



Duro-Sense Corporation

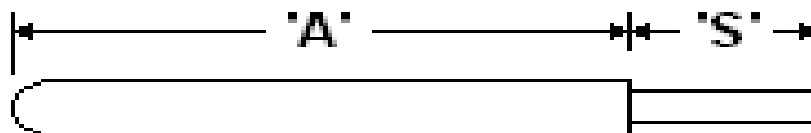


MINERAL- INSULATED THERMOCOUPLES

MINERAL INSULATED THERMOCOUPLES

Thermocouple Ordering Information

Style 'A'



Part #:	MTC-A-																
	Sheath	Calibration	Sheath	Junction	'A'	'S'	SP*										
	Diameter	(Table 2)	Material	(Table 4)	Length	Strip											
	(Table 1)		(Table 3)		(inches)	(inches)											

*SP = Special Limits of Error

If standard limits of error
Is desired, omit this field.

NOTE: Dual Element Style is notated as 'AA'

NOTE: For any additional modifications to this assembly, add "-MOD" to the end of the part number and provide a physical description of the modification.

Table 1
Sheath Diameter

P/N	Description
020	.020 inches
032	.032 inches
040	.040 inches
063	.063 inches
090	.090 inches
125	.125 inches
188	.188 inches
250	.250 inches
313	.313 inches
375	.375 inches
XXX	Special

Table 2
Calibration

P/N	Description
1	Type 'J'
2	Type 'K'
3	Type 'T'
4	Type 'E'
5	Type 'N'
X	Special

Table 3
Sheath Material

P/N	Description
1	Alloy 600
2	304 S.S.
3	316 S.S.
4	310 S.S.
5	321 S.S.
6	446 S.S.
7	MI2300
X	Special

Table 4
Junction

P/N	Description
E	Exposed
EE	Dual Exposed
E/HS	Exposed-Half Shield
E/AT	Exposed-Aspirated Tip
G	Grounded
GG	Dual Grounded
U	Ungrounded
UU	Uncommon-Ungrounded
CU	Common-Ungrounded

Example:

Single Element MTC-A-06321-U-12-0.75-SP

Style A, .063" ϕ , Type 'K', Alloy 600 sheath, ungrounded junction,
12" active length, 3/4" strip length, special limits of error.

Dual Element: MTC-AA-06321-UU-12-0.75-SP

Style A, .063" ϕ , Type 'K', Alloy 600 sheath, uncommon-ungrounded junction,
12" active length, 3/4" strip length, special limits of error.



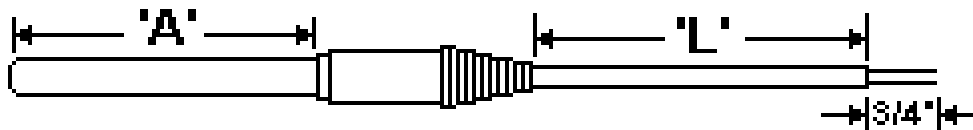
DURO-SENSE CORPORATION 869 Sandhill Ave., Carson, CA 90746

Phone: (310) 533-6877 -- Fax: (310) 533-0330 -- E-mail: sales@duro-sense.com -- Website: www.duro-sense.com

MINERAL INSULATED THERMOCOUPLES

Thermocouple Ordering Information

Style 'B'



Part #:MTC-B-									
Sheath Diameter		Calibration	Sheath Material	Junction	Sheath Length	Lead Length	Wire Type	SP*	Cold End Termination
(Table 1)		(Table 2)	(Table 3)	(Table 4)	(inches)	(inches)	(Table 5)		(Table 6)

*SP = Special Limits of Error

If standard limits of error is desired, omit this field.

NOTE: Dual Element Style is notated as 'BB'

NOTE: For any additional modifications to this assembly, add "-MOD" to the end of the part number and provide a physical description of the modification.

Table 1 Sheath Diameter		Table 2 Calibration		Table 3 Sheath Material		Table 4 Junction		Table 5 Leadwire Type		Table 6 Cold End Termination	
P/N	Description	P/N	Description	P/N	Description	P/N	Description	P/N	Description	P/N	Description
020	.020 inches	1	Type 'J'	1	Alloy 600	E	Exposed	A	GB/GB	A	Standard Plug
032	.032 inches	2	Type 'K'	2	304 S.S.	EE	Dual Exposed	B	GB/GB-SS	B	Hi-Temp Plug
040	.040 inches	3	Type 'T'	3	316 S.S.	E/HS	Exposed-Half Shield	C	TEX/TEX	C	Ceramic Plug
063	.063 inches	4	Type 'E'	4	310 S.S.	E/AT	Exposed-Aspirated Tip	D	TEX/TEX-SS	D	Miniature Plug
090	.090 inches	5	Type 'N'	5	321 S.S.	G	Grounded	E	TEX/TW/ALM/TEX	E	Miniature Hi-Temp Plug
125	.125 inches	X	Special	6	446 S.S.	GG	Dual Grounded	F	P/P	F	Miniature Ceramic Plug
188	.188 inches			7	MI2300	U	Ungrounded	G	P/TW/ALM/P	G	Standard Jack
250	.250 inches			X	Special	UU	Uncommon-Ungrounded	X	Special	H	Hi-Temp Jack
313	.313 inches					CU	Common-Ungrounded	For a physical description of wire construction, refer to thermocouple wire page in catalog.		J	Ceramic Jack
375	.375 inches									K	Miniature Jack
XXX	Special									L	Miniature Hi-Temp Jack
										M	Miniature Ceramic Jack
										N	Spade Lug
										P	Ring Lug
										R	Stripped Leads
										X	Special

Example:

Single Element MTC-B-06321-U-12-48A-SP-A

Style B, .063" ϕ , Type 'K', Alloy 600 sheath, ungrounded junction, 12" active length, 48" lead length, lead wire with fiberglass insulation, special limits of error, standard male connector.

Dual Element: MTC-BB-06321-UU-12-48A-SP-AA

Style B, .063" ϕ , Type 'K', Alloy 600 sheath, uncommon-ungrounded junction, 12" active length, 48" lead length, lead wire with fiberglass insulation, special limits of error, dual standard male connectors.



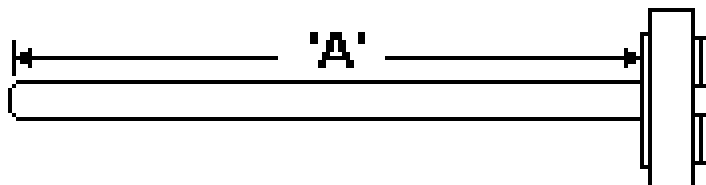
DURO-SENSE CORPORATION 869 Sandhill Ave., Carson, CA 90746

Phone: (310) 533-6877 -- Fax: (310) 533-0330 -- E-mail: sales@duro-sense.com -- Website: www.duro-sense.com

MINERAL INSULATED THERMOCOUPLES

Thermocouple Ordering Information

Style 'C'



Part #:	MTC-C-												
	Sheath Diameter (Table 1)	Calibration (Table 2)	Sheath Material (Table 3)	Junction (Table 4)	Length (inches)	SP* (Table 5)	Cold End Termination (Table 5)						

*SP = Special Limits of Error

If standard limits of error is desired, omit this field.

NOTE: Dual Element Style is notated as 'CC'

NOTE: For any additional modifications to this assembly, add "-MOD" to the end of the part number and provide a physical description of the modification.

Table 1

Sheath Diameter

P/N	Description
020	.020 inches
032	.032 inches
040	.040 inches
063	.063 inches
090	.090 inches
125	.125 inches
188	.188 inches
250	.250 inches
313	.313 inches
375	.375 inches

Table 2

Calibration

P/N	Description
1	Type 'J'
2	Type 'K'
3	Type 'T'
4	Type 'E'
5	Type 'N'
X	Special

Table 3

Sheath Material

P/N	Description
1	Alloy 600
2	304 S.S.
3	316 S.S.
4	310 S.S.
5	321 S.S.
6	446 S.S.
7	MI2300
X	Special

Table 4

Junction

P/N	Description
E	Exposed
EE	Dual Exposed
E/HS	Exposed-Half Shield
E/AT	Exposed-Aspirated Tip
G	Grounded
GG	Dual Grounded
U	Ungrounded
UU	Uncommon-Ungrounded
CU	Common-Ungrounded

Table 5

Cold End Termination

P/N	Description
1	Glass-Filled Polymer
2	Ceramic

Example:

Single Element MTC-C-06321-U-12-SP-1

Style C, .063" ϕ , Type 'K', Alloy 600 sheath, ungrounded junction, 12" active length, special limits of error. Glass-filled Nylon block.

Dual Element: MTC-CC-06321-UU-12-SP-1

Style C, .063" ϕ , Type 'K', Alloy 600 sheath, uncommon-ungrounded junction, 12" active length, special limits of error. Glass-filled Nylon block.



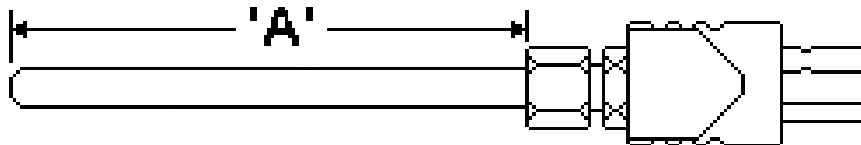
DURO-SENSE CORPORATION 869 Sandhill Ave., Carson, CA 90746

Phone: (310) 533-6877 -- Fax: (310) 533-0330 -- E-mail: sales@duro-sense.com -- Website: www.duro-sense.com

MINERAL INSULATED THERMOCOUPLES

Thermocouple Ordering Information

Style 'D'



Part #: **MTC-D-** - - - -

Sheath Diameter (Table 1) Calibration (Table 2) Sheath Material (Table 3) Junction (Table 4) Length (inches) SP* Cold End Termination

***SP** = Special Limits of Error

If standard limits of error is desired, omit this field.

NOTE: Dual Element Style is notated as 'DD'

NOTE: For any additional modifications to this assembly, add "-MOD" to the end of the part number and provide a physical description of the modification.

Table 1
Sheath Diameter

P/N	Description
020	.020 inches
032	.032 inches
040	.040 inches
063	.063 inches
090	.090 inches
125	.125 inches
188	.188 inches
250	.250 inches
313	.313 inches
375	.375 inches
XXX	Special

Table 2

Calibration

P/N	Description
1	Type 'J'
2	Type 'K'
3	Type 'T'
4	Type 'E'
5	Type 'N'
X	Special

Table 3
Sheath Material

P/N	Description
1	Alloy 600
2	304 S.S.
3	316 S.S.
4	310 S.S.
5	321 S.S.
6	446 S.S.
7	MI2300
X	Special

Table 4 Junction

P/N	Description
E	Exposed
EE	Dual Exposed
E/HS	Exposed-Half Shield
E/AT	Exposed-Aspirated Tip
G	Grounded
GG	Dual Grounded
U	Ungrounded
UU	Uncommon-Ungrounded
CU	Common-Ungrounded

Table 5
Cold End Termination

P/N	Description
A	Standard Plug
B	Hi-Temp Plug
C	Ceramic Plug
D	Miniature Plug
E	Miniature Hi-Temp Plug
F	Miniature Ceramic Plug
X	Special

Example:

Single Element MTC-D-06321-U-12-SP-B

Style D, .063" ϕ , Type 'K', Alloy 600 sheath, ungrounded junction, 12" active length, special limits of error, hi-temp male connector.

Dual Element: MTC-DD-06321-UU-12-SP-B

Style D, .063" ϕ , Type 'K', Alloy 600 sheath, uncommon-ungrounded junction, 12" active length, special limits of error, hi-temp male connectors.



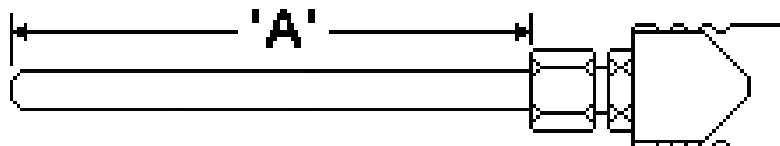
DURO-SENSE CORPORATION 869 Sandhill Ave., Carson, CA 90746

Phone: (310) 533-6877 -- Fax: (310) 533-0330 -- E-mail: sales@duro-sense.com -- Website: www.duro-sense.com

MINERAL INSULATED THERMOCOUPLES

Thermocouple Ordering Information

Style 'G'



Part #:	MTC-G-												
	Sheath Diameter (Table 1)	Calibration (Table 2)	Sheath Material (Table 3)	Junction (Table 4)	Length (inches)	SP*	Cold End Termination						

*SP = Special Limits of Error

If standard limits of error is desired, omit this field.

NOTE: Dual Element Style is notated as 'GG'

NOTE: For any additional modifications to this assembly, add "-MOD" to the end of the part number and provide a physical description of the modification.

Table 1
Sheath Diameter

P/N	Description
020	.020 inches
032	.032 inches
040	.040 inches
063	.063 inches
090	.090 inches
125	.125 inches
188	.188 inches
250	.250 inches
313	.313 inches
375	.375 inches
XXX	Special

Table 2
Calibration

P/N	Description
1	Type 'J'
2	Type 'K'
3	Type 'T'
4	Type 'E'
5	Type 'N'
X	Special

Table 3
Sheath Material

P/N	Description
1	Alloy 600
2	304 S.S.
3	316 S.S.
4	310 S.S.
5	321 S.S.
6	446 S.S.
7	MI2300
X	Special

Table 4
Junction

P/N	Description
E	Exposed
EE	Dual Exposed
E/HS	Exposed-Half Shield
E/AT	Exposed-Aspirated Tip
G	Grounded
GG	Dual Grounded
U	Ungrounded
UU	Uncommon-Ungrounded
CU	Common-Ungrounded

Table 5
Cold End Termination

P/N	Description
A	Standard Jack
B	Hi-Temp Jack
C	Ceramic Jack
D	Miniature Jack
E	Miniature Hi-Temp Jack
F	Miniature Ceramic Jack

Example:

Single Element MTC-G-06321-U-12-SP-B

Style G, .063" ϕ , Type 'K', Alloy 600 sheath, ungrounded junction, 12" active length, special limits of error, hi-temp female connector.

Dual Element: MTC-GG-06321-UU-12-SP-B

Style G, .063" ϕ , Type 'K', Alloy 600 sheath, uncommon-ungrounded junction, 12" active length, special limits of error, hi-temp female connectors.



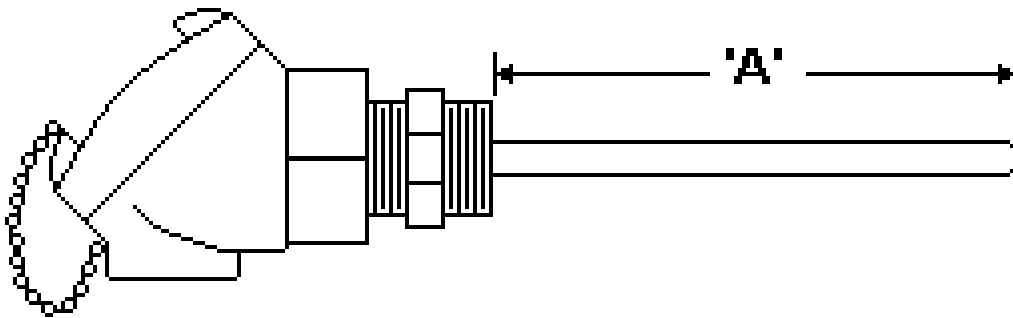
DURO-SENSE CORPORATION 869 Sandhill Ave., Carson, CA 90746

Phone: (310) 533-6877 -- Fax: (310) 533-0330 -- E-mail: sales@duro-sense.com -- Website: www.duro-sense.com

MINERAL INSULATED THERMOCOUPLES

Thermocouple Ordering Information

Style 'H'



Part #:MTC-H-													*SP = Special Limits of Error If standard limits of error is desired, omit this field.	
Sheath Diameter (Table 1)	Calibration (Table 2)	Sheath Material (Table 3)	Junction (Table 4)	Sheath Length (inches)	SP*	Process Fitting (Table 5)	Head Style (Table 6)							

NOTE: Dual Element Style is notated as 'HH'

NOTE: For any additional modifications to this assembly, add "-MOD" to the end of the part number and provide a physical description of the modification.

Table 1
Sheath Diameter

P/N	Description
020	.020 inches
032	.032 inches
040	.040 inches
063	.063 inches
090	.090 inches
125	.125 inches
188	.188 inches
250	.250 inches
313	.313 inches
375	.375 inches
XXX	Special

Table 2
Calibration

P/N	Description
1	Type 'J'
2	Type 'K'
3	Type 'T'
4	Type 'E'
5	Type 'N'
X	Special

Table 3
Sheath Material

P/N	Description
1	Alloy 600
2	304 S.S.
3	316 S.S.
4	310 S.S.
5	321 S.S.
6	446 S.S.
7	MI2300
X	Special

Table 4
Junction

P/N	Description
E	Exposed
EE	Dual Exposed
E/HS	Exposed-Half Shield
E/AT	Exposed-Aspirated Tip
G	Grounded
GG	Dual Grounded
U	Ungrounded
UU	Uncommon-Ungrounded
CU	Common-Ungrounded

Table 5
Process Fitting

P/N	Description
A	1/4" NPT
B	3/8" NPT
C	1/2" NPT
D	3/4" NPT
E	1" NPT
F	1 1/4" NPT
G	1 1/2" NPT
H	None
X	Special

Table 6
Connection Head

P/N	Description
A	Cast Aluminum
B	Miniature Aluminum
C	Cast Iron
D	Polypropylene
E	Miniature Plastic
F	Explosion Proof
G	Canister Style
X	Special

Example:

Single Element MTC-H-06321-U-12-SP-C-A

Style H, .063" ϕ , Type 'K', Alloy 600 sheath, ungrounded junction, 12" active length, special limits of error, 1/2" NPT process threads, cast aluminum head.

Dual Element: MTC-HH-06321-UU-12-SP-C-A

Style H, .063" ϕ , Type 'K', Alloy 600 sheath, uncommon-ungrounded junction, 12" active length, special limits of error, 1/2" NPT process threads, cast aluminum head.



DURO-SENSE CORPORATION 869 Sandhill Ave., Carson, CA 90746

Phone: (310) 533-6877 -- Fax: (310) 533-0330 -- E-mail: sales@duro-sense.com -- Website: www.duro-sense.com



Duro-Sense Corporation

A pair of hands is holding a tablet computer. The screen of the tablet displays the words 'TERMS & CONDITIONS' in a large, white, sans-serif font. The background of the screen is a gradient of blue and yellow. The tablet is held at an angle, and the hands are visible on the left and right sides. The background of the entire image is a geometric pattern of yellow and orange triangles.

**TERMS
& CONDITIONS**

**TERMS &
CONDITIONS**

TERMS AND CONDITIONS

WARRANTY:

Duro-Sense Corporation products and related parts are sold under the foregoing warranties, which extend only to the first buyer of said products as new merchandise directly from Duro-Sense Corporation or from an authorized distributor, representative or reseller.

Duro-Sense Corporation products and related parts are warranted to be free from defects in workmanship and material at the time of manufacture, and will conform to specifications set forth in relevant Duro-Sense Corporation catalog pages for such products.

Duro-Sense Corporation's sole and exclusive obligation and the purchaser's sole and exclusive remedy under the above warranty is limited to repair or replacement, at Duro-Sense Corporation's option. All claims hereunder shall be deemed waived unless made in writing, within thirty days of delivery, to Duro-Sense Corporation's main office at 869 Sandhill Avenue, Carson, CA 90746, and which, if so advised by Duro-Sense Corporation, are returned to the designated facility during normal business hours, transportation prepaid, and which, upon examination by Duro-Sense Corporation, are found to be non-compliant with the above warranty.

Duro-Sense Corporation sells products only under the above terms and conditions, which are expressly in lieu of all other warranties whatsoever, expressed, implied or statutory, including without limitation the implied warranties of merchantability and fitness for a particular purpose. Duro-Sense Corporation will not be bound by terms and conditions stated by any purchaser in any offer, acceptance or other contractual document, nor shall purchaser be entitled to incidental, special or consequential costs, expenses or damages excepting only the repair or replacement described above.

PAYMENT TERMS:

Net 30 Days (Pending Credit Approval). Account balances that are past due will be charged a \$1.00 service charge or a 1.5% finance charge per month, of the outstanding balance, whichever is greater.

ORDER MINIMUM:

\$25.00 Net per order.

PRICING:

Prices are subject to change without notice. There is no published price list. Please contact the sales department or your local sales representative for current pricing.



DURO-SENSE CORPORATION 869 Sandhill Ave., Carson, CA 90746

Phone: (310) 533-6877 -- Fax: (310) 533-0330 -- E-mail: sales@duro-sense.com -- Website: www.duro-sense.com

TERMS AND CONDITIONS

SHIPPING TERMS:

All orders are shipped F.O.B. Duro-Sense Corporation factory. All shipments are made prepaid and additional, unless otherwise negotiated in advance. Packing and handling charges are included in the shipping charges. Insurance charges are added only at the request of the purchaser.

Drop shipments will be made at the purchaser's request, providing that the invoice is issued to the "purchaser" and not to the "receiver".

Damage to shipments beyond the F.O.B. point is the responsibility of the carrier. Shipments should be opened promptly upon receipt and any claim for damage is to be initiated by the purchaser with the carrier. Replacement shipments will be made on a chargeable basis.

Each shipment should be examined by the purchaser promptly upon receipt. Any claims for shipment shortages must be made to Duro-Sense Corporation within 72 hours of receipt of shipment.

MATERIAL RETURNS:

Returns for credit, evaluation or repair will not be allowed without prior factory authorization. Purchaser must contact the factory for a "Return Merchandise Authorization" (RMA) number, and clearly describe the item, the reason for its return, the original purchase order number, order date, invoice number, and any other pertinent information germane to the item(s) in question.

RESTOCKING CHARGES:

Products and related parts that are returned to Duro-Sense Corporation in unused and like-new condition, that are returned for credit, will be subject to a minimum 20% restocking charge. The actual charges will be determined, by Duro-Sense Corporation, based on the type of material, its resale value and inspection and evaluation of the material in question.

CERTIFICATION:

N.I.S.T. traceable calibration and certification is available for thermocouples, RTD's and thermocouple wire. Certifications are limited to temperatures between -109°F and 2650°F (-78°C and 1454°C). Certifications are dependent upon calibration limitations of element materials and sheaths where applicable. The minimum sensor assembly length for certification is 18 inches of sheath length and the minimum length for certifying insulated thermocouple wire is 24 inches. Thermocouple wire is certified by making thermocouples from each end of the wire spool and evaluating them at specified temperatures. Lead-time for certification is dependent upon the quantity of items being certified as well as the capacity of the calibration laboratory at the time. Purchaser should contact Duro-Sense Corporation directly for current certification lead times.

COMPLIANCE:

Duro-Sense Corporation is dedicated to maintaining the highest level of quality in both manufacturing and testing. Duro-Sense Corporation operates under its own quality standard, DSQ-2000, which is compliant with the following quality and testing standards:

ISO-9001, AS-9100, MIL-I-45208, MIL-STD-45662A, ISO 10012-1:2003, ANSI/NCSS Z-540-3-2006, AMS2750E, ASTM E 220-7A, ASTM E 230-03, ASTM E 207-08, ANSI/ASQC Z1.4-1993.

Copies of the Duro-Sense Corporation quality manual and any existing certifications are available upon request.



DURO-SENSE CORPORATION 869 Sandhill Ave., Carson, CA 90746

Phone: (310) 533-6877 -- Fax: (310) 533-0330 -- E-mail: sales@duro-sense.com -- Website: www.duro-sense.com



Duro-Sense Corporation

**869 Sandhill Avenue
Carson, California 90746**

Phone: **(310) 533-6877**

Fax: **(310) 533-0330**

sales@duro-sense.com