

	Page
General Information	M2
Part Number Examples	M4
Thermocouple Elements (MA)	M5
Leadwire Style Thermocouples (MB)	M6
Leadwire Style Thermocouples (MD, ME, MF, or MG – with transition fitting)	M7
Standard Connector Thermocouples (MK, ML, MM, MN, MO, or MP)	M8
Miniature Connector Thermocouples (MQ, MR, or MS)	M9
Flip-Top Connection Head Thermocouples (MT or M4)	M10
Screw-Cover Connection Head Thermocouples (M1, M2, M5, M8, or MW)	M11
Miniature Connection Head Thermocouples (MY, MX, or MZ)	M12
Sheath Mounting Fitting	M14
Sheath Mounting Fittings and Bend Options	M15

For other MgO/Thermocouple products:

See the Food, Dairy & Pharmaceutical Section of the Catalog for the for the following items:

- Sanitary Connected Thermocouples (CIP)
- Thermometer Replacement Thermocouples
- Penetration Style Sensors

See the Thermowell Assemblies & Thermowells Section of the Catalog for the following items:

- MgO Thermocouple Style Thermowells
- MgO Thermocouple Replacement for Thermowells

GENERAL INFORMATION, MgO INSULATED THERMOCOUPLES

SensorTec, Inc. utilizes the highest quality MgO (magnesium oxide) insulated metal sheathed cable available in all MgO thermocouples. All cable meets or exceeds all applicable ANSI/ASTM standards. MgO insulated thermocouples have many desirable characteristics (i.e. fast response, compact size, broad temperature range, formability, weldability, durability, accuracy, thermal shock and vibration resistance). These characteristics make the SensorTec MgO insulated thermocouple an excellent choice for virtually all laboratory or process applications.

The standard MgO insulated thermocouple configuration consists of ANSI/ASTM standard limits of error conductor material and standard (96%) pure insulation. Each catalog page details a variety of other configurations available.

☒ INITIAL CALIBRATION TOLERANCES FOR THERMOCOUPLES (0°C/32°F REFERENCE JUNCTION)

Type			Temperature Range		Tolerances (whichever is greater)	
			°C	°F	Standard	Special
J	+ Lead	White	0 to 750	32 to 1652	±2.2°C or +0.75%	±1.1°C or ±0.4%
	- Lead	Red				
K	+ Lead	Yellow	0 to 1250	32 to 2282	±2.2°C or +0.75%	±1.1°C or ±0.4%
	- Lead	Red				
E	+Lead	Purple	0 to 900	32 to 1652	±1.7°C or +0.50%	±1.0°C or ±0.4%
	- Lead	Red				
T	+ Lead	Blue	0 to 350	32 to 662	±1.0°C or +0.75%	±0.5°C or +0.4%
	- Lead	Red				

☒ STANDARD SHEATH MATERIALS

Type	Code	Temperature Range
304 Stainless Steel	T	899°C (1650°F)
310 Stainless Steel	V	1150°C (2100°F)
316 Stainless Steel	W	899°C (1650°F)
446 Stainless Steel	S	1150°C (2100°F)
Inconel Alloy 600	J	1212°C (2150°F)

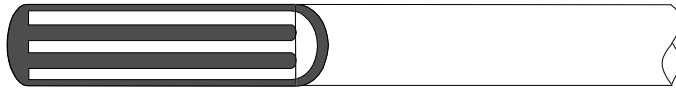
The following table gives the maximum recommended temperature for each sheath size and material type by thermocouple calibration: (Based on single element types)

☒ MgO Sheath Size and Rating (°F)

Calibration	Material	1/16"	1/8"	3/16"	1/4"	3/8"
J	ALL	1500	1500	1500	1500	1500
K	304 SS	1600	1600	1600	1600	1600
	310 SS	1900	2000	2000	2000	2000
	316 SS	1600	1600	1600	1600	1600
	446 SS	1900	2000	2000	2100	2100
	Alloy 600	2000	2100	2150	2150	2150
E	ALL	1600	1600	1600	1600	1600
T	ALL	662	662	662	662	662

☒ MEASURING JUNCTION TYPES

(G) Grounded



(U) Ungrounded



(E) Exposed

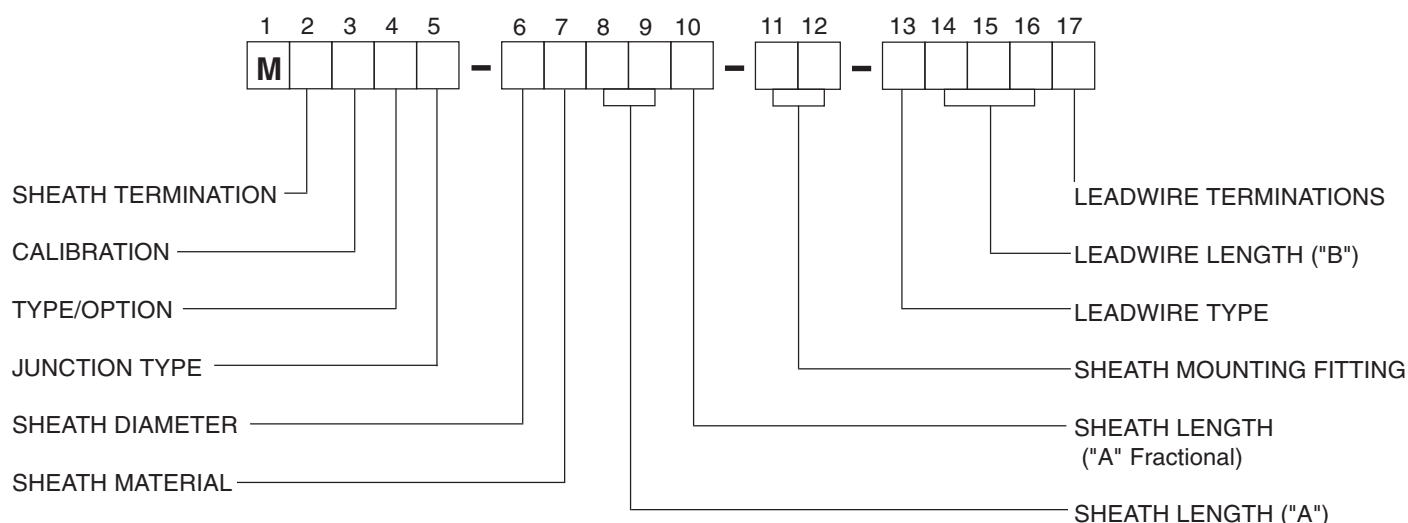


NOTE: All duplex ungrounded and exposed sensors are supplied with two thermocouples isolated from each other as standard. For diameters less than .125 OD, isolated junction must be specified. Consult factory for availability.

An ungrounded junction is recommended for small diameter thermocouples (.125" OD and under) that are to be used in high temperature applications or that are to undergo temperature calibration.

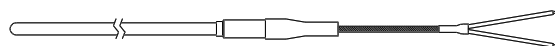
An ungrounded junction is also recommend if the thermocouple is to be used with a PLC or temperature controller that has non-isolated inputs.

PART NUMBERING EXAMPLES FOR MGO THERMOCOUPLES



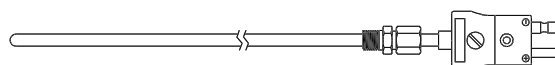
MDJ0G-KW12A-00-F060B

MGO - Type "J", Transition Fitting, Grounded, 1/4" Dia. Sheath, 12" Long, 316 SS Material, No Fitting and 5 Ft. of Stranded Fiberglass Wire with SS Overbraid, 2-1/2" Split Leads. Refer to page M-2.



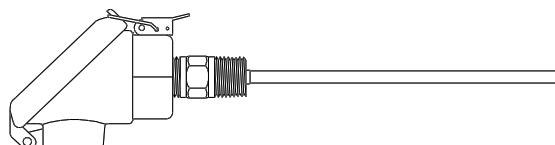
MKE0G-KT24A-2B

MGO - Type "E", Standard Male Plug, Grounded, 1/4" Dia. Sheath, 24" Long, 304 SS Material, Compression Fitting Brass 1/4" NPT. Refer to page M-3.

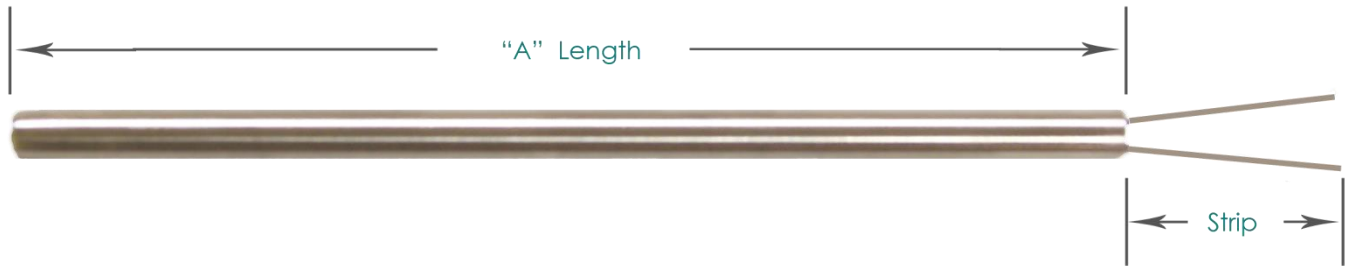


MTJ0G-KJ06L-56

MGO - Type "J", Snap-Cover, Cast Aluminum, Grounded, 1/4" Dia. Sheath, 6-1/2" Long, Inconel 600 Material, Spring Loaded 1/2 NPT Stainless Steel Hex Nipple Mounting Provision. Refer to page M-5.



Thermocouple Elements



	1	2	3	4		5	6	7	8	9		10
M	A				-						-	

(1) Sheath Termination

Bulk Material, Stripped Bare Lead	A
-----------------------------------	---

(2) ANSI / ASTM Calibration

Type "J"	J	Type "T"	T
Type "K"	K	Type "E"	E

(3) Thermocouple Element Options

Limits of Error (Accuracy)	Standard	Special
Single Element (2-wire)	0	1
Duplex Element (4-wire)	4	5
Single, High Purity Insulation	2	3
Duplex, High Purity Insulation	6	7

(4) Junction Type

Exposed	E	Grounded	G	Ungrounded	U
---------	---	----------	---	------------	---

(5) Sheath Diameter (inches)

.040	D	1/8 (.125)	G	1/4 (.250)	K
1/16 (.063)	E	3/16 (.188)	I	3/8 (.375)	N

(6) Sheath Material

Inconel 600	J	304 SST	T	316 SST	W
446 SST	S	310 SST	V		

(7 & 8) Sheath Length ("A")

Whole Inches: Example 06 = 6 inches

(9) Sheath Fractional Length ("A" Fractional)

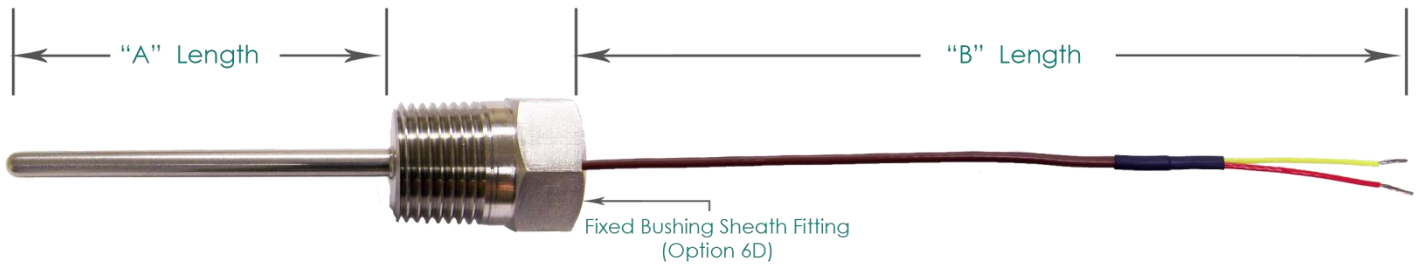
None	A	1/4	G	5/8	N
1/16	B	3/8	J	3/4	Q
1/8	C	1/2	L	7/8	S
3/16	E				

(10) Strip Length

1/4"	A
1/2"	B
3/4"	C
1"	D
2"	E
2-1/2"	F
3"	G

Note: The available strip length options may be limited on small diameter & some duplex configurations due to the fragile nature of the conductors.

Thermocouple Sheath & Lead Wire Style



1	2	3	4	5	6	7	8	9	10	11	12	13	14	16	16	
M	B				-					-					-	

(1) ANSI / ASTM Calibration

Type "J"	J	Type "T"	T
Type "K"	K	Type "E"	E

(2) Thermocouple Element Options

Limits of Error (Accuracy)	Standard	Special
Single Element (2-wire)	0	1
Duplex Element (4-wire)	4	5
Single, High Purity Insulation	2	3
Duplex, High Purity Insulation	6	7

(3) Junction Type

Exposed	E	Grounded	G	Ungrounded	U
---------	---	----------	---	------------	---

(4) Sheath Diameter (inches)

1/16 (.063)	E	3/16 (.188)	I	3/8 (.375)	N
1/8 (.125)	G	1/4 (.250)	K		

(5) Sheath Material

Inconel 600	J	304 SST	T	316 SST	W
446 SST	S	310 SST	V		

(6 & 7) Sheath Length ("A")

Whole Inches: Example 06 = 6 inches

(8) Sheath Fractional Length ("A" Fractional)

None	A	1/4	G	5/8	N
1/16	B	3/8	J	3/4	Q
1/8	C	1/2	L	7/8	S
3/16	E				

(9 & 10) Sheath Mounting Fitting

NPT Size →	1/8"	1/4"	1/2"
Fixed Hex Bushing, 316 SST	6A	6B	6D
Fixed Hex Nipple, 316 SST	46	47	48

Note: For a complete listing of sensor mounting options, compatibility, specifications, and ordering instructions, please see page M-7.

(11) Lead Wire Type

Stranded Wire	°C	°F	Code
Fiberglass Insulated Cable	450°C	842°F	D
Fiberglass w/ SST Flex Armor	450°C	842°F	E
Fiberglass w/ SST Over Braid	450°C	842°F	F
Teflon Insulated Cable	200°C	392°F	M
Teflon Cable w/ SST Flex Armor	200°C	392°F	N
Teflon Cable w/ SST Over Braid	200°C	392°F	O
Shielded Teflon Cable	200°C	392°F	P

Note: For a complete list of all wire options, refer to page ??

(12, 13, & 14) Lead Wire Length Inches ("B")

Whole Inches: Example: 048 = 48 inches

Note: For lead wire beyond the flex armor ("C" length), include length After "B" length. Example: 048(012) = 12" of leads beyond the flex

(15) Lead Wire Termination Options

None	A
Split Leads (2-1/2") / Stripped	B
Split Leads with #8 Spade Lugs	C
Split Leads with 1/4" Push-On Terminals	E
Split Leads with Insulated Wire Sleeves	J
Standard Male Plug (200°C / 382°F)	K
Standard Plug with Mating Jack	L
Standard Female Jack	M
Miniature Male Plug (200°C / 382°F)	Q
Miniature Plug with Mating Jack	R
Miniature Female Jack	S

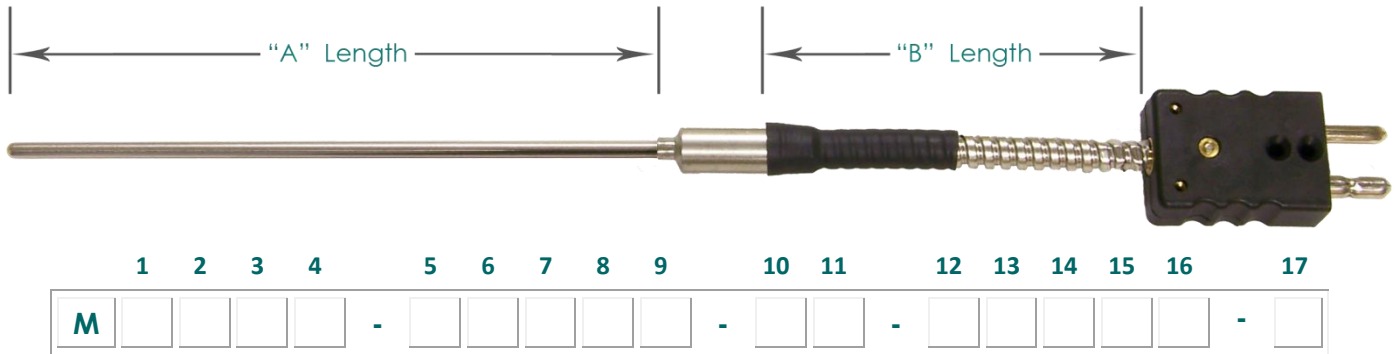
(16) Special Options

BX Electrical Connector, 1/2"	NA	NA	F
PVC Coating over Flex Armor (Black)	90°C	194°F	J
Teflon Coating over Flex Armor (White)	200°C	392°F	K
Teflon Encapsulated Sheath (Black)	200°C	392°F	T

Note: Standard temperature rating for "MB" Style is 200°C (392°F). Consult factory for higher temperature options.

Thermocouple Transition Lead Wire Style

Transition Fitting (Code D & E)



(1) Transition Style

Style	°C	°F	Code
Standard Transition Fitting	200°C	392°F	D
Hi-Temp Transition Fitting	450°C	842°F	E
Transition w/ Relief Spring	200°C	392°F	F
Hi Temp w/ Relief Spring	450°C	842°F	G

(2) ANSI / ASTM Calibration

Type "J"	J	Type "T"	T
Type "K"	K	Type "E"	E

(3) Thermocouple Element Options

Limits of Error (Accuracy)	Standard	Special
Single Element (2-wire)	0	1
Duplex Element (4-wire)	4	5
Single, High Purity Insulation	2	3
Duplex, High Purity Insulation	6	7

(4) Junction Type

Exposed	E	Grounded	G	Ungrounded	U
---------	---	----------	---	------------	---

(5) Sheath Diameter (inches)

.040	D	1/8 (.125)	G	1/4 (.250)	K
1/16 (.063)	E	3/16 (.188)	I	3/8 (.375)	N

(6) Sheath Material

Inconel 600	J	304 SST	T	316 SST	W
446 SST	S	310 SST	V		

(7 & 8) Sheath Length ("A")

Whole Inches: Example 06 = 6 inches

(9) Sheath Fractional Length ("A" Fractional)

None	A	1/4	G	5/8	N
1/16	B	3/8	J	3/4	Q
1/8	C	1/2	L	7/8	S
3/16	E				

(10 & 11) Sheath Mounting Fitting

Select fitting from pages M-19 & M-20
None 00

(12) Lead Wire Type

Stranded Wire	°C	°F	Code
Fiberglass Insulated Cable	450°C	842°F	D
Fiberglass w/ SST Flex Armor	450°C	842°F	E
Fiberglass w/ SST Over Braid	450°C	842°F	F
Teflon Insulated Cable	200°C	392°F	M
Teflon Cable w/ SST Flex Armor	200°C	392°F	N
Teflon Cable w/ SST Over Braid	200°C	392°F	O
Shielded Teflon Cable	200°C	392°F	P

Note: For a complete list of all wire options, refer to page ??

(13, 14, & 15) Lead Wire Length Inches ("B")

Whole Inches: Example: 048 = 48 inches

Note: For lead wire beyond the flex armor ("C" length), include length After "B" length. Example: 048(012) = 12" of leads beyond the flex

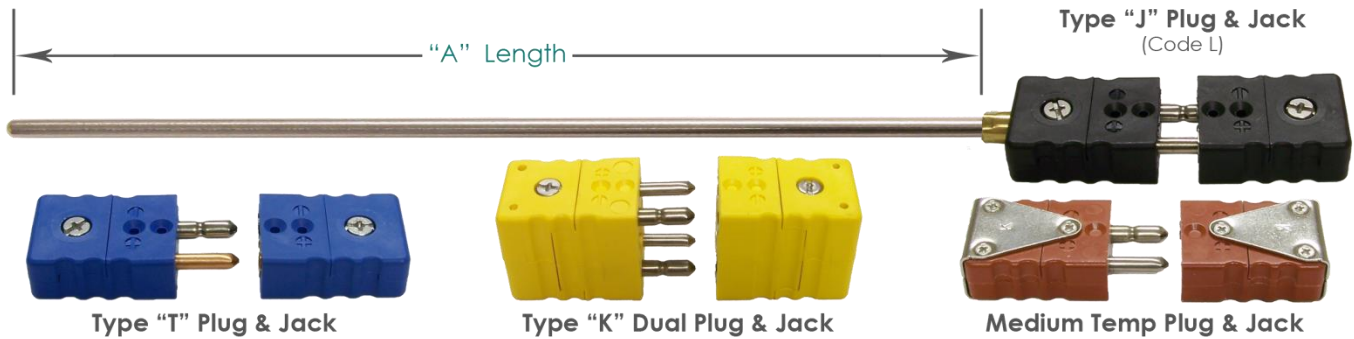
(16) Lead Wire Termination Options

None	A
Split Leads (2-1/2") / Stripped	B
Split Leads with #8 Spade Lugs	C
Split Leads with 1/4" Push-On Terminals	E
Split Leads with Insulated Wire Sleeves	J
Standard Male Plug (200°C / 382°F)	K
Standard Plug with Mating Jack	L
Standard Female Jack	M
Miniature Male Plug (200°C / 382°F)	Q
Miniature Plug with Mating Jack	R
Miniature Female Jack	S

(17) Special Options

PVC Coating over Flex Armor (Black)	90°C	194°F	J
Teflon Coating over Flex Armor (White)	200°C	392°F	K
Teflon Encapsulated Sheath (Black)	200°C	392°F	T

Thermocouple Standard Connectors



	1	2	3	4		5	6	7	8	9		10	11		12
M					-						-			-	

(1) Sheath Termination

Connector Option	°C	°F	Code
Standard Male Plug	200°C	392°F	K
Standard Plug with Mating Jack	200°C	392°F	L
Standard Female Jack	200°C	392°F	M
Medium Temp Male Plug	427°C	800°F	N
Medium Temp Plug with Mating Jack	427°C	800°F	O
Medium Temp Female Jack	427°C	800°F	P

(2) ANSI / ASTM Calibration

Type "J"	J	Type "T"	T
Type "K"	K	Type "E"	E

(3) Thermocouple Element Options

Limits of Error (Accuracy)	Standard	Special
Single Element (2-wire)	0	1
Duplex Element (4-wire)	4	5
Single, High Purity Insulation	2	3
Duplex, High Purity Insulation	6	7

(4) Junction Type

Exposed	E	Grounded	G	Ungrounded	U
---------	---	----------	---	------------	---

(5) Sheath Diameter (inches)

.040	D	1/8 (.125)	G	1/4 (.250)	K
1/16 (.063)	E	3/16 (.188)	I	3/8 (.375)	N

(6) Sheath Material

Inconel 600	J	304 SST	T	316 SST	W
446 SST	S	310 SST	V		

(7 & 8) Sheath Length ("A")

Whole Inches: Example 06 = 6 inches

(9) Sheath Fractional Length ("A" Fractional)

None	A	1/4	G	5/8	N
1/16	B	3/8	J	3/4	Q
1/8	C	1/2	L	7/8	S
3/16	E				

(10 & 11) Sheath Mounting Fitting

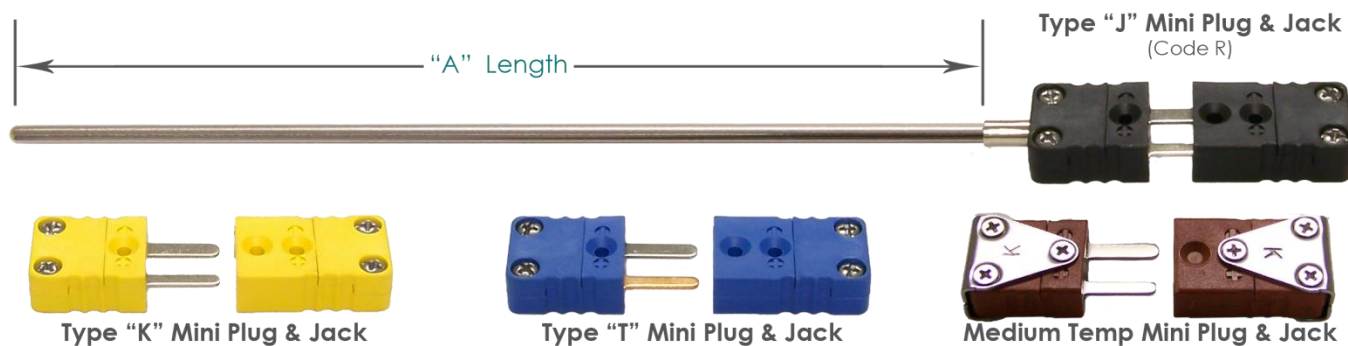
NPT Size →	1/8"	1/4"	1/2"
SST Compression Fitting	1A	1B	1D
Brass Compression Fitting	2A	2B	2D
Re-Adjustable SST Compr. Ftg.	3A	3B	3D

Note: For a complete listing of sensor mounting options, compatibility, specifications, and ordering instructions, please see page M-7.

(12) Special Options

Compression Tube Adapter on Connector	C
Teflon Encapsulated Sheath 200°C / 392°F (Black)	T

Thermocouple Miniature Connectors



	1	2	3	4		5	6	7	8	9		10	11		12
M					-						-			-	

(1) Sheath Termination

Connector Option	°C	°F	Code
Miniature Male Plug	200°C	392°F	Q
Miniature Plug with Mating Jack	200°C	392°F	R
Miniature Female Jack	200°C	392°F	S

(2) ANSI / ASTM Calibration

Type "J"	J	Type "T"	T
Type "K"	K	Type "E"	E

(3) Thermocouple Element Options

Limits of Error (Accuracy)	Standard	Special
Single Element (2-wire)	0	1
Duplex Element (4-wire)	4	5
Single, High Purity Insulation	2	3
Duplex, High Purity Insulation	6	7

(4) Junction Type

Exposed	E	Grounded	G	Ungrounded	U
---------	---	----------	---	------------	---

(5) Sheath Diameter (inches)

.040	D	1/8 (.125)	G
1/16 (.063)	E	3/16 (.188)	I

(6) Sheath Material

Inconel 600	J	304 SST	T	316 SST	W
446 SST	S	310 SST	V		

(7 & 8) Sheath Length ("A")

Whole Inches: Example 06 = 6 inches

(9) Sheath Fractional Length ("A" Fractional)

None	A	1/4	G	5/8	N
1/16	B	3/8	J	3/4	Q
1/8	C	1/2	L	7/8	S
3/16	E				

(10 & 11) Sheath Mounting Fitting

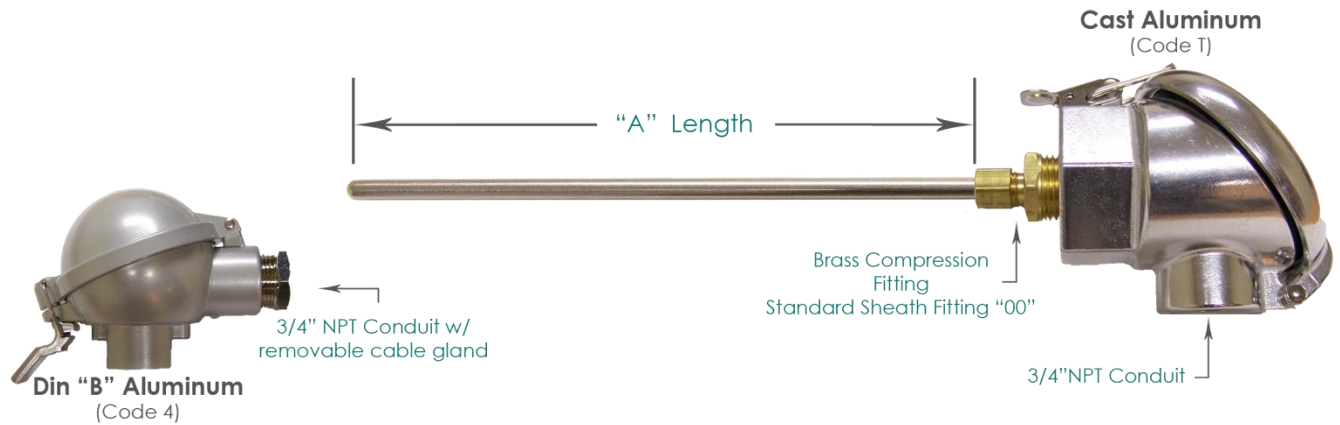
NPT Size →	1/8"	1/4"	1/2"
SST Compression Fitting	1A	1B	1D
Brass Compression Fitting	2A	2B	2D
Re-Adjustable SST Compr. Ftg.	3A	3B	3D

Note: For a complete listing of sensor mounting options, compatibility, specifications, and ordering instructions, please see page M-7.

(12) Special Options

Compression Tube Adapter on Connector	C
Teflon Encapsulated Sheath (Black)	T

Thermocouple Flip-Top Connection Heads



	1	2	3	4		5	6	7	8	9		10	11		12
M					-						-			-	

(1) Sheath Termination

Material	°C	°F	Code
Cast Aluminum	200°C	392°F	T
Din "B" Size Aluminum WP	200°C	392°F	4

(2) ANSI / ASTM Calibration

Type "J"	J	Type "T"	T
Type "K"	K	Type "E"	E

(3) Thermocouple Element Options

Limits of Error (Accuracy)	Standard	Special
Single Element (2-wire)	0	1
Duplex Element (4-wire)	4	5
Single, High Purity Insulation	2	3
Duplex, High Purity Insulation	6	7

(4) Junction Type

Exposed	E	Grounded	G	Ungrounded	U
---------	---	----------	---	------------	---

(5) Sheath Diameter (inches)

1/8 (.125)	G	1/4 (.250)	K
3/16 (.188)	I	3/8 (.375)	N

(6) Sheath Material

Inconel 600	J	304 SST	T	316 SST	W
446 SST	S	310 SST	V		

(7 & 8) Sheath Length ("A")

Whole Inches: Example 06 = 6 inches

(9) Sheath Fractional Length ("A" Fractional)

None	A	1/4	G	5/8	N
1/16	B	3/8	J	3/4	Q
1/8	C	1/2	L	7/8	S
3/16	E				

(10 & 11) Sheath Mounting Fitting

NPT Size →	1/8"	1/4"	1/2"
SST Compression Fitting	1A	1B	1D
Brass Compression Fitting	2A	2B	2D
Re-Adjustable SST Compr. Ftg.	3A	3B	3D
Fixed Hex Nipple, 316 SST	46	47	48
Spring Loaded Hex Nipple SST	N/A	N/A	56

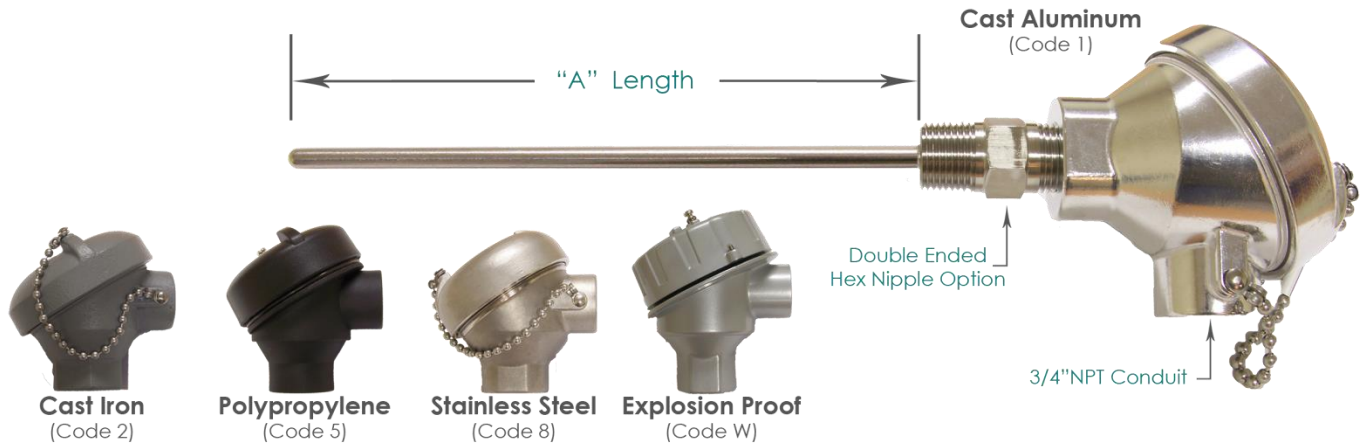
Note: For a complete listing of sensor mounting options, compatibility, specifications, and ordering instructions, please see page M-7.

(12) Special Options

Non-Isolated Transmitter, PC Programmable	Q9
Isolated Transmitter, PC Programmable	Q2
Grounding Stud (Screw)	G
Conduit Opening Reducer, 3/4" x 1/2"	R
Teflon Encapsulated Sheath 200°C / 392°F (Black)	T

See the Temperature Transmitter Section for complete transmitter options and specifications.

Thermocouple Screw-Cover Connection Heads



	1	2	3	4	5	6	7	8	9	10	11	12
M					-					-		-

(1) Sheath Termination

Material	°C	°F	Rating	Code
Cast Aluminum	200°C	392°F	NEMA 4	1
Cast Iron	200°C	392°F	NEMA 4	2
Black Polypropylene	90°C	194°F	IP65	5
Stainless Steel (316)	200°C	392°F	NEMA4X	8
Explosion Proof *	90°C	194°F	NEMA 4	W

*FM Approved Class I, DIV I, Groups A,B,C,D, T6
Class II, III, DIV I, Groups E, F, G, T6

(2) ANSI / ASTM Calibration

Type "J"	J	Type "T"	T
Type "K"	K	Type "E"	E

(3) Thermocouple Element Options

Limits of Error (Accuracy)	Standard	Special
Single Element (2-wire)	0	1
Duplex Element (4-wire)	4	5
Single, High Purity Insulation	2	3
Duplex, High Purity Insulation	6	7

(4) Junction Type

Exposed	E	Grounded	G	Ungrounded	U
---------	---	----------	---	------------	---

(5) Sheath Diameter (inches)

1/8 (.125)	G	1/4 (.250)	K
3/16 (.188)	I	3/8 (.375)	N

(6) Sheath Material

Inconel 600	J	304 SST	T	316 SST	W
446 SST	S	310 SST	V		

(7 & 8) Sheath Length ("A")

Whole Inches: Example 06 = 6 inches

(9) Sheath Fractional Length ("A" Fractional)

None	A	1/4	G	5/8	N
1/16	B	3/8	J	3/4	Q
1/8	C	1/2	L	7/8	S
3/16	E				

(10 & 11) Sheath Mounting Fitting

NPT Size →	1/8"	1/4"	1/2"
SST Compression Fitting	1A	1B	1D
Brass Compression Fitting	2A	2B	2D
Re-Adjustable SST Compr. Ftg.	3A	3B	3D
Fixed Hex Nipple, 316 SST	46	47	48
Spring Loaded Hex Nipple SST	N/A	N/A	56

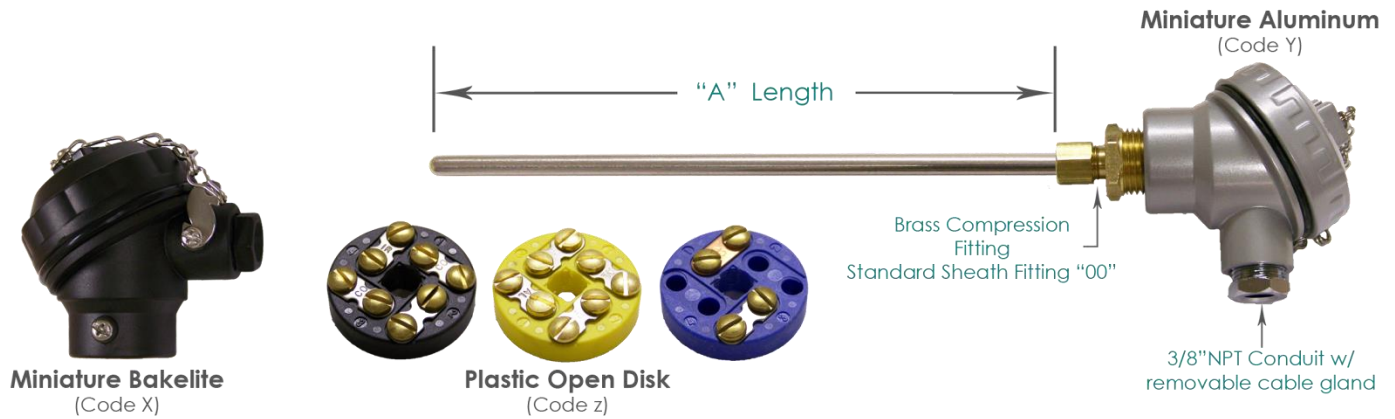
Note: For a complete listing of sensor mounting options, compatibility, specifications, and ordering instructions, please see page M-7.

(12) Special Options

Non-Isolated Transmitter, PC Programmable	Q9
Isolated Transmitter, PC Programmable	Q2
Grounding Stud (Screw)	G
Conduit Opening Reducer, 3/4" x 1/2"	R
Teflon Encapsulated Sheath 200°C / 392°F (Black)	T

See the Temperature Transmitter Section for complete transmitter options and specifications.

Thermocouple Miniature Connection Heads



	1	2	3	4		5	6	7	8	9		10	11		12
M					-						-			-	

(1) Sheath Termination

Material	°C	°F	Code
Miniature Aluminum	200°C	392°F	Y
Miniature Bakelite	200°C	392°F	X
Plastic Open Disk	200°C	392°F	Z

(2) ANSI / ASTM Calibration

Type "J"	J	Type "T"	T
Type "K"	K	Type "E"	E

(3) Thermocouple Element Options

Limits of Error (Accuracy)	Standard	Special
Single Element (2-wire)	0	1
Duplex Element (4-wire)	4	5
Single, High Purity Insulation	2	3
Duplex, High Purity Insulation	6	7

(4) Junction Type

Exposed	E	Grounded	G	Ungrounded	U
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(5) Sheath Diameter (inches)

1/8 (.125)	G	1/4 (.250)	K
3/16 (.188)	I	3/8 (.375)	N

(6) Sheath Material

Inconel 600	J	304 SST	T	316 SST	W
446 SST	S	310 SST	V		

(7 & 8) Sheath Length ("A")

Whole Inches: Example 06 = 6 inches

(9) Sheath Fractional Length ("A" Fractional)

None	A	1/4	G	5/8	N
1/16	B	3/8	J	3/4	Q
1/8	C	1/2	L	7/8	S
3/16	E				

(10 & 11) Sheath Mounting Fitting

NPT Size →	1/8"	1/4"	1/2"
SST Compression Fitting	1A	1B	1D
Brass Compression Fitting	2A	2B	2D
Re-Adjustable SST Compr. Ftg.	3A	3B	3D
Fixed Hex Nipple, 316 SST	46	47	48
Spring Loaded Hex Nipple SST	N/A	N/A	56

Note: For a complete listing of sensor mounting options, compatibility, specifications, and ordering instructions, please see page M-7.

(12) Special Options

Non-Isolated Transmitter, PC Programmable	Q9
Isolated Transmitter, PC Programmable	Q2
Grounding Stud (Screw)	G
Conduit Opening Reducer, 3/4" x 1/2"	R
Teflon Encapsulated Sheath 200°C / 392°F (Black)	T

See the Temperature Transmitter Section for complete transmitter options and specifications.

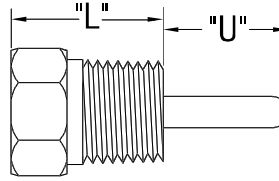
SHEATH MOUNTING FITTINGS

Fixed Brazed or Welded Bushings

Code	Description	NPT	"L"
6A	316 Stainless Steel	1/8	.80
6B	316 Stainless Steel	1/4	.81
6D	316 Stainless Steel	1/2	1.09
6E	316 Stainless Steel	3/4	1.20
7A	Brass	1/8	.80
7B	Brass	1/4	.96
7D	Brass	1/2	1.20

Insert "U" length

Ex. 6 D04 = 4" "U" length

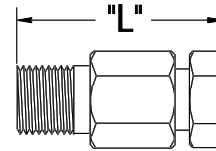


COMPRESSION FITTINGS

One-time Adjustable*

Available Sizes and "L" Length

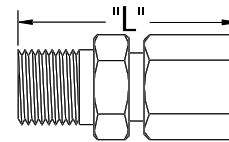
Code	Description	NPT	1/16"	1/8"	3/16"	1/4"	3/8"
1A	Stainless Steel	1/8	1.27	1.24	1.29	1.29	N/A
1B	Stainless Steel	1/4	1.22	1.40	1.43	1.49	1.57
1D	Stainless Steel	1/2	N/A	1.66	N/A	1.76	1.82
2A	Brass	1/8	1.03	1.02	1.10	1.15	N/A
2B	Brass	1/4	1.22	1.40	1.18	1.24	1.28
2D	Brass	1/2	1.40	1.35	1.25	1.44	1.53



Re-Adjustable*

Available Sizes and "L" Length

Code	Description	NPT	1/16"	1/8"	3/16"	1/4"	3/8"
3A	Stainless Steel	1/8	1.21	1.21	1.21	N/A	N/A
3B	Stainless Steel	1/4	N/A	1.40	1.43	2.50	2.50
3D	Stainless Steel	1/2	N/A	1.66	N/A	1.76	1.82

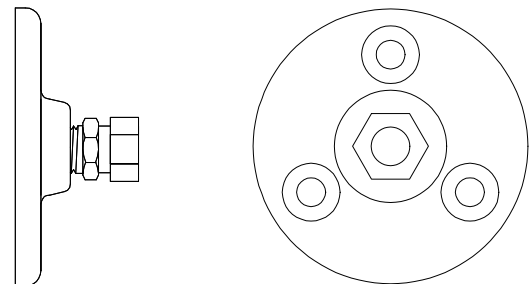


NOTE: All Re-adjustable fittings contain Teflon ferrules standard.
Consult Sales for Neoprene or Lava ferrules

Mounting Flanges*

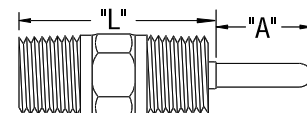
Code	Description
25	Flange w/ Brass Compression, Adjustable
26	Flange w/SS Compression, Adjustable

* NOT AVAILABLE WITH TEFLON COATED SHEATH!



Double Ended Hex Nipples

Code	Description	NPT	"L"	Compatible with Head Order Codes
45	Steel, brazed on	1/2	2.10	T, V, W, 1, 2, 3, 4, 5, 8
46	Stainless Steel (316SS)	1/8	1.01	T, V, X, Y, 1
47	Stainless Steel (316SS)	1/4	2.10	T, V, X, Y, 1
48	Stainless Steel (316SS)	1/2	2.10	T, V, W, 1, 2, 3, 4, 5, 8
55	Steel, spring loaded	1/2	2.10	T, V, 1, 2, 3, 4, 5, 8
56	Stainless Steel, spring loaded	1/2	2.10	T, V, 1, 2, 3, 4, 5, 8
57	Stainless Steel, self contained spring loaded (1/4" sheath only)	1/2	2.50	T, V, W, 1, 2, 3, 4, 5, 8
60	Stainless Steel (316SS)	3/4	2.50	T, V, W, 1, 2, 3, 4, 5, 8
61	Stainless Steel (316SS)	1	2.50	T, V, W, 1, 2, 3, 4, 5, 8

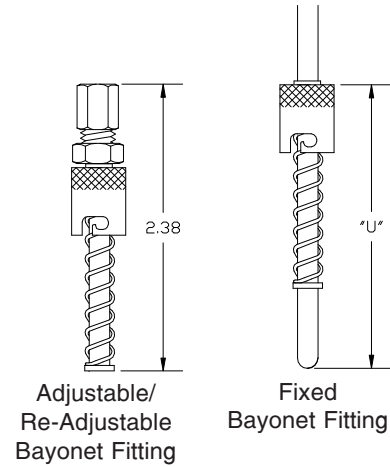


SHEATH MOUNTING FITTINGS and BEND OPTIONS

Bayonet Fittings

Code	Description	Available Sheath Sizes
27	Adjustable Bayonet Fitting	1/8
28	Re-Adjustable Bayonet Fitting	1/8
29	Fixed Bayonet Fitting	1/8, 3/16, 1/4

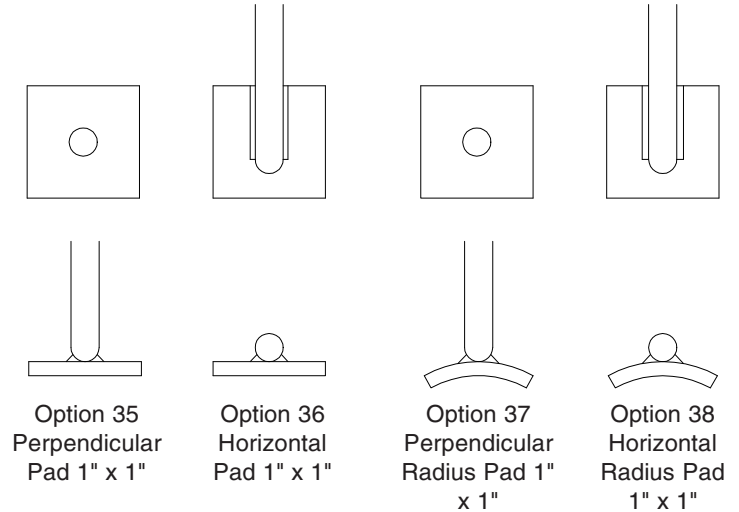
* Insert "U" length
Ex. 2904 = 4" "U" length



Weld Pads

Code	Description
35	Perpendicular Pad, 316 SS, 1" x 1"
36	Horizontal Pad, 316 SS, 1" x 1"
37*	Perpendicular Radius Pad*, 316 SS, 1" x 1"
38*	Horizontal Radius Pad*, 316 SS, 1" x 1"

* Specify Radius (Ex. 37(2)=2"R)



Sheath Bends

Code	Description
A*	90° Bend
B*	45° Bend

* Insert "U" Length
Ex. A04=4" "U" Length

