# **OVERHEAD CATENARY WIRE PURE HARD DRAWN COPPER**

Contact / Trolley Wire for Transit Systems



Images not to scale. See Table 1 for Dimensions

### **CONSTRUCTION:**

This product offers: excellent corrosion resistance, wear characteristics, and high-tensile strength properties. Hard Drawn Copper trolley wire is offered in the ASTM configurations: grooved, figure 8, or figure 9.

### **APPLICATIONS AND FEATURES:**

For use as overhead power source for subways, light and heavy transit systems, electrically powered mine train, buses, and industrial cranes. Southwire hard drawn copper trolley wire is ideal for high-speed rail transportation system.

- Mechanically Rugged
- High Tensile Strength and Breaking Load
- Low Thermal Loss
- RoHS/Proposition 65 Compliant
- Stable and Reliable for Long Term use
- · Easy to Install for Renovating Exiting Lines in the Field.

### **SPECIFICATIONS:**

- ASTM B47 Copper Trolley Wire
- ASTM B116 Figure-9 deep-section grooved and Figure-8 copper trolley wire for use in industrial haulage
- EN 50149 Railway Applications. Fixed Installations. Electric Traction. Copper and Copper Alloy Grooved Contact Wires.





## **TABLE 1 Weights and Measurements**

Stock Number	Conductor Size	Overall Diameter	Area		Weight		Tensile Strength	Resistance @ 68°F 20°C		Min Breaking Strength
			Cmils	Inches <sup>2</sup>			(minimum)	00 1 20 0		ouchgui
	AWG				Pounds/1,000 Ft.	Pounds/Mile	Lbs./in²	Ω/1,000Ft.	Ω/Mile	Pounds
TBD	2/0	0.392	137,900	0.1083	416.61	2205	50,200	0.0774	0.4087	5,438
TBD	3/0	0.430	167,300	0.1314	506.44	2674	48,500	0.0638	0.3369	6,374
592467	4/0	0.482	212,000	0.1665	641.86	3389	46,600	0.0504	0.2659	7,780
597541	300	0.574	299,800	0.2355	907.58	4792	44,200	0.0356	0.1880	10,415
587578	350	0.620	351,200	0.2758	1062.88	5612	42,800	0.0304	0.0997	11,812

#### Notes:

- 1. These numbers represent the minimum percent IACS conductivity of the alloys. Other alloys are available subject to special inquiry.
- 2. Figure 8 and 9 wire are also available upon request. Size 6 AWG (336,200 Cmil) Grooved wall will be regularly furnished as 350,000 Cmil size
- 3. Tolerances: The above data are approximately and subject to normal manufacturing tolerances Weights, breaking strengths and resistance are base on nominal dimensions