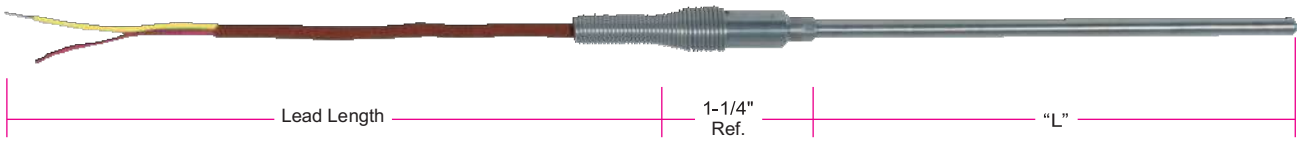
Style CMTA1 — Transition to Lead Wire (Custom Manufactured)



Ordering Information

Thermocouples are offered with the options listed in the work-sheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Optional Installation Compression Fitting See Box 13

Design Features

- Mineral insulated sheath provides flexibility to form and bend the thermocouple to meet design requirements.
- Stainless steel transition with optional Strain Relief Spring
- Standard epoxy potting transition provides greater moisture resistance rated to 450°F (232°C). Optional ceramic based potting rated to 1000°F (538°C). Ceramic potting not recommended with Teflon® leads, nor for high humidity applications.

Ordering Code:

	1	2	3	4	5	6	7	8	9	10	11	12	13	14
CMTA1 –														

Calibration Code *BOX 1*

ANSI Standard Tolerances	**J K E T N R S B**
Special Tolerances	**3 4 5 6 7**

Junction *BOX 8*

	Grounded	Ungrounded	Exposed
Single	**G**	**U**	**E**
Dual, common	**4**	**5**	**6**
Dual, isolated	—	**7**	**8**

Lead Wire Length *BOX 9*

In inches **001** to **999**
12" (012) Standard

Number of Conductors *BOX 2*

2 = Single (Standard)
4 = Duplex

Lead Wire Construction *BOX 10*

		w/ SS Overbraid	w/ SS Flex Armor
Fiberglass 900°F (482°C)	**S**	**B**	**A**
Teflon 400°F (204°C)	**T**	**D**	**F**

Depending on availability .040" to .125" uses 24 gauge lead wire. Larger than .125" thermo-couples use 20 gauge lead wire depending on availability and insulation type.

Insulation *BOX 3*

M = 96% min. MgO (Standard)
H = 99.4% min. MgO

Sheath Material *BOX 4*

A = Alloy 600
B = 304 SS
C = 316 SS

Lead Wire Termination *BOX 11*

P = Standard Male Plug
J = Standard Female Jack
K = Std. Plug with Mating Conn.
D = Miniature Male Plug
E = Miniature Female Jack
F = Miniature Plug with Mating Jack
B = Standard—2-1/2 in. Split Leads
S = 2-1/2 in. Split Leads with Spade Lugs
C = 2-1/2 in. Split Leads with BX connector and Spade Lugs
X = Other (Specify)

See page HK_ECA for Termination Style

Sheath O.D. *BOX 5*

A = .020" ±.001
B = .032" ±.001
C = .040" ±.001
D = .063" ±.001
E = .093" ±.002
F = .125" ±.002
G = .188" ±.002
H = .250" +.003/−.002
J = .313" +.003/−.002
K = .375"
L = 1.0mm ±.03
N = 1.5mm ±.03
P = 2.0 mm ±.03
Q = 3.0 mm ±.03
R = 4.5 mm ±.05
S = 6.0 mm
T = 8.0 mm
V = 9.0 mm

Strain Relief Spring *BOX 12*

O = Not Required
Y = Required

Optional Compression Fitting *BOX 13*

1 = 1/8" NPT SS
2 = 1/4" NPT SS
3 = 1/2" NPT SS
0 = None Required
4 = 1/8" NPT Brass
5 = 1/4" NPT Brass
6 = 1/2" NPT Brass

Sheath Length "L" *BOX 6*

Whole inches
01 to **99**
For lengths over 99 in. consult HK.

Special Requirements *BOX 14*

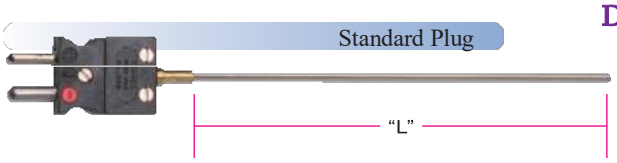
H = High temp potting 1000°F (538°C)
O = Standard Epoxy Potting 450°F (232°C)
X = Other (Specify)

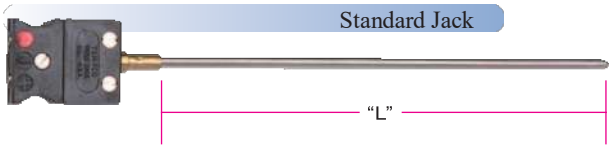
Sheath Length "L" *BOX 7*

Fractional inches

0 = 0"
1 = 1/8"
2 = 1/4"
3 = 3/8"
4 = 1/2"
5 = 5/8"
6 = 3/4"
7 = 7/8"

Style CMTA2 Plug or Jack Termination (Custom Manufactured)





Optional Installation Compression Fitting See Box 12

Design Features

- Pins are made with Matching thermocouple alloys.
- Standard plugs come with hollow pins as standard and solid pins as an option.
- Standard size and miniature plugs and jacks have a 350°F (177°C) continuous and 400°F (204°C) intermittent temperature rating.
- High temperature plugs and jacks are rated for 500°F (260°C) continuous operation and 550°F (288°C) intermittent (brown only).
- Ultra high temperature plugs and jacks are rated for 800°F (427°C) continuous operation and 1000°F (538°C) intermittent (all are reddish-brown in color).
- Dual element available for sheath O.D. of 0.063" to 0.375".
- 0.020" to 0.250" use crimp insert—0.313" and 0.375" use tube adapters.
- Miniature plugs have solid flat pins.

Ordering Information

Thermocouples are offered with the options listed in the work-sheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Ordering Code:

CMTA2 – [1] [2] [3] [4] [5] [6]–[7] [8] [9] [10] [11] [12] [13]

Calibration Code *BOX 1*

ANSI Standard Tolerances J K E T N R S B

Special Tolerances 3 4 5 6 7

Number of Conductors *BOX 2*

2 = Single (Standard)
4 = Duplex

Connector Type *BOX 9*

Standard Plugs and Jacks
P = Standard Plug
J = Standard Jack
K = Standard Plug w/Mating Jack
Miniature Plugs and Jacks (.188" max O.D.)
D = Miniature Plug
E = Miniature Jack
F = Miniature Plug w/Mating Jack

Insulation *BOX 3*

M = 96% min. MgO (Standard)
H = 99.4% min. MgO

Sheath Material *BOX 4*

A = Alloy 600 B = 304 SS C = 316 SS

Connector Temp Rating *BOX 10*

S = Standard 350°F (177°C)
H = High Temperature 500°F (260°C)
U = Ultra-High Temperature 800°F (427°C) (Miniature not available)

Sheath O.D. *BOX 5*

A = .020" ±.001
B = .032" ±.001
C = .040" ±.001
D = .063" ±.001
E = .092" ±.001
F = .125" ±.002
G = .188" ±.002
H = .250" +.003/−.002
J = .313" +.003/−.002
K = .375" +.003/−.002
L = 1.0mm ±.03
N = 1.5mm ±.03
P = 2.0mm ±.03
Q = 3.0mm ±.03
R = 4.5mm ±.05
S = 6.0mm +.07/−.05
T = 8.0mm
V = 9.0mm

Pin Option *BOX 11*

H = Hollow pins—std. S = Solid pins O = For Jack Termination

Sheath Length "L" *BOX 6*

Whole inches
01 to 99
For lengths over 99 in. consult HK.

Sheath Length "L" *BOX 7*

Fractional inches
0 = 0"
1 = 1/8"
2 = 1/4"
3 = 3/8"
4 = 1/2"
5 = 5/8"
6 = 3/4"
7 = 7/8"

Optional Compression Fitting *BOX 12*

1 = 1/8" NPT SS
2 = 1/4" NPT SS
3 = 1/2" NPT SS
4 = 1/8" NPT Brass
5 = 1/4" NPT Brass
6 = 1/2" NPT Brass
0 = None Required

Junction *BOX 8*

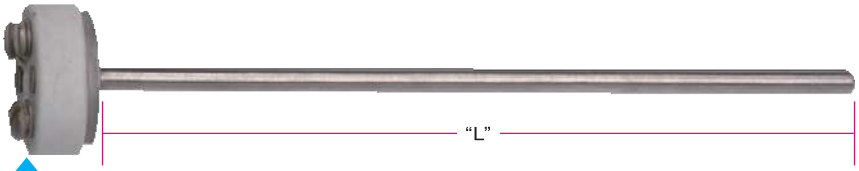
	Grounded	Ungrounded	Exposed
Single	G	U	E
Dual, common	4	5	6
Dual, isolated	7	8	

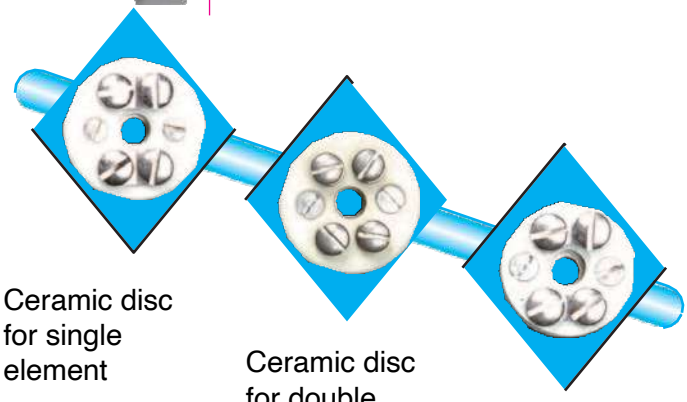
Special Requirements *BOX 13*

X = Specify
0 = None

Email: info@hkgco.com WWW.HKGCO.COM Tel: +1-989-501-9025

Style CMTA3 — Open Disc Termination





Ceramic disc for single element

Ceramic disc for double element

Silicon/fiber disc for single element

Design Features

- Economical termination with nickel plated brass inserts.
- Available in sheath diameters ranging from 0.063" to 0.250", single and duplex construction.

Optional Installation Compression Fitting See Box 10

Ordering Information

Thermocouples are offered with the options listed in the work-sheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Ordering Code: **CMTA3** – [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11]

Calibration Code *BOX 1*

ANSI Standard Tolerances	**J K E T N R S B**
Special Tolerances	**3 4 5 6 7**

Number of Conductors *BOX 2*

2 = Single (Standard)
4 = Duplex

Insulation *BOX 3*

M = 96% min. MgO (Standard)
H = 99.4% min. MgO

Sheath Material *BOX 4*

A = Alloy 600
B = 304 SS
C = 316 SS

Sheath O.D. *BOX 5*

D = .063" ±.001 **G** = .188" ±.002 **Q** = 3.0 mm ±.03
E = .092" ±.001 **H** = .250" +.003/–.002 **R** = 4.5 mm ±.05
F = .125" ±.002 **P** = 2.0 mm ±.03 **S** = 6.0 mm

Sheath Length "L" *BOX 6*

Whole inches
01 to **99**
For lengths over 99 in. consult HK.

Sheath Length "L" *BOX 7*

Fractional inches

0 = 0"	**3** = 3/8"	**6** = 3/4"
1 = 1/8"	**4** = 1/2"	**7** = 7/8"
2 = 1/4"	**5** = 5/8"	

Junction *BOX 8*

	Grounded	Ungrounded	Exposed
Single	**G**	**U**	**E**
Dual, common	**4**	**5**	**6**
Dual, isolated	—	**7**	**8**

Termination *BOX 9*

1* = Silicone/glass cloth to 350°F (177°C) 1" O.D. with Brass mounting plate
2 = Ceramic to 1000°F (538°C) 1-1/8" O.D. Single and Dual element with SS mounting plate
* Single element only

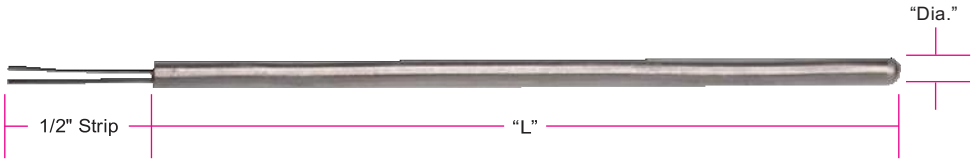
Optional Compression Fitting *BOX 10*

1 = 1/8" NPT SS	**4** = 1/8" NPT Brass
2 = 1/4" NPT SS	**5** = 1/4" NPT Brass
3 = 1/2" NPT SS	**6** = 1/2" NPT Brass
0 = None Required	

Special Requirements *BOX 11*

X = Specify
0 = None

Style CMTA4 Stripped Cold End (Custom Manufactured)



Design Features

- Standard strip length is ½ inch.
- Stripped end sealed with resin to inhibit moisture penetration.
- Duplex available from 0.063" to 0.375" diameter.

Ordering Information

Thermocouples are offered with the options listed in the work-sheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Optional Installation Compression Fitting See Box 10

Ordering Code: **CMTA4** – [1] [2] [3] [4] [5] [6]–[7] [8] [9] [10] [11]

Calibration Code *BOX 1*

ANSI Standard Tolerances	**J K E T N R S B**
Special Tolerances	**3 4 5 6 7**

Sheath Length "L" *BOX 6*

Whole inches
01 to **99**
For lengths over 99 in. consult HK.

Sheath Length "L" *BOX 7*

Fractional inches

0 = 0"	**3** = 3/8"	**6** = 3/4"
1 = 1/8"	**4** = 1/2"	**7** = 7/8"
2 = 1/4"	**5** = 5/8"	

Number of Conductors *BOX 2*

2 = Single (Standard)
4 = Duplex

Junction *BOX 8*

	Grounded	Ungrounded	Exposed
Single	**G**	**U**	**E**
Dual, common	**4**	**5**	**6**
Dual, isolated	—	**7**	**8**

Insulation *BOX 3*

M = 96% min. MgO (Standard)
H = 99.4% min. MgO

Strip Length *BOX 9*

S = 1/2" standard
1 = 1"
2 = 2"
3 = 3"
1" maximum on .040" and smaller

Sheath Material *BOX 4*

A = Alloy 600
B = 304 SS
C = 316 SS

Optional Compression Fitting *BOX 10*

1 = 1/8" NPT SS	**4** = 1/8" NPT Brass
2 = 1/4" NPT SS	**5** = 1/4" NPT Brass
3 = 1/2" NPT SS	**6** = 1/2" NPT Brass
0 = None Required	

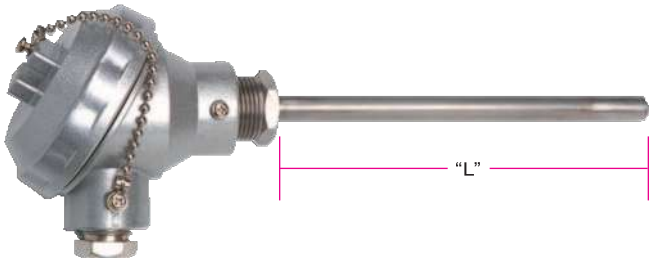
Sheath O.D. *BOX 5*

B = .032" ±.001 **H** = .250" +.003/−.002 **Q** = 3.0mm ±.03
C = .040" ±.001 **J** = .313" +.003/−.002 **R** = 4.5mm ±.05
D = .063" ±.001 **K** = .375" +.003/−.002 **S** = 6.0mm +.07/−.05
E = .092" ±.001 **L** = 1.0mm ±.03 **T** = 8.0mm
F = .125" ±.002 **N** = 1.5mm ±.03 **V** = 9.0mm
G = .188" ±.002 **P** = 2.0mm ±.03

Special Requirements *BOX 11*

X = Specify
0 = None

Style CMTA5 — Connection Head



Optional Installation Compression Fitting See Box 10

Design Features

- HK's connection heads are gasketed to seal against moisture, dust and corrosive or hostile atmospheres.
- Screw covers are attached to body with a plated chain.
- Covers have lugs for tightening or loosening with a screwdriver or wrench.
- Available in single (2-wire) or duplex (4-wire).
- HK's connection heads are available in die cast aluminum, Bakelite and cast iron in a variety of sizes from miniature for confined areas to the large universal head designed for heavy process and industrial applications.

Ordering Information

Thermocouples are offered with the options listed in the work-sheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Ordering Code: **CMTA5** – [1] [2] [3] [4] [5] [6] [7] [8] [9] [10] [11]

Calibration Code *BOX 1*

ANSI Standard Tolerances	**J K E T N R S B**
Special Tolerances	**3 4 5 6 7**

Insulation *BOX 3*

M = 96% min. MgO (Standard)
H = 99.4% min. MgO

Number of Conductors *BOX 2*

2 = Single (Standard)
4 = Duplex

Sheath Material *BOX 4*

A = Alloy 600
B = 304 SS
C = 316 SS

Sheath O.D. *BOX 5*

D = .063" ±.001
F = .125" ±.002
G = .188" ±.002
H = .250" +.003/−.002
J = .313"
K = .375"
P = 2.0 mm ±.03
Q = 3.0 mm ±.03
R = 4.5 mm ±.05
S = 6.0 mm +.07/−.05

Sheath Length "L" *BOX 6*

Whole inches
01 to **99**
For lengths over 99 in. consult HK.

Sheath Length "L" *BOX 7*

Fractional inches

0 = 0"
1 = 1/8"
2 = 1/4"
3 = 3/8"
4 = 1/2"
5 = 5/8"
6 = 3/4"
7 = 7/8"

Junction *BOX 8*

	Grounded	Ungrounded	Exposed
Single	**G**	**U**	**E**
Dual, common	**4**	**5**	**6**
Dual, isolated	—	**7**	**8**

Optional Compression Fitting *BOX 10*

1 = 1/8" NPT SS
2 = 1/4" NPT SS
3 = 1/2" NPT SS
0 = None Required
4 = 1/8" NPT Brass
5 = 1/4" NPT Brass
6 = 1/2" NPT Brass

Connection Head *BOX 9*

A = Standard Size Aluminum
B = Medium Size
C = Miniature Aluminum
H = Standard Cast Iron
F = Standard Bakelite
P = Polypropylene
N = Miniature Nickel Plated Steel
S = Stainless Steel

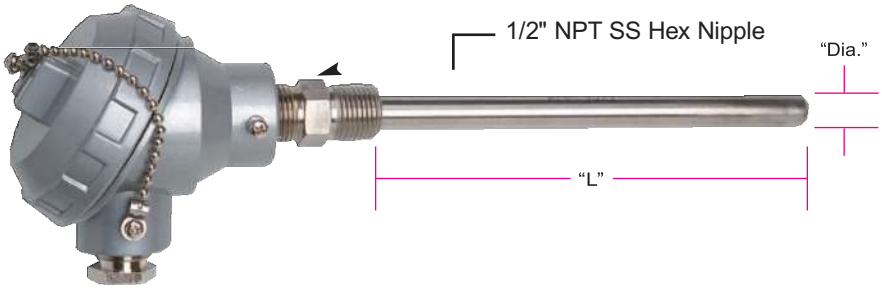
Note: Conduit connection for A, F, H & S is 1/2" (3/4" is available); for B & C is 3/8"; and for P is 3/4"

Please refer to Pg. 7 for all types of head

Special Requirements *BOX 11*

X = Specify
0 = None

Style CMTA6 (Custom Engineered/Manufactured)



Design Features

- 1/2" NPT Stainless Steel Process Connection.
- HK's connection heads are gasketed to seal against moisture, dust and corrosive or hostile atmospheres.
- Screw covers are attached to body with a plated chain.
- Covers have lugs for tightening or loosening with a screwdriver or wrench.
- Available in single (2-wire) or duplex (4-wire).
- HK's connection heads are available in die cast aluminum, Bakelite and cast iron in a variety of sizes from miniature for confined areas to the large universal head designed for heavy process and industrial applications.

Ordering Information

Thermocouples are offered with the options listed in the work-sheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Ordering Code: **CMTA6** – [1] [2] [3] [4] [5] [6]---[7] [8] [9] [10] [11]

Calibration Code *BOX 1*

ANSI Standard Tolerances	**J K E T N R S B**
Special Tolerances	**3 4 5 6 7**

Number of Conductors *BOX 2*

2 = Single (Standard)
4 = Duplex

Insulation *BOX 3*

M = 96% min. MgO (Standard)
H = 99.4% min. MgO

Sheath Material *BOX 4*

A = Alloy 600
B = 304 SS
C = 316 SS

Sheath O.D. *BOX 5*

D = .063" ±.001
F = .125" ±.002
G = .188" ±.002
H = .250" +.003/−.002
J = .313"
K = .375"
P = 2.0 mm ±.03
Q = 3.0 mm ±.03
R = 4.5 mm ±.05
S = 6.0 mm +.07/−.05

Sheath Length "L" *BOX 6*

Whole inches
01 to **99**
For lengths over 99 in. consult HK.

Sheath Length "L" *BOX 7*

Fractional inches

0 = 0"	**3** = 3/8"	**6** = 3/4"
1 = 1/8"	**4** = 1/2"	**7** = 7/8"
2 = 1/4"	**5** = 5/8"	

Junction *BOX 8*

	Grounded	Ungrounded	Exposed
Single	**G**	**U**	**E**
Dual, common	**4**	**5**	**6**
Dual, isolated	—	**7**	**8**

Connection Head *BOX 9*

A = Standard Size Aluminum
B = Medium Size Aluminum
C = Miniature Aluminum
H = Standard Cast Iron
S = Stainless Steel
F = Standard Bakelite
P = Polypropylene (FDA Approved)

Note: Conduit connection for A, F, H & S is 1/2" (3/4" is available); for B & C is 3/8"; and for P is 3/4"

Please refer to Pg. 7 for all types of head

Spring-Loaded Probe *BOX 10*

O = Not required
Y = Required

Special Requirements *BOX 11*

X = Specify
0 = None

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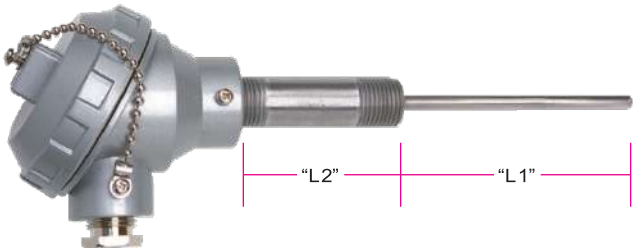
Style CMTA7 Connection Head with 1/2" NPT Pipe Nipple



Design Features

- HK's connection heads are gasketed to seal against moisture, dust and corrosive or hostile atmospheres.
- Screw covers are attached to body with a plated chain.
- Covers have lugs for tightening or loosening with a screwdriver or wrench.
- Available in single (2-wire) or duplex (4-wire).
- HK's connection heads are available in die cast aluminum, Bakelite and cast iron in a variety of sizes from miniature for confined areas to the large universal head designed for heavy process and industrial applications.
- Pipe nipple is galvanized steel.

Ordering Information

Thermocouples are offered with the options listed in the work-sheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Ordering Code:

	1	2	3	4	5	6	7	8	9	10	11	12
CMTA7 –												

Calibration Code *BOX 1*

ANSI Standard Tolerances	**J K E T N R S B**
Special Tolerances	**3 4 5 6 7**

Junction *BOX 8*

	Grounded	Ungrounded	Exposed
Single	**G**	**U**	**E**
Dual, common	**4**	**5**	**6**
Dual, isolated	—	**7**	**8**

Number of Conductors *BOX 2*

2 = Single (Standard)
4 = Duplex

Connection Head *BOX 9*

A = Standard Size Aluminum
B = Medium Size
C = Miniature
H = Standard Cast Iron
S = Stainless Steel
F = Standard Bakelite
P = Polypropylene (FDA Approved)

Note: Conduit connection for A, F, H & S is 1/2" (3/4" is available); for B & C is 3/8"; and for P is 3/4"

Please refer to Pg. 2 for all types of head

Insulation *BOX 3*

M = 96% min. MgO (Standard)
H = 99.4% min. MgO

Sheath Material *BOX 4*

A = Alloy 600
B = 304 SS
C = 316 SS

"L2" 1/2" NPT Nipple Length *BOX 10*

Whole inches **00** to **99**
For lengths over 99 in. consult HK.
Standard Lengths **S1** = 1", **S2** = 2-1/2", **S3** = 5-1/2"

Sheath O.D. *BOX 5*

F = .125" ±.002
G = .188" ±.002
H = .250" +.003/−.002
J = .313"
K = .375"
Q = 3.0 mm ±.03
R = 4.5 mm ±.05
S = 6.0 mm +.07/−.05

Spring-Loaded Probe *BOX 11*

O = Not required
Y = Required

Special Requirements *BOX 12*

X = Specify
0 = None

Sheath Length "L1" *BOX 6*

Whole inches
01 to **99**
For lengths over 99 in. consult HK.

Sheath Length "L1" *BOX 7*

Fractional inches
0 = 0"
1 = 1/8"
2 = 1/4"
3 = 3/8"
4 = 1/2"
5 = 5/8"
6 = 3/4"
7 = 7/8"

Style CMTA8 Connection Head with 1/2" NPT Nipple, Union, Nipple

Design Features

- HK's connection heads are gasketed to seal against moisture, dust and corrosive or hostile atmospheres.
- Screw covers are attached to body with a plated chain.
- Covers have lugs for tightening or loosening with a screwdriver or wrench.
- Available in single (2-wire) or duplex (4-wire).
- HK's connection heads are available in die cast aluminum, Bakelite and cast iron in a variety of sizes from miniature for confined areas to the large universal head designed for heavy process and industrial applications.
- Nipple-Union-Nipple is galvanized steel.

Ordering Information

Thermocouples are offered with the options listed in the work-sheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Ordering Code:

	1	2	3	4	5	6	7	8	9	10	11	12
CMTA8 –												

Calibration Code *BOX 1*

ANSI Standard Tolerances	**J K E T N R S B**
Special Tolerances	**3 4 5 6 7**

Number of Conductors *BOX 2*

2 = Single (Standard)
4 = Duplex

Insulation *BOX 3*

M = 96% min. MgO (Standard)
H = 99.4% min. MgO

Sheath Material *BOX 4*

A = Alloy 600
B = 304 SS
C = 316 SS

Sheath O.D. *BOX 5*

F = .125" ±.002
G = .188" ±.002
H = .250" +.003/−.002
J = .313"
K = .375"
Q = 3.0 mm ±.03
R = 4.5 mm ±.05
S = 6.0 mm +.07/−.05

Sheath Length "L1" *BOX 6*

Whole Inches
01 to **99**
For lengths over 99 in. consult HK

Sheath Length "L1" *BOX 7*

Fractional Inches
0 = 0"
1 = 1/8"
2 = ¼"
3 = 3/8"
4 = 1/2"
5 = 5/8"
6 = 3/4"
7 = 7/8"

Junction *BOX 8*

	Grounded	Ungrounded	Exposed
Single	**G**	**U**	**E**
Dual, common	**4**	**5**	**6**
Dual, isolated	—	**7**	**8**

Connection Head *BOX 9*

A = Standard Size Aluminum
B = Medium Size Aluminum
C = Miniature Aluminum
H = Standard Cast Iron
S = Stainless Steel
F = Standard Bakelite
P = Polypropylene (FDA Approved)

Note: Conduit connection for A, F, H & S is 1/2" (3/4" is available); for B & C is 3/8"; and for P is 3/4"

Please refer to Pg. 2 for all types of head

"L2" Dimension (in.) *BOX 10*

Nipple, Union, Nipple
Whole inches **03** to **99**
Standard Lengths **S1** = 3-1/2", **S2** = 6-1/2", **S3** = 12-1/2"

Spring-Loaded Probe *BOX 11*

O = Not required
Y = Required

Special Requirements *BOX 12*

X = Specify
0 = None

Connection Head(Temperature Sensor Enclosure)

Mini Head 1

Mini Head 2

Mini Head 3

Plastic Head

Small Bakelite Head

Weather Proof Head

Weather Proof Head(BIG)

Hinge Type Head

Imported Head 1

Imported Head 2

Imported Head 3

Imported Head 4

Flame Proof Head 1

Flame Proof Head 2
(II C APPROVED)

IP-65 HEAD

SS Head

SS Head (SMALL)

Stainless Steel(SS) Head 1

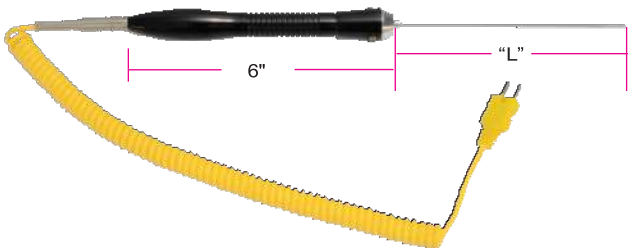
Stainless Steel(SS) Head 2

KNE Type Head

Contact : +91-22-26773837 Telefax : +91-22-66954779 Mobile : +91-9967642914

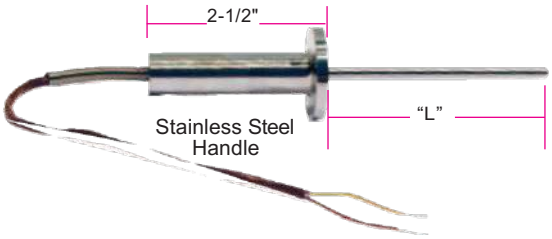
Style CMTA9 Handheld Probe

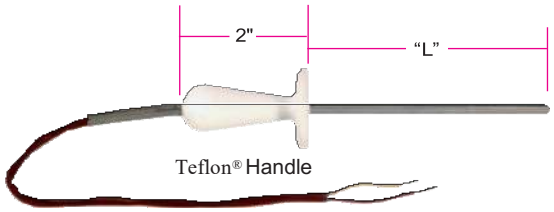
Bakelite Handle



Design Features

- Coil cord lengths are available only in 1 ft. (5 ft. extended) and 2 ft. (10 ft. extended).
- Coil cord construction is good to 221°F (105°C).
- Fiberglass lead construction is good to 900°F (482°C).
- Teflon® insulated lead construction is good to 392°F (200°C).





Ordering Information

Thermocouples are offered with the options listed in the work-sheet below. Create an ordering code by filling in the boxes with the appropriate number and/or letter designation for your requirements, and a part number will be assigned.

Ordering Code:

CMTA9 – [1] [2] [3] [4] [5] [6]–[7] [8] [9] [10]–[11] [12] [13] [14]

Calibration Code *BOX 1*

ANSI Standard Tolerances	**J**	**K**	**E**	**T**	**N**
Special Tolerances	**3**	**4**	**5**	**6**	**7**

Number of Conductors *BOX 2*

2 = Single
4 = Duplex

Insulation *BOX 3*

M = 96% min. MgO (Standard)
H = 99.4% min. MgO

Sheath Material *BOX 4*

A = Alloy 600
B = 304 SS
C = 316 SS

Sheath O.D. *BOX 5*

F = .125" ±.002
G = .188" ±.002
H = .250"

Sheath Length "L" *BOX 6*

Whole inches
01 to **99**
For lengths over 99 in. consult HK.

Sheath Length "L" *BOX 7*

Fractional inches

0 = 0"	**3** = 3/8"	**6** = 3/4"
1 = 1/8"	**4** = 1/2"	**7** = 7/8"
2 = 1/4"	**5** = 5/8"	

Junction *BOX 8*

	Grounded	Ungrounded	Exposed
Single	**G**	**U**	**E**
Dual, common	**4**	**5**	**6**
Dual, isolated	—	**7**	**8**

Tip *BOX 9*

R = Round Tip
D = Drill Point
F = Flat Tip
O = Exposed Junction

Lead Wire Length *BOX 10*

In inches **012** to **999**
For Coil Cords Enter 060 or 120

Lead Wire Construction *BOX 11*

		Overbraid	Flex Armor
Coil Cord	**C**	—	—
Fiberglass	**S**	**B**	**A**
Teflon®	**T**	**D**	**F**

Note: Coil cord insulation is PVC/Polyurethane with a temperature rating of 221°F (105°C).

Lead Wire Termination *BOX 12*

P = Standard Male Plug
J = Standard Female Jack
K = Std. Plug with Mating Jack
D = Mini Male Plug
E = Mini Female Jack
F = Mini Plug with Mating Jack
B = Std.— 2-1/2" Split Leads
S = Leads with Spade Lugs
C = 2-1/2" Split with BX connector and Spade Lugs

Handle Type *BOX 13*

1 = Stainless Steel
2 = Teflon® 500°F (260°C)
3 = Bakelite 400°F (204°C)

Special Requirements *BOX 14*

X = Specify
0 = None

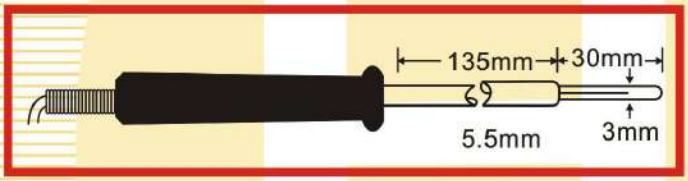
For more HK Handle probe designs please refer to Page 2 and 3

THERMOCOUPLE, RTD & M.I. HANDLE PROBES

GENERAL SPECIFICATIONS :-

- All portable handle probes available with black powder coated aluminium Handle or red anodized aluminium handle & cover or abonite handle.
- Some probes have PVC cap to cover the sensor entierly for safe storage.
- All probes come with an end spring which act as a strain relief for the cable.
- All probes come with an extension cable (original grade condoucter cable) pvc/pvc or teflon/teflon or compensating grade cable pvc/pvc.
- For end connection minature or standard plug or 3 - pin plug or single pin RF plug or only flying leads.
- Special design can be developed based on application.

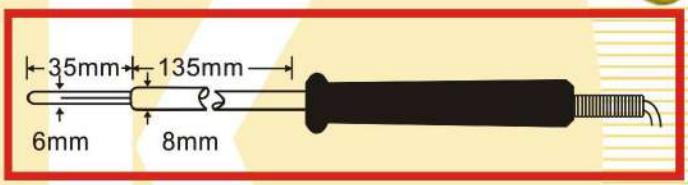
COMMERCIAL LEAF PROBE



Application : Instant temperature measurement of small object surface like electronic componants etc.

MAX. OPERATING TEMPERATURE : 400°C

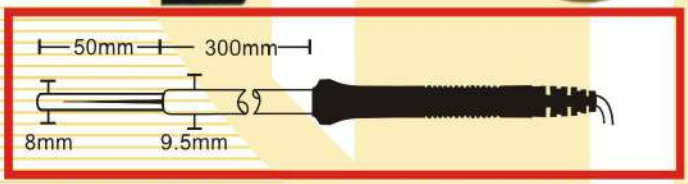
LEAF PROBE



Application : Widely used Probe for flat surface temperature measurement like Hot Plates, Moulds etc.

MAX. OPERATING TEMPERATURE : 600°C

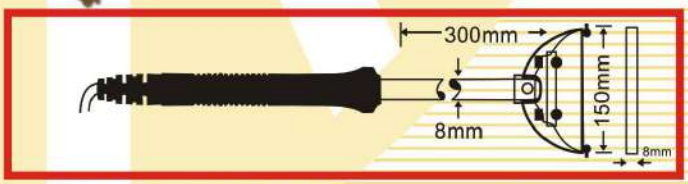
HIGH TEMPERATURE LEAF PROBE



Application : Useful for flat surface temperature measurement upto 800°C

MAX. OPERATING TEMPERATURE : 800°C

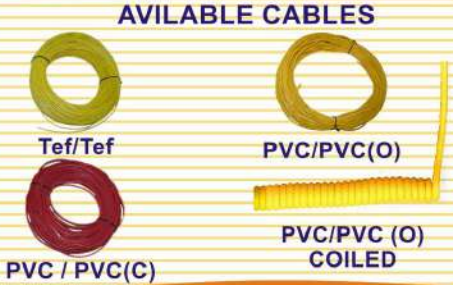
BOW PROBE



Application : Suitable for measurement of curved convex surface like Rollers, Bearing etc.

MAX. OPERATING TEMPERATURE : 800°C

AVILABLE CABLES



AVILABLE TERMINATIONS

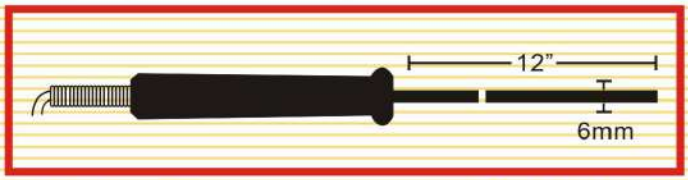
180°ADJUSTABLE BOW PROBE

HK TEMPSENSORS (INDIA)

Unit No. 16, Veena dalvi Industrial Estate, S. V. Road, Near Ajit Glass Factory, Jogeshwari (W), Mumbai - 400 102, INDIA.

Email: hktempsensorsindia@yahoo.in
Contact : +91-22-2678 7184
+91-22-2677 3837
Telefax : +91-22-6695 4779
Mobile : +91-9967642914

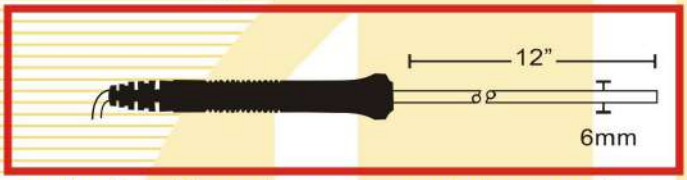
TEFLON COATED IMMERSION PROBE



Application : Temperature measurement of acidic liquids

MAX. OPERATING TEMPERATURE : 250°C

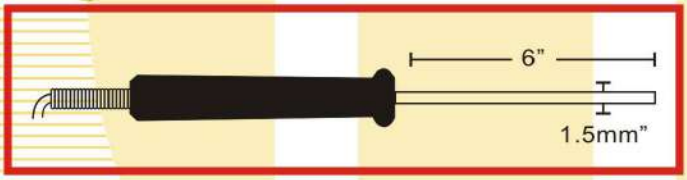
GENERAL PURPOSE IMMERSION PROBE



Application : Tempreture measurment of noncorrosive gases and non - acidic liquids

MAX. OPERATING TEMPERATURE : 600°C

NEEDLE PROBE

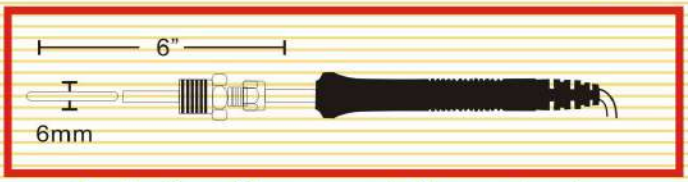


Application : Low diameter, Mineral Insulated (MI) thermocouple with ground junction for instant, accurate tempreture of gases and liquids

MAX. OPERATING TEMPERATURE : 600 C

(Note : For Measurement of high temperature, up to 1150 C, Inconel 600 M. I. In 6mm Dia up to 18" long thermocoupel is used.)

COMPRESSION FITTING PROBE



Application : Measurement of temperature in thermowell. Available BSP and NPT threads

MAX. OPERATING TEMPERATURE : 600°C

FLEXIBLE BID PROBE

ROLLER PROBE

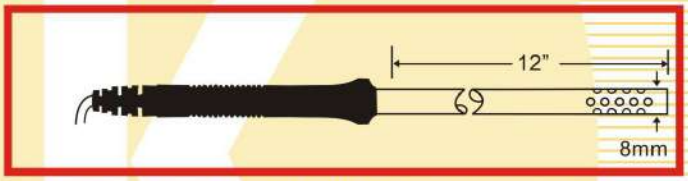
COMMERCIAL QUALTIY

MAX. OPERATING TEMPERATURE : 600°C

INDUSTRIAL QUALTIY

MAX. OPERATING TEMPERATURE : 600°C

GAS PROBE



Application : Exposed Junction thermocouple with perforated protection sheath for air or gas temperature in air - ducts, Chimneys, Chambers etc.

MAX. OPERATING TEMPERATURE : 800 C

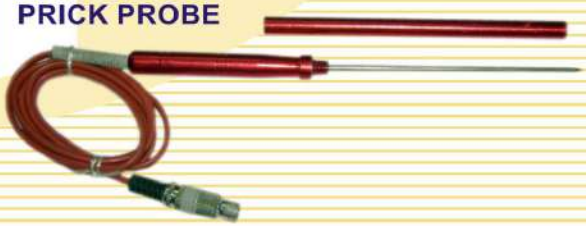
FAST RESPONSE SURFACE PROBE - L- Type

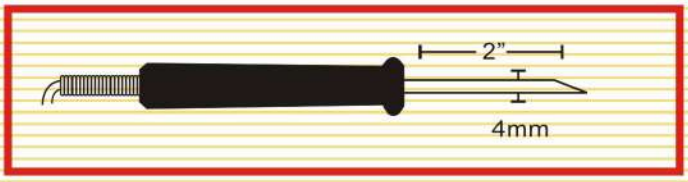
(With open sensing element)

Application : Instant temperature measurment of small object surface like electronic componants on PCB.

MAX. OPERATING TEMPERATURE : 400°C

PRICK PROBE





Application : Measurement of semisolid materials likes rubber oasters, frozen food, tyre and tread etc.

MAX. OPERATING TEMPERATURE : 400°C

Contact : +91-22-2678 7184 +91-22-2677 3837 Telefax : +91-22-6695 4779 / Mobile : +91-9967642914