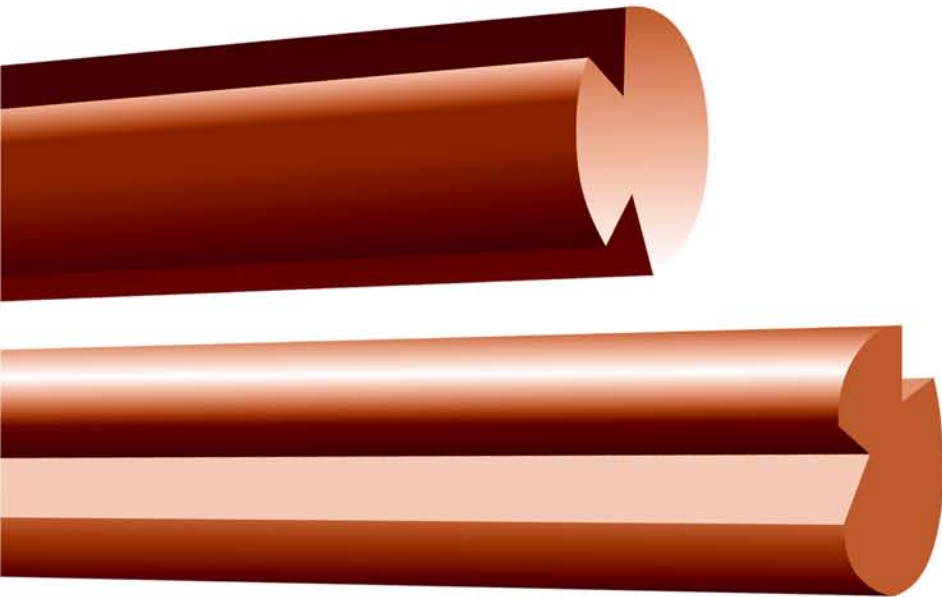


# Trolley Wire

## Single Conductor - Solid Copper



### **APPLICATIONS:**

For use as overhead power source for subways, light and heavy transit systems, electrically powered mine trains, buses, and industrial cranes.


### **SPECIFICATIONS:**

Manufactured and tested in accordance with the latest revisions of ASTM B-47 and ASTM B-116.

### **CONSTRUCTION:**

This product offers the highest commercial - grade conductivity, good corrosion resistance, and good wear characteristics. Algonquin trolley wire is a single conductor of solid copper, having a hard drawn temper, and is offered in ASTM configurations Round, Grooved and Figure 9 Deep-Section Grooved.

# Trolley Wire - Copper

Conductor		Overall Diameter*		Area			Weight			Tensile Strength (minimum)		DC Resistance at 20°C			Min. Breaking Strength	
Cross Section	Size (AWG or kcmil)	Inches	mm	Circular Mils	Sq. In.	Sq. mm	Lbs. per 1,000 Ft	Lbs. per Mile	kg per km	Pounds per Sq. In.	kgf per Sq. mm	Ohms per 1,000 Ft	Ohms per Mile	Ohms per km	Lbs.	Kg.
<b>Round (ASTM B 47)</b>																
	1/0	0.325	8.25	105,600	0.083	53.5	319.5	1,687	475	54,500	38.3	0.1011	0.5338	0.3318	4,518	2,049
	2/0	0.365	9.27	133,100	0.105	67.4	402.8	2,127	599	52,800	37.1	0.0802	0.4235	0.2632	5,519	2,503
	3/0	0.410	10.4	167,800	0.132	85.0	507.8	2,681	755	51,000	35.9	0.0636	0.3359	0.2088	6,720	3,048
	4/0	0.460	11.7	211,600	0.166	107	640.5	3,382	953	49,000	34.5	0.0541	0.2664	0.1656	8,143	3,694
	300	0.548	13.9	300,000	0.236	152	908.0	4,794	1,350	46,400	32.6	0.0356	0.1879	0.1168	10,930	4,958
<b>Grooved (ASTM B 47)</b>																
	2/0	0.392	9.96	137,900	0.108	69.9	417.6	2,205	621	50,200	35.3	0.0774	0.4087	0.2540	5,437	2,466
	3/0	0.430	10.9	167,300	0.131	84.8	506.4	2,674	756	48,500	34.1	0.0638	0.3369	0.2094	6,373	2,891
	4/0	0.482	12.2	212,000	0.167	107	641.9	3,389	955	46,600	32.8	0.0504	0.2659	0.1652	7,759	3,519
	300	0.574	14.6	299,800	0.236	152	907.6	4,792	1,350	44,200	31.1	0.0356	0.1880	0.1168	10,410	4,722
	350	0.620	15.7	351,200	0.276	178	1,063	5,612	1,581	42,800	30.1	0.0304	0.1605	0.0997	11,810	5,354
<b>Figure 9 Deep-Section Grooved (ASTM B 116)</b>																
	355 <sup>(1)</sup>	0.680 X 0.482	17.3 X 12.2	336,400	0.264	170	1,018	5,377	1,515	43,300	30.5	0.0317	0.1675	0.1040	11,440	5,191
	350 <sup>(2)</sup>	0.707 x 0.496	17.9 x 12.6	348,900	0.274	177	1,056	5,576	1,571	42,800	30.1	0.0306	0.1615	0.1004	11,730	5,321
	400	0.745 x 0.552	18.2 x 14.0	397,200	0.312	201	1,202	6,347	1,789	41,300	29.0	0.0269	0.1419	0.0882	12,880	5,842

\*For Figure 9 wire, dimensions given are nominal height of entire section and width of lower lobe. Size AWG 6/0 (336,200 C mil) Grooved will regularly be furnished in 350,000 C mil.

(1) This size is not presently covered by ASTM B 116.

(2) Subject of special inquiry.

Tolerances: The above data are approximate and subject to nominal manufacturing tolerances. Weights, breaking strengths and resistances are based on nominal dimensions.

## Trolley Wire Standard Package

Package Code	Flange (in.)	Traverse (in.)	Drum (in.)	Arbor Hole (in.)	Tare Weight (lbs.)	Capacity (lbs.)
P071-Z94	45	22.5	30	3.125	245	3,100
P071-Z95	50	22.5	30	3.125	185	5,000
P071-Z96	58	22.5	30	3.125	450	8,000