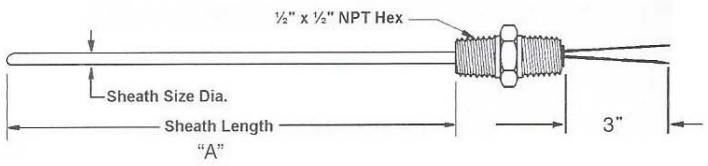
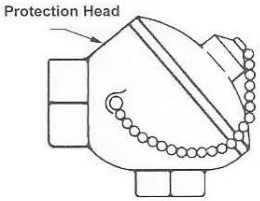
Measurement Solutions **480-897-0300** **info@measol.com** **www.MEASOL.com**

Mineral Insulated Thermocouples

Industrial Process





IP- ☐☐ - ☐☐ - ☐☐ - ☐ - ☐☐☐☐

Calibration*

Iron Constantan	**J**
Chromel Alumel	**K**
Chromel Constantan	**E**
Copper Constantan	**T**

*For additional calibrations call sales

Sheath Materials*

A .... 304SS **Q** .. Inconel 600
F .... 316SS **D** ... 310SS

*Consult sales for special sheath materials

Sheath O.D. (in)*

18 ..... .125 **14** ..... .250
316 ... .188 **516** ..... .313

*Consult sales for other diameters

Junction*

	Grounded	Ungrounded	Exposed
Single	**G**	**U**	**E**
Dual	**H**	**W**	**D**

*Dual ungrounded & exposed junctions are isolated

Transmitter Option

Omit if none needed. See ordering information on next page.

Termination

ST .... Stripped Leads, 3" bare leads are standard. Specify lead length in inches and "GG" or "TT" after code for glass or teflon leads.
CA .... Cast Aluminum Head
CI ..... Cast Iron Head
NY .... Nylon Head, Black
PW ... Polypropylene Head, White
EX .... Explosion Proof Head

See page 75 for head descriptions. Consult sales for additional options.

Fittings

See Table "B" on next page for ordering code. 1/2" x 1/2" NPT SS fitting (code "A") is standard.

Sheath Length "A"

Specify in inches

• Standard probe assemblies use 1/2"x1/2" NPT SS fitting brazed. Welded construction is available use fitting code "C".
• Spring loaded assembly is not sealed at process fitting.

See next page for pricing and discount schedule

Ordering example; **IP-KA-14U-12A-ST48GG** = Type "K" 304 stainless steel. 1/4" od, ungrounded junction. 12" A length with 1/2 x1/2" brazed fitting and 48" of fiberglass leads.

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Industrial Process (Cont'd)

Transmitter option; 1. **I** = Isolated or **N** = Non-isolated 2. & 3. **Temp. Range** (see table A below) 4. **°C** or **°F**

Example; | I | 0 | 200 | C | = Isolated 0-200 degrees C = 4-20mA

	Non-isolated	Isolated
T/C Input:	J, K, T, N	AE, B, E, J, K, N, R, S, T, U
Output:	4-20mA	4-20mA or 20-4mA
Ambient Temp.:	-40 to 185°F / -40 to 85°C	-40 to 185°F / -40 to 85°C
Power Supply:	6.5 to 32 VDC	6.5 to 36 VDC
Polarity Protection	Yes	Yes
Accuracy:	± 0.1% of span	± 0.1% of span
Calib. Accuracy:	± 0.1% of span	max. of 0.2°C or 0.1% of span
Long Term Stability	± 0.1% of span/year	± 0.1% of span/year
Connection:	up to 12 Awg. wire	up to 16 Awg. wire

Table A
Standard Ranges

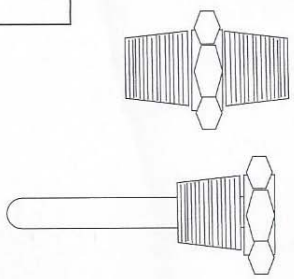
J	K	T
0 - 200°C	0 - 250°C	-50 - 100°C
0 - 500°C	0 - 500°C	0 - 200°C
0 - 760°C	0 - 1000°C	0 - 400°C
0 - 350°F	0 - 500°F	-60 - 200°F
0 - 1000°F	0 - 1000°F	0 - 400°F
0 - 1400°F	0 - 2000°F	0 - 760°F

Consult factory for other ranges.

Table B FITTINGS

Thread	Material	Sheath OD	Order Code
1/2"x1/2"	316SS	.125" to .313"	A
1/2"x1/2"	316SS	.125" to .250"	*B
1/2"x1/2"	316SS	.125" to .313"	**C
1/2" Single	316SS	.125" to .313"	D
1/4"x1/4"	316SS	.188" to .250"	E
1/4" Single	304SS	.062" to .250"	F
1/8" Single	304SS	.062" to .250"	G

** Spring Loaded Assembly*
*** 316SS welded fitting*



Standard orientation shown

Standard orientation for single threaded fittings is threads facing process. Add "X" after fitting order code for backwards fitting (threads facing lead end).

Industrial process thermocouples feature connection heads which provide superior dust and moisture protection. A variety of head styles are available depending upon your application. Optional head-mounted transmitters are also available.

Discount Schedule

1 - 9 units	Net
10 - 24 units	10%
25 and up	20%

P R I C I N G

*Basic (includes 1st 12" of sheath) *For dual element add $15 to basic		.062	.125	.188	.250	.313
		N/A	$26	$28	$31	$38
Add'l Sheath per inch Single Element	304SS	N/A	.15	.25	.45	.75
	Inc. 600	N/A	.20	.40	.55	1.05
Add'l Sheath Dual Element	304SS	N/A	.30	.40	.50	1.20
	Inc. 600	N/A	.35	.60	.80	1.30
Junction Adder	G,E,H	N/A	N/C	N/C	N/C	N/C
	U	N/A	$2	$2	$2	$2
	W,D	N/A	$6	$4	$4	$4
Protection Head Adder		CA	CI	NY	PW	EX
		$26	$26	$22	$25	$50
Fitting Adder		A	B	C,F,G	D	E
		N/C	$10	$5	$4	$9

Transmitter option add $99 for non-isolated or $189 for isolated.