

TT420 Temperature Transmitters

- Monitor temperature on a wide range of machinery
- Sensors output standard 4-20mA signal
- Compatible with I.S. barriers, PLCs, meters and data acquisition systems
- Ready to use — no calibration required
- Simple and straightforward installation
- Brass rub blocks available — consult factory

Product Information

Description

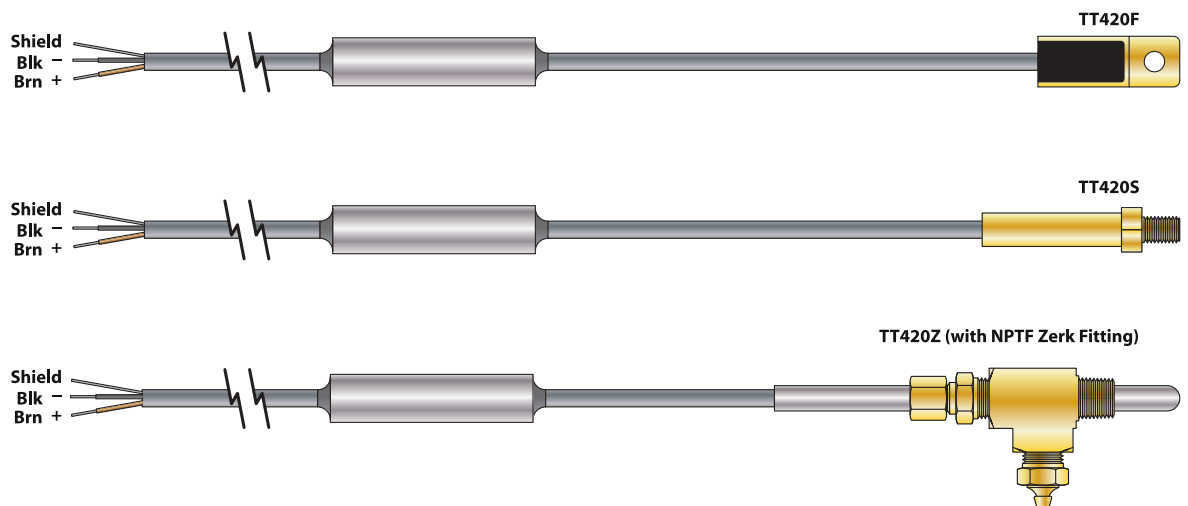
TT420 temperature transmitters combine a temperature sensor, signal conditioning and 2-wire loop-powered 4-20mA transmitter into one compact package. All models are compatible with standard I.S. barriers and PLC analog inputs and are identical with the exception of the measurement probe, of which there are 3 options:

The **TT420F** mounts onto any flat surface with a #10 machine screw.

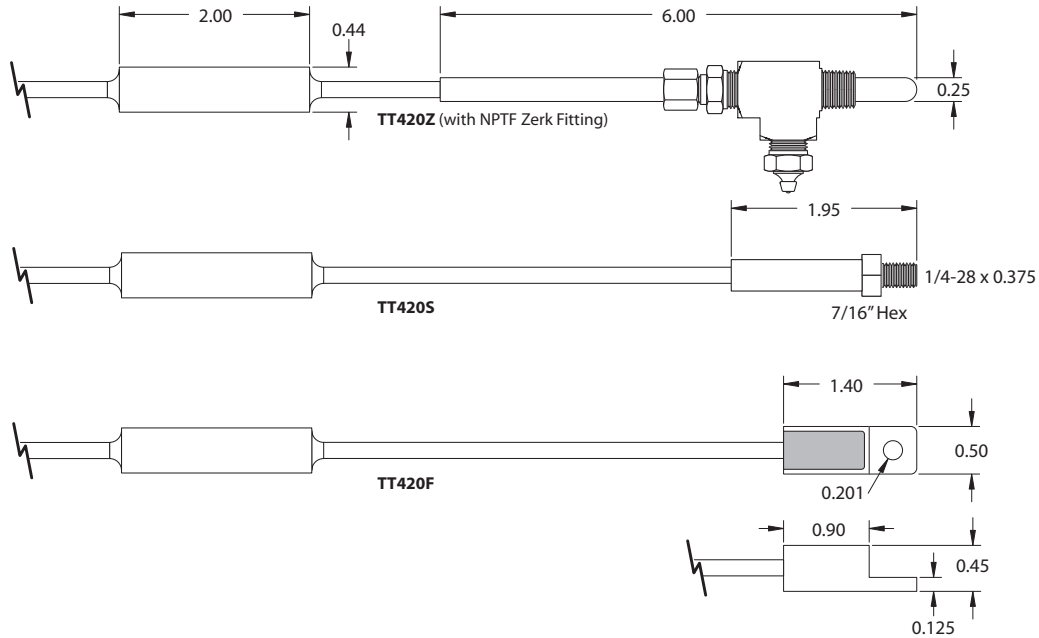
The **TT420S** screws into any surface with a 1/4"- 28 tap.

The **TT420Z** mounts into 1/8" or 1/4" NPT grease-fitting (zerk) taps.

TT420 temperature transmitters can be used to monitor temperature on a wide range of machinery: conveyors, bucket elevators, motors, gearboxes, pumps, turbines, fans, curing ovens, centrifuges, agitators and hammermills. All models come ready to use right out of the box, requiring no user calibration. Brass rub blocks are available for use with models TT420F and TT420S, please consult factory for more information.



Dimensions • TT420 Temperature Transmitters



Specifications • TT420 Temperature Transmitters

Models

TT420Z	800-001500
TT420Z(w/1/8" NPTF zerk fitting)	800-001501
TT420Z (w/1/4" NPTF zerk fitting)	800-001502
TT420F	800-001510
TT420S	800-001520
Brass Rub Block 4" x 2" x .5"	301-000100

Output (linear)

Io (-40°C)	4 mA
Io (+120°C)	20 mA
Io(T) = (0.1 mA/°C) * T + 8 mA	(see figure 1)

Specifications

Vin (min → max)	8-30 Vdc
Operating Temp	-40°C → 120°C (measurement probe) -20°C → 80°C (ambient)

Accuracy	± 1°C (at 25°C) ± 3°C (at -40°C, 120°C)
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Cable

Color Code	Brown (V+) Black (V-)
Length	10 ft.

Protection

Class II (E, F, G) Div. 1 Intrinsically Safe design for use in Intrinsically Safe circuits. Reverse-wiring protected.

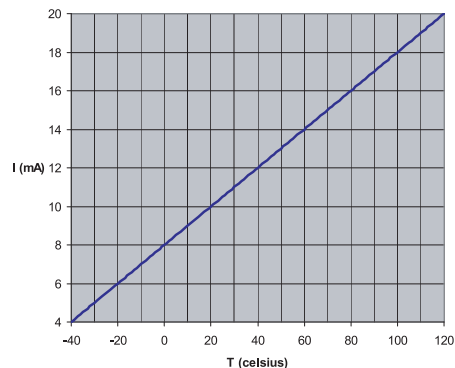
I.S. Wiring Note

The DIN rail (I.S. Ground) must be insulated from the surrounding cabinet (and all other potentials) and connected to earth ground at the 24V supply only.

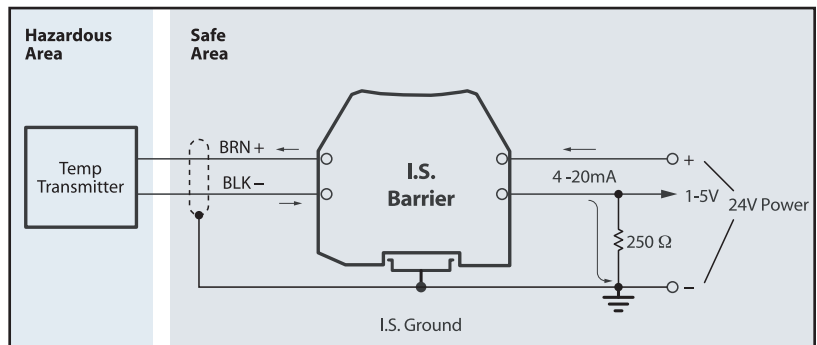
Recommended I.S. Barriers

MTL	MTL7787, MTL7707P
Pepperl-Fuchs	Z787

Figure 1



I.S. Wiring



Specifications subject to change without notice.

ES-725 Rev A



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