

MINERAL INSULATED CABLES

DIAMETERS IN METRIC
AND INCH SIZES

Sheath materials:

Thermocouple cables:

Stainless steel 304, 310, 316, 321, 446,
Inconel 600, Incoloy 800, Incoloy 825, Microbell

RTD cables with Copper or Nickel conductors:

Stainless steel 304, 316, 321

THERMOCOUPLE TOLERANCE

(REFERENCE JUNCTION AT °C)

ASTM E230 / ANSI MC 96.1 / 2750E

ANSI Code		Standard Limits		Special Limits	
J	Temperature Range	>0 to 750°C	>32 to 1382°F	0 to 750°C	32 to 1382°F
	Tolerance Value	2.2°C or 0.75%	4.0°F or 0.75%	1.1°C or 0.4%	2.0°F or 0.4%
K	Temperature Range	>0 to 1250°C	>32 to 2282°F	0 to 1250°C	32 to 2282°F
	Tolerance Value	2.2°C or 0.75%	4.0°F or 0.75%	1.1°C or 0.4%	2.0°F or 0.4%
	Temperature Range	-200 to 0°C	-328 to 32°F		
	Tolerance Value	2.2°C or 2.0%	4.0°F or 2.0%		
T	Temperature Range	>0 to 350°C	>32 to 662°F	0 to 350°C	2 to 662°F
	Tolerance Value	1.0°C or 0.75%	1.8°F or 0.75%	0.5°C or 0.4%	1°F or 0.4%
	Temperature Range	-200 to 0°C	-328 to 32°F		
	Tolerance Value	1.0°C or 1.5%	1.8°F or 1.5%		
E	Temperature Range	>0 to 900°C	>32 to 1652°F	0 to 900°C	32 to 1652°F
	Tolerance Value	1.7°C or 0.5%	3.0°F or 0.5%	0.5°C or 0.4%	1.8°F or 0.4%
	Temperature Range	-200 to 0°C	-328 to 32°F		
	Tolerance Value	1.7°C or 1.0%	3.0°F or 1.0%		
N	Temperature Range	>0 to 1300°C	>32 to 2372°F	0 to 1300°C	32 to 2372°F
	Tolerance Value	2.2°C or 0.75%	4.0°F or 0.75%	0.5°C or 0.4%	2.0°F or 0.4%
	Temperature Range	-270 to 0°C	-454 to 32°F		
	Tolerance Value	2.2°C or 2.0%	4.0°F or 2.0%		
R/S	Temperature Range	>0 to 1450°C	32 to 2642°F	0 to 1450°C	32 to 2642°F
	Tolerance Value	1.5°C or 0.25%	2.7°F or 0.25%	0.6°C or 0.1%	1.0°F or 0.1%

IEC EN 60584-2

IEC Code		Class 1	Class 2
J	Temperature Range	-40 to 375°C	-40 to 333°C
	Tolerance Value	±1.5°C	±2.5°C
	Temperature Range	375 to 750°C	333 to 750°C
	Tolerance Value	±0.4% Reading	±0.75% Reading
K/N	Temperature Range	-40 to 375°C	-40 to 333°C
	Tolerance Value	±1.5°C	±2.5°C
	Temperature Range	375 to 1000°C	333 to 1200°C
	Tolerance Value	±0.4% Reading	±0.75% Reading
T	Temperature Range	-40 to 125°C	-40 to 133°C
	Tolerance Value	±0.5°C	±1°C
	Temperature Range	125 to 350°C	133 to 350°C
	Tolerance Value	±0.4% Reading	±0.75% Reading
E	Temperature Range	-40 to 375°C	-40 to 333°C
	Tolerance Value	±1.5°C	±2.5°C
	Temperature Range	375 to 800°C	333 to 900°C
	Tolerance Value	±0.4% Reading	±0.75% Reading
R/S	Temperature Range	0 to 1100°C	0 to 600°C
	Tolerance Value	±1°C	±1.5°C
	Temperature Range	1100 to 1600°C	600 to 1600°C
	Tolerance Value	±[1 + 0.3% x 1(Rdg-1100)]°C	±0.25% Reading

MgO insulation

We only use high purity MgO in our mineral insulated cables.

	%
MgO	99.500
CaO	0.320
FE ₂ O ₃	0.070
Al ₂ O ₃	0.100
CaO	0.002

Sheaths

304

Max. continuous temperature: 900° C (1700° F)

Heat resistance: Good oxidation resistance in intermittent service to 870° C (1600° F) and continuous service to 900° C (1700° F). Continuous use of 304 in 425 to 850° C (800 to 1575° F) range not recommended but often performs well in temperatures fluctuating above and below this range.

Corrosion resistance: Excellent in a wide variety of corrosive media including hot petroleum products and steam combustion gases.

Welding: Suitable for all standard welding methods.

Applications: Nuclear power plants, chemical equipment, textile and paper industry, fat, soap and nitric acid industries, food processing, dairy and brewery works.

304	%
C	0.060
Mn	2.000
P	0.035
S	0.030
Si	1.000
Cr	17.500
Ni	8.100
Fe	71.280

310

Max. continuous temperature: 1150° C (2100° F)

Heat resistance: Good resistance to oxidation in intermittent service in air at temperatures up to 1150° C (2100° F) in continuous service. Good resistance to thermal fatigue and cyclic heating. Widely used where sulphur dioxide gas is encountered at elevated temperatures. Continuous use in 425 to 850° C (800 to 1575° F) range not recommended but often performs well in temperatures above and below this range.

Corrosion resistance: Excellent resistance at normal temperatures and when in high temperature service exhibits good resistance to oxidation and carburizing atmospheres up to 900° C (1700° F). Resists fuming nitric acid at room temperature and fused nitrates up to 420° C (800° F).

Welding: Good characteristics suited to all standard welding methods.

Applications: Nuclear power plants, crude oil and petrochemistry, furnace construction, heat exchangers, air heaters, cement and brick kilns, glass works, jet engine afterburner and gas inlet temperature measuring applications.

310	%
C	0.019
Mn	1.000
P	0.019
S	0.001
Si	0.650
Cr	24.510
Ni	19.450
Mo	0.270
Fe	53.850
Cu	0.180
Co	0.050

316

Max. continuous temperature: 925° C (1700° F)

Heat resistance: Good oxidation resistance in intermittent service to 800° C (1500°) and in continuous service to 925° C (1700° F).

Corrosion resistance: Good resistance to a wide range of chemicals. Highly resistant to complex sulphur compounds used in pulp and paper processing. Also resists attack of marine and corrosive industrial atmospheres.

Welding: Good characteristics suited to all standard welding methods.

Applications: Chemical instrument construction, nuclear power plants, reactor instrumentation, furnace construction, sulphite, chemical pulp, textile, dye, fatty acid, photochemical and pharmaceutical industries.

316	%
C	0.015
Mn	0.630
P	0.034
S	0.002
Si	0.340
Cr	16.200
Ni	12.210
Mo	2.070
Fe	68.480

321

Max. continuous temperature: 900° C (1700° F)

Heat resistance: Good oxidation resistance in intermittent service to 800° C (1500°) and in continuous service to 900° C (1700° F). Resistant to carbon dioxide up to 650° C (1200° F).

Corrosion resistance: Excellent resistance to aggressive environments such as hot crude oil products, steam and combustion gases.

Welding: Suitable for all standard welding methods.

Applications: Nuclear power plants, reactor instrumentation, construction of chemical instruments, such as production of acetyl acid and nitric acids, heat exchangers, annealing furnaces, paper and textile industry, crude oil refinement and petrochemistry, fat and soap industry, food processing, dairy and fermentation works.

321	%
C	0.040
Mn	0.650
P	0.031
S	0.003
Si	0.410
Cr	17.370
Ni	8.340
Ti	0.300
Fe	72.856
Cu	0.180
Co	0.100

Inconel600

Max. continuous temperature: 1150° C (2100° F)

Heat resistance: Excellent high temperature strength and resistance.

Corrosion resistance: Good resistance to general corrosion and stress-corrosion cracking, and good high temperature strength and resistance to oxidation. Limit for use in carbon dioxide is approx. 500° C (900° F), in liquid sodium approx. 750° C (1400° F), in sulphur containing atmosphere approx. 550° (1000° F) and in water free of chloride approx. 600° C (1100°).

Welding: Suitable for all standard welding methods.

Applications: Construction of (nuclear) power plants, PWR, furnace construction, fiber production, synthetic material production, paper industry, food processing, steam boilers, column stills, jet and rocket engines.

Inconel600	%
C	0.010
Mn	0.200
P	0.010
S	0.002
Si	0.490
Cr	15.190
Ni	75.510
Mo	0.000
Fe	8.300
Cu	0.180
Co	0.100

Incoloy800

Max. continuous temperature: 1100° C (2000° F)

Heat resistance: Good general high temperature strength and resistance.

Corrosion resistance: Good elevated temperature resistance to oxidation, carburization and nitrogenisation. Good sulphur and corrosion resistance.

Welding: Suitable for all standard welding methods.

Applications: Nuclear power plants, heat exchangers, carburizing equipment, heating elements.

Incoloy800	%
C	0.057
Mn	1.030
P	0.008
S	0.001
Si	0.360
Cr	20.340
Ni	30.290
Ti	0.170
Fe	47.324
Cu	0.230
Al	0.190

Nicrobell

Max. continuous temperature: 1300° C (2375° F)

Heat resistance: Extended high temperature strength and resistance.

Corrosion resistance: Excellent oxidation resistance, generally superior to stainless steels. Suitable for use in reducing, oxidizing and vacuum atmospheres. Can be used in sulphurous atmospheres at reduced temperatures.

Welding: Suitable for all standard welding methods.

Applications: Nuclear power plants, heat exchangers, carburizing equipment, heating elements, vacuum furnaces and flues.

Nicrobell	%
C	0.050
Mg	0.150
Cr	23.0- 25.0
Ni	72.2- 74.2
Si	1.400
Nb	0.500
Co	0.300
Mo	0.100
Fe	0.300

For other sheath materials, please contact us for availability.

SIMPLEX CABLES (METRIC SIZES)

Sheath O.D. MM	Physical Characteristics	Standard Range of Cable References						
		304	310	316	321	Inconel600	Incoloy800	Nicrobell
8.0		8.0K304	8.0K310	8.0K316	8.0K321	8.0K600	8.0K800	8.0K-Nic
	Nom. Cond. 1.20mm	8.0J304	8.0J310	8.0J316	8.0J321	8.0J600	8.0J800	
	Nom. Sheath thickness 0.80mm	8.0E304	8.0E310	8.0E316	8.0E321	8.0E600	8.0E800	
	Weight / 1000m: ± 265 kg	8.0T304	8.0T310	8.0T316	8.0T321	8.0T600	8.0T800	
		8.0N304	8.0N310	8.0N316	8.0N321	8.0N600	8.0N800	8.0N-Nic
Approx. Coil length (meter) *	40	40	40	40	30	30	30	
6.0		6.0K304	6.0K310	6.0K316	6.0K321	6.0K600	6.0K800	6.0K-Nic
	Nom. Cond. 0.90mm	6.0J304	6.0J310	6.0J316	6.0J321	6.0J600	6.0J800	
	Nom. Sheath thickness 0.60mm	6.0E304	6.0E310	6.0E316	6.0E321	6.0E600	6.0E800	
	Weight / 1000m: ± 150 kg	6.0T304	6.0T310	6.0T316	6.0T321	6.0T600	6.0T800	
		6.0N304	6.0N310	6.0N316	6.0N321	6.0N600	6.0N800	6.0N-Nic
Approx. Coil length (meter) *	80	50-60	80-100	80	50	50	50	
4.5		4.5K304	4.5K310	4.5K316	4.5K321	4.5K600	4.5K800	4.5K-Nic
	Nom. Cond. 0.68mm	4.5J304	4.5J310	4.5J316	4.5J321	4.5J600	4.5J800	
	Nom. Sheath thickness 0.45mm	4.5E304	4.5E310	4.5E316	4.5E321	4.5E600	4.5E800	
	Weight / 1000m: ± 80 kg	4.5T304	4.5T310	4.5T316	4.5T321	4.5T600	4.5T800	
		4.5N304	4.5N310	4.5N316	4.5N321	4.5N600	4.5N800	4.5N-Nic
Approx. Coil length (meter) *	100	100	80-100	100	100	100	100	
3.0		3.0K304	3.0K310	3.0K316	3.0K321	3.0K600	3.0K800	3.0K-Nic
	Nom. Cond. 0.45mm	3.0J304	3.0J310	3.0J316	3.0J321	3.0J600	3.0J800	
	Nom. Sheath thickness 0.30mm	3.0E304	3.0E310	3.0E316	3.0E321	3.0E600	3.0E800	
	Weight / 1000m: ± 37 kg	3.0T304	3.0T310	3.0T316	3.0T321	3.0T600	3.0T800	
		3.0N304	3.0N310	3.0N316	3.0N321	3.0N600	3.0N800	3.0N-Nic
Approx. Coil length (meter) *	230	300	230	230	200	200	200	
2.0		2.0K304	2.0K310	2.0K316	2.0K321	2.0K600	2.0K800	2.0K-Nic
	Nom. Cond. 0.30mm	2.0J304	2.0J310	2.0J316	2.0J321	2.0J600	2.0J800	
	Nom. Sheath thickness 0.20mm	2.0E304	2.0E310	2.0E316	2.0E321	2.0E600	2.0E800	
	Weight / 1000m: ± 17 kg	2.0T304	2.0T310	2.0T316	2.0T321	2.0T600	2.0T800	
		2.0N304	2.0N310	2.0N316	2.0N321	2.0N600	2.0N800	2.0N-Nic
Approx. Coil length (meter) *	500	500	500	500	300-400	300	300	
1.5		1.5K304	1.5K310	1.5K316	1.5K321	1.5K600	1.5K800	1.5K-Nic
	Nom. Cond. 0.22mm	1.5J304	1.5J310	1.5J316	1.5J321	1.5J600	1.5J800	
	Nom. Sheath thickness 0.15mm	1.5E304	1.5E310	1.5E316	1.5E321	1.5E600	1.5E800	
	Weight / 1000m: ± 9.5 kg	1.5T304	1.5T310	1.5T316	1.5T321	1.5T600	1.5T800	
		1.5N304	1.5N310	1.5N316	1.5N321	1.5N600	1.5N800	1.5N-Nic
Approx. Coil length (meter) *	500	300	300	500	500	500	500	
1.0		1.0K304	1.0K310	1.0K316	1.0K321	1.0K600	1.0K800	1.0K-Nic
	Nom. Cond. 0.15mm	1.0J304	1.0J310	1.0J316	1.0J321	1.0J600	1.0J800	
	Nom. Sheath thickness 0.10mm	1.0E304	1.0E310	1.0E316	1.0E321	1.0E600	1.0E800	
	Weight / 1000m: ± 4.3 kg	1.0T304	1.0T310	1.0T316	1.0T321	1.0T600	1.0T800	
		1.0N304	1.0N310	1.0N316	1.0N321	1.0N600	1.0N800	1.0N-Nic
Approx. Coil length (meter) *	400	400	400	400	400	400	400	
0.5		0.5K304	0.5K310	0.5K316	0.5K321	0.5K600	0.5K800	0.5K-Nic
	Nom. Cond. 0.075mm, Nom. Sheath thickness 0.05mm, Weight / 1000m: ± 1.2 kg							
Approx. Coil length (meter) *	200	200	200	200	200	200	200	

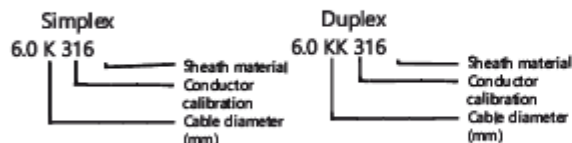
***Average coil length, coil length may vary. Other sheaths, elements and diameters on request.**

DUPLEX CABLES (METRIC SIZES)

Sheath O.D. MM	Physical Characteristics	Standard Range of Cable References						
		304	310	316	321	Inconel600	Incoloy800	Nicrobell
8.0		8.0KK304	8.0KK310	8.0KK316	8.0KK321	8.0KK600	8.0KK800	8.0KK-Nic
	Nom. Cond. 1.20mm	8.0JJ304	8.0JJ310	8.0JJ316	8.0JJ321	8.0JJ600	8.0JJ800	
	Nom. Sheath thickness 0.08mm	8.0EE304	8.0EE310	8.0EE316	8.0EE321	8.0EE600	8.0EE800	
	Weight / 1000m: ± 265 kg	8.0TT304	8.0TT310	8.0TT316	8.0TT321	8.0TT600	8.0TT800	
		8.0NN304	8.0NN310	8.0NN316	8.0NN321	8.0NN600	8.0NN800	8.0NN-Nic
Approx. Coil length (meter) *	40	40	40	40	30	30	30	
6.0		6.0KK304	6.0KK310	6.0KK316	6.0KK321	6.0KK600	6.0KK800	6.0KK-Nic
	Nom. Cond. 0.90mm	6.0JJ304	6.0JJ310	6.0JJ316	6.0JJ321	6.0JJ600	6.0JJ800	
	Nom. Sheath thickness 0.60mm	6.0EE304	6.0EE310	6.0EE316	6.0EE321	6.0EE600	6.0EE800	
	Weight / 1000m: ± 150 kg	6.0TT304	6.0TT310	6.0TT316	6.0TT321	6.0TT600	6.0TT800	
		6.0NN304	6.0NN310	6.0NN316	6.0NN321	6.0NN600	6.0NN800	6.0NN-Nic
Approx. Coil length (meter) *	80	50-60	80-100	80	50	50	50	
4.5		4.5KK304	4.5KK310	4.5KK316	4.5KK321	4.5KK600	4.5KK800	4.5KK-Nic
	Nom. Cond. 0.68mm	4.5JJ304	4.5JJ310	4.5JJ316	4.5JJ321	4.5JJ600	4.5JJ800	
	Nom. Sheath thickness 0.45mm	4.5EE304	4.5EE310	4.5EE316	4.5EE321	4.5EE600	4.5EE800	
	Weight / 1000m: ± 80 kg	4.5TT304	4.5TT310	4.5TT316	4.5TT321	4.5TT600	4.5TT800	
		4.5NN304	4.5NN310	4.5NN316	4.5NN321	4.5NN600	4.5NN800	4.5NN-Nic
Approx. Coil length (meter) *	100	100	80-100	100	100	100	100	
3.0		3.0KK304	3.0KK310	3.0KK316	3.0KK321	3.0KK600	3.0KK800	3.0KK-Nic
	Nom. Cond. 0.45mm	3.0JJ304	3.0JJ310	3.0JJ316	3.0JJ321	3.0JJ600	3.0JJ800	
	Nom. Sheath thickness 0.30mm	3.0EE304	3.0EE310	3.0EE316	3.0EE321	3.0EE600	3.0EE800	
	Weight / 1000m: ± 37 kg	3.0TT304	3.0TT310	3.0TT316	3.0TT321	3.0TT600	3.0TT800	
		3.0NN304	3.0NN310	3.0NN316	3.0NN321	3.0NN600	3.0NN800	3.0NN-Nic
Approx. Coil length (meter) *	230	300	230	230	200	200	200	
2.0		K	2.0KK310	2.0KK316	2.0KK321	2.0KK600	2.0KK800	2.0KK-Nic
	Nom. Cond. 0.30mm	2.0JJ304	2.0JJ310	2.0JJ316	2.0JJ321	2.0JJ600	2.0JJ800	
	Nom. Sheath thickness 0.20mm	2.0EE304	2.0EE310	2.0EE316	2.0EE321	2.0EE600	2.0EE800	
	Weight / 1000m: ± 17 kg	2.0TT304	2.0TT310	2.0TT316	2.0TT321	2.0TT600	2.0TT800	
		2.0NN304	2.0NN310	2.0NN316	2.0NN321	2.0NN600	2.0NN800	2.0NN-Nic
Approx. Coil length (meter) *	500	500	500	500	300-400	300	300	
.5		1.5KK304	1.5KK310	1.5KK316	1.5KK321	1.5KK600	1.5KK800	1.5KK-Nic
	Nom. Cond. 0.22mm	1.5JJ304	1.5JJ310	1.5JJ316	1.5JJ321	1.5JJ600	1.5JJ800	
	Nom. Sheath thickness 0.15mm	1.5EE304	1.5EE310	1.5EE316	1.5EE321	1.5EE600	1.5EE800	
	Weight / 1000m: ± 9.5 kg	1.5TT304	1.5TT310	1.5TT316	1.5TT321	1.5TT600	1.5TT800	
		1.5NN304	1.5NN310	1.5NN316	1.5NN321	1.5NN600	1.5NN800	1.5NN-Nic
Approx. Coil length (meter) *	500	300	300	500	500	500	500	

*Average coil length, coil length may vary. Other sheaths, elements and diameters on request.

Cable reference



Calibration

K – Chromel / Alumel
NiCr-Ni

J – Iron / Constantan
Fe-CuNi

E – Chromel / Constantan
NiCr-CuNi

T – Copper / Constantan
Cu-CuNi

N – Nicrosil / Nisil
NiCrSi-NiSi

Ordering

To order, all that is necessary is to specify part number (eg. 6.0K316) and length required.

SIMPLEX CABLES (IMPERIAL INCH SIZES)

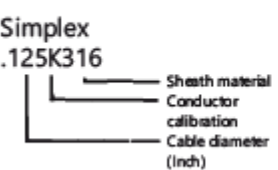
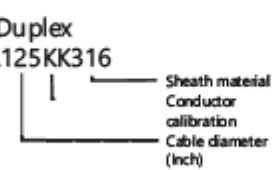
Sheath O.D INCH	Physical Characteristics	Standard Range of Cable References						
		304	310	316	321	Inconel600	Incoloy800	Nicrobell
.375 (3/8" ≈ 9.5mm)		.375K304	.375K310	.375K316	.375K321	.375K600	.375K800	.375K-Nic
	Nom. Cond. 0.056"	.375J304	.375J310	.375J316	.375J321	.375J600	.375J800	
	Nom. Sheath thickness 0.0375"	.375E304	.375E310	.375E316	.375E321	.375E600	.375E800	
	Weight / 1000 feet: ± 320 lbs	.375T304	.375T310	.375T316	.375T321	.375T600	.375T800	
	Approx. Coil length (feet) *	.375N304	.375N310	.375N316	.375N321	.375N600	.375N800	.375N-Nic
.250 (1/4" ≈ 6.4mm)		.250K304	.250K310	.250K316	.250K321	.250K600	.250K800	.250K-Nic
	Nom. Cond. 0.0375"	.250J304	.250J310	.250J316	.250J321	.250J600	.250J800	
	Nom. Sheath thickness 0.025"	.250E304	.250E310	.250E316	.250E321	.250E600	.250E800	
	Weight / 1000 feet: ± 110 lbs	.250T304	.250T310	.250T316	.250T321	.250T600	.250T800	
	Approx. Coil length (feet) *	.250N304	.250N310	.250N316	.250N321	.250N600	.250N800	.250N-Nic
.188 (3/16" ≈ 4.8mm)		.188K304	.188K310	.188K316	.188K321	.188K600	.188K800	.250K-Nic
	Nom. Cond. 0.028"	.188J304	.188J310	.188J316	.188J321	.188J600	.188J800	
	Nom. Sheath thickness 0.019"	.188E304	.188E310	.188E316	.188E321	.188E600	.188E800	
	Weight / 1000 feet: ± 60 lbs	.188T304	.188T310	.188T316	.188T321	.188T600	.188T800	
	Approx. Coil length (feet) *	.188N304	.188N310	.188N316	.188N321	.188N600	.188N800	.188N-Nic
.125 (1/8" ≈ 3.2mm)		.125K304	.125K310	.125K316	.188K321	.125K600	.125K800	.250K-Nic
	Nom. Cond. 0.019"	.125J304	.125J310	.125J316	.188J321	.125J600	.125J800	
	Nom. Sheath thickness 0.013"	.125E304	.125E310	.125E316	.188E321	.125E600	.125E800	
	Weight / 1000 feet: ± 28 lbs	.125T304	.125T310	.125T316	.188T321	.125T600	.125T800	
	Approx. Coil length (feet) *	.125N304	.125N310	.125N316	.188N321	.125N600	.125N800	.125N-Nic
.063 (1/16" ≈ 1.6mm)		.063K304	.063K310	.063K316	.063K321	.063K600	.063K800	.063K-Nic
	Nom. Cond. 0.0095"	.063J304	.063J310	.063J316	.063J321	.063J600	.063J800	
	Nom. Sheath thickness 0.0063"	.063E304	.063E310	.063E316	.063E321	.063E600	.063E800	
	Weight / 1000 feet: ± 7.3 lbs	.063T304	.063T310	.063T316	.063T321	.063T600	.063T800	
	Approx. Coil length (feet) *	.063N304	.063N310	.063N316	.063N321	.063N600	.063N800	.063N-Nic
.040 (1/25" ≈ 1.0mm)		.040K304	.040K310	.040K316	.040K321	.040K600	.040K800	.040K-Nic
	Nom. Cond. 0.006"	.040J304	.040J310	.040J316	.040J321	.040J600	.040J800	
	Nom. Sheath thickness 0.004"	.040E304	.040E310	.040E316	.040E321	.040E600	.040E800	
	Weight / 1000 feet: ± 2.9 lbs	.040T304	.040T310	.040T316	.040T321	.040T600	.040T800	
	Approx. Coil length (feet) *	.040N304	.040N310	.040N316	.040N321	.040N600	.040N800	.040N-Nic
.020 (1/50" ≈ 0.5mm)		.020K304	.020K310	.020K316	.020K321	.020K600	.020K800	.020K-Nic
	Nom. Cond. 0.003"							
	Nom. Sheath thickness 0.002"							
	Weight / 1000 feet: ± 0.80 lbs							
Approx. Coil length (feet) *								

*Average coil length, coil length may vary. Other sheaths, elements and diameters on request.

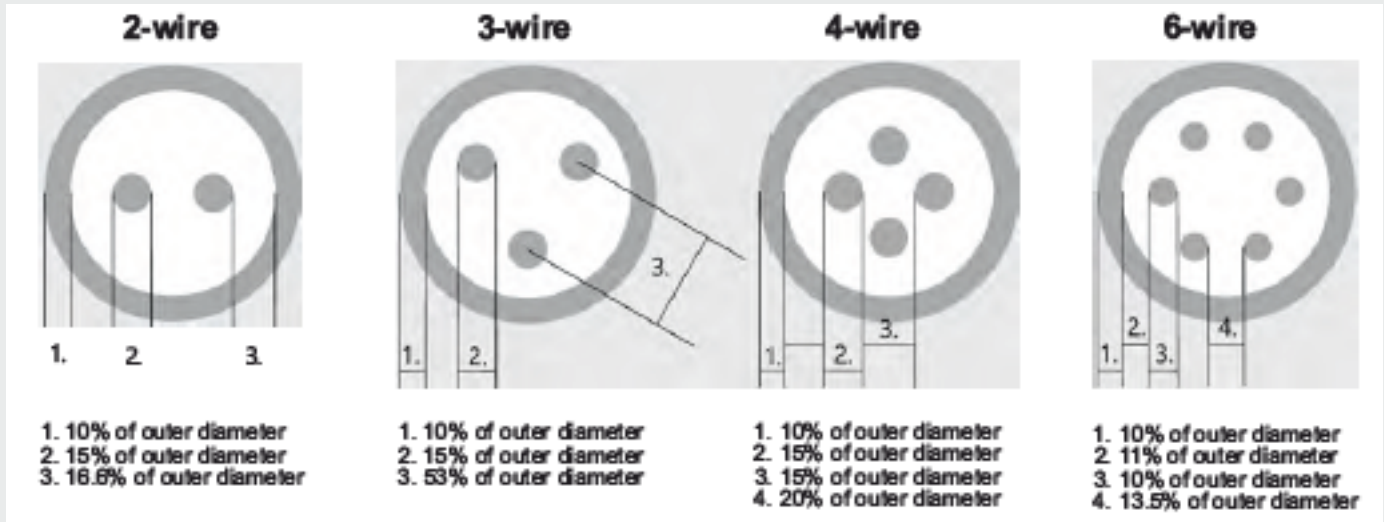
DUPLEX CABLES

Sheath O.D. MM	Physical Characteristics	Standard Range of Cable References						
		304	310	316	321	Inconel600	Incoloy800	Nicrobell
.375 (3/8" ≈ 9.5mm)	Nom. Cond. 0.056"	.375KK304	.375KK310	.375KK316	.375KK321	.375KK600	.375KK800	.375KK-Nic
	Nom. Sheath thickness 0.0375"	.375JJ304	.375JJ310	.375JJ316	.375JJ321	.375JJ600	.375JJ800	
	Weight / 1000 feet: ± 320 lbs	.375EE304	.375EE310	.375EE316	.375EE321	.375EE600	.375EE800	
		.375TT304	.375TT310	.375TT316	.375TT321	.375TT600	.375TT800	
	Approx. Coil length (feet) *	.375NN304	.375NN310	.375NN316	.375NN321	.375NN600	.375NN800	.375NN-Nic
.250 (1/4" ≈ 6.4mm)	Nom. Cond. 0.0375"	.250KK304	.250KK310	.250KK316	.250KK321	.250KK600	.250KK800	.250KK-Nic
	Nom. Sheath thickness 0.025"	.250JJ304	.250JJ310	.250JJ316	.250JJ321	.250JJ600	.250JJ800	
	Weight / 1000 feet: ± 110 lbs	.250EE304	.250EE310	.250EE316	.250EE321	.250EE600	.250EE800	
		.250TT304	.250TT310	.250TT316	.250TT321	.250TT600	.250TT800	
	Approx. Coil length (feet) *	.250NN304	.250NN310	.250NN316	.250NN321	.250NN600	.250NN800	.250NN-Nic
.188 (3/16" ≈ 4.8mm)	Nom. Cond. 0.028"	.188KK304	.188KK310	.188KK316	.188KK321	.188KK600	.188KK800	.188KK-Nic
	Nom. Sheath thickness 0.019"	.188JJ304	.188JJ310	.188JJ316	.188JJ321	.188JJ600	.188JJ800	
	Weight / 1000 feet: ± 60 lbs	.188EE304	.188EE310	.188EE316	.188EE321	.188EE600	.188EE800	
		.188TT304	.188TT310	.188TT316	.188TT321	.188TT600	.188TT800	
	Approx. Coil length (feet) *	.188NN304	.188NN310	.188NN316	.188NN321	.188NN600	.188NN800	.188NN-Nic
.125 (1/8" ≈ 3.2mm)	Nom. Cond. 0.019"	.125KK304	.125KK310	.125KK316	.125KK321	.125KK600	.125KK800	.125KK-Nic
	Nom. Sheath thickness 0.013"	.125JJ304	.125JJ310	.125JJ316	.125JJ321	.125JJ600	.125JJ800	
	Weight / 1000 feet: ± 28 lbs	.125EE304	.125EE310	.125EE316	.125EE321	.125EE600	.125EE800	
		.125TT304	.125TT310	.125TT316	.125TT321	.125TT600	.125TT800	
	Approx. Coil length (feet) *	.125NN304	.125NN310	.125NN316	.125NN321	.125NN600	.125NN800	.125NN-Nic
.063 (1/16" ≈ 1.6mm)	Nom. Cond. 0.0095"	.063KK304	.063KK310	.063KK316	.063KK321	.063KK600	.063KK800	.063KK-Nic
	Nom. Sheath thickness 0.0063"	.063JJ304	.063JJ310	.063JJ316	.063JJ321	.063JJ600	.063JJ800	
	Weight / 1000 feet: ± 7.3 lbs	.063EE304	.063EE310	.063EE316	.063EE321	.063EE600	.063EE800	
		.063TT304	.063TT310	.063TT316	.063TT321	.063TT600	.063TT800	
	Approx. Coil length (feet) *	.063NN304	.063NN310	.063NN316	.063NN321	.063NN600	.063NN800	.063NN-Nic

*Average coil length, coil length may vary. Other sheaths, elements and diameters on request.

<h3>Cable reference</h3>		<h3>Calibration</h3>	<h3>Ordering</h3>
<p>Simplex .125K316</p> 	<p>Duplex .125KK316</p> 	<p>K – Chromel / Alumel NiCr-Ni</p> <p>J – Iron / Constantan Fe-CuNi</p> <p>E – Chromel / Constantan NiCr-CuNi</p> <p>T – Copper / Constantan Cu-CuNi</p> <p>N – Nicrosil / Nisil NiCrSi-NiSi</p>	<p>To order, all that is necessary is to specify part number (e.g. .125K316) and length required.</p>

RTD CABLES



IMPORTANT FEATURES

Resistance per Meter @ 20°C (Ohms per meter)

Outer Diameter MM	Outer Diameter (Inches)	# of Conductors	Conductor Diameter (mm)	Wall Thickness (mm)	Cu	Ni
1.5		2	0.23	0.15	0.43	2.166
1.6	0.63 (1/16")	2	0.24	0.16	0.39	1.989
2.0		2	0.30	0.20	0.25	1.273
3.0		2	0.45	0.30	0.11	0.566
3.2	0.125 (1/8")	2	0.48	0.32	0.098	0.497
4.0		2	0.60	0.40	0.063	0.318
4.5		2	0.68	0.45	0.049	0.248
4.8	0.188 (3/16")	2	0.72	0.48	0.044	0.221
5.0		2	0.75	0.50	0.04	0.204
6.0		2	0.90	0.60	0.028	0.141
6.4	0.250 (1/4")	2	0.96	0.64	0.025	0.124
8.0		2	1.20	0.80	0.016	0.079
1.5		3	0.23	0.15	0.43	2.166
1.6	0.63 (1/16")	3	0.24	0.16	0.39	1.989
2.0		3	0.30	0.20	0.25	1.273
3.0		3	0.45	0.30	0.11	0.566
3.2	0.125 (1/8")	3	0.48	0.32	0.098	0.497
4.0		3	0.60	0.40	0.063	0.318
4.5		3	0.68	0.45	0.049	0.248
4.8	0.188 (3/16")	3	0.72	0.48	0.044	0.221
5.0		3	0.75	0.50	0.04	0.204
6.0		3	0.90	0.60	0.028	0.141
6.4	0.250 (1/4")	3	0.96	0.64	0.025	0.124
8.0		3	1.20	0.80	0.016	0.079
1.5		4	0.23	0.15	0.43	2.166
1.6	.063 (1/16")	4	0.24	0.16	0.39	1.989
2.0		4	0.30	0.20	0.25	1.273
3.0		4	0.45	0.30	0.11	0.566
3.2	.125 (1/8")	4	0.48	0.32	0.098	0.497
4.0		4	0.60	0.40	0.063	0.318
4.5		4	0.68	0.45	0.049	0.248
4.8	0.188 (3/16")	4	0.72	0.48	0.044	0.221
5.0		4	0.75	0.50	0.04	0.204
6.0		4	0.90	0.60	0.028	0.141
6.4	0.250 (1/4")	4	0.96	0.64	0.025	0.124
8.0		4	1.20	0.80	0.016	0.079
1.5		6	0.17	0.15	0.782	3.965
1.6	0.63 (1/16")	6	0.18	0.16	0.697	3.537
2.0		6	0.22	0.20	0.467	2.367
3.0		6	0.33	0.30	0.207	1.052
3.2	0.125 (1/8")	6	0.35	0.32	0.184	0.935
4.0		6	0.44	0.40	0.116	0.592
4.5		6	0.50	0.45	0.090	0.458
4.8	0.188 (3/16")	6	0.53	0.48	0.080	0.408
5.0		6	0.55	0.50	0.075	0.379
6.0		6	0.66	0.60	0.052	0.263
6.4	0.250 (1/4")	6	0.70	0.64	0.046	0.234
8.0		6	0.88	0.80	0.029	0.148