

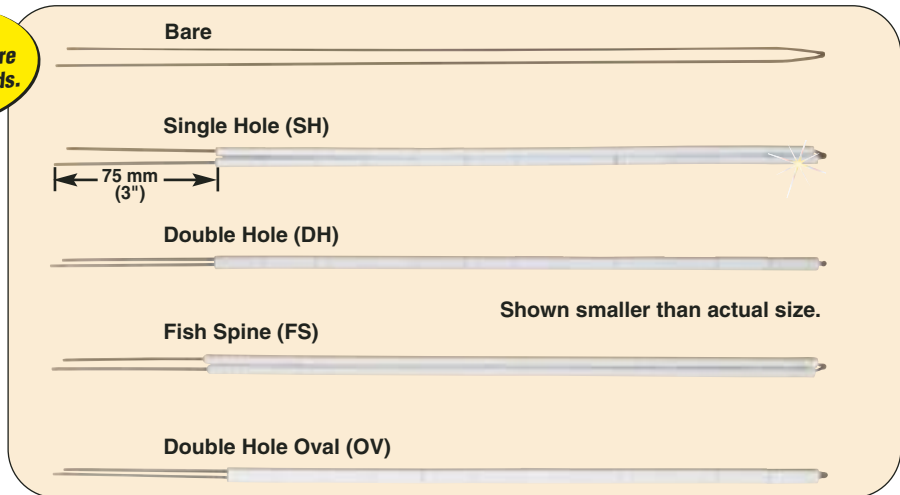
Thermocouple Elements

**MEETS OR EXCEEDS
SPECIAL LIMITS
OF ERROR (SLE)
AND EN 60584-2:
Tolerance Class 1**



See Page
A-148 For Spare
Insulator Beads.

OMEGA® thermocouples are precise temperature measuring elements and are made of the highest grade materials available. They are carefully assembled according to the highest standards set by the industry. OMEGA's thermocouples are checked against standard temperature-millivolt curves to assure calibration accuracy and are made from material that meets or exceeds both ANSI Special Limits of Error and EN 60584-2: Tolerance Class 1.



Iron-Constantan (J), CHROMEALOMEGA® (K), CHROMEALOMEGA®-Constantan (E) Thermocouple Wire, Copper-Constantan (T), OMEGALLOY®-NICROSIL-NISIL (N) MOST POPULAR MODELS HIGHLIGHTED!

Base Metal Thermocouples 300 mm (12") Long plus 76.2 (3") Leads Standard														
Type of Element	AWG Wire Size	Insulator Used	Type J Iron-Constantan	Price 300 mm (12" L)	Price Add'l 150 mm (6") or Fraction	Type K CHROMEALOMEGA	Price 300 mm (12" L)	Price Add'l 150 mm (6") or Fraction	Type T Copper-Constantan	Price 300 mm (12" L)	Price Add'l 150 mm (6") or Fraction	Type E CHROMEALOMEGA-Constantan	Price 300 mm (12" L)	Price Add'l 150 mm (6" L) or Fraction†
Bare	8		Bare-8-J-12	\$15	\$5	Bare-8-K-12	\$15	\$5	Bare-8-T-12	\$15	\$5	Bare-8-E-12	\$15	\$5
Wires	14	None	Bare-14-J-12	10	3	Bare-14-K-12	10	3	Bare-14-T-12	10	3	Bare-14-E-12	10	3
(No Insulators)	20		Bare-20-J-12	8	3	Bare-20-K-12	8	3	Bare-20-T-12	8	3	Bare-20-E-12	8	3
	24		Bare-24-J-12	8	3	Bare-24-K-12	8	3	Bare-24-T-12	8	3	Bare-24-E-12	8	3
With Single Hole Round Insulators	8	SH-1-8	SH-1-8-J-12	\$25	\$10	SH-1-8-K-12	\$25	\$10	SH-1-8-T-12	\$25	\$10	SH-1-8-E-12	\$25	\$10
	14	SH-1-14	SH-1-14-J-12	20	4	SH-1-14-K-12	20	4	SH-1-14-T-12	20	4	SH-1-14-E-12	20	4
	20	SH-1-20	SH-1-20-J-12	18	4	SH-1-20-K-12	18	4	SH-1-20-T-12	18	4	SH-1-20-E-12	18	4
	24	SH-1-24	SH-1-24-J-12	18	4	SH-1-24-K-12	18	4	SH-1-24-T-12	18	4	SH-1-24-E-12	18	4
With Double Hole Round Insulators	8	DH-1-8	DH-1-8-J-12	\$25	\$10	DH-1-8-K-12	\$25	\$10	DH-1-8-T-12	\$25	\$10	DH-1-8-E-12	\$25	\$10
	14	DH-1-14	DH-1-14-J-12	20	4	DH-1-14-K-12	20	4	DH-1-14-T-12	20	4	DH-1-14-E-12	20	4
	20	DH-1-20	DH-1-20-J-12	18	4	DH-1-20-K-12	18	4	DH-1-20-T-12	18	4	DH-1-20-E-12	18	4
	24	DH-1-24	DH-1-24-J-12	18	4	DH-1-24-K-12	18	4	DH-1-24-T-12	18	4	DH-1-24-E-12	18	4
With Single Hole Fish-Spine Insulators	8	FS-260-8	FS-260-8-J-12	\$25	\$10	FS-260-8-K-12	\$25	\$10	FS-260-8-T-12	\$25	\$10	FS-260-8-E-12	\$25	\$10
	14	FS-200-14	FS-200-14-J-12	20	4	FS-200-14-K-12	20	4	FS-200-14-T-12	20	4	FS-200-14-E-12	20	4
	20	FS-110-20	FS-110-20-J-12	18	4	FS-110-20-K-12	18	4	FS-110-20-T-12	18	4	FS-110-20-E-12	18	4
With Double Hole Oval Insulators	8	OV-1-8	OV-1-8-J-12	\$25	\$10	OV-1-8-K-12	\$25	\$10	OV-1-8-T-12	\$25	\$10	OV-1-8-E-12	\$25	\$10
	14	OV-1-14	OV-1-14-J-12	20	4	OV-1-14-K-12	20	4	OV-1-14-T-12	20	4	OV-1-14-E-12	20	4
	20	OV-1-20	OV-1-20-J-12	18	4	OV-1-20-K-12	18	4	OV-1-20-T-12	18	4	OV-1-20-E-12	18	4

† Optional lengths available. When ordering, change the last digits (-12) to show actual length desired in inches and fractions or millimeters. Over 5', consult Sales Department for pricing.

Note: For R, S and B thermocouples, see page with RAT, SAT, BAT series.

Insulator Dimensional Chart

Dimensions: mm (in)

AWG Wire Size	Single Hole (SH)		Double Hole (DH)		Fish Spine (FS)		Double Hole Oval (OV)	
	SH OD (Indv'l)	Well ID*	DH OD	Well ID*	FS OD (Indv'l)	Well ID*	DH OD	Well ID*
8	6.35 (0.250)	13.33 (0.525)	11.91 (0.469)	12.42 (0.489)	6.60 (0.260)	13.84 (0.545)	11.91 (0.469)	12.42 (0.489)
14	4.77 (0.188)	10.16 (0.400)	7.14 (0.281)	7.67 (0.302)	5.08 (0.200)	10.79 (0.425)	7.29 (0.312)	8.43 (0.332)
20	3.17 (0.125)	6.98 (0.275)	3.96 (0.156)	4.47 (0.176)	2.80 (0.110)	6.22 (0.245)	4.37 (0.172)	4.87 (0.192)
24	1.60 (0.063)	3.81 (0.150)	3.17 (0.125)	3.68 (0.145)	-	-	-	-

* Recommended minimum well, tube or hole ID

Note: For all bead dimensions, see page A-149.

Ordering Examples: DH-1-14-K-12, 14 AWG Type K thermocouple, 300 mm (12") long with double hole (DH) type ceramic bead insulators, \$20. BARE-20-K-18, 20 AWG Type K thermocouple, 600 mm (18") bare wire (BARE), \$8 + 3 = \$11.

Insulation Temperature Ratings ¹	
XC	1200°C (2200°F)
SH	1600°C (2900°F)
DH	1600°C (2900°F)
FS	1200°C (2200°F)
OV	1600°C (2900°F)

¹ Insulation only. Check operating limits of wire.

Note: XE Nextel braided ceramic sleeving.

New Sizes Available! See Page A-147



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