



ROME COPPER TROLLEY WIRE

Round and Grooved

<p>APPLICATION: As a current carrying trolley wire or contact wire supplying electrical power to urban transit buses, railroad vehicles, subways, light rail transit systems, electrically powered mine trains, and industrial conveyors. Provides high conductivity, good corrosion resistance and good wear-rate properties.</p> <p>STANDARDS: 1. Conforms to ASTM Specification B-47 for Copper Trolley Wire.</p> <p>CONSTRUCTION: Single conductor solid copper of hard temper manufactured from continuously cast oxygen-free electrolytic copper, drawn into round or grooved joint-free trolley wire.</p>	 <p>ROUND</p>  <p>GROOVED</p>
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Size AWG or kcmil	Overall Diameter		Area			Weight			Tensile Strength Min.		Resistance (68F - 20C)			Min. Breaking Strength	
	in	mm	cmil	in ²	mm ²	lb/kft	lb/mi	kg/km	lb/in ²	kg/mm ²	Ohms/ kft.	Ohms/ mi	Ohms/ km	lb	kg
ROUND															
1/0	.3249	8.252	105600	.0829	53.5	319.5	1687	475	54500	38.3	.1011	.53381	.33177	4518	2049
2/0	.3648	9.266	133100	.1045	67.4	402.8	2127	599	52800	37.1	.08021	.42351	.26321	5519	2503
3/0	.4096	10.404	167800	.1318	85.0	507.8	2681	755	51000	35.9	.06362	.33591	.20877	6720	3048
4/0	.4600	11.684	211600	.1662	107.2	640.5	3382	953	49000	34.5	.05405	.26638	.16556	8143	3694
300	.5477	13.911	300000	.2356	152.0	908.0	4794	1350	46400	32.6	.03558	.18786	.11676	10930	4958
GROOVED															
2/0	.392	9.957	137900	.1083	69.9	417.6	2205	621	50200	35.3	.07741	.40872	.25402	5437	2466
3/0	.430	10.922	167300	.1314	84.8	506.4	2674	755	48500	34.1	.06380	.33686	.20936	6373	2891
4/0	.482	12.243	212000	.1665	107.4	641.9	3389	955	46600	32.8	.05035	.26585	.16523	7759	3519
300	.574	14.580	299800	.2355	151.9	907.6	4792	1350	44200	31.1	.03560	.18797	.11682	10410	4722
350	.620	15.748	351200	.2758	177.9	1063.0	5612	1581	42800	30.1	.03039	.16046	.09973	11810	5357

- NOTES: 1. Customer must specify relation between the vertical axis of grooved wire to the axis of the shipping reel. This can be specified as groove-up or groove-down.
2. Data shown are approximate subject to normal manufacturing tolerances. Weights and breaking strengths are based upon nominal dimensions of ASTM B-47. Resistances are based upon nominal sizes and dimensions.

Information on this sheet subject to change without notice.

Specification

ROME COPPER TROLLEY WIRE

Round and Grooved

1. SCOPE

- 1.1 This specification describes a solid copper conductor of hard temper manufactured from continuously-cast, oxygen-free electrolytic copper, drawn into round or grooved joint-free trolley wire. The wire is suitable for use as a current carrying trolley wire, contact wire, or auxiliary wire where maximum conductivity is required for supplying electrification to urban transit buses, railroad vehicles, subways, light rail transit systems, electrically powered mine trains and industrial conveyors.

2. SPECIFICATION

- 2.1 The following specification shall form a part of this specification:
 - 2.1.1 ASTM Specification B47 for Copper Trolley Wire.

3. CONDUCTOR

- 3.1 Conductors shall be round or grooved of the specified size, meeting the requirements of the ASTM specification.

4. TESTS

- 4.1 Conductors shall be tested to insure conformance to ASTM Specification B47 for Copper Trolley Wire. Certified test reports may be furnished if requested prior to manufacture.

5. PACKAGING

- 5.1 The trolley wire can be supplied in continuous, joint-free lengths up to 6000 pounds per reel. Standard package shall be a 48 inch reel with a steel sleeve reinforced arbor hole for a 2 1/2 inch diameter shaft. Steel plates for other shafts and/or 4 inch square arbor for railroads may also be supplied.