

OVERHEAD CATENARY SYSTEMS MESSENGER WIRE - BARE COPPER

Messenger Wire for Transit Systems



Images not to scale. See Table 1 for Dimensions

CONSTRUCTION:

This product can be made in variations of Hard Drawn or Medium-Hard Drawn Copper with concentric or unilay stranding options. Tinned coated copper and Proof Positive™ anti-theft conductors are also available upon request.

APPLICATIONS AND FEATURES:

For use in Trolley and High Speed Rail applications as supports for contact and dropper wires in overhead catenary systems. Southwire's messenger wire is designed for long service life with the ability to maintain rugged strength through sustained performance.

- Pure Copper
- Flexible to Wind and Vibration
- Durable and Reliable Support
- Mechanically Rugged
- High Tensile Strength and Breaking Load
- RoHS/Proposition 65 Compliant

SPECIFICATIONS:

- ASTM B1 - Hard-Drawn Copper
- ASTM B8 - Concentric-Lay-Stranded Hard or Medium-Hard Drawn Copper
- ASTM B33 - Tinned Copper Wire
- ASTM B787 - 19 Wire Combination Unilay-Stranded Copper Conductors.



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TABLE 1 Weights and Measurements

Stock Code	Cond. Size	Strands	Strand Class	Approx. Weight lbs./MFT	Approx. OD inches		Hard Drawn Rated Strength lbs.	Resistance DC @ 20°C Ω/MFT	Allowable Ampacity* Amps
	AWG				Individual	Complete Cable			
TBA	8	7	B	51	0.049	0.146	777	0.6663	95
TBA	6	7	B	81	0.061	0.184	1228	0.4191	130
TBA	4	7	A, B	129	0.077	0.232	1938	0.2636	170
TBA	3	7	A, B	163	0.087	0.26	2433	0.209	200
TBA	2	7	A, B	205	0.097	0.292	3050	0.166	230
TBA	1	7	A	258	0.109	0.328	3801	0.1316	265
TBA	1/0	7	A, AA	326	0.123	0.368	4752	0.1042	310
TBA	1/0	19	B	326	0.075	0.373	4752	0.1042	310
TBA	2/0	7	A, AA	411	0.138	0.414	5926	0.0827	355
TBA	2/0	19	B	411	0.084	0.418	6690	0.0827	355
TBA	3/0	7	A, AA	518	0.155	0.464	7366	0.0656	410
TBA	4/0	7	A, AA	653	0.174	0.522	9154	0.052	480
TBA	4/0	19	B	653	0.106	0.528	9617	0.052	480
TBA	250	19	A	772	0.115	0.574	11360	0.044	530
TBA	250	37	B	772	0.082	0.575	11600	0.044	530
TBA	300	19	A	926	0.126	0.628	13510	0.0367	590
TBA	350	19	A	1081	0.136	0.679	15590	0.0314	650
593421	500	19	A	1544	0.116	0.814	22510	0.022	810
588744	500	37	B	1544	0.116	0.814	22510	0.022	810
TBA	600	37	A, AA	1853	0.127	0.891	27020	0.0183	910
588829	750	61	A, B	2316	0.111	0.998	34090	0.0147	1040
TBA	1000	61	A, B	3088	0.128	1.152	45030	0.011	1240

Notes:

*Ampacity based on 75°C conductor temperature 25°C ambient temperature 2 ft./sec. wind in sun.

Numbers shown above are for concentrically stranded constructions and may vary slightly for combination unilay stranded constructions. Dimensions and weights shown above are nominal and subject to industry tolerances.

