

TEMPCO




LEAD WIRE & THERMOCOUPLE WIRE



The demand for readily available & conveniently packaged lead wire and thermocouple wire is high. Whether you have a new installation, rebuilding an oven, a heat-treating furnace, an extruder or just changing out one heater, it is always good practice to replace the power lead wire. Now, Tempco makes it convenient & easy with competitively priced spools of High Temperature Power Lead Wire and Thermocouple Wire.

Lead wire & thermocouple wire can be easily purchased by contacting your Tempco sales representative.

Features:

-  **In Stock - Ready to Ship!**
-  **Lead Wire Spool Sizes:**
100, 250, 500 & 1000 feet
-  **Thermocouple Wire Spool Sizes:**
100 & 250 feet

Insulation	Temperature	Voltage	UL number	Gauge	Conductor
Spools come in the following lengths (ft.): 100, 250, 500, & 1000					
MG - Mica Fiberglass	450°C 842°F	600V	5335/ 5107	10 thru 18	Stranded, (NCC) Nickel Clad Copper
TGGT - Teflon® Fiberglass (2) Teflon®	250°C 482°F	600V	5256	10 thru 18	Stranded, (NPC) Nickel Plated Copper
* PTFE Lead wire can be purchased in Red, White, or Black in 100 or 250 ft. spool lengths					
*PTFE	200°C 392°F	300V	1180	14 thru 22	Stranded, (SPC) Silver Plated Copper

Continue for more details

Heating Elements • Controls • Sensors



HIGH TEMPERATURE TYPE MG (550°C), TYPE MG (450°C) AND TYPE TGGT (250°C) LEAD WIRE

High Temperature Lead Wires are designed for:

- Internal wiring for commercial and industrial heating products
- Heaters
- Heat treating furnaces and kilns
- Commercial food service equipment
- Oven Wiring

STOCK LEAD WIRE

Type MG — 600 Volt, 550°C (1022°F), UL 5400

Insulation Type – Mica/Glass (MG) Composite

Conductor Material – Nickel Clad Copper (NCC) (27% Nickel by weight)



Wire	Nominal OD (in)	Stranding Num./Ga.	Maximum Amps @40°C	Feet per Spool	Part Number	Feet per Spool	Part Number	Feet per Spool	Part Number	Feet per Spool	Part Number
18	0.124	16/30	23	100	LDWR-1163	250	LDWR-1168	500	LDWR-1173	1000	LDWR-1178
16	0.138	26/30	30	100	LDWR-1164	250	LDWR-1169	500	LDWR-1174	1000	LDWR-1179
14	0.158	41/30	45	100	LDWR-1165	250	LDWR-1170	500	LDWR-1175	1000	LDWR-1180
12	0.182	65/30	56	100	LDWR-1166	250	LDWR-1171	500	LDWR-1176	1000	LDWR-1181
10	0.212	105/30	75	100	LDWR-1167	250	LDWR-1172	500	LDWR-1177	1000	LDWR-1182

STOCK LEAD WIRE

Type MG — 600 Volt, 450°C (842°F), UL 5335/5107

Insulation Type – Mica/Glass (MG) Composite

Conductor Material – Nickel Clad Copper (NCC) (27% Nickel by weight)



Wire Gauge	Nominal OD (in)	Stranding Num./Ga.	Maximum Amps @40°C	Feet per Spool	Part Number	Feet per Spool	Part Number	Feet per Spool	Part Number	Feet per Spool	Part Number
18	0.115	16/30	23	100	LDWR-1088	250	LDWR-1098	500	LDWR-1142	1000	LDWR-1152
16	0.134	26/30	30	100	LDWR-1089	250	LDWR-1099	500	LDWR-1143	1000	LDWR-1153
14	0.143	41/30	45	100	LDWR-1090	250	LDWR-1100	500	LDWR-1144	1000	LDWR-1154
12	0.166	65/30	56	100	LDWR-1091	250	LDWR-1101	500	LDWR-1145	1000	LDWR-1155
10	0.203	105/30	75	100	LDWR-1092	250	LDWR-1102	500	LDWR-1146	1000	LDWR-1156

STOCK LEAD WIRE

Type TGGT — 600 Volt, 250°C (482°F), UL 5256

Insulation Type – Teflon®/Glass/Glass/Teflon® (TGGT)

Conductor Material – Nickel Plated Copper (NPC) (2% Nickel by weight)



Wire Gauge	Nominal OD (in)	Stranding Num./Ga.	Maximum Amps @40°C	Feet per Spool	Part Number	Feet per Spool	Part Number	Feet per Spool	Part Number	Feet per Spool	Part Number
18	0.094	19/30	20	100	LDWR-1093	250	LDWR-1103	500	LDWR-1147	1000	LDWR-1157
16	0.103	26/30	26	100	LDWR-1094	250	LDWR-1104	500	LDWR-1148	1000	LDWR-1158
14	0.118	41/30	39	100	LDWR-1095	250	LDWR-1105	500	LDWR-1149	1000	LDWR-1159
12	0.136	65/30	54	100	LDWR-1096	250	LDWR-1106	500	LDWR-1150	1000	LDWR-1160
10	0.174	105/30	73	100	LDWR-1097	250	LDWR-1107	500	LDWR-1151	1000	LDWR-1161



TYPE PTFE (200°C/392°F) LEAD WIRE

STOCK LEAD WIRE

Type PTFE — 300 Volt, 200°C (392°F) UL 1180

Insulation Type – PTFE

Conductor Material – Silver Plated Copper (SPC)



NOTE: Recommended Maximum Amperage is based on an Ambient Temperature of 40°C (104°F) and not more than three current carrying conductors in a raceway/conduit or bundled and directly buried. For de-rating factors for higher ambient temperatures consult Tempco's engineering data on page 16-10. For more information consult the National Electrical Code, Articles 310-15 through 310-84.

NOTE: For nickel wire conductor and other high temperature lead wire—consult Tempco.

INSULATION COLOR: RED

Wire Gauge	Nominal OD (in)	Stranding Num./Ga.	Maximum Amps @40°C	Feet per Spool	Part Number
22	0.056	19/34	9.6	100	LDWR-1112
20	0.064	19/32	14	100	LDWR-1111
18	0.073	19/30	18	100	LDWR-1110
16	0.079	19/29	24	100	LDWR-1109
14	0.093	19/27	36	100	LDWR-1108
22	0.056	19/34	9.6	250	LDWR-1127
20	0.064	19/32	14	250	LDWR-1126
18	0.073	19/30	18	250	LDWR-1125
16	0.079	19/29	24	250	LDWR-1124
14	0.093	19/27	36	250	LDWR-1123

INSULATION COLOR: WHITE

Wire Gauge	Nominal OD (in)	Stranding Num./Ga.	Maximum Amps @40°C	Feet per Spool	Part Number
22	0.056	19/34	9.6	100	LDWR-1117
20	0.064	19/32	14	100	LDWR-1116
18	0.073	19/30	18	100	LDWR-1115
16	0.079	19/29	24	100	LDWR-1114
14	0.093	19/27	36	100	LDWR-1113
22	0.056	19/34	9.6	250	LDWR-1132
20	0.064	19/32	14	250	LDWR-1131
18	0.073	19/30	18	250	LDWR-1130
16	0.079	19/29	24	250	LDWR-1129
14	0.093	19/27	36	250	LDWR-1128

INSULATION COLOR: BLACK

Wire Gauge	Nominal OD (in)	Stranding Num./Ga.	Maximum Amps @40°C	Feet per Spool	Part Number
22	0.056	19/34	9.6	100	LDWR-1122
20	0.064	19/32	14	100	LDWR-1121
18	0.073	19/30	18	100	LDWR-1120
16	0.079	19/29	24	100	LDWR-1119
14	0.093	19/27	36	100	LDWR-1118
22	0.056	19/34	9.6	250	LDWR-1137
20	0.064	19/32	14	250	LDWR-1136
18	0.073	19/30	18	250	LDWR-1135
16	0.079	19/29	24	250	LDWR-1134
14	0.093	19/27	36	250	LDWR-1133



ANSI TYPE J AND K DUPLEX THERMOCOUPLE WIRE STOCKED ON 100 AND 250 FOOT SPOOLS

Can be used for manufacturing thermocouple assemblies or as hook up wire between a thermocouple assembly and display instrumentation or a temperature control. The calibration is guaranteed to the full temperature range of the thermocouple type.

TC Type	Wire Type	Insulation	Insulation Temperature Limits (°F/°C)	Nominal Overall Dimensions (inches)	Part Number	
					100 Foot Spool	250 Foot Spool
J	20 Gauge Solid	Fiberglass	900/482	.060 × .106	TCWR-1028	TCWR-1032
J	20 Gauge Stranded	Fiberglass	900/482	.066 × .118	TCWR-1033	TCWR-1035
J	24 Gauge Solid	Fiberglass	900/482	.048 × .082	TCWR-1037	TCWR-1069
J	24 Gauge Stranded	Fiberglass	900/482	.048 × .082	TCWR-1038	TCWR-1070
J	20 Gauge Stranded	Fiberglass with SS overbraid	900/482	.088 × .140	TCWR-1047	TCWR-1051
J	20 Gauge Solid	FEP Teflon®	400/204	.068 × .116	TCWR-1060	TCWR-1062
J	24 Gauge Stranded	Fiberglass with SS overbraid	900/482	.074 × .100	TCWR-1048	TCWR-1052
K	20 Gauge Solid	Fiberglass	900/482	.060 × .116	TCWR-1025	TCWR-1029
K	20 Gauge Stranded	Fiberglass	900/482	.066 × .118	TCWR-1034	TCWR-1036
K	24 Gauge Solid	Fiberglass	900/482	.044 × .074	TCWR-1039	TCWR-1071
K	24 Gauge Stranded	Fiberglass	900/482	.050 × .082	TCWR-1040	TCWR-1072
K	20 Gauge Stranded	Fiberglass with SS overbraid	900/482	.088 × .140	TCWR-1049	TCWR-1053
K	20 Gauge Solid	FEP Teflon®	400/204	.068 × .116	TCWR-1061	TCWR-1063
K	24 Gauge Stranded	Fiberglass with SS overbraid	900/482	.074 × .100	TCWR-1050	TCWR-1054



ANSI TYPE JX AND KX THERMOCOUPLE EXTENSION WIRE STOCKED ON 100 AND 250 FOOT SPOOLS

Due to its cost advantage thermocouple extension wire is used to make the connection between the thermocouple assembly and the measuring instrument, especially when long distances are involved. Thermocouple extension wire has approximately the same characteristics as thermocouple wire but its accuracy is guaranteed over a limited temperature range.

TC Type	Wire Type	Insulation	Insulation Temperature Limits (°F/°C)	Nominal Overall Dimensions (inches)	Part Number	
					100 Foot Spool	250 Foot Spool
JX	20 Gauge Solid	PVC	221/105	.092 × .154	TCWR-1027	TCWR-1031
JX	20 Gauge Stranded	PVC	221/105	.098 × .166	TCWR-1041	TCWR-1073
JX	24 Gauge Solid	PVC	221/105	.080 × .130	TCWR-1042	TCWR-1074
JX	24 Gauge Stranded	PVC	221/105	.084 × .138	TCWR-1043	TCWR-1075
JX	20 Gauge Solid	PVC with Shield & Drain	221/105	.169 Diameter	TCWR-1055	TCWR-1057
KX	20 Gauge Solid	PVC	221/105	.092 × .154	TCWR-1026	TCWR-1030
KX	20 Gauge Stranded	PVC	221/105	.098 × .166	TCWR-1044	TCWR-1076
KX	24 Gauge Solid	PVC	221/105	.080 × .130	TCWR-1045	TCWR-1077
KX	24 Gauge Stranded	PVC	221/105	.084 × .138	TCWR-1046	TCWR-1078
KX	20 Gauge Solid	PVC with Shield & Drain	221/105	.169 Diameter	TCWR-1056	TCWR-1058

NOTE: Tempco's Thermocouple Wire and Extension Wire is supplied to meet Standard Tolerances of ANSI Circular MC96.1-1982.