



RHH/RHW-2/USE-2 Copper Wire

(Silicone-Free)

Spec Sheet

Base Sku: 710



Solid



7-Strand



19-Strand



37-Strand



61-Strand

DESCRIPTION:

USE-2 600 Volts or RHH/RHW-2 1000 Volts. Underground Service Entrance Cable. Copper Conductors. Cross-Linked Polyethylene (XLP) Insulation. High Heat, Moisture & Abrasion Resistant. Insulation colors: Black, red, blue, white, brown, orange, yellow, gray, and green.

CONSTRUCTION:

- Conductor: Class B compressed stranded bare copper per ASTM B3 and ASTM B8
- Insulation: Cross Linked Polyethylene (XLPE) Type RHH/RHW-2 USE-2 Silicone-Free, High Heat, Moisture and Abrasion Resistant

APPLICATIONS & FEATURES:

USE-2 600 Volts or RHH/RHW-2 1000 Volts power cables are suited for use in wet and dry areas, conduits, ducts, troughs, trays, direct burial, aerial supported by a messenger, and where superior electrical properties are desired. These cables are capable of operating continuously at the conductor temperature not in excess of 90°C for normal operation in wet and dry locations, 130°C for emergency overload, and 250°C for short circuit conditions. Rated for 1000 lbs./FT maximum sidewall pressure.

SPECIFICATIONS:

- ASTM B3 Soft or Annealed Copper Wire
- ASTM B8 Concentric-Lay-Stranded Copper Conductors
- UL 44 Thermoset-Insulated Wires and Cables
- UL 854 Service Entrance Cable
- ICEA S-95-658 (NEMA WC70) Power Cables Rated 2000 Volts or Less for the Distribution of Electrical Energy
- RoHS-2 (European Directive 2011/65/EU)

Weights & Measurements						
Size	Strand Count	Diameter Over Conductor	Insulation Thickness	Aprox. OD	Copper Weight per 1000ft	Aprox. Weight per 1000ft
14 AWG/Kcmil	7	.070"	45 mil	0.161"	12 lbs	20 lbs
12 AWG/Kcmil	Solid	.080"	45 mil	0.174"	19 lbs	28 lbs
12 AWG/Kcmil	7	.088"	45 mil	0.179"	20 lbs	28 lbs
10 AWG/Kcmil	7	.113"	45 mil	0.203"	32 lbs	42 lbs
10 AWG/Kcmil	7	.113"	45 mil	0.207"	32 lbs	42 lbs
8 AWG/Kcmil	7	.141"	60 mil	0.259"	95 lbs	67 lbs
6 AWG/Kcmil	7	.177"	60 mil	0.304"	81 lbs	109 lbs
4 AWG/Kcmil	7	.225"	60 mil	0.345"	128 lbs	153 lbs
3 AWG/Kcmil	7	.252"	60 mil	0.378"	162 lbs	191 lbs
2 AWG/Kcmil	7	.282"	60 mil	0.403"	205 lbs	244 lbs
1 AWG/Kcmil	19	.322"	80 mil	0.481"	258 lbs	304 lbs
1/0 AWG/Kcmil	19	.361"	80 mil	0.522"	325 lbs	390 lbs
2/0 AWG/Kcmil	19	.405"	80 mil	0.564"	410 lbs	481 lbs
3/0 AWG/Kcmil	19	.456"	80 mil	0.616"	518 lbs	598 lbs
4/0 AWG/Kcmil	19	.512"	80 mil	0.672"	653 lbs	742 lbs
250 AWG/Kcmil	37	.558"	95 mil	0.748"	771 lbs	884 lbs
300 AWG/Kcmil	37	.610"	95 mil	0.801"	926 lbs	1023 lbs
350 AWG/Kcmil	37	.661"	95 mil	0.851"	1081 lbs	1213 lbs
400 AWG/Kcmil	37	.705"	95 mil	0.896"	1235 lbs	1345 lbs
500 AWG/Kcmil	37	.789"	95 mil	0.956"	1544 lbs	1696 lbs
600 AWG/Kcmil	61	.865"	110 mil	1.085"	1853 lbs	2028 lbs
750 AWG/Kcmil	61	.968"	110 mil	1.188"	2316 lbs	2534 lbs
1000 AWG/Kcmil	61	1.117"	110 mil	1.337"	3088 lbs	3283 lbs



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Size	Minimum Bend Radius	Maximum Pull Tension	DC Resistance at 25°C $\Omega/1000ft$	AC Resistance at 75°C $\Omega/1000ft$	Inductive Resistance at 60Hz $\Omega/1000ft$	Allowable Ampacity at 75°C	Allowable Ampacity at 90°C
14 AWG/Kcmil	0.6 in	32 lbs	2.631	3.170	0.058	20 Amp	25 Amp
12 AWG/Kcmil	0.7 in	52 lbs	1.662	2.002	0.054	25 Amp	30 Amp
12 AWG/Kcmil	0.7 in	52 lbs	1.662	2.002	0.054	25 Amp	30 Amp
10 AWG/Kcmil	0.8 in	83 lbs	1.040	1.253	0.050	35 Amp	40 Amp
10 AWG/Kcmil	0.8 in	83 lbs	1.040	1.253	0.050	35 Amp	40 Amp
8 AWG/Kcmil	1.0 in	132 lbs	0.653	0.786	0.052	50 Amp	55 Amp
6 AWG/Kcmil	1.2 in	209 lbs	0.411	0.495	0.051	65 Amp	75 Amp
4 AWG/Kcmil	1.4 in	333 lbs	0.258	0.310	0.048	85 Amp	95 Amp
3 AWG/Kcmil	1.5 in	420 lbs	0.205	0.246	0.047	100 Amp	115 Amp
2 AWG/Kcmil	1.6 in	530 lbs	0.162	0.195	0.045	115 Amp	130 Amp
1 AWG/Kcmil	1.9 in	669 lbs	0.128	0.154	0.046	130 Amp	145 Amp
1/0 AWG/Kcmil	2.1 in	844 lbs	0.102	0.122	0.044	150 Amp	170 Amp
2/0 AWG/Kcmil	2.3 in	1064 lbs	0.081	0.097	0.043	175 Amp	195 Amp
3/0 AWG/Kcmil	2.5 in	1342 lbs	0.064	0.078	0.042	200 Amp	225 Amp
4/0 AWG/Kcmil	2.7 in	1692 lbs	0.051	0.062	0.041	230 Amp	260 Amp
250 AWG/Kcmil	3.0 in	2000 lbs	0.043	0.053	0.041	255 Amp	290 Amp
300 AWG/Kcmil	3.2 in	2400 lbs	0.036	0.045	0.041	285 Amp	290 Amp
350 AWG/Kcmil	3.4 in	2800 lbs	0.031	0.039	0.040	310 Amp	350 Amp
400 AWG/Kcmil	3.6 in	3200 lbs	0.027	0.035	0.040	335 Amp	380 Amp
500 AWG/Kcmil	3.8 in	4000 lbs	0.022	0.029	0.039	380 Amp	430 Amp
600 AWG/Kcmil	5.4 in	4800 lbs	0.018	0.025	0.039	420 Amp	475 Amp
750 AWG/Kcmil	3.9 in	6000 lbs	0.014	0.022	0.038	475 Amp	535 Amp
1000 AWG/Kcmil	6.7 in	8000 lbs	0.011	0.018	0.037	545 Amp	615 Amp

* All dimensions are nominal and subject to normal manufacturing tolerances.

* Ampacities based upon 2023 NEC Table 310.16 and do not take into account the overcurrent protection limitations in NEC 240.4(D) of 15 Amps for 14 AWG CU, 20 Amps for 12 AWG CU, and 30 Amps for 10 AWG CU (independent of the conductor temperature rating and stranding if size is present in table). Also, see NEC sections 310.15 and 110.14(C) for additional requirements.

* Inductive Reactance is based on non-ferrous conduit with one diameter spacing center-to-center.

