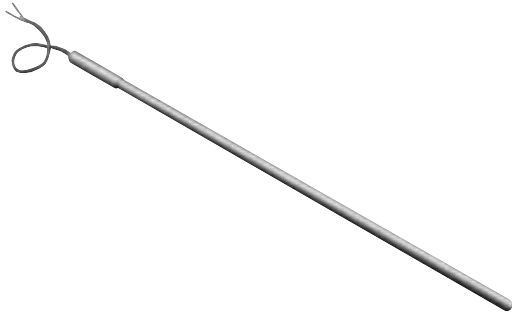


# Models 101 & 103 General Purpose Thermocouple

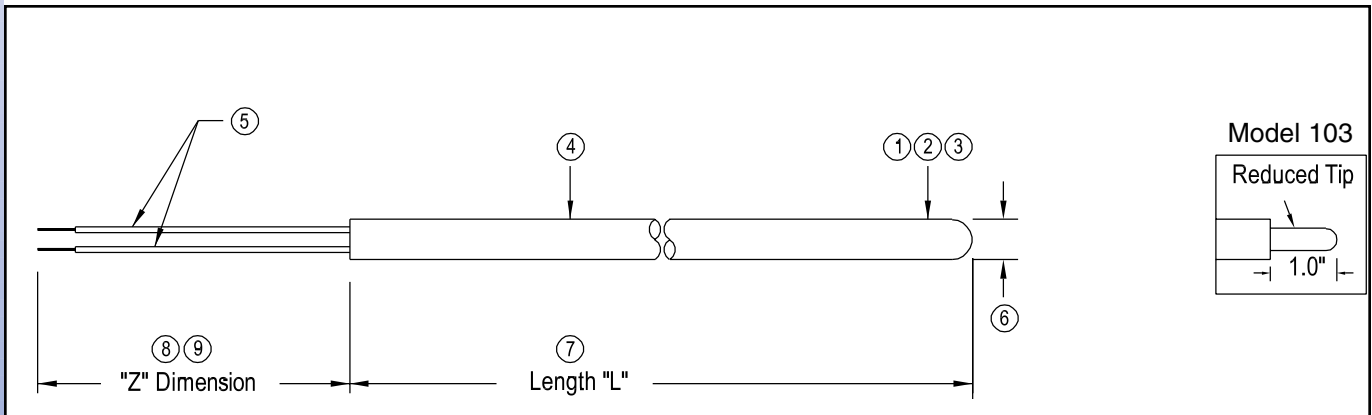


**Model 101** is a Straight Sheath temperature sensor.

- Refer to Model 201 if welded fitting is required.
- Refer to 300 Series if spring loading is required.

**Model 103** is a Reduced Tip/Fast Response temperature sensor.

- Refer to Model 203 if welded fitting is required.



### Specifications:

1. Base Model	Base Model/Series Number.
2. A. Accuracy:	ANSI Special Limits of Error is standard. See Thermocouple General Specifications.
B. Type:	Application dependent. See Thermocouple General Specifications.
C. Response Time:	Dependent on sheath diameter and measuring junction. See Thermocouple General Specifications.
D. Tip Sensitivity:	Thermocouples are inherently tip sensitive.
3. Grounded:	At the tip, thermocouple wires are attached to inside of probe wall, resulting in quick response time.
Ungrounded:	At the tip, thermocouple wires are insulated from the inside of probe wall; results are a slower response time but increased isolation.
Exposed:	Thermocouple junction protrudes out of sheath tip, results are quickest response time, but limited to use in non-corrosive, non-pressurized applications.
4. Construction:	Code A - 316SS tube construction, teflon insulated lead wire. Code C - 316SS MgO construction, fiberglass insulated lead wire. Code B - Inconel sheathed MgO construction, fiberglass insulated lead wire.
5. Lead Wires:	<div style="display: flex; justify-content: space-around; align-items: center;"> <div style="text-align: center;"> <p>Single</p> </div> <div style="text-align: center;"> <p>Dual</p> </div> </div>
6. Sheath Diameter:	.250" (1/4") is industry standard. Use code C/N for reduced tip design.
7. Sheath Length:	Entire stem length.
8. Lead Wire Length:	Length of wires beyond the sheath. Use Z000 if connector is installed directly on the end of sheath.
9. Lead Wire Protection:	Stainless Steel Overbraid or Stainless Steel Armor. Order length at 3-6" shorter than lead wire length. Example: Z024-X020
10. Connectors:	Optional male plug for sensor end. For mating jack add code "J".
11. Optional Fittings:	Sensor is not supplied with mounting hardware, specify optional fitting.

Model	Description		
101	General Purpose Thermocouple (Non-Spring Loaded)		
103	Reduced Tip/ Fast Response Thermocouple (Non-Spring Loaded)		
<b>1</b>	<b>Code</b>	<b>Thermocouple Type</b>	<b>Range</b>
	J	Type J Thermocouple	32 to 1400°F      0 to 760°C
	K	Type K Thermocouple	-328 to 2300°F    -200 to 1260°C
	T	Type T Thermocouple	-328 to 700°F      -200 to 371°C
	E	Type E Thermocouple	-328 to 1600°F    -200 to 871°C
	R	Type R Thermocouple	32 to 2700°F      0 to 1482°C
	S	Type S Thermocouple	32 to 2700°F      0 to 1482°C
	B	Type B Thermocouple	32 to 3100°F      0 to 1704°C
	N	Type N Thermocouple	-454 to 2372°F    -270 to 1300°C
		Add "MT" for matched to transmitter. See Thermocouple General Specifications.	
<b>2</b>	<b>Code</b>	<b>Junction Type</b>	
	G	Grounded	
	U E	Ungrounded Exposed	
<b>3</b>	<b>Code</b>	<b>Construction Temperature Limit</b>	
	A	500° F Maximum	
	C B	1600° F Maximum 2300° F Maximum	
<b>4</b>	<b>Code</b>	<b>Number of Lead Wires</b>	
	2 4	Single Thermocouple Dual Thermocouple	
<b>5</b>	<b>Code</b>	<b>Sheath Diameter</b>	<b>Model</b>
	A	.125" Diameter	101
	B	.187" Diameter	101
	C	.250" Diameter	101
	C/N	.250" (1/4") Diameter / .156" Diameter Tip	103
	A/G Other	.125" (1/8") Diameter / .063" Diameter Tip Consult factory	103
<b>6</b>	<b>Code</b>	<b>Sheath Length</b>	
	XXX.X	Specify length to nearest 0.1"	
<b>7</b>	<b>Code</b>	<b>Lead Wire Length</b>	
	Z003	3" - Standard with head	
	Z024	24" - Standard without head	
	ZXXX	Other - consult factory	
<b>8</b>	<b>Code</b>	<b>Lead Wire Protection</b>	
	X__	Stainless steel overbraid-(specify inches)	
	Y__ Other	Stainless steel armor - (specify inches) Consult factory	
<b>9</b>	<b>Code</b>	<b>Connectors</b>	
	P1	Standard Size, Standard Temperature	
	P2	Standard Size, High Temperature	
	P3 P4	Miniature, Standard Temperature Miniature, High Temperature (add /"J" for optional mating jack)	
<b>10</b>	<b>Code</b>	<b>Optional Fittings</b>	
	A1S	Compression: 1/8" Sheath x 1/8" NPT SS	
	B1S	3/16" Sheath x 1/8" NPT SS	
	B2S	3/16" Sheath x 1/4" NPT SS	
	C1S	1/4" Sheath x 1/8" NPT SS	
	C2S	1/4" Sheath x 1/4" NPT SS	
	C3S	1/4" Sheath x 1/2" NPT SS	
	NS1	1/4" Sheath x 1/2" NPT Hex Nipple	
	NS2	3/16" Sheath x 1/2" NPT Hex Nipple	
	NS3	1/8" Sheath x 1/2" NPT Hex Nipple	
310 FS5	Spring-Loaded: Spring loaded Hex Fitting Kit 1/4" Sheath 1/2" X 1/2" Hex Fitting With Adjustable Fluid Seal		
	Other Consult Factory		

101	-	J	-	G	-	C	-	2	-	C	-	012.0	-	Z024	-	X020	-	-	-	NS1
-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Sample Model Number  
Your Model Number

