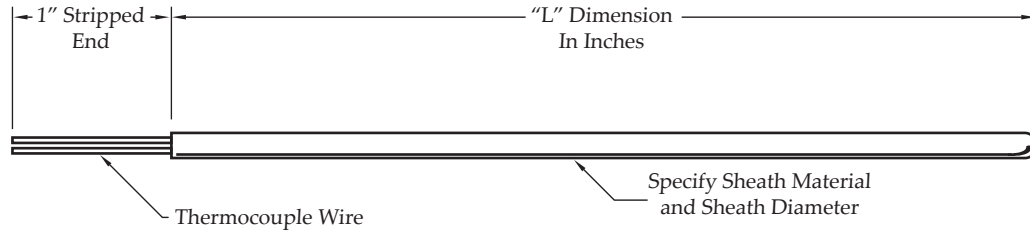


Industrial Process Thermocouples

SHEATHED MgO THERMOCOUPLE ASSEMBLY WITH STRIPPED END

The TDC2 Style Thermocouple features an MgO insulated element which is junctioned and terminated with a standard 1" long strip. This style is designed for field replacement or addition of other termination options.



STYLE TDC2 - Stripped End MgO Thermocouple

Table 1: Thermocouple Type

Thermocouple Type Codes				Limits of Error
E	J	K	T	Standard Limits
2	3	4	8	Special Limits

Table 2: Junction Type

Code	Single Junction	Code	Dual Junction
G	Grounded	H	Grounded
U	Ungrounded	L	Ungrounded Isolated
C	Exposed	V	Ungrounded Common
		W	Exposed

Table 3: Sheath Material

Code	Metal Type
1	310 Stainless Steel
2	321 Stainless Steel
3	330 Stainless Steel
4	304 Stainless Steel
5	446 Stainless Steel
6	316 Stainless Steel
7	347 Stainless Steel
8	Inconel® 600 (Alloy 600)
A	Alloy 601

Table 4: Sheath Diameter

Code	O.D. Size
T	.020" O.D.
Y	.032" or 1/32" O.D.
W	.040" O.D.
A	.062" or 1/16" O.D.
B	.125" or 1/8" O.D.
V	.156" or 5/32" O.D.
C	.188" or 3/16" O.D.
D	.250" or 1/4" O.D.
E	.313" or 5/16" O.D.
F	.375" or 3/8" O.D.
H	.500" or 1/2" O.D.

Table 5: "L" Dimension

Specify in inches. See table on page 27 for codes.

Part Number Sequence

TDC2-JG-4F100

TDC2	-	J	G	-	4	F	100
TDC2		Table 1	Table 2		Table 3	Table 4	Table 5
Sensor Type & Style No.		Thermocouple Type	Junction Type		Sheath Material	Sheath Diameter	"L" Dimension

Industrial Process Thermocouples

SHEATHED MgO THERMOCOUPLE ASSEMBLY WITH PLUG

The TDC3 Style Thermocouple features an MgO insulated element with universal disconnect plug for reliable connections. Plugs are available in standard (400°F), high temperature (800°F), and ceramic (1200°F) materials.

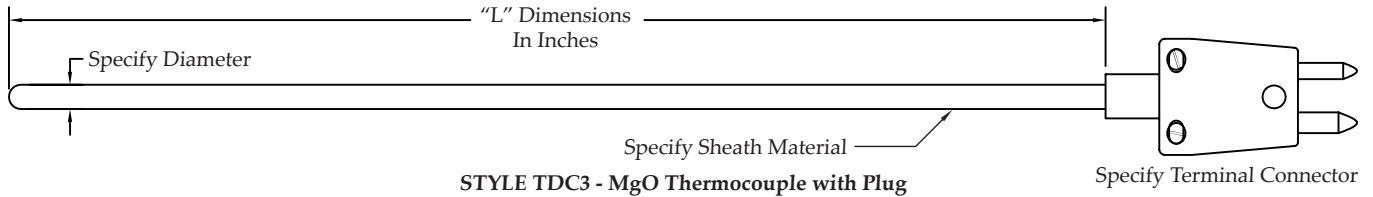


Table 1: Thermocouple Type

Thermocouple Type Codes				Limits of Error
E	J	K	T	Standard Limits
2	3	4	8	Special Limits

Table 2: Junction Type

Code	Single Junction	Code	Dual Junction
G	Grounded	H	Grounded
U	Ungrounded	L	Ungrounded Isolated
C	Exposed	V	Ungrounded Common
		W	Exposed

Table 3: Sheath Material

Code	Metal Type
1	310 Stainless Steel
2	321 Stainless Steel
3	330 Stainless Steel
5	446 Stainless Steel
6	316 Stainless Steel
7	347 Stainless Steel
8	Inconel® 600 (Alloy 600)
A	Alloy 601

Table 4: Sheath Diameter

Code	O.D. Size
T	.020" O.D.
Y	.032" or 1/32" O.D.
W	.040" O.D.
A	.062" or 1/16" O.D.
B	.125" or 1/8" O.D.
V	.156" or 5/32" O.D.
C	.188" or 3/16" O.D.
D	.250" or 1/4" O.D.
E	.313" or 5/16" O.D.
F	.375" or 3/8" O.D.
H	.500" or 1/2" O.D.

Table 5: "L" Dimension

Specify in inches. See table on page 27 for codes.

Table 6: Terminal Connector

Code	Termination Style
3	Standard Molded Plug
6	Standard Plug with Brazing Adapter
7	Standard Plug with Tube Adapter
8	High Temperature Plug with Crimp Adapter
9	Ceramic Plug with Tube Adapter
F	Mini Molded Plug
M	Mini Plug with Crimp Adapter
X	Special, Specify

Part Number Sequence

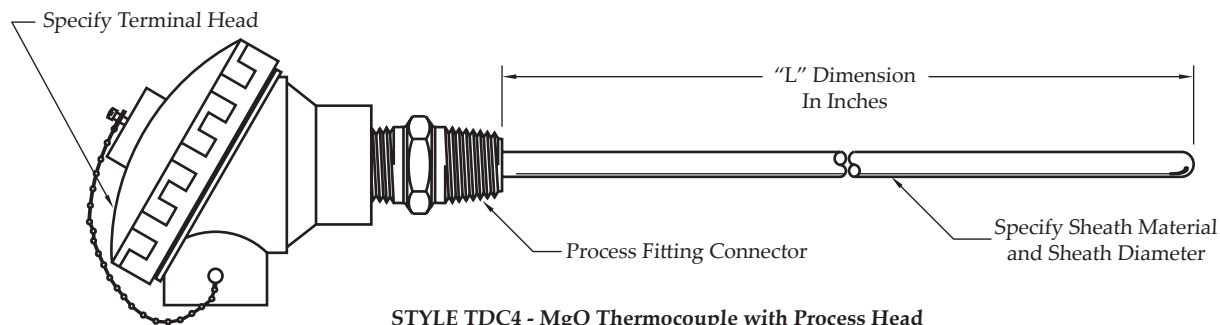
TDC3-JG-4F12F-3

TDC3	-	J	G	-	4	F	12F	-	3
TDC3		Table 1	Table 2		Table 3	Table 4	Table 5		Table 6
Sensor Type & Style No.		Thermocouple Type	Junction Type		Sheath Material	Sheath Diameter	"L" Dimension		Terminal Connector

Industrial Process Thermocouples

SHEATHED MgO THERMOCOUPLE ASSEMBLY WITH PROCESS HEAD

The TDC4 Style Thermocouple features an MgO insulated element with a protective terminal housing and process connector. This style can be manufactured as spring loaded for direct field replacement into existing thermowells.



STYLE TDC4 - MgO Thermocouple with Process Head

Table 1: Thermocouple Type

Thermocouple Type Codes				Limits of Error
E	J	K	T	Standard Limits
2	3	4	8	Special Limits

Table 2: Junction Type

Code	Single Junction	Code	Dual Junction
G	Grounded	H	Grounded
U	Ungrounded	L	Ungrounded Isolated
C	Exposed	V	Ungrounded Common
		W	Exposed

Table 3: Sheath Material

Code	Metal Type
1	310 Stainless Steel
2	321 Stainless Steel
4	304 Stainless Steel
5	446 Stainless Steel
6	316 Stainless Steel
7	347 Stainless Steel
8	Inconel® 600 (Alloy 600)
A	Alloy 601

Table 4: Sheath Diameter

Code	O.D. Size
T	.020" O.D.
Y	.032" or 1/32" O.D.
W	.040" O.D.
A	.062" or 1/16" O.D.
B	.125" or 1/8" O.D.
V	.156" or 5/32" O.D.
C	.188" or 3/16" O.D.
D	.250" or 1/4" O.D.
E	.313" or 5/16" O.D.
F	.375" or 3/8" O.D.
H	.500" or 1/2" O.D.

Table 5: "L" Dimension

Specify in inches. See table on page 27 for codes.

Table 7: Spring Loaded Option

Code	Probe Tip Style
1	Fixed
2	Spring Loaded

Table 8: Screw Cover Terminal Heads

Code	Screw Cover Head Materials
A	1/2" NPT Conduit, Aluminum Head
B	3/4" NPT Conduit, Aluminum Head
C	1/2" NPT Conduit, Cast Iron Head
D	3/4" NPT Conduit, Cast Iron Head
M	1/4" NPT Conduit Connection, Miniature Plastic Head
P	1/2" NPT Conduit, Grey Delrin Head
R	3/4" NPT Conduit, Grey Delrin Head
W	1/2" NPT Conduit, White Polypropylene Head
V	3/4" NPT Conduit, White Polypropylene Head
Z	1/2" NPT Conduit, Explosion Proof Aluminum Head
Y	3/4" NPT Conduit, Explosion Proof Aluminum Head

Table 6: Fitting Options

Code	Process Size
0	No Process Connection
6	1/2" NPT Stainless Steel Hex Nipple
8	3/4" NPT Stainless Steel Hex Nipple
G	1/2" NPT Brass Hex Bushing
H	1/2" NPT Stainless Steel Hex Bushing

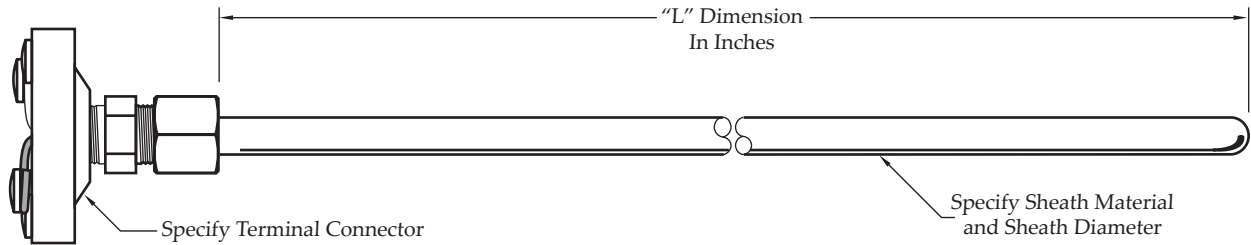
Part Number Sequence TDC4-JG-6C060-61A0

TDC4	-	J	G	-	6	C	060	-	6	1	A	0
TDC4		Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 6		
Sensor Type & Style No.		Thermocouple Type	Junction Type	Sheath Material	Sheath Diameter	"L" Dimension	Fitting Options Into Head	Spring Loaded Option	Terminal Heads	Fitting Options On Probe		

Industrial Process Thermocouples

SHEATHED MgO THERMOCOUPLE ASSEMBLY WITH OPEN TERMINAL DISC

The TDC5 Style Thermocouple features an MgO insulated element with an open terminal disc design. This design allows greater accessibility in wiring for space restricted areas.



STYLE TDC5 - MgO Thermocouple with Open Terminal Disc

Table 1: Thermocouple Type

Thermocouple Type Codes				Limits of Error
E	J	K	T	Standard Limits
2	3	4	8	Special Limits

Table 2: Junction Type

Code	Single Junction	Code	Dual Junction
G	Grounded	H	Grounded
U	Ungrounded	L	Ungrounded Isolated
C	Exposed	V	Ungrounded Common
		W	Exposed

Table 3: Sheath Material

Code	Metal Type
1	310 Stainless Steel
2	321 Stainless Steel
4	304 Stainless Steel
5	446 Stainless Steel
6	316 Stainless Steel
7	347 Stainless Steel
8	Inconel® 600 (Alloy 600)
A	Alloy 601

Table 4: Sheath Diameter

Code	O.D. Size
T	.020" O.D.
Y	.032" or 1/32" O.D.
W	.040" O.D.
A	.062" or 1/16" O.D.
B	.125" or 1/8" O.D.
V	.156" or 5/32" O.D.
C	.188" or 3/16" O.D.
D	.250" or 1/4" O.D.
E	.313" or 5/16" O.D.
F	.375" or 3/8" O.D.
H	.500" or 1/2" O.D.

Table 5: "L" Dimension

Specify in inches. See table on page 27 for codes.

Table 6: Terminal Connector

Code	Termination Style
J	Circular Terminal Block, Ceramic
K	Circular Terminal Block, Glass Cloth
X	Special, Specify

Part Number Sequence

TDC5-KG-4D09D-K

TDC5	-	K	G	-	4	D	09D	-	K
TDC5		Table 1	Table 2		Table 3	Table 4	Table 5		Table 6
Sensor Type & Style No.		Thermocouple Type	Junction Type		Sheath Material	Sheath Diameter	"L" Dimension		Terminal Connector

Industrial Process Thermocouples

SHEATHED MgO THERMOCOUPLE ASSEMBLY WITH INSULATED LEADWIRE

The TDC6 Style Thermocouple features an MgO insulated element that is terminated to an insulated extension wire. An optional terminal connector can be added to the extension wire.

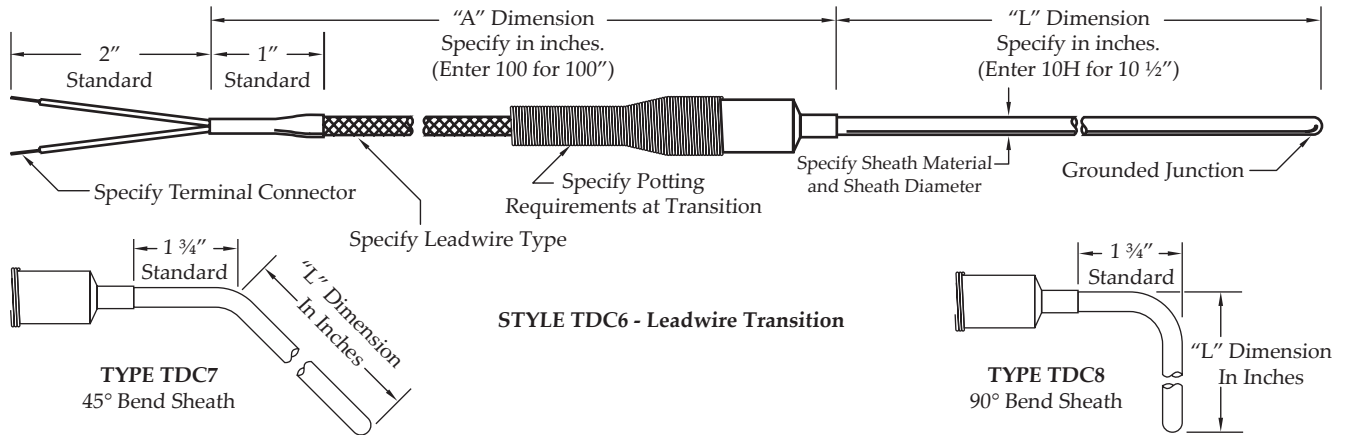


Table 1: Thermocouple Type

Thermocouple Type Codes				Limits of Error
E	J	K	T	Standard Limits
2	3	4	8	Special Limits

Table 2: Junction Type

Code	Single Junction	Code	Dual Junction
G	Grounded	H	Grounded
U	Ungrounded	L	Ungrounded Isolated
C	Exposed	V	Ungrounded Common
		W	Exposed

Table 3: Sheath Material

Code	Metal Type
1	310 Stainless Steel
2	321 Stainless Steel
4	304 Stainless Steel
5	446 Stainless Steel
6	316 Stainless Steel
7	347 Stainless Steel
8	Inconel® 600 (Alloy 600)
A	Alloy 601

Table 4: Sheath Diameter

Code	O.D. Size
T	.020" O.D.
Y	.032" or 1/32" O.D.
W	.040" O.D.
A	.062" or 1/16" O.D.
B	.125" or 1/8" O.D.
V	.156" or 5/32" O.D.
C	.188" or 3/16" O.D.
D	.250" or 1/4" O.D.
E	.313" or 5/16" O.D.
F	.375" or 3/8" O.D.
H	.500" or 1/2" O.D.

Table 5: "L" Dimension

Specify in inches. See table on page 27 for codes.

Table 6: "A" Dimension

Specify in inches. See table on page 27 for codes.

Table 7: Leadwire Type & Construction

Insulation Type	Conductor Type	Standard	Stainless Steel Overbraid	Stainless Steel Armor
Fiberglass	Solid	A	B	C
Teflon	Solid	D	E	F
Fiberglass	Stranded	G	H	J
Teflon	Stranded	K	L	M
Kapton	Solid	N	P	Q
PVC	Solid	R	S	T
PVC	Stranded	W	Y	Z

Table 8: Terminal Connector

Code	Termination Style
0	Split Leads, 2" Length Standard
1	3/16" Spade Lugs
3	Standard Plug
4	Standard Jack
M	Mini Plug
N	Mini Jack
X	Special, Specify

Table 9: Potting Requirements

Code	Maximum Temperatures
L	500°F
M	1000°F

Part Number Sequence TDC6-TG-6D08M-024C0M

TDC6	-	T	G	-	6	D	08M	-	024	C	0	M
TDC6		Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8	Table 9		

Sensor Type Thermocouple Junction Sheath Sheath "L" "A" Leadwire Terminal Potting
& Style No. Type Type Material Diameter Dimension Dimension Construction Connector Requirements

Industrial Process Thermocouples

SHEATHED MgO MINI THERMOCOUPLE ASSEMBLY WITH MOLDED TRANSITION

The TDC9 Style Thermocouple features an MgO insulated element that is terminated to an insulated extension wire and encapsulated in a plastic injection molded "mini" transition using insert mold technology and a Liquid Crystal Polymer. Transition can withstand continuous exposure to temperatures up to 562°F.

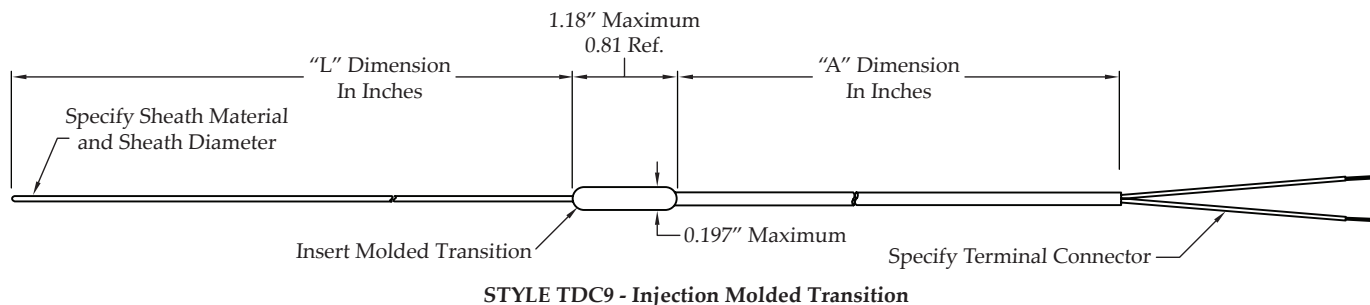


Table 1: Thermocouple Type

Thermocouple Type Codes				Limits of Error
E	J	K	T	Standard Limits
2	3	4	8	Special Limits

Table 2: Junction Type

Code	Single Junction
G	Grounded
U	Ungrounded
C	Exposed

Table 3: Sheath Material

Code	Metal Type
4	304 Stainless Steel
6	316 Stainless Steel
8	Inconel® 600 (Alloy 600)

Table 4: Sheath Diameter

Code	O.D. Size
T	.020" O.D.
Y	.032" or 1/32" O.D.
W	.040" O.D.
A	.062" or 1/16" O.D.
X	Special, Specify

Table 5: "L" Dimension

Specify in inches. See table on page 27 for codes.

Table 6: "A" Dimension

Specify in inches. See table on page 27 for codes.

Table 7: Leadwire Type & Construction

Insulation Type	Conductor Type	Standard
Fiberglass	Solid	A
Teflon	Solid	D
Fiberglass	Stranded	G
Teflon	Stranded	K
Kapton	Solid	N

Table 8: Terminal Connector

Code	Termination Style
0	Split Leads, 2" Length Standard
1	#6 Spade Lugs
3	Standard Plug
4	Standard Jack
X	Special, Specify

Part Number Sequence TDC9-TG-6T08M-024A0L

TDC9	-	T	G	-	6	T	08M	-	024	A	0
TDC9		Table 1	Table 2	Table 3	Table 4	Table 5	Table 6	Table 7	Table 8		
Sensor Type & Style No.		Thermocouple Type	Junction Type	Sheath Material	Sheath Diameter	"L" Dimension	"A" Dimension	Leadwire Construction	Terminal Connector		