4X				
Probe Length	072 = 72" (1.83M) 144 = 144" (3.66M) 240 = 240" (6M) 288 = 288" (7.3M)				





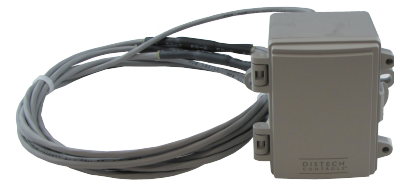
# TS-AP2X Sensor Series

## Flexible Duct Averaging Temperature Sensors, Nema 4X

This series of flexible duct averaging temperature sensors provides precision temperature sensing of mixed-air ducts. It incorporates numerous sensors on an FT6 plenum-rated cable. It acts as a single sensor, averaging any temperature change across the sensors

### Specifications

Operating Temperature	-20°C to 60°C -4°F to 140°F
Storage Temperature	-20°C to 60°C -4°F to 140°F
Ambient Humidity	0 to 95% Non-condensing
Dissipation Factor	2.2 mW/K (Thermistor)
Max Power @ 25°C (77°F)	75 mW (Thermistor)
Thermal Time Constant	Less than 10s (Thermistor)
Type	10kΩ NTC thermistor, Type 2
Accuracy	±0.2°C ±0.36°F
Enclosure Material	Plastic, Grey ABS; Type: UL94-V0; IP65 (NEMA 4X))



### Applications

- Used for measuring temperature on supply and return air ducts
- Incorporated in chillers to monitor temperature gradients

## Accessories



### Rubber Tube Clamps

TS-C00025	Rubber tube clamp for duct averaging temperature sensor 1/4" (6.35mm)
TS-C0003125	Rubber tube clamp for duct averaging temperature sensor 5/16" (8mm)
TS-C000375	Rubber tube clamp for duct averaging temperature sensor 3/8" (9.5mm)

### Features & Benefits

- Economical
- Ease of installation
- Wide selection of thermistor curves
- Proven long stability and performance
- Adaptable to most duct sizes
- Multiple lengths available



## Build Your Flexible Duct Averaging Temperature Sensor

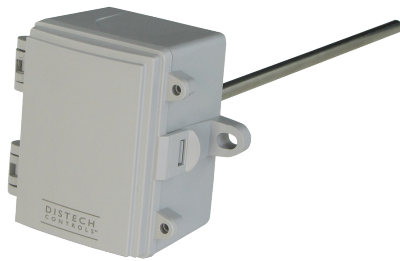
	TS-	AP	2X	072
Mounting Style		AP = Duct averaging, plenum cable probe		
Enclosure			2X = Plastic enclosure, Nema 4X	
Probe Length				072 = 72" (1.83M) 144 = 144" (3.66M) 240 = 240" (6M) 288 = 288" (7.3M)



\*Items stocked at Distech Controls HQ

TS-AP2X144  
TS-AP2X288





## TS-AR2X Sensor Series

### Rigid Duct Averaging Temperature Sensors, Nema 4X

The TS-AR2X Sensor Series are rigid duct averaging temperature sensors. They are encapsulated in a 6.00 mm (0.236") OD, 304 stainless steel probe. All probes provide excellent heat transfer and fast response, and they resist moisture penetration. This temperature sensor is available with various probe lengths

#### Specifications

Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Ambient Humidity	0 to 95% Non-condensing
Temperature Sensor Type	10kΩ NTC thermistor, Type 2
Temperature Sensor Accuracy	±0.2°C; ±0.36°F
Probe Material	304 Series Stainless Steel
Probe Dimension	6.00 mm (0.236") Diameter
Dissipation Factor	2.2 mW/K (Thermistor)
Max Power @ 25°C (77°F)	75 mW (Thermistor)
Thermal Time Constant	Less than 10s (Thermistor)
Material	Plastic, Grey ABS; Type: UL94-V0; IP65 (NEMA 4X)
Shipping weight	0.60 lbs (0.2727 kg)

#### Applications

- Used for measuring temperature on supply and return ducts
- 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
- Used for more precise measurements by taking readings at various points and averaging out

#### Features & Benefits

- Economical
- Ease of installation
- Probes made of corrosion-resistant 304 stainless steel
- Accurate temperature monitoring for increased comfort
- Proven long stability and performance



## Build Rigid Duct Averaging Temperature Sensor

	TS-	AR	2X	018
Mounting Style		AR = Duct averaging, rigid stainless steel probe		
Enclosure			2X = Plastic enclosure, Nema 4X	
Probe Length				018 = 18" (45.7cm) 024 = 24" (60.9cm) 036 = 36" (91.5cm)



## TS-SP2X Sensor Series Strap-On Temperature Sensors (Probe), Nema 4X

The TS-SP2X Sensor represents a strap-on temperature sensor that provides precision temperature sensing for pipes and tanks. The single-point strap-on temperature sensor uses a precision sensor encapsulated in a 6.35 mm (0.25") OD and a 304 stainless steel probe. It is available in various lengths. All probes are constructed so as to provide excellent heat transfer and fast response, and they are potted so as to resist moisture penetration. The sensor has a pre-formed 1/2" (12.7mm) knockout for conduit connections..

### Specifications

Operating Temperature	-20°C to 105°C; -4°F to 221°F
Storage Temperature	-20°C to 105°C; -4°F to 221°F
Ambient Humidity	0 to 95% Non-condensing
Dissipation Factor	2.2 mW/K (Thermistor)
Max Power @ 25°C (77°F)	75 mW (Thermistor)
Thermal Time Constant	Less than 10s (Thermistor)
Temperature Sensor Type	10kΩ NTC thermistor, Type 2
Temperature Sensor Range	-20°C to 105°C; -4°F to 221°F
Temperature Sensor Accuracy	±0.2°C, ±0.36°F
Enclosure Material	Plastic, Grey ABS; Type: UL94-V0; IP65 (NEMA 4X)
Shipping Weight	0.60lbs (0.2727kg)



### Model Selection

* TS-SP2X002	Strap-on temperature sensor 50mm (2") with ABS enclosure, hinged cover
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### Applications

- Used for measuring temperature on supply and return hot water pipes of heating systems
- Used for measuring temperature in supply and return lines in chillers

### Features & Benefits

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



## TS-SS2X Sensor Series Strap-On Temperature Sensors (Clamp), Nema 4X

This single-point strap-on temperature sensor incorporates a precision sensor bonded to a 38 mm x 38 mm (1.5" x 1.5") aluminum plate and adhered to a 38 mm x 25.4 mm (1.5 x 1") compressible foam. A 254-mm (10") pipe clamp is provided to secure the assembly to various pipe sizes. All probes are constructed to provide excellent heat transfer and fast response, and they are potted so as to resist moisture penetration

### Specifications

Operating Temperature	-20°C to 105°C; -4°F to 221°F
Storage Temperature	-20°C to 105°C; -4°F to 221°F
Ambient Humidity	0 to 95% Non-condensing
Sensor Accuracy	±0.2°C; ±0.36°F
Temperature Sensor Type	10K Ω NTC thermistor, Type 2
Probe Material	Square aluminum plate with compressible foam backing
Probe Dimension	38 mm (1.5") Square
Enclosure Material	Grey ABS Type: UL94-V0; IP65 (NEMA4X)
Shipping Weight	0.60lbs (0.2727kg)



### Model Selection

* TS-SS2X010	Strap-On Sensor (Clamp) with ABS Enclosure, hinged cover
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### Applications

- Used for measuring temperature on supply and return hot water pipers of heating systems
- Can be mounted directly to various sizes of pipes
- Used for measuring temperature in supply and return lines in chillers

### Features & Benefits

- Economical
- Ease of installation
- Accurate temperature monitoring for increased comfort
- Proven long stability and performance



\*Items stocked at Distech Controls HQ





## TS-O2X Sensor Series

### Outdoor Temperature Sensors, Nema 4X

This series is composed of single-point precision temperature sensors for outside air. The sensing element is constructed so as to provide excellent heat transfer and fast response, and it is potted so as to resist moisture penetration. A sun and wind shield is integrated into the enclosure. The sensor should be mounted, using the provided mounting holes, on an outside north-facing wall under the eaves, so that it can be protected from direct sunlight.

#### Applications

- Used for measuring outdoor temperature

#### Features & Benefits

- Economical
- Ease of installation
- Wide selection of thermistor curves
- Accurate temperature monitoring for increased comfort
- Sensors are hermetically sealed

#### Specifications

Operating Temperature	-50°C to 100°C (-58°F to 212°F)
Dissipation Factor	2.2mW/K (Thermistor)
Max Power @ 25°C (77°F)	75mW (Thermistor)
Thermal Time Constant	Less than 10s (Thermistor)
Type	10kΩ NTC thermistor, Type 2
Accuracy	±0.2°C (±0.36°F)
Enclosure Material	(Grey) Hinged Lid, ABS - UL94-V0 - IP65 (NEMA 4X)



#### Model Selection

* TS-O2X	Outside Air Sensors (ABS Enclosure and Hinged Cover)
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## TS-G Sensor

### Glass Temperature Sensor



The TS-G sensor is single point glass temperature sensors that utilize a precision sensor encapsulated in an Aluminum probe (31.75 mm L x 9.525 mm W x 9.525 mm H (1.25" x .375" x .375")). The standard wire length is 600 mm (24"). All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. The TS-G can accommodate a wide variety of sensing elements such as NTC thermistors, RTD elements, Nickel RTD elements and IC sensors.

#### Specifications

Operating Temperature	-50°C to 100°C (-58°F to 212°F)
Dissipation Factor	2.2mW/K (Thermistor)
Max Power @ 25°C (77°F)	75mW (Thermistor)
Thermal Time Constant	Less than 10s (Thermistor)
Type	10kΩ NTC thermistor, Type 2
Accuracy	±0.2°C (±0.36°F)
Wire Material	1.524 m (5') PVC insulated, parallel bonded
Termination	Pigtail 2 or 3 wire
Probe Material	Aluminum
Probe Dimensions	31.75 mm x 9.525 mm x 9.525 mm (1.25" x 0.375" x 0.375")

#### Applications

- Used for measuring temperature of window panes

#### Features & Benefits

- Economical
- Proven long term stability and performance
- Ease of installation
- Accurate temperature monitoring for increased comfort
- Sensors are hermetically sealed



## TS-PC Sensor

### Flying Lead Temperature Sensors

The TS-PC are single point flying lead temperature sensors that utilize a precision sensor encapsulated in a 304 series stainless steel probe. All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration.

#### Specifications

Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Relative Humidity	0 to 95% Non-condensing
Dissipation Factor	2.2mW/K (Thermistor)
Max Power @ 25°C (77°F)	75mW (Thermistor)
Thermal Time Constant	Less than 10s (Thermistor)
Type	10kΩ NTC thermistor, Type 2
Wire Material	1.83 m (6') Plenum rated FT-6 22 AWG
Termination	Pigtail 2 or 3 wire
Probe Material	304 Series Stainless Steel
Probe Dimensions	6.35 mm x 50 mm (0.25" x 2")



#### Applications

- Used to monitor single point temperature within a duct
- Used in air handling units to provide temperature sensing for control of heating and cooling

#### Features & Benefits

- Economical
- Proven long term stability and performance
- Ease of installation
- Accurate temperature monitoring for increased comfort
- Sensors are hermetically sealed



## TS-C Sensor

### Clip Temperature Sensors

The TS-C are temperature sensors with a mounting clip. These devices provide precision temperature sensing of rooms. They are meant to be mounted in existing enclosures. This product offers a cost effective solution for customers who wish to have ease of installation to their Building Automation System. The TS-C series can accommodate a wide variety of sensing elements such as NTC thermistors, RTD elements, Nickel RTD elements and IC sensors.

#### Specifications

Operating Temperature	-20°C to 105°C (-4°F to 221°F)
Storage Temperature	-20°C to 105°C (-4°F to 221°F)
Relative Humidity	0 to 95% Non-condensing
Dissipation Factor	2.2 mW/K
Max Power @ 25°C (77°F)	75 mW
Thermal Time Constant	Less than 10s
Type	10kΩ, type 2, NTC thermistor
Accuracy	±0.2°C (±0.36°F)



#### Applications

- Used as a replacement sensor element for retrofit jobs

#### Features & Benefits

- Economical
- Proven long term stability and performance
- Ease of installation
- Accurate temperature monitoring for increased comfort
- Sensors are hermetically sealed



\* Item stocked at Distech Controls HQ





### Applications

- Used to measure temperature of concrete slabs

### Features & Benefits

- Economical
- Proven long term stability and performance
- Ease of installation
- Accurate temperature monitoring for increased comfort
- Sensors are hermetically sealed

# TS-CS Sensor Series Slab Temperature Sensors

The TS-CS Series are single-point slab temperature sensors that utilize a precision sensor encapsulated in thermal conductive coating. All probes are constructed to provide excellent heat transfer, fast response and to resist moisture penetration. Different wire types and wire lengths are available. The TS-CS series can accommodate a wide variety of sensing elements such as NTC thermistors, RTD elements, Nickel RTD elements and IC sensors.

### Specifications

Operating Temperature (ZW)	-20°C to 105°C (-4°F to 221°F)
Operating Temperature (FT)	-20°C to 60°C (-4°F to 140°F)
Operating Temperature (MP)	-20 to 80°C (-4 to 176°F)
Dissipation Factor	2.2 mW/K
Max Power @ 25°C (77°F)	75 mW
Thermal Time Constant	Less than 10s
Type	10kΩ, type 2, NTC thermistor
Accuracy	±0.2°C (±0.36°F)
Termination	Pigtail 2 or 3 wire

### Model Selection

TS-CSZ012	Concrete slab temperature sensor 300mm (12") zip wire. Other wire lengths available.
TS-CSP012	Concrete slab temperature sensor 300mm (12") FT-6 wire. Other wire lengths available.
TS-CSM012	Concrete slab temperature sensor 300mm (12") moisture proof wire. Other wire lengths available.



# TS-R Transmitter Series

## Room Temperature Transmitters

The TS-R Series are stainless steel wall plate temperature transmitters. They are a low profile, single gang transmitter that incorporate a precision platinum RTD and provide a high accuracy signal with excellent long-term stability, low hysteresis, and fast response for measurement of room temperatures. The TS-R Series can be mounted directly to a single gang electrical box or directly to a wall. Insulating foam is adhered to the back of the enclosure to provide a thermal barrier from internal wall temperatures.



### Specifications

Operating Temperature	0°C to 70°C (32°F to 158°F)
Storage Temperature	0°C to 70°C (32°F to 158°F)
Power Supply	15-35 Vdc or 15-32 Vac
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited
Maximum Loop Load	>600Ω
Loop Current Range	2 mA nominal (occurs with shorted sensor) to 22.5 mA nominal (occurs with open sensor)
Maximum Output (Voltage)	Limited to <10.5
Transmitter Accuracy	±0.1% of span, including linearity
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)

### Applications

- Used for measuring temperature of rooms

### Features & Benefits

- Economical
- Proven long term stability and performance
- Voltage and current output signals
- Low hysteresis and fast response
- Virtually immune to power supply noise and input voltage fluctuations

## Accessories

### Calibration Certificate

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



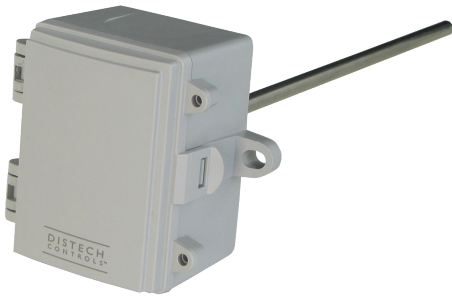
## Build Your Room Temperature Transmitter

	TS-	R	C04	MP	X	R1
Mounting Style		R = Room				
Control Signal Output			C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC			
Enclosure				MP = Metal plate		
Mounting Screws					X = Regular mounting screws S = Tamperproof mounting screws	
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)



# TS-Dydy2X Transmitter Series

## Duct/Immersion Temperature Transmitters, Nema 4X



The TS-Dydy2X Series all-purpose temperature transmitters provide the precision temperature of a duct. When combined with a TS-TW series Stainless Steel thermowell, they can be used to measure liquid temperatures in a pipe. The TS-Dydy2X single-point temperature sensor utilizes a precision sensor encapsulated in a 6.00 mm (0.236") OD and a 304-series stainless-steel probe. It is available in various lengths. All probes provide excellent heat transfer, fast response, and resistance to moisture penetration. The transmitter offers a high-accuracy signal with excellent long-term stability, low hysteresis, and fast response.

### Applications

- Used for measuring temperature on supply and return ducts, supply and return hot water pipes of heating systems, supply and return lines in chillers, or domestic hot water tanks and piping
- Incorporated in chillers to monitor temperature gradients

### Features & Benefits

- Slim, compact style and clean lines are well received by architects and building owners
- Economical
- Ease of installation
- Probes made of corrosion-resistant 304 stainless steel
- Accurate temperature monitoring for increased comfort

### Specifications

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
Wire Material	PVC Insulated, parallel bonded (Type 2, 100Q Plat. Uses FT4)
Maximum Loop Load	>600Ω
Maximum Output (Voltage)	Limited to <5.5 Vdc for 0-5 Vdc, <10.5 for 0-10 Vdc
Maximum Current (Voltage)	5 mA nominal
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited
RFI Rejection	Good RFI rejection of normal frequencies
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Temperature Sensor Type	1000Ω Platinum RTD
Transmitter Accuracy	±0.1% of span, including linearity
Probe Dimension	6.00 mm (0.236") Diameter
Probe Sensing Range	-20 to 105°C (-4 to 221°F)
Probe Material	304 Series Stainless Steel



## Build Your Duct/Immersion Temperature Transmitter

		TS-	D	C04	2X	002	R1
Mounting Style	D = Duct or Immersion						
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" (50mm) 004 = 4" (100mm) 006 = 6" (150mm) 008 = 8" (200mm) 012 = 12" (300mm) 018 = 18" (450mm)						
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)						



# TS-ACyyy2X Transmitter Series

## Copper Duct Averaging Temperature Transmitters, Nema 4X

The TS-ACyyy2X Transmitter Series are copper duct averaging temperature sensors. These devices provide precision temperature sensing of mixed air ducts. This temperature sensor is available with various lengths to fit any application. The duct averaging sensor incorporates numerous sensors inside a copper tube. It acts as a single sensor, averaging any temperature change across the sensors.



### Specifications

Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Relative Humidity	0 to 95% Non-condensing
Enclosure	Grey ABS; Type: UL94-V0; IP65 (NEMA 4X)
Shipping Weight	0.60lbs (0.2727kg)
Temperature Sensor Type	1000Ω Platinum, IEC 751, 385 Alpha, thin film (RTD)
Temperature Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Transmitter Accuracy	±0.1% of span, including linearity
RFI Rejection	Good RFI rejection of normal frequencies
Maximum Loop Load	>600Ω

### Applications

- Used for measuring temperature on supply and return air ducts

### Features & Benefits

- Economical
- Ease of Installation
- Wide selection of thermistor curves
- Adaptable to most duct sizes
- Accurate temperature monitoring for increased comfort



## Accessories

### Calibration Certificate

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

### Rubber Tube Clamps

TS-C00025	Rubber tube clamp for duct averaging temperature sensor 1/4" (6.35mm)
TS-C0003125	Rubber tube clamp for duct averaging temperature sensor 5/16" (8mm)
TS-C000375	Rubber tube clamp for duct averaging temperature sensor 3/8" (9.5mm)



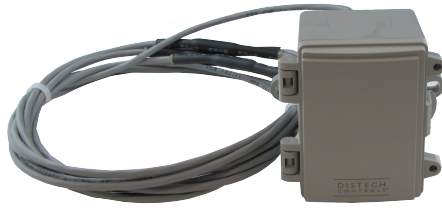
## Build Your Copper Duct Averaging Temperature Transmitter

	TS- AC C04 2X 072 R1
Mounting Style	AC = Duct averaging, flexible copper probe
Control Signal Output	C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC
Enclosure	2X = Plastic enclosure, Nema 4X
Probe Length	072 = 72" (1.8M) 144 = 144" (3.6M) 240 = 240" (6M) 288 = 288" (7.3M)
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)



# TS-APyyy2X Transmitter Series

## Flexible Duct Averaging Temperature Transmitters, Nema 4X



### Applications

- Used for measuring temperature on supply and return air ducts

### Features & Benefits

- Economical
- Ease of installation
- Wide selection of thermistor curves
- Adaptable to most duct sizes
- Accurate temperature monitoring for increased comfort

### Specifications

Operating temperature	-20°C to 60°C; -4°F to 140°F
Storage temperature	-20°C to 60°C; -4°F to 140°F
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Temperature Sensor Type	1000Ω Platinum, IEC 751, 385 Alpha, thin film (RTD)
RFI Rejection	Good RFI rejection of normal frequencies
Wire Material	PVC insulated, parallel bonded (Type 2, 100 Plat. Uses FT4)
Maximum Loop Load	>600Ω
Maximum Output (Voltage)	Limited to <5.5 Vdc for 0-5 Vdc, <10.5 for 0-10 vdc
Maximum Current (Voltage)	5 mA nominal
Protection Circuitry	Reverse voltage protected and output limited

## Accessories



### Calibration Certificate

TS-NIST NIST Calibration Certificate

Note: Calibration certificates must be purchased at the time of purchasing the relative sensors.

### Rubber Tube Clamps

TS-C00025	Rubber tube clamp for duct averaging temperature sensor 1/4" (6.35mm)
TS-C0003125	Rubber tube clamp for duct averaging temperature sensor 5/16" (8mm)
TS-C000375	Rubber tube clamp for duct averaging temperature sensor 3/8" (9.5mm)



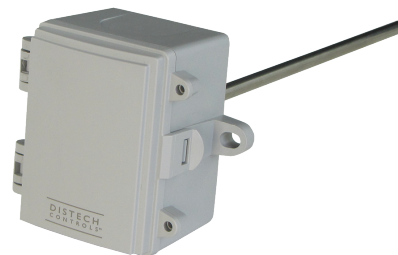
## Build Your Flexible Duct Averaging Temperature Transmitter

	TS-	AP	C04	2X	072	R1
Mounting Style		AP = Duct averaging, flexible copper probe				
Control Signal Output			C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC			
Enclosure				2X = Plastic enclosure, Nema 4X		
Probe Length					072 = 72" (1.8M) 144 = 144" (3.6M) 240 = 240" (6M) 288 = 288" (7.3M)	
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)



# TS-ARyyy2X Transmitter Series

## Rigid Duct Averaging Temperature Transmitters, Nema 4X



This series of rigid duct averaging temperature transmitters incorporates numerous precision platinum RTDs at equal distances, and a stainless steel probe. All probes provide excellent heat transfer and fast response, and they resist moisture penetration. This temperature transmitter is available with various probe lengths.

### Specifications

Operating temperature	-40°C to 85°C (-40°F to 185°F)
Storage temperature	-40°C to 85°C (-40°F to 185°F)
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Type	1000Ω Platinum, IEC 751, 385 Alpha, thin film (RTD)
Temperature Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Probe Material	304 Series Stainless Steel
Probe Dimension	6.35 mm (0.25") Diameter
RFI Rejection	Good RFI rejection of normal frequencies
Protection Circuitry	Reverse voltage protected and output limited
Wire Material	PVC insulated, parallel bonded (Type 2, 100 Plat. Uses FT4)
Maximum Loop Load	>600Ω
Maximum Output (Voltage)	Limited to <5.5 Vdc for 0-5 Vdc, <10.5 for 0-10 vdc

### Applications

- Used for measuring temperature on supply and return ducts
- 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

## Accessories



### Calibration Certificate

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

### Features & Benefits

- Economical
- Ease of installation
- Probes made of corrosion resistant 304 stainless steel
- Accurate average temperature monitoring for increased comfort
- Proven long stability and performance



## Build Your Rigid Duct Averaging Temperature Transmitter

	TS-	AR	C04	2X	018	R1
Mounting Style		AR = Duct averaging, rigid stainless steel probe				
Control Signal Output			C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC			
Enclosure				2X = Plastic enclosure, Nema 4X		
Probe Length					018 = 18" (45cm) 024 = 24" (60cm) 036 = 36" (91cm)	
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)



# TS-SPyyy2X Transmitter Series

## Strap-On Temperature Transmitters, Nema 4X



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

### Specifications

Operating temperature	-40°C to 85°C (-40°F to 185°F)
Storage temperature	-40°C to 85°C (-40°F to 185°F)
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Type	1000Ω Platinum RTD
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Probe Material	Aluminum Plate with compressible foam backing
Probe Dimension	6.35 mm (0.25") Diameter
Probe Sensing Range	-20 to 105°C (-4 to 221°F)
Wire Material	PVC Insulated, parallel bonded
RFI Rejection	Good RFI rejection of normal frequencies

### Accessories



### Calibration Certificate

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



## Build Your Strap-On Temperature Transmitter

	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)



# TS-SSyyy2X Transmitter Series Strap-On Temperature Transmitters, Nema 4X

The TS-SSyyy2X Transmitter Series are single -point strap-on temperature transmitters. They incorporate a precision platinum RTD bonded to a 1.5" x 1.5" Aluminum plate and adhered to 1" compressible foam. A 25.4 cm (10") S/S Pipe clamp is provided so as to fasten the assembly to various sizes of pipes. All sensors provide excellent heat transfer and fast response, and they resist moisture penetration. A transmitter that offers a high-accuracy signal with excellent long-term stability, low hysteresis, and fast response is provided. A 1000Ω Platinum, IEC 751, 385 Alpha, thin film sensor is standard.

## Specifications

Operating temperature	-40°C to 85°C; -40°F to 185°F)
Storage temperature	-40°C to 85°C (-40°F to 185°F)
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Type	1000Ω Platinum RTD
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Probe Material	Aluminum Plate with compressible foam backing
Probe Dimension	38.1 mm (1.5") Square
RFI Rejection	Good RFI rejection of normal frequencies
Protection Circuitry	Reverse voltage protected and output limited
Maximum Loop Load	>600Ω



## Accessories

### Calibration Certificate

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



## Applications

- Used for measuring temperature on supply and return hot water pipes of heating systems
- Can be mounted directly onto various sizes of pipes
- Used for measuring temperature in supply and return lines in chillers.

## Features & Benefits

- Economical
- Ease of Installation
- Accurate temperature monitoring for increased comfort
- Hermetically sealed transmitters
- Proven long-term stability and performance
- Choice of scaled ranges and outputs
- Equipped with a "Quick Release" clamp for maneuverability



## Build Your Strap-On Temperature Transmitter

	TS-	SS	C04	2X	010	R1
Mounting Style		SS = Strap-on, strap				
Control Signal Output			C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC			
Enclosure				2X = Plastic enclosure, Nema 4X		
Probe Length					010 = 10" (25 CM) (available on SS Mounting Style option only)	
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)





# TS-Oyyy2X Transmitter Series

## Outdoor Temperature Transmitters, Nema 4X

This series is composed of single-point temperature transmitters for outside air that use a precision platinum RTD sensor. All probes are constructed so as to provide excellent heat transfer and fast response, and they are potted so as to resist moisture penetration. A sun and wind shield is integrated into the enclosure.

### Applications

- Used for measuring outdoor temperature

### Features & Benefits

- Economical
- Proven long-term stability and performance
- Voltage and current output signals
- Low hysteresis and fast response
- Choice of scaled ranges and outputs

### Specifications

Operating temperature	-40°C to 85°C (-40°F to 185°F)
Storage temperature	-40°C to 85°C (-40°F to 185°F)
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Type	1000Ω Platinum RTD
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Probe Sensing Range	-40°C -85°C (-40°F -185°F)
Enclosure Material	ABS, UL94-V0, IP65 (NEMA4X)
Shipping Weight	0.7 lbs (318 g)
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited
Maximum Loop Load	>600Ω
Loop Current Range	2 mA nominal (occurs with shorted sensor) to 22.5 mA nominal (occurs with open sensor)
Maximum Output (Voltage)	Limited to <5.5 Vdc for 0-5 Vdc <10.5 for 0-10 Vdc



## Build Your Outdoor Temperature Transmitter

		TS-	O	C04	2X	R1
Mounting Style	O = Outdoor					
Control Signal Output	C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC					
Enclosure	2X = Plastic enclosure, Nema 4X					
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)					





## TS-DFS Series

# Low Limit Freeze Protection Switches (DPDT)

The TS-DFS Low Limit Freeze Protection Switch series protects cooling coils in air handler systems by preventing frost build up on the coils. By sensing the lowest temperature along any 30 cm (1 foot) section of capillary, the DPDT manual or automatic reset relays signal the building management system, as well as cut off the fan. Set points can be adjusted as low as 1° C (34°F) utilizing the visual set point indicator and set point screw.



### Specifications

Temperature Limits	Operating: -51°C to 71°C (-60°F to 160°F) Sensing Element: 149°C (300°F) max.
Switch Type	DPDT snap acting
Electrical Ratings	Inductive: 14 FLA, 84 LRA, 3/4 hp @ 120 VAC / 12 FLA, 72 LRA, 2 hp @ 240 VAC Pilot Duty: 720 VA max @ 120 to 600 VAC / 144 VA max @ 24 VAC
Adjustable Range	1°C to 21°C (34°F to 70°F)
Deadband	2.5°C (4.5°F), fixed
Wetted Material	Vapor-filled copper capillary, tin-plated, 10' or 20'
Housing Material	Plated steel case, painted steel cover, plastic set point window
Reset Action	Manual or automatic
Agency Approvals	cUL, UL

### Applications

- Used as a low limit control when a "lock-out" type control is desired or required by local code

### Features & Benefits

- Low temperature cut out
- Manual and Auto Reset
- DPDT Output

### Model Selection

TS-DFS-DM20	Low Limit Freeze Protection Switch, manual reset, 20' (609 cm) capillary
TS-DFS-DA20	Low Limit Freeze Protection Switch, automatic reset, 20' (609 cm) capillary
TS-DFS-DM10	Low Limit Freeze Protection Switch, manual reset, 10' (305 cm) capillary
TS-DFS-DA10	Low Limit Freeze Protection Switch, automatic reset, 10' (305 cm) capillary

### Accessories

TS-CC1-N	Capillary Clip for Low Limit Freeze Protection Switch
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## TS-ST-FRE Series

# Flexible Duct Averaging Low Limit Thermostats (SPDT)

The TS-ST-FRE Series Flexible Duct Averaging Low Limit Thermostats (SPDT) provides a switch output based on the average temperature detected along a two or six metre capillary sensor. A common application is for frost protection on fresh air intakes or airconditioning systems, to prevent the icing up of filters, fans and coils. The capillary is fixed in a matrix across the duct, in a position downstream of the pre-heater or frost coil.



### Specifications

Control Range	-30 to +10°C
Differential	2 to 16°C
Switch Rating	230 VAC @ 24 (10) A 24 Vdc @ 3A
Housing Material	ABS
Housing Dimensions	86 x 75 x 44 mm
Capillary	Material: Copper Charge: Vapour Max. temp. 150°C
Dimensions	2m or 6m x 1.8mm diameter
Protection	IP44
Weight	476 g

Note:

All these thermostats include six capillary fixing clips as standard.

### Model Selection

* TS-ST-FRE1	Capillary Frost Thermostats, 6m. capillary, auto reset
* TS-ST-FRE2	Capillary Frost Thermostats, 6m. capillary, manual reset

### Applications

- Used as a low limit control when a "lock-out" type control is desired or required by local code

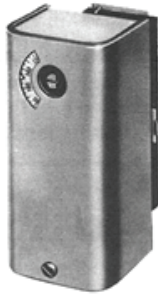
### Features & Benefits

- Easy adjustment of setpoint
- Setting indicator
- Pre-set thermostats to speed commissioning time



\* Items stocked at Distech Controls HQ





### Applications

- Designed for mounting on pipes
- Used to control equipment under normal operating conditions

### Features & Benefits

- Economical
- Used as a convector or fan coil changeover control to automatically select either the heating or cooling function of wall type SPDT heating and cooling thermostats.

## TS-141-0522

# Strap-On High Limit Thermostat

This electric surface mounted thermostat has a Single-Pole, Double-Throw (SPDT) contact mechanism and is designed especially for mounting on pipes.

### Specifications

Switch Action	SPDT
Scale Range	50°F to 200°F (10°C to 93°C)
Maximum Bulb Temperature	240°F (115°C)
Maximum case ambient temperature	131°F (55°C)
Electrical Ratings	See Table Below
Differential	Fixed 4°F (2.2°C)
Cover Finish	Gray baked enamel galvanized steel
Shipping Weight	1.5 lb (0.68 kg)
Dimensions in inches (mm)	H: 4.41 (112) W: 2.16 (55) Conduit Opening: 1.81 (46)
Agency certification	UL Listed: File E35198, CCN XAPX CSA Certified: File LR 948, Class 4813 02

### Electrical Ratings

Max. Motor Ratings	120 Vac	240 Vac
Full Load Amps	10	6
Locked Rotor Amps	60	36



### Applications

- Used as a high limit control when a "lock-out" type control is desired or required by local code

### Features & Benefits

- Located in a return air duct and is wired to shut down air conditioning or ventilating fans when the duct air temperature becomes excessive.

## TS-141-0530

# Duct High Limit Thermostat

The TS-141-0530 Duct High Limit Control Thermostat is duct mounted and has a rigid bulb, bi-metal rod and tube construction.

### Specifications

Switch Action	Single-Pole, Single-Throw (SPST) manual reset
Scale Range	Adjustable from 25°F (-4°C) to 215°F (102°C)
Maximum Bulb Temperature	300°F (149°C)
Electrical Ratings	See Table Below
Cover Finish	Gray baked enamel galvanized steel
Shipping Weight	1.8 lb (0.8 kg)
Thermal System	Rigid bulb, bi-metal rod and tube construction
Agency Certification	UL Listed: File MP3487, CCN MBPR CSA Certified: File LR 948, Class 4813 02

### Electrical Ratings

Locked Rotor Amps (LRA)	Motor Ratings (Full Load Amps)		Non-Inductive Amps	
	120 Vac	240 Vac	120 Vac	240 Vac
96	48	16	8	16





# TS-D Sensor Series

## Duct Temperature Sensors

The TS-D Series are duct bracket-mount temperature sensors. These devices provide precision temperature sensing of ducts. The TS-D single point duct temperature sensor utilizes a precision sensor encapsulated in a 6.35 mm (0.25") OD, 304 series stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resistance to moisture penetration.

### Specifications

Operating Temperature	-20°C to 105°C (-4°F to 221°F)
Storage Temperature	-20°C to 105°C (-4°F to 221°F)
Relative Humidity	0 to 95% Non-condensing
Wire Material	PVC Insulated, parallel bonded (Type 2, 100Ω Plat. Uses FT4)
Dissipation Factor	2.2 mW/K
Max Power @ 25°C (77°F)	75 mW
Thermal Time Constant	Less than 10s
Type	10kΩ, type 2, NTC thermistor
Accuracy	±0.2°C (±0.36°F)
Probe Dimension	6.35 mm (0.25") Diameter



### Applications

- Used for measuring temperature on supply and return ducts
- 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
- Sensors are hermetically sealed
- Proven long stability and performance
- Probes made of corrosion resistant 304 stainless steel



## Build Your Duct Temperature Sensor

		TS-	D	XX	002
Mounting Style	D = Duct				
Enclosure	XX = No enclosure PS = Plastic square enclosure PR = Plastic round enclosure MJ = Metal junction box enclosure MW = Metal weatherproof enclosure				
Probe Length	002 = 2" 004 = 4" 006 = 6" 008 = 8" 012 = 12" 018 = 18"				

\* Items stocked at Distech Controls HQ

TS-DMJ008	TS-DPR012	TS-DPS018
TS-DMJ012	TS-DPS004	TS-DXX004
TS-DPR004	TS-DPS006	TS-DXX006
TS-DPR006	TS-DPS008	TS-DXX008
TS-DPR008	TS-DPS012	TS-DXX012





## Flexible Duct Averaging Temperature Sensors



This series of flexible duct averaging temperature sensors provide precision temperature sensing of mixed air ducts. It incorporates numerous sensors on an FT4 plenum rated wiring cable. It acts as a single sensor, averaging any temperature change across the sensors.

### Applications

- Used for measuring temperature on supply and return air ducts
- 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
- Wide selection of thermistor curves
- Proven long stability and performance
- Adaptable to most duct sizes

### Specifications

Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Relative Humidity	0 to 95% Non-condensing
Dissipation Factor	2.2 mW/K
Max Power @ 25°C (77°F)	75 mW
Thermal Time Constant	Less than 10s
Type	10kΩ, type 2, NTC thermistor
Accuracy	±0.2°C ( ±0.36°F)

### Accessories

* TS-C00025	Rubber tube clamp for duct averaging temperature sensor 1/4"
TS-C0003125	Rubber tube clamp for duct averaging temperature sensor 5/16"
TS-C000375	Rubber tube clamp for duct averaging temperature sensor 3/8"



## Build Your Flexible Duct Averaging Temperature Sensor

		TS-	AP	PS	072
Mounting Style	AP = Duct averaging, plenum cable probe AC = Duct averaging, flexible copper probe				
Enclosure	PS = Plastic square enclosure PR = Plastic round enclosure MJ = Metal junction box enclosure MW = Metal weatherproof enclosure				
Probe Length	072 = 72" 144 = 144" 240 = 240" 288 = 288"				

\* Items stocked at Distech Controls HQ  
 TS-ACPS288  
 TS-APPS144  
 TS-APPS288



# TS-AR Sensor Series

## Rigid Duct Averaging Temperature Sensors



The TS-AR Series Rigid Duct Averaging Temperature Sensors are encapsulated in a 6.35 mm (0.25") OD, 304 stainless steel probe. All probes provide excellent heat transfer, fast response and resist moisture penetration. This temperature sensor is available with various probe lengths and various enclosures to fit any application. It can accommodate a wide variety of sensing elements such as NTC thermistors, RTD elements, Nickel RTD elements and IC sensors.

### Specifications

Operating Temperature	-20°C to 60°C (-4°F to 140°F)
Storage Temperature	-20°C to 60°C (-4°F to 140°F)
Relative Humidity	0 to 95% Non-condensing
Dissipation Factor	2.2 mW/K
Max Power @ 25°C (77°F)	75 mW
Thermal Time Constant	Less than 10s
Type	10kΩ, type 2, NTC thermistor
Probe Material	304 Series Stainless Steel
Probe Dimension	6.35 mm (0.25") Diameter
Material	Cast Aluminum Type: IP66 (NEMA3X)

### Applications

- Used for measuring temperature on supply and return ducts
- 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
- Used for more precise measurements by taking readings at various points and taking the average

### Features & Benefits

- Economical
- Ease of Installation
- Probes made of corrosion resistant 304 stainless steel
- Accurate temperature monitoring for increased comfort
- Proven long stability and performance



## Build Your Rigid Averaging Temperature Sensor

	TS-	AR	PS	018
Mounting Style	AR = Duct averaging, rigid stainless steel probe			
Enclosure	PS = Plastic square enclosure PR = Plastic round enclosure MJ = Metal junction box enclosure MW = Metal weatherproof enclosure			
Probe Length	018 = 18" 024 = 24" 036 = 36"			





## TS-I Sensor Series

## Immersion Temperature Sensors



This series of single point temperature sensor utilizes a precision sensor encapsulated in a 6.35 mm (0.25") OD, 304 series stainless steel probe and is available in various lengths. All probes provide excellent heat transfer, fast response and resistance to moisture penetration.

## Specifications

Operating Temperature	-20°C to 105°C -4°F to 221°F
Storage Temperature	-20°C to 105°C -4°F to 221°F
Relative Humidity	0 to 95% Non-condensing
Dissipation Factor	2.2 mW/K
Max Power @ 25°C (77°F)	75 mW
Thermal Time Constant	Less than 10s
Type	10kΩ, type 2, NTC thermistor
Accuracy	±0.2°C ±0.36°F
Material	Grey Painted Aluminum IP64/NEMA 3X

## Applications

- Used for measuring temperature on supply and return hot water pipes of heating systems
- Used for measuring temperature in domestic hot water tanks and piping
- Used for measuring temperature in supply and return lines in chillers

## Features &amp; Benefits

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

## Accessories

## Thermal Joint Compound

TS-JC2	Thermal Joint Compound, 2 oz Jar
* TS-JC5	Thermal Joint Compound, 5 oz Tube
TS-JC8	Thermal Joint Compound, 8 oz Jar

## Thermowells

* TS-WS304002	50mm (2") 304 SS well
* TS-WS304004	100mm (4") 304 SS well
* TS-WS304006	150mm (6") 304 SS well
TS-WS304008	200mm (8") 304 SS well
TS-WS316002	50mm (2") 316 SS well
TS-WS316004	100mm (4") 316 SS well
TS-WS316006	150mm (6") 316 SS well
TS-WS316008	200mm (8") 316 SS well



## Build Your Immersion Temperature Sensor

TS- I XX 002 X	
Mounting Style	I = Immersion
Enclosure	XX = No enclosure PS = Plastic square enclosure PR = Plastic round enclosure MJ = Metal junction box enclosure MW = Metal weatherproof enclosure
Probe Length	002 = 2" 004 = 4" 006 = 6" 008 = 8"

\* Items stocked at Distech Controls HQ

TS-IMJ004X	TS-IPR004X	TS-IPS004X
TS-IPR002X	TS-IPR006X	TS-IPS006X
TS-IPR004S	TS-IPS002X	





# TS-SP Sensor Series

## Strap-On Temperature Sensors (Probe)

The TS-SPP Sensor Series are strap-on temperature sensors. These devices provide precision temperature sensing of pipes and tanks. The single point strap-on temperature sensor utilizes a precision sensor encapsulated in a 6.35 mm (0.25") OD, 304 stainless steel probe and is available in various lengths. All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. It is available with a variety of enclosures which contain pre-formed 1/2" knockouts for conduit connections.

### Specifications

Operating Temperature	-20°C to 105°C -4°F to 221°F
Storage Temperature	-20°C to 105°C -4°F to 221°F
Relative Humidity	0 to 95% Non-condensing
Dissipation Factor	2.2 mW/K
Max Power @ 25°C (77°F)	75 mW
Thermal Time Constant	Less than 10s
Type	10kΩ, type 2, NTC thermistor
Accuracy	±0.2°C ±0.36°F
Material	TS-SPPS002 and TS-SPPR002: Grey ABS (UL94-5VB) TS-SPMJ002: Galvanized Steel TS-SPMW002: Cast Aluminum
Enclosure Ratings	TS-SPPS002: IP61(NEMA 2) TS-SPPR002: IP65 (NEMA4X) TS-SPMJ002: IP50 (NEMA1) TS-SPMW002: IP64 (NEMA3X)

### Model Selection

* TS-SPPS002	Strap-On Sensors - Probe (Rectangular ABS Enclosure)
* TS-SPPR002	Strap-On Sensors - Probe (Round ABS Enclosure and Gasketed Cover)
TS-SPMJ002	Strap-On Sensors - Probe (Metal Junction Box Enclosure)
TS-SPMW002	Strap-On Sensors - Probe (Galvanized Steel Enclosure)



### Applications

- Used for measuring temperature on supply and return hot water pipes of heating systems
- Used for measuring temperature in supply and return lines in chillers

### Features & Benefits

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

# TS-SS Sensor Series

## Strap-On Temperature Sensors (Clamp)

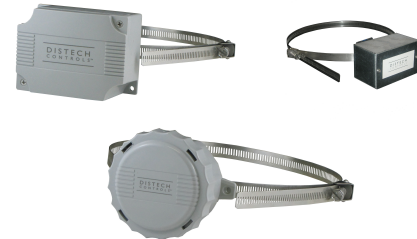
This series of single point strap-on temperature sensors incorporate a precision sensor bonded to a 38 mm x 38 mm (1.5" x 1.5") aluminum plate and adhered to a 38 mm x 25.4 mm (1.5 x 1") compressible foam. A 254 mm (10") pipe clamp is provided to secure the assembly to various sizes of pipe. All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. It is available with a variety of enclosures.

### Specifications

Operating Temperature	-20°C to 105°C (-4°F to 221°F)
Storage Temperature	-20°C to 105°C (-4°F to 221°F)
Relative Humidity	0 to 95% Non-condensing
Protection Circuitry	Reverse voltage protected and output Storage temperature: -20°C to 105°C -4°F to 221°F limited
RFI Rejection	Good RFI rejection of normal frequencies
Wire Material	PVC Insulated, parallel bonded, (Type 2, 100Ω Plat. Uses FT4)
Type	10kΩ, type 2, NTC thermistor
Accuracy	±0.2°C (±0.36°F)
Probe Material and Dimension	Square aluminum plate with compressible foam backing, 38 mm (1.5") Square
Enclosure Ratings	TS-SSPS010: Grey ABS Type UL94-5VB, IP61 (NEMA12) TS-SSPR010: Grey ABS Type UL94-5VB IP65 (NEMA4X) TS-SSMJ010: Galvanized Steel Type IP50 (NEMA1)

### Model Selection

* TS-SSPS010	Strap-On Sensors (Clamp) with Rectangular ABS Enclosure
TS-SSPR010	Strap-On Sensors (Clamp) with Round ABS Enclosure and Gasketed Cover
TS-SSMJ010	Strap-On Sensors (Clamp) with Galvanized Steel Enclosure



### Applications

- Used for measuring temperature on supply and return hot water pipers of heating systems
- Can be mounted directly to various sizes of pipes
- Used for measuring temperature in supply and return lines in chillers

### Features & Benefits

- Economical
- Ease of installation
- Accurate temperature monitoring for increased comfort
- Proven long stability and performance



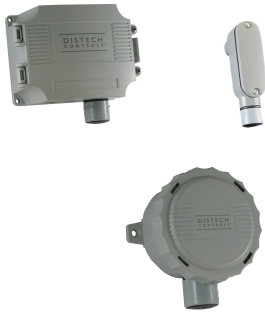
\* Items stocked at Distech Controls HQ





# TS-O Sensor Series

## Outdoor Temperature Sensors



This series of sensors are single point outside air temperature sensor that utilizes a precision sensor. The sensing element is constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. A sun and wind shield is integrated into the enclosure. This sensor should be mounted on an outside north facing wall using the provided mounting holes, under the eaves which will provide protection from direct sunlight.

### Specifications

Operating Temperature	-50°C to 100°C (-58°F to 212°F)
Dissipation Factor	2.2mW/K (Thermistor)
Max Power @ 25°C (77°F)	75mW (Thermistor)
Thermal Time Constant	Less than 10s (Thermistor)
Type	10kΩ NTC thermistor, Type 2
Accuracy	±0.2°C (±0.36°F)
Enclosure	TS-OMW: Cast Aluminum - IP64 (NEMA 3X) TS-OPR: (Grey) Round, ABS - UL94-5VB - IP65 (NEMA 4X) TS-OPS: (Grey)Hinged Lid, ABS - UL94-5VB - IP65 (NEMA 4X)

### Applications

- Used for measuring outdoor temperature
- Outside air temperature sensor with aluminum weatherproof enclosure and integrated sunshield/windshield

### Features & Benefits

- Economical
- Ease of installation
- Wide selection of thermistor curves
- Accurate temperature monitoring for increased comfort
- Sensors are hermetically sealed

### Model Selection

* TS-OMW	Outside Air Sensors (Aluminum Weatherproof Enclosure)
* TS-OPR	Outside Air Sensors (Round ABS Enclosure and Gasketed Cover)
* TS-OPS	Outside Air Sensors (Rectangular ABS Enclosure and Hinged Cover)





# TS-D Transmitter Series

## Duct Temperature Transmitters

This series of duct temperature transmitters incorporate a precision platinum RTD encapsulated in a 6.35 mm (0.25") OD, and a 304 stainless steel probe. All probes provide excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response is provided.



### Specifications

Operating temperature	-40°C to 85°C (-40°F to 185°F)
Storage temperature	-40°C to 85°C (-40°F to 185°F)
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Type	1000Ω Platinum RTD
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Probe Sensing Range	-20 to 105°C (-4 to 221°F)
Probe Material	304 Series Stainless Steel
Probe Dimension	6.35 mm (0.25") Diameter
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited

### Applications

- Used for measuring temperature on supply and return ducts
- 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

- Slim, compact style and clean lines are well received by architects and building owners
- Economical
- Ease of installation
- Probes made of corrosion resistant 304 stainless steel
- Accurate temperature monitoring for increased comfort

## Accessories

### Calibration Certificate

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



## Build Your Duct Temperature Transmitter

	TS-	D	C04	PS	002	R1
Mounting Style		D = Duct				
Control Signal Output			C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC			
Enclosure				PS = Plastic square enclosure PR = Plastic round enclosure MJ = Metal junction box enclosure MW = Metal weatherproof enclosure		
Probe Length					002 = 2" 004 = 4" 006 = 6" 008 = 8" 012 = 12" 018 = 18"	
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)



## TS-A Transmitter Series

## Flexible Duct Averaging Temperature Transmitters



The TS-A Series are copper duct averaging temperature sensors. These devices provide precision temperature sensing of mixed air ducts. This temperature sensor is available with various lengths and various enclosures to fit any application. The duct averaging sensor incorporates numerous sensors inside a copper tube. It acts as a single sensor, averaging any temperature change across the sensors.

## Specifications

Operating Temperature	-20°C to 60°C -4°F to 140°F
Storage Temperature	-20°C to 60°C -4°F to 140°F
Relative Humidity	0 to 95% Non-condensing
Dissipation Factor	2.2 mW/K
Max Power @ 25°C (77°F)	75 mW
Thermal Time Constant	Less than 10s
Type	10kΩ, type 2, NTC thermistor
Accuracy	±0.2°C ±0.36°F
Material	Cast Aluminum Type: IP64 (NEMA3X)

## Applications

- Used for measuring temperature on supply and return air ducts

## Features &amp; Benefits

- Economical
- Ease of Installation
- Wide selection of thermistor curves
- Adaptable to most duct sizes
- Accurate temperature monitoring for increased comfort

## Accessories

## Calibration Certificate

TS-NIST NIST Calibration Certificate

Note: Calibration certificates must be purchased at the time of purchasing the relative sensors.

## Rubber Tube Clamps

TS-C00025	Rubber tube clamp for duct averaging temperature sensor 1/4"
TS-C0003125	Rubber tube clamp for duct averaging temperature sensor 5/16"
TS-C000375	Rubber tube clamp for duct averaging temperature sensor 3/8"



## Build Your Flexible Averaging Temperature Transmitter

	TS-	AP	C04	PS	072	R1
Mounting Style		AP = Duct averaging, plenum cable probe AC = Duct averaging, flexible copper probe				
Control Signal Output			C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC			
Enclosure				PS = Plastic square enclosure PR = Plastic round enclosure MJ = Metal junction box enclosure MW = Metal weatherproof enclosure		
Probe Length					072 = 72" 144 = 144" 240 = 240" 288 = 288"	
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)



# TS-AR Transmitter Series

## Rigid Duct Averaging Temperature Transmitters



This series of rigid duct averaging temperature transmitters incorporate numerous precision platinum RTDs at equal distances, and a stainless steel probe. All probes provide excellent heat transfer, fast response and resist moisture penetration. This temperature transmitter is available with various probe lengths and various enclosures to fit any application.

### Specifications

Operating temperature	-40°C to 85°C (-40°F to 185°F)
Storage temperature	-40°C to 85°C -40°F to 185°F
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Type	1000Ω Platinum RTD
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Probe Material	304 Series Stainless Steel
Probe Dimension	6.35 mm (0.25") Diameter
RFI Rejection	Good RFI rejection of normal frequencies
Protection Circuitry	Reverse voltage protected and output limited
Maximum Loop Load	>600Ω

### Applications

- Used for measuring temperature on supply and return ducts
- 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

### Accessories

#### Calibration Certificate

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

### Features & Benefits

- Economical
- Ease of installation
- Probes made of corrosion resistant 304 stainless steel
- Accurate average temperature monitoring for increased comfort
- Proven long stability and performance



## Build Your Rigid Averaging Temperature Transmitter

	TS-	AR	C04	PS	018	R1
Mounting Style		AR = Duct averaging, rigid stainless steel probe				
Control Signal Output			C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC			
Enclosure				PS = Plastic square enclosure PR = Plastic round enclosure MJ = Metal junction box enclosure MW = Metal weatherproof enclosure		
Probe Length					018 = 18" 024 = 24" 036 = 36"	
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)





### Applications

- Used for measuring temperature on supply and return hot water pipes of 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 average temperature monitoring for increased comfort
- Transmitters are hermetically sealed

## TS-I Transmitter Series Immersion Temperature Transmitters

The TS-I Series are single point immersion temperature transmitters. They incorporate a precision platinum RTD encapsulated in a stainless steel probe. All probes provide excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response is provided. This temperature transmitter is available with various probe lengths and various enclosures to fit any application.

### Specifications

Operating temperature	-40°C to 85°C (-40°F to 185°F)
Storage temperature	-40°C to 85°C (-40°F to 185°F)
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Type	1000Ω Platinum RTD
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Probe Material	304 Series Stainless Steel
Probe Dimension	6.35 mm (0.25") Diameter
Probe Sensing Range	-20 to 105°C (-4 to 221°F) (Standard)
Protection Circuitry	Reverse voltage protected and output limited
RFI Rejection	Good RFI rejection of normal frequencies

### Accessories

#### Calibration Certificate

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

#### Thermal Joint Compound

TS-JC2	Thermal Joint Compound, 2 oz Jar
TS-JC5	Thermal Joint Compound, 5 oz Tube
TS-JC8	Thermal Joint Compound, 8 oz Jar

#### Thermowells

* TS-WS304002	50mm (2") 304 SS well
* TS-WS304004	100mm (4") 304 SS well
* TS-WS304006	150mm (6") 304 SS well
TS-WS304008	200mm (8") 304 SS well
TS-WS316002	50mm (2") 316 SS well
TS-WS316004	100mm (4") 316 SS well
TS-WS316006	150mm (6") 316 SS well
TS-WS316008	200mm (8") 316 SS well



## Build Your Immersion Temperature Transmitter

	TS-	I	C04	PS	002	R1
Mounting Style		I = Immersion				
Control Signal Output			C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC			
Enclosure				PS = Plastic square enclosure PR = Plastic round enclosure MJ = Metal junction box enclosure MW = Metal weatherproof enclosure		
Probe Length					002 = 2" 004 = 4" 006 = 6" 008 = 8"	
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)





# TS-S Transmitter Series

## Strap-On Temperature Transmitters

The TS-SP Series are single point strap-on temperature transmitters that incorporate a precision platinum RTD encapsulated in a stainless steel probe. All probes provide excellent heat transfer, fast response and resist moisture penetration. A transmitter that provides a high accuracy signal with excellent long term stability, low hysteresis and fast response is provided. This temperature transmitter is available with various enclosures to fit any application.

### Specifications

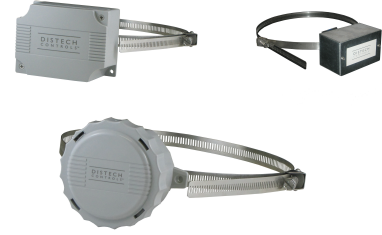
Operating temperature	-40°C to 85°C (-40°F to 185°F)
Storage temperature	-40°C to 85°C (-40°F to 185°F)
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Type	1000Ω Platinum RTD
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Probe Material	304 Series Stainless Steel
Probe Dimension	6.35 mm (0.25") Diameter
Probe Sensing Range	-20 to 105°C (-4 to 221°F) (Standard)
Wire Material	PVC Insulated, parallel bonded (Type 2, 100 Plat. Uses FT4)
RFI Rejection	Good RFI rejection of normal frequencies

### Accessories

#### Calibration Certificate

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



#### Applications

- Used for measuring temperature on supply and return hot water pipes used 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



## Build Your Strap-On Temperature Transmitter

		TS-	SP	C04	PS	002	R1
Mounting Style	SP = Strap-on, probe SS = Strap-on, strap						
Control Signal Output	C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC						
Enclosure	PS = Plastic square enclosure PR = Plastic round enclosure MJ = Metal junction box enclosure MW = Metal weatherproof enclosure (N/A on SS Mounting Style option)						
Probe Length	002 = 2" (available on SP Mounting Style option only) 010 = 10" (available on SS Mounting Style option only)						
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)						





### Applications

- Used for measuring outdoor temperature

### Features & Benefits

- Economical
- Proven long term stability and performance
- Voltage and current output signals
- Low hysteresis and fast response
- Choice of scaled ranges and outputs

# TS-O Transmitter Series Outdoor Temperature Transmitters

This series of a single point outside air temperature transmitters utilize a precision platinum RTD sensor. All probes are constructed to provide excellent heat transfer, fast response and are potted to resist moisture penetration. A sun and wind shield is integrated into the enclosure.

### Specifications

Operating temperature	-40°C to 85°C (-40°F to 185°F)
Storage temperature	-40°C to 85°C (-40°F to 185°F)
Transmitter Accuracy	±0.1% of span, including linearity
Temperature Sensor Type	1000Ω Platinum RTD
Sensor Accuracy	±0.3°C (±0.54°F) @ 0°C (32°F)
Material	ABS, UL94-5VB, IP64 (NEMA4X)
Input Voltage Effect	Negligible over specified operating range
Protection Circuitry	Reverse voltage protected and output limited
Power Supply	15-35 VDC or 22-32 VAC

## Accessories

### Calibration Certificate

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



## Build Your Outdoor Temperature Transmitter

		TS-	O	C04	PS	R1
Mounting Style	O = Outdoor					
Control Signal Output	C04 = Current, 4-20mA V05 = Voltage, 0-5VDC V10 = Voltage, 0-10VDC					
Enclosure	PS = Plastic square enclosure					
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)					

