

TT420 Temperature Sensor

- 2-wire, loop-powered 4-20 mA analog output
- Attachment probe, sensor, 2-wire 4-20 mA signal conditioner, and cable in one
- Compatible with PLCs, meters, and data acquisition systems
- No user calibration: works right out of the box
- UL Listed, Intrinsically Safe (IS)
- Class I, Div I (C, D) Class II, Div I (E, F, G)



Description

TT420 temperature sensors combine a sensor, signal conditioner and 2-wire loop-powered 4-20 mA transmitter into a rugged and compact package. All models are compatible with standard 2-wire 4-20 mA current loops and analog inputs and are identical with the exception of the measurement probes and fittings.

Application

- Conveyors
- Bucket Elevators
- Motors
- Gearboxes
- Agitators
- Tanks

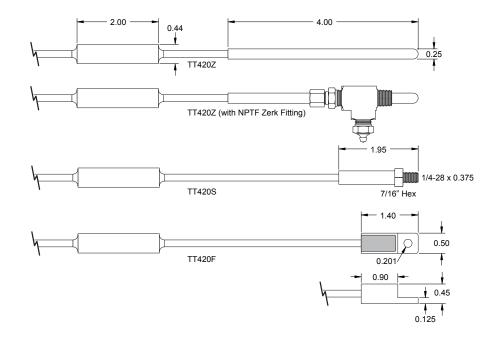
- Pumps
- Turbines
- Fans
- Hammermills
- Centrifuges
- Bearings

Models

- TT420Z* 1/4 in stainless steel probe often used with thermowells and compression fitting mount (tanks, piping, bearing grease fittings)
 - * Available with or without compression fitting adapters
- TT420S Threaded stud mount with either 1/4-28 or 3/8-16 stud threads.
- TT420F flat surface mount mounts onto any flat surface with a #10 machine screw (included)

TT420 Dimensions

(4" Probe shown below)



Product Specifications

| TT420 Specifications | | |
|---|---|--|
| Vin (min \rightarrow max) | 8 → 30 VDC | |
| Operating Temperature (Measurement Probe) | -40° C → +120° C (-40° F → +248° F) | |
| Operating Temperature (Ambient) | -20° C → +80° C (-4° F → +176° F) | |
| Accuracy | ±1° C (at 25° C) ±3° C (at -40° C, 120° C) | |
| Cable | | |
| Color Code | Brown (V+), Black (V-) | |

Specifications subject to change without notice.

Ordering

(standard cable length is 10' unless otherwise noted)

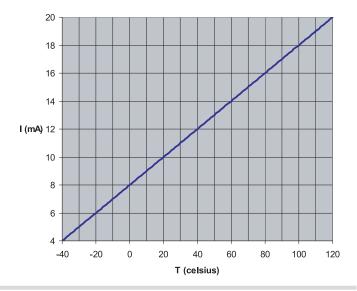
| Model | Part Number |
|--|-------------|
| TT420S (1/4-28) | 800-001520 |
| TT420S (3/8-16) | 800-001521 |
| TT420F | 800-001510 |
| TT420F w/50' Cable | 800-001511 |
| TT420Z 2" Probe | 800-001543 |
| TT420Z 4" Probe | 800-001503 |
| TT420Z 4" Probe, w/50' Cable | 800-001540 |
| TT420Z 4" Probe, 1/4" NPTF Grease Fitting | 800-001505 |
| TT420Z 4" Probe, 1/8" NPTF Grease Fitting | 800-001504 |
| TT420Z 6" Probe | 800-001500 |
| TT420Z 6" Probe, 1/8" NPTF Grease Fitting | 800-001501 |
| TT420Z 6" Probe, 1/4" NPTF Grease Fitting | 800-001502 |
| TT420Z 8" Probe | 800-001530 |
| TT420Z 8" Probe, 1/8" NPTF Grease Fitting | 800-001545 |
| TT420Z 12" Probe | 800-001519 |

Intrinsically Safe Barrier Option

| Recommended | Mauf. Model | Part Number |
|--|-----------------------------|-------------|
| I.S. Barrier Cooper Crouse-Hinds MTL Inc. | MTL7787+ (or equivalent) | 597-000104 |

Accessories

| Accessory | Part Number |
|---|-------------|
| 1/8" - 1/4" NPT Adapter, Stainless Steel | 300-004100 |
| 1/8" - 1/2" NPT Adapter, Stainless Steel | 300-004101 |
| 1/4" Diameter Compression Fitting 1/8" NPTF male, Brass | 300-003202 |
| Brass Grease Fitting 1/8" NPTF | 300-003203 |
| Stainless Steel Conduit Fitting for TT420Z | 725-000806 |



Customization

If one of our standard products does not meet your specifications, please call one of our applications specialists. Many of our products can be customized to fit specific needs.

Additional Information

For more information about product, please refer to the TT420 Temperature Sensor Installation and Operating Manual.

Email: sales@electro-sensors.com

Tel: (800)328-6170 Fax: (952)930-0130

We also have more information online at:

www.electro-sensors.com