

Contact

Residential/Commercial/Industrial
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Soft Bare Copper

Description

ASTM B-3 Soft or Annealed Copper Wire. ASTM B-3 Specification details the requirements for solid wires and the individual wires in stranded conductors.

ASTM B-8 Concentric - Lay - Stranded Copper Conductors

Solid or stranded 100% conductivity copper conductors.



Application

Used for bonding and grounding electrical circuits and systems.

Standards

National Factory standard

Characteristics

Construction characteristics	
Conductor material	Annealed copper

Soft Drawn Bare Copper

Size AWG or kcmil	Nominal Diameter		Approximate Conductor Weight		Nominal D.C. Resistance @ 25°C	
	mm	in	kg/km	lbs/kft	Ω/km	Ω/kft
14 (1)	1.63	0.064	18.5	12.4	8.44	2.570
12 (1)	2.05	0.081	29.4	19.8	5.31	1.620
10 (1)	2.59	0.102	46.8	31.4	3.34	1.020
8 (7)	3.61	0.142	75.9	51.0	2.14	0.653
6 (7)	4.55	0.179	121.0	81.1	1.35	0.411
4 (7)	5.72	0.225	192.0	129.0	0.848	0.258
2 (7)	7.19	0.283	305.0	205.0	0.533	0.163
1 (19)	7.95	0.313	385.0	258.0	0.423	0.129
1/0 (19)	8.94	0.352	485.0	325.0	0.335	0.102
2/0 (19)	10.03	0.395	611.0	410.0	0.266	0.081
3/0 (19)	11.25	0.443	771.0	518.0	0.211	0.064
4/0 (19)	12.65	0.498	972.0	653.0	0.167	0.051
250 (37)	13.77	0.542	1149.0	772.0	0.142	0.043
300 (37)	15.09	0.594	1378.0	926.0	0.118	0.036
350 (37)	16.28	0.641	1609.0	1081.0	0.101	0.031
400 (37)	17.40	0.685	1838.0	1235.0	0.088	0.027
500 (37)	19.46	0.766	2298.0	1544.0	0.071	0.021
600 (61)	21.34	0.840	2758.0	1853.0	0.059	0.018
750 (61)	23.85	0.939	3447.0	2316.0	0.047	0.014
1000 (61)	28.37	1.117	4595.0	3088.0	0.035	0.011

* ASTM B-3 Specification details the requirements for solid wires and the individual wires in stranded conductors.

AC90 (-40°C) XLPE 600 Volts 90°C Zero Halogen

2 Conductors
Nexans ref.: AC90

ARMoured CABLE FOR COMMERCIAL, INDUSTRIAL & APARTMENT USE

Description

CSA File #LL23462 Class 5811 01

Two copper or aluminum conductor material (ACM) conductors with low temperature EXELENE® cross-linked polyethylene insulation (RW90 XLPE) and bare copper or aluminum bonding wire. Conductor assembly paper wrapped and covered with bare interlocked aluminum armour. Rated 600 volts. LEAD FREE and RoHS compliant.

Limited Smoke Zero Halogen - CSA rated ST1 per CSA 22.2 No. 2556. Meets the FT4 flame spread test.

Application

For open and concealed wiring in dry locations only.

For use in cabletroughs and ventilated flexible cableways in dry locations only. Minimum recommended installation temperature minus 40°C (with suitable handling procedures).

Maximum conductor temperature 90°C. Approved for use with ceiling fixtures.



Standards

National CSA C22.2 N° 2556;
CSA C22.2 N° 51

Characteristics

Construction characteristics

Conductor material Copper or Aluminum

Electrical characteristics

Maximum operating voltage 600 V

Usage characteristics

Maximum operating temperature 90 °C

Two Conductors (plus bonding wire)

Size AWG or kcmil	Insulation Thickness		Bonding Wire** Size AWG		Approximate Diameter				Approximate Net Cable Weight				Ampacity (amps) 30°C Ambient	
	mm	in	Copper	Aluminum	Copper		Aluminum		Copper		Aluminum		Copper	Aluminum
					mm	in	mm	in	kg/km	lbs/kft	kg/km	lbs/kft		
14 (1)	0.76	0.030	14	--	12.0	0.47	--	--	145	98	--	--	15	—
12 (1)	0.76	0.030	14	12	12.8	0.51	12.8	0.51	176	115	114	76	20	15
10 (1)	0.76	0.030	12	10	13.9	0.55	13.9	0.55	233	156	137	92	30	25

Selling information

Insulation Colour Code: 2 Conductors - Black, White

**Copper bonding wire supplied with copper conductors. Aluminum bonding wire supplied with aluminum conductors.

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Usage characteristics	
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