

# Thermocouple, 1/4" Diameter Stainless Steel Tube Type

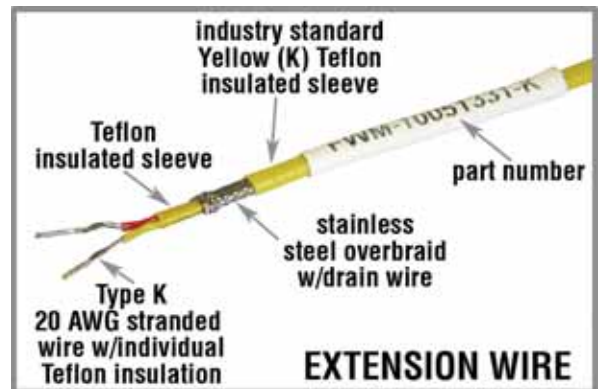


## Features

- 1/4" diameter 316 stainless steel tubing sheath
- Type K, 6" and 10" probes
- Can be used with 2", 4.5" and 7.5" insertion thermowells
- Can be bent anywhere along its length to a 90° angle
- Tip sensitive to minimize temperature influence from surrounding environment

Due to the increase in controller and telemetry applications, this thermocouple product line has been added to the line up of Murphy temperature monitoring end devices. They are designed to fit as many applications as possible with the fewest possible parts and the fewest possible installation caused faults.

Most of the thermocouple failures occur in how the thermocouples extension wire is installed and connected. This new line incorporates Type K, 20 AWG stranded extension wire encased in a rugged cable to meet demanding environments. The extension wire lengths are available in 5', 15', 30', 50', and 100' lengths. This will enable a run from the point of measurement to the nearest conduit entry or to be installed in a cable tray. The industry standard yellow Teflon allows easy identification of K type thermocouple wires so they can be separated from high voltage wires following good installation practices.



Thermowells are available in 2", 4-1/2", or 7-1/2" lengths for insertion depth and have a 1/2" NPT process connection. They are supplied with a standard stainless steel compression fitting for securing the thermocouple in the thermowell at the appropriate depth. In low pressure applications the thermocouple can be inserted directly into the process through a standard 1/4" SS tubing compression fitting.

## Product Overview

The thermocouples are encased in a 1/4" diameter 316 stainless steel tubing sheath with stainless steel Bell Spring for strain relief. The initial offerings are K type thermocouples with 6" and 10" long 1/4" diameter probes. The thermocouples are shipped straight, but can be bent with standard tubing benders anywhere along its length to a 90° angle to minimize clearance required and help prevent damage due to personnel working on the unit. The thermocouple is tip sensitive to minimize ambient temperature influence and should be inserted between 25% and 75% of the piping inside diameter or enough to minimize any skin temperature affect on the tip of the probe when installed in vessels.

## Additional features

- Stainless steel transition sealing gland with a stainless steel Bell Spring for strain relief.
- Standard bore through stainless steel compression fitting for securing the thermocouple in the thermowell at the appropriate depth.
- Can be inserted directly into a low-pressure application process through a standard 1/4" SS bore through tubing compression fitting.
- Enables a run from the point of measurement to the nearest conduit entry, junction box, or all the way to the panel housing the readout and monitoring instrument. Can also be installed in a cable tray.
- The thermowell assembly comes with a stainless steel bore through compression fitting and ferrel saving installation time and money.

## How to Order

Item Number	Product Name	Description
10051331	Thermocouple, Type K, 1/4Dia. Tube x 6"L	w/5' Thermocouple Extension Wire
10051325	Thermocouple, Type K, 1/4Dia. Tube x 6"L	w/15' Thermocouple Extension Wire
10051326	Thermocouple, Type K, 1/4Dia. Tube x 6"L	w/30' Thermocouple Extension Wire
10051327	Thermocouple, Type K, 1/4Dia. Tube x 6"L	w/50' Thermocouple Extension Wire
10051328	Thermocouple, Type K, 1/4Dia. Tube x 6"L	w/100' Thermocouple Extension Wire
10051332	Thermocouple, Type K, 1/4Dia. Tube x 10"L	w/5' Thermocouple Extension Wire
10051323	Thermocouple, Type K, 1/4Dia. Tube x 10"L	w/15' Thermocouple Extension Wire
10051317	Thermocouple, Type K, 1/4Dia. Tube x 10"L	w/30' Thermocouple Extension Wire
10051322	Thermocouple, Type K, 1/4Dia. Tube x 10"L	w/50' Thermocouple Extension Wire
10051321	Thermocouple, Type K, 1/4Dia. Tube x 10"L	w/100' Thermocouple Extension Wire
10707436	Thermowell, 1/2"NPT, 1/4" T, 2.0"L	Assembly 304SS
10707437	Thermowell, 1/2"NPT, 1/4" T, 4.5"L	Assembly 304SS
10707438	Thermowell, 1/2"NPT, 1/4" T, 7.5"L	Assembly 304SS

**Warranty** - A limited warranty on materials and workmanship is given with this FW Murphy product.  
A copy of the warranty may be viewed or printed by going to <http://www.fwmurphy.com/warranty>