

# OMEGACLAD® Thermocouple Wire Magnesium Oxide Insulation Metal Sheathed

0.010 to 0.312 inch Diameter

**MADE WITH HIGH PURITY  
MAGNESIUM OXIDE (MgO)**

OMEGACLAD® metal-sheathed thermocouple wire containing inert, non-vitrified insulation is used in the manufacture of thermocouple probes. It can also be used as extension wire.

Discount Schedule for OMEGACLAD®					
Dia. 1 mm or 0.040" and above			Dia. 0.8 mm or 0.032" and below		
Metric	Feet	Net	Metric	Feet	Net
0 to 3 m	0 to 10'		0 to 7.5 m	0 to 24'	
3.1 to 7.5 m	11 to 25'	10%	7.6 to 30 m	25 to 99'	10%
7.6 to 15 m	26 to 50'	25%	30.1 to 75 m	100 to 249'	25%
15.1 to 30 m	51 to 100'	30%	Over 75 m	Over 249'	30%
30.1 to 150 m	101 to 500'	35%			
151 to 300 m	501 to 1000'	40%			
Over 300 m	Over 1,000'	45%			

Continuous Lengths from 5 feet to thousands of feet.



**Type N  
Available with  
Inconel Sheath**

## MOST POPULAR MODELS HIGHLIGHTED!

TYPICAL APPLICATION OMEGACLAD® wire used as extension wire feedthrough with a compression fitting.

- Available in 304, 310, 316, and 321 Stainless Steel, Inconel 600 or Hastelloy X, and Super OMEGACLAD® XL
- Withstands Vibration, High Temperatures and Pressures
- Easily Formed, Durable
- Highest Quality
- Can Be Welded

**Heavy Wall  
OMEGACLAD®  
Consult Custom  
Engineering.**

Available in these sizes:

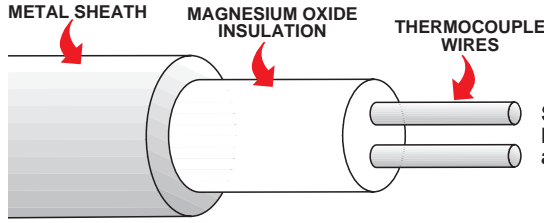


Model Number	Wire Calibration	Sheath Material	Sheath Diameter (in)	Wall Thickness (in)	Resistance at 60°F Ω/ Dbl. ft.	Wire Diameter (in)	AWG Gage
304-J-MO-020-(*)	Iron-Constantan <b>J</b>	304 Stainless Steel	0.020	0.003	23	0.004	38
304-J-MO-032-(*)			0.032	0.005	14.2	0.005	36
304-J-MO-040-(*)			0.040	0.007	8.9	0.006	34
304-J-MO-062-(*)			0.062	0.010	3.6	0.010	30
304-J-MO-125-(*)			0.125	0.018	0.88	0.020	24
304-J-MO-188-(*)			0.188	0.025	0.36	0.032	20
304-J-MO-250-(*)	0.250	0.036	0.22	0.040	18		
INC-J-MO-020-(*)	Iron-Constantan <b>J</b>	Inconel 600	0.020	0.003	23	0.004	38
INC-J-MO-032-(*)			0.032	0.005	14.2	0.005	36
INC-J-MO-040-(*)			0.040	0.007	8.9	0.006	34
INC-J-MO-062-(*)			0.062	0.010	3.6	0.010	30
INC-J-MO-125-(*)			0.125	0.018	0.88	0.020	24
INC-J-MO-188-(*)			0.188	0.025	0.36	0.032	20
INC-J-MO-250-(*)	0.250	0.036	0.22	0.040	18		
304-K-MO-010-(*)	CHROMEQA®-ALOMEGA® <b>K</b>	304 Stainless Steel	0.010	0.0015	600	0.0015	50
304-K-MO-020-(*)			0.020	0.003	38	0.004	38
304-K-MO-032-(*)			0.032	0.005	24.1	0.005	36
304-K-MO-040-(*)			0.040	0.007	15	0.006	34
304-K-MO-062-(*)			0.062	0.010	6.0	0.010	30
304-K-MO-125-(*)			0.125	0.018	1.5	0.020	24
304-K-MO-188-(*)	0.188	0.025	0.59	0.032	20		
304-K-MO-250-(*)	0.250	0.036	0.37	0.040	18		
INC-K-MO-010-(*)	CHROMEQA®-ALOMEGA® or OMEGA-P® OMEGA-N® <b>K or N†</b>	Inconel 600	0.010	0.0015	600	0.0015	50
INC-K-MO-020-(*)			0.020	0.003	38	0.004	38
INC-K-MO-032-(*)			0.032	0.005	24.1	0.005	36
INC-K-MO-040-(*)			0.040	0.007	15	0.006	34
INC-K-MO-062-(*)			0.062	0.010	6.0	0.010	30
INC-K-MO-125-(*)			0.125	0.018	1.5	0.020	24
INC-K-MO-188-(*)	0.188	0.025	0.59	0.032	20		
INC-K-MO-250-(*)	0.250	0.036	0.37	0.040	18		
INC-K-MO-312-(*)	0.312	0.040	0.37	0.044	18		
304-T-MO-020-(*)	Copper-Copper-Constantan <b>T</b>	304 Stainless Steel	0.020	0.003	20	0.004	38
304-T-MO-032-(*)			0.032	0.005	12.2	0.005	36
304-T-MO-040-(*)			0.040	0.007	7.7	0.006	34
304-T-MO-062-(*)			0.062	0.010	3.0	0.010	30
304-T-MO-125-(*)			0.125	0.018	0.75	0.020	24
304-T-MO-188-(*)			0.188	0.025	0.298	0.032	20
304-T-MO-250-(*)	0.250	0.036	0.19	0.040	18		
INC-T-MO-020-(*)	Copper-Constantan <b>T</b>	Inconel 600	0.020	0.003	19.99	0.004	38
INC-T-MO-032-(*)			0.032	0.005	12.2	0.005	36
INC-T-MO-040-(*)			0.040	0.007	7.66	0.006	34
INC-T-MO-062-(*)			0.062	0.010	3.04	0.010	30
INC-T-MO-125-(*)			0.125	0.018	0.75	0.020	24
INC-T-MO-188-(*)			0.188	0.025	0.19	0.032	20
INC-T-MO-250-(*)	0.250	0.036	0.19	0.040	18		
304-E-MO-010-(*)	CHROMEQA®-Constantan <b>E</b>	304 Stainless Steel	0.010	0.0015	716.9	0.0015	50
304-E-MO-020-(*)			0.020	0.003	45.1	0.004	38
304-E-MO-032-(*)			0.032	0.005	28.8	0.005	36
304-E-MO-040-(*)			0.040	0.007	18.09	0.006	34
304-E-MO-062-(*)			0.062	0.010	7.17	0.010	30
304-E-MO-125-(*)			0.125	0.018	1.78	0.020	24
304-E-MO-188-(*)	0.188	0.025	0.71	0.032	20		
304-E-MO-250-(*)	0.250	0.036	0.45	0.040	18		
INC-E-MO-010-(*)	CHROMEQA®-Constantan <b>E</b>	Inconel 600	0.010	0.0015	716.9	0.0015	50
INC-E-MO-020-(*)			0.020	0.003	45.1	0.004	38
INC-E-MO-032-(*)			0.032	0.005	28.8	0.005	36
INC-E-MO-040-(*)			0.040	0.007	18.09	0.006	34
INC-E-MO-062-(*)			0.062	0.010	7.17	0.010	30
INC-E-MO-125-(*)			0.125	0.018	1.78	0.020	24
INC-E-MO-188-(*)	0.188	0.025	0.71	0.032	20		
INC-E-MO-250-(*)	0.250	0.036	0.45	0.040	18		

\* Specify length in feet. 5' minimum order. † For Type N, change "K" in model number to "N", no extra charge. For 310, 316 or 321 stainless steel sheath, change "304" in the model number to "310", "316" or "321"; no additional charge. For SUPER OMEGACLAD® XL, change "304" in the model number to "XL"; consult Sales for price. For Hastelloy-X, change "304" in the model number to "HASTX"; consult Sales for price. For Special Limits of Error, add suffix "SLE" to the model number; add 20% to price.  
Ordering Examples: 1.) 304-K-MO-062-125, Inconel 600 sheath, Type K or N wire, CHROMEQA®-ALOMEGA® insulation, 0.125" cable OD, 25'. 2.) INC-N-MO-125-25, Inconel 600 sheath, Type N wire, MgO insulation, 0.125" cable OD, 25' \$3.15 x 25 x 0.9.

# Metric OMEGACLAD® Thermocouple Wire

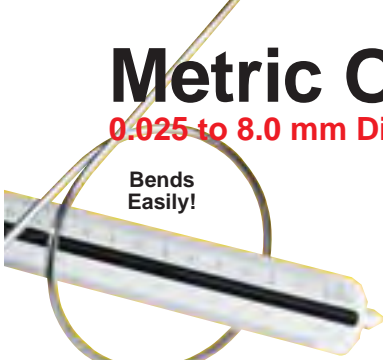
0.025 to 8.0 mm Dia.



Shown larger than actual size.

Available with 304SS, 316SS, 321SS, INCONEL 600, Hastelloy-X and SUPER OMEGACLAD® XL Sheaths!

Bends Easily!



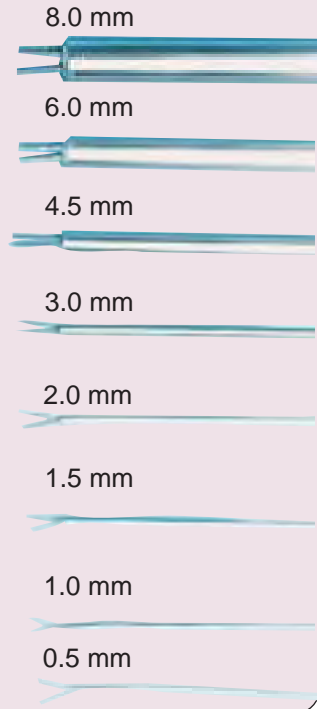
Available!



Type N Available with Inconel Sheath

MADE WITH HIGH PURITY MAGNESIUM OXIDE (MgO)

Available in these sizes:



Technical Notes:  
Compacted magnesium oxide is hygroscopic (absorbs moisture)

Custom Assemblies:  
Special sheathing, insulation and thermocouple alloys are available on special order. Consult Sales Department for price and delivery.

Important Ordering Note:  
OMEGACLAD® wire will be supplied to ±10% of specified length. Prices will be adjusted accordingly.

**MOST POPULAR MODELS HIGHLIGHTED!**

Model Number	Wire Calibration	Sheath Material	Sheath Diameter mm	Wall Thickness mm	Resistance 15.5°C Ohm/dbl. meter	Wire Diameter mm
304-J-MO-0.25MM-(*)	<b>J</b>	304 Stainless Steel	0.25	0.04	1181	0.04
304-J-MO-0.5MM-(*)			0.5	0.08	98	0.09
304-J-MO-0.75MM-(*)			0.75	0.13	46	0.13
304-J-MO-1.0MM-(*)			1.0	0.15	26	0.18
304-J-MO-1.5MM-(*)			1.5	0.25	12	0.25
304-J-MO-2.0MM-(*)			2.0	0.31	6.9	0.36
304-J-MO-3.0MM-(*)			3.0	0.46	4.6	0.56
304-J-MO-4.5MM-(*)			4.5	0.66	1.5	0.79
304-J-MO-6.0MM-(*)			6.0	0.94	0.82	1.02
INC-J-MO-0.25MM-(*)	<b>J</b>	Inconel® 600	0.25	0.04	1181	0.04
INC-J-MO-0.5MM-(*)			0.5	0.08	98	0.09
INC-J-MO-0.75MM-(*)			0.75	0.13	46	0.13
INC-J-MO-1.0MM-(*)			1.0	0.15	26	0.18
INC-J-MO-1.5MM-(*)			1.5	0.25	12	0.25
INC-J-MO-2.0MM-(*)			2.0	0.31	6.9	0.36
INC-J-MO-3.0MM-(*)			3.0	0.46	4.6	0.56
INC-J-MO-4.5MM-(*)			4.5	0.66	1.5	0.79
INC-J-MO-6.0MM-(*)			6.0	0.94	0.82	1.02
304-K-MO-0.25MM-(*)	<b>K</b>	304 Stainless Steel	0.25	0.04	1968	0.04
304-K-MO-0.5MM-(*)			0.5	0.08	174	0.09
304-K-MO-0.75MM-(*)			0.75	0.13	79	0.13
304-K-MO-1.0MM-(*)			1.0	0.15	43	0.18
304-K-MO-1.5MM-(*)			1.5	0.25	19	0.25
304-K-MO-2.0MM-(*)			2.0	0.32	11	0.36
304-K-MO-3.0MM-(*)			3.0	0.46	4.9	0.56
304-K-MO-4.5MM-(*)			4.5	0.66	2.2	0.79
304-K-MO-6.0MM-(*)			6.0	0.94	1.2	1.02
INC-K-MO-0.25MM-(*)	<b>K or N<sup>†</sup></b>	Inconel® 600	0.25	0.04	1968	0.04
INC-K-MO-0.5MM-(*)			0.5	0.08	174	0.09
INC-K-MO-0.75MM-(*)			0.75	0.13	79	0.13
INC-K-MO-1.0MM-(*)			1.0	0.15	43	0.18
INC-K-MO-1.5MM-(*)			1.5	0.25	19	0.25
INC-K-MO-2.0MM-(*)			2.0	0.31	11	0.36
INC-K-MO-3.0MM-(*)			3.0	0.46	4.9	0.56
INC-K-MO-4.5MM-(*)			4.5	0.66	2.2	0.79
INC-K-MO-6.0MM-(*)			6.0	0.94	1.2	1.01
INC-K-MO-8.0MM-(*)	8.0	1.01	1.2	1.11		
304-T-MO-0.25MM-(*)	<b>T</b>	304 Stainless Steel	0.25	0.04	1043	0.04
304-T-MO-0.5MM-(*)			0.5	0.08	66	0.09
304-T-MO-0.75MM-(*)			0.75	0.13	39	0.13
304-T-MO-1.0MM-(*)			1.0	0.15	24	0.18
304-T-MO-1.5MM-(*)			1.5	0.25	9.8	0.25
304-T-MO-2.0MM-(*)			2.0	0.31	5.6	0.36
304-T-MO-3.0MM-(*)			3.0	0.46	2.5	0.56
304-T-MO-4.5MM-(*)			4.5	0.66	1.2	0.79
304-T-MO-6.0MM-(*)			6.0	0.94	0.65	1.02
INC-T-MO-0.5MM-(*)	<b>T</b>	Inconel® 600	0.5	0.08	66	0.09
INC-T-MO-0.75MM-(*)			0.75	0.13	39	0.13
INC-T-MO-1.0MM-(*)			1.0	0.15	24	0.18
INC-T-MO-1.5MM-(*)			1.5	0.25	9.8	0.25
INC-T-MO-2.0MM-(*)			2.0	0.31	5.6	0.36
INC-T-MO-3.0MM-(*)			3.0	0.46	2.5	0.56
INC-T-MO-4.5MM-(*)			4.5	0.66	1.2	0.79
INC-T-MO-6.0MM-(*)			6.0	0.94	0.65	1.02
304-E-MO-0.25MM-(*)			<b>E</b>	304 Stainless Steel	0.25	0.04
304-E-MO-0.5MM-(*)	0.5	0.08			190	0.09
304-E-MO-0.75MM-(*)	0.75	0.13			95	0.13
304-E-MO-1.0MM-(*)	1.0	0.15			49	0.18
304-E-MO-1.5MM-(*)	1.5	0.25			20	0.25
304-E-MO-2.0MM-(*)	2.0	0.31			11	0.36
304-E-MO-3.0MM-(*)	3.0	0.46			5.2	0.56
304-E-MO-4.5MM-(*)	4.5	0.66			3.0	0.79
304-E-MO-6.0MM-(*)	6.0	0.94			1.6	1.02
INC-E-MO-0.25MM-(*)	<b>E</b>	Inconel® 600	0.25	0.04	2352	0.04
INC-E-MO-0.5MM-(*)			0.5	0.08	190	0.09
INC-E-MO-0.75MM-(*)			0.75	0.13	95	0.13
INC-E-MO-1.0MM-(*)			1.0	0.15	49	0.18
INC-E-MO-1.5MM-(*)			1.5	0.25	20	0.25
INC-E-MO-2.0MM-(*)			2.0	0.31	11	0.36
INC-E-MO-3.0MM-(*)			3.0	0.46	5.2	0.56
INC-E-MO-4.5MM-(*)			4.5	0.66	3.0	0.7
INC-E-MO-6.0MM-(*)			6.0	0.94	1.6	1.02

\* Specify length in meters (5 meters, minimum order). † For Type N change "K" in model number to "N", same price. For 310, 316 or 321 stainless steel sheath, change "304" in the Model Number to "310", "316" or "321"; no additional charge. For Hastelloy-X, change "304" in the Model Number to "HASTX"; consult Sales for price. For Special Limits of Error, add suffix "SLE" to the Model Number; add 20% to price. **Ordering Example: 304-K-MO-1.5MM-10**, 10 m of type K CHROMEAGA®-ALOMEGA® wire with 304 SS sheath, 1.5 mm diameter.

# omega.co.uk®

Your One-Stop Source for Process Measurement and Control!

Freephone 0800 488 488 | International +44(0) 161 777 6622 | Fax +44(0) 161 777 6622 | Sales@omega.co.uk

[www.omega.co.uk](http://www.omega.co.uk)



#### UNITED STATES

[www.omega.com](http://www.omega.com)

1-800-TC-OMEGA  
Stamford, CT.

#### UNITED KINGDOM

[www.omega.co.uk](http://www.omega.co.uk)

Manchester, England  
0800-488-488  
+44-(0)161-777-6611

#### CANADA

[www.omega.ca](http://www.omega.ca)

Laval(Quebec)  
1-800-TC-OMEGA

#### FRANCE

[www.omega.fr](http://www.omega.fr)

0800-466-342

#### GERMANY

[www.omega.de](http://www.omega.de)

Deckenfronn, Germany  
0800-8266342

#### BENELUX

[www.omega.nl](http://www.omega.nl)

0800-099-33-44



## More than 100,000 Products Available!

### • Temperature

Calibrators, Connectors, General Test and Measurement Instruments, Handheld Instruments for Temperature Measurement, Ice Point References, Indicating Labels, Crayons, Cements and Lacquers, Infrared Temperature Measurement Instruments, Recorders, Relative Humidity Measurement Instruments, PT100 Probes, PT100 Elements, Temperature & Process Meters, Timers and Counters, Temperature and Process Controllers and Power Switching Devices, Thermistor Elements, Probes and Assemblies, Thermocouples, Thermowells and Head and Well Assemblies, Transmitters, Thermocouple Wire, RTD Probes

### • Flow and Level

Air Velocity Indicators, Doppler Flowmeters, Level Measurement, Magnetic Flowmeters, Mass Flowmeters, Pitot Tubes, Pumps, Rotameters, Turbine and Paddle Wheel Flowmeters, Ultrasonic Flowmeters, Valves, Variable Area Flowmeters, Vortex Shedding Flowmeters

### • pH and Conductivity

Conductivity Instrumentation, Dissolved Oxygen Instrumentation, Environmental Instrumentation, pH Electrodes and Instruments, Water and Soil Analysis Instrumentation

### • Data Acquisition

Communication Products and Converters, Data Acquisition and Analysis Software, Data Loggers Plug-in Cards, Signal Conditioners, USB, RS232, RS485, Ethernet and Parallel Port Data Acquisition Systems, Wireless Transmitters and Receivers

### • Pressure, Strain and Force

Displacement Transducers, Dynamic Measurement Force Sensors, Instrumentation for Pressure and Strain Measurements, Load Cells, Pressure Gauges, Pressure Reference Section, Pressure Switches, Pressure Transducers, Proximity Transducers, Regulators, Pressure Transmitters, Strain Gauges, Torque Transducers, Valves

### • Heaters

Band Heaters, Cartridge Heaters, Circulation Heaters, Comfort Heaters, Controllers, Meters and Switching Devices, Flexible Heaters, General Test and Measurement Instruments, Heater Hook-up Wire, Heating Cable Systems, Immersion Heaters, Process Air and Duct, Heaters, Radiant Heaters, Strip Heaters, Tubular Heaters