Designation: ~~B8 – 11 (Reapproved 2017)~~ B8 – 23

Standard Specification for Concentric-Lay-Stranded Copper Conductors, Hard, Medium-Hard, or Soft[1]

This standard is issued under the fixed designation B8; the number immediately following the designation indicates the year of original adoption or, in the case of revision, the year of last revision. A number in parentheses indicates the year of last reapproval. A superscript epsilon (ε) indicates an editorial change since the last revision or reapproval.

This standard has been approved for use by agencies of the U.S. Department of Defense.

1. Scope

1.1 This specification covers bare concentric-lay-stranded conductors made from round copper wires, either uncoated or coated with tin, lead, or lead alloy for general use for electrical purposes. These conductors shall be constructed with a central core surrounded by one or more layers of helically laid wires.

NOTE 1—This specification also permits conductors for use as covered or insulated electrical conductors.

NOTE 2—Sealed conductors, that are intended to prevent longitudinal water propagation and are further covered/insulated, are also permitted within the guidelines of this specification.

1.2 For the purposes of this specification, conductors are classified as follows (Explanatory Note 1 and Note 2):

1.2.1 *Class AA*—For bare conductors usually used in overhead lines.

1.2.2 *Class A*—For conductors to be covered with weather-resistant (weather-proof), slow-burning materials, and for bare conductors where greater flexibility than is afforded by Class AA is required.

1.2.3 *Class B*—For conductors to be insulated with various materials such as rubber, paper, varnished cloth, and so forth, and for the conductors indicated under Class A where greater flexibility is required.

1.2.4 *Class C and Class D*—For conductors where greater flexibility is required than is provided by Class B conductors.

1.3 The SI values for density are regarded as the standard. For all other properties, the inch-pound values are to be regarded as standard and the SI units may be approximate.

1.4 *This international standard was developed in accordance with internationally recognized principles on standardization established in the Decision on Principles for the Development of International Standards, Guides and Recommendations issued by the World Trade Organization Technical Barriers to Trade (TBT) Committee.*

[1] This specification is under the jurisdiction of ASTM Committee B01 on Electrical Conductors and is the direct responsibility of Subcommittee B01.04 on Conductors of Copper and Copper Alloys.

Current edition approved ~~April 1, 2017~~Nov. 1, 2023. Published ~~April 2017~~November 2023. Originally approved in 1915. Last previous edition approved in ~~2011~~2017 as ~~B8 – 11.~~B8 – 11 (2017). DOI: ~~10.1520/B0008-11R17.~~10.1520/B0008-23.

2. Referenced Documents

2.1 *ASTM Standards:*[2]

B1 Specification for Hard-Drawn Copper Wire
B2 Specification for Medium-Hard-Drawn Copper Wire
B3 Specification for Soft or Annealed Copper Wire
B33 Specification for Tin-Coated Soft or Annealed Copper Wire for Electrical Purposes
B172 Specification for Rope-Lay-Stranded Copper Conductors Having Bunch-Stranded Members, for Electrical Conductors
B173 Specification for Rope-Lay-Stranded Copper Conductors Having Concentric-Stranded Members, for Electrical Conductors
B174 Specification for Bunch-Stranded Copper Conductors for Electrical Conductors
B189 Specification for Lead-Coated and Lead-Alloy-Coated Soft Copper Wire for Electrical Purposes
B193 Test Method for Resistivity of Electrical Conductor Materials
B246 Specification for Tinned Hard-Drawn and Medium-Hard-Drawn Copper Wire for Electrical Purposes
B263 Test Method for Determination of Cross-Sectional Area of Stranded Conductors
B354 Terminology Relating to Uninsulated Metallic Electrical Conductors
B787/B787M Specification for 19 Wire Combination Unilay-Stranded Copper Conductors for Subsequent Insulation
E29 Practice for Using Significant Digits in Test Data to Determine Conformance with Specifications

3. Ordering Information

3.1 Orders for material under this specification shall include the following information:

3.1.1 Quantity of each size and class,

3.1.2 Conductor size: circular-mil area or AWG (Section 6),

3.1.3 Class (see 1.2 and Table 1),

3.1.4 Temper (see ~~13.2~~14.2),

3.1.5 Whether coated or uncoated; if coated, designate type of coating (see ~~13.1~~14.1 and ~~13.2~~14.2),

3.1.6 Details of special-purpose lays, if required (see ~~5.4~~5.5),

3.1.7 When physical tests shall be made (see Sections 7 and ~~8~~9),

3.1.8 Package size (see Section ~~15~~16),

3.1.9 Lagging, if required (see section ~~15.2~~16.2),

3.1.10 Special package marking, if required (see ~~section 15.3~~16.3), and

3.1.11 Place of inspection (see Section ~~14~~15).

4. Joints

4.1 Welds and brazes may be made in rods or in wires prior to final drawing. Joints may not be made in the finished wires composing hard-drawn or medium-hard-drawn Class AA conductors of seven wires or less. In other conductors, welds and brazes may be made in the finished individual wires composing the conductor, but shall not be closer together than prescribed in Table 2.

[2] For referenced ASTM standards, visit the ASTM website, www.astm.org, or contact ASTM Customer Service at service@astm.org. For *Annual Book of ASTM Standards* volume information, refer to the standard's Document Summary page on the ASTM website.

TABLE 1 Construction Requirements of Concentric-Lay-Stranded Copper Conductors

Area of Cross-Section, cmil	Size, American Wire ~~Gage~~Gauge	Class AA		Class A		Class B[A]		Class C		Class D	
		Number of Wires	Diameter of Wires, mils	Number of Wires	Diameter of Wires, mils	Number of Wires	Diameter of Wires, mils	Number of Wires	Diameter of Wires, mils	Number of Wires	Diameter of Wires, mils
*5 000 000	...	...	...	169	172.0	217	151.8	271	135.8	271	135.8
4 500 000	...	...	...	169	163.2	217	144.0	271	128.9	271	128.9
4 000 000	...	...	...	169	153.8	217	135.8	271	121.5	271	121.5
3 500 000	...	...	...	127	166.0	169	143.9	217	127.0	271	113.6
*3 000 000	...	...	...	127	153.7	169	133.2	217	117.6	271	105.2
*2 500 000	...	...	...	91	165.7	127	140.3	169	121.6	217	107.3
*2 000 000	...	...	...	91	148.2	127	125.5	169	108.8	217	96.0
1 900 000	...	...	...	91	144.5	127	122.3	169	106.0	217	93.6
1 800 000	...	...	...	91	140.6	127	119.1	169	103.2	217	91.1
*1 750 000	...	...	...	91	138.7	127	117.4	169	101.8	217	89.8
1 700 000	...	...	...	91	136.7	127	115.7	169	100.3	217	88.5
1 600 000	...	...	...	91	132.6	127	112.2	169	97.3	217	85.9
*1 500 000	...	...	...	61	156.8	91	128.4	127	108.7	169	94.2
1 400 000	...	...	...	61	151.5	91	124.0	127	105.0	169	91.0
1 300 000	...	...	...	61	146.0	91	119.5	127	101.2	169	87.7
*1 250 000	...	...	...	61	143.1	91	117.2	127	99.2	169	86.0
1 200 000	...	...	...	61	140.3	91	114.8	127	97.2	169	84.3
1 100 000	...	...	...	61	134.3	91	109.9	127	93.1	169	80.7
*1 000 000	...	37	164.4	61	128.0	61	128.0	91	104.8	127	88.7
900 000	...	37	156.0	61	121.5	61	121.5	91	99.4	127	84.2
*800 000	...	37	147.0	61	114.5	61	114.5	91	93.8	127	79.4
*750 000	...	37	142.4	61	110.9	61	110.9	91	90.8	127	76.8
*700 000	...	37	137.5	61	107.1	61	107.1	91	87.7	127	74.2
650 000	...	37	132.5	61	103.2	61	103.2	91	84.5	127	71.5
*600 000	...	37	127.3	37	127.3	61	99.2	91	81.2	127	68.7
550 000	...	37	121.9	37	121.9	61	95.0	91	77.7	127	65.8
*500 000	...	19	162.2	37	116.2	37	116.2	61	90.5	91	74.1
450 000	...	19	153.9	37	110.3	37	110.3	61	85.9	91	70.3
*400 000	...	19	145.1	19	145.1	37	104.0	61	81.0	91	66.3
*350 000	...	12	170.8	19	135.7	37	97.3	61	75.7	91	62.0
*300 000	...	12	158.1	19	125.7	37	90.0	61	70.1	91	57.4
*250 000	...	12	144.3	19	114.7	37	82.2	61	64.0	91	52.4
*211 600	0000	7	173.9	7	173.9	19	105.5	37	75.6	61	58.9
*167 800	000	7	154.8	7	154.8	19	94.0	37	67.3	61	52.4
*133 100	00	7	137.9	7	137.9	19	83.7	37	60.0	61	46.7
*105 600	0	7	122.8	7	122.8	19	74.5	37	53.4	61	41.6
*83 690	1	3[B]	167.0	7	109.3	19	66.4	37	47.6	61	37.0
*66 360	2	3[B]	148.7	7	97.4	7	97.4	19	59.1	37	42.4
*52 620	3	3[B]	132.5	7	86.7	7	86.7	19	52.6	37	37.7
*41 740	4	3[B]	118.0	7	77.2	7	77.2	19	46.9	37	33.6
*33 090	5	...	...	...	...	7	68.8	19	41.7	37	29.9
*26 240	6	...	...	...	...	7	61.2	19	37.2	37	26.6
*20 820	7	...	...	...	...	7	54.5	19	33.1	37	23.7
*16 510	8	...	...	...	...	7	48.6	19	29.5	37	21.1
*13 090	9	...	...	...	...	7	43.2	19	26.2	37	18.8
*10 380	10	...	...	...	...	7	38.5	19	23.4	37	16.7
*6 530	12	...	...	...	...	7	30.5	19	18.5	37	13.3
*4 110	14	...	...	...	...	7	24.2	19	14.7	37	10.5
*2 580	16	...	...	...	...	7	19.2	19	11.7	...	...
*1 620	18	...	...	...	...	7	15.2	19	9.2	...	...
*1 020	20	...	...	...	...	7	12.1	19	7.3	...	...
*640	22	...	...	...	...	7	9.6	19	5.8	...	...
*404	24	...	...	...	...	7	7.6	19	4.6	...	...

* The sizes of conductors that have been marked with an asterisk provide for one or more schedules of preferred series, and are commonly used in the industry. The sizes not marked are given simply as a matter of reference and it is suggested that their use be discouraged.

[A] For unidirectional/unilay constructions the number of wires shown are minimum requirements.

[B] Although Class AA conductors having three strands do not conform to the construction requirements of 1.1, they are listed in this table for convenience.

5. Lay

5.1 For Class AA conductors composed of less than seven wires, the ~~preferred lay is 11 times the outside diameter of the completed conductor, but shall be not~~ length of lay of a layer of wires shall not be less than 8 nor more than 14 times ~~this diameter.~~the outside diameter of that layer.

5.2 For Class AA conductors composed of seven wires or more, the ~~preferred~~ length of lay of a layer of wires ~~is 13.5 times the~~

TABLE 2 Minimum Distance Between Joints in the Completed Conductor

Number of Wires in Conductor	Hard or Medium-Hard					Soft
	Class AA	Class A	Class B	Class C	Class D	All Classes
3	none permitted	...	...	...	...	1 ft
7	none permitted	50 ft	50 ft	...	...	1 ft
12	50 ft	50 ft	...	...	...	1 ft
19	50 ft	50 ft	50 ft	50 ft	...	1 ft
20 to 36	50 ft	50 ft	50 ft	50 ft	...	1 ft in a layer[A]
37 to 60		25 ft	25 ft	25 ft	25 ft	1 ft in a layer[A]
61 and over	...	5 ft	5 ft	5 ft	5 ft	1 ft in a layer[A]

[A] Except as indicated, the limitations apply to closeness of joints throughout the completed conductor.

~~outside diameter of that layer, but shall be not less than 10 nor more than 16 times this diameter.~~shall not be less than 10 nor more than 16 times the diameter of that layer. The length of lay of any copper layer shall not be less than the length of lay of the copper layer immediately beneath it.

5.3 For all other classes the lay of a layer of wires shall be not less than 8 nor more than 16 times the outside diameter of that layer, except that for conductors composed of 37 wires or more, this requirement shall apply only to the two outer layers. The lay of the layers other than the two outer layers shall be at the option of the manufacturer, unless otherwise agreed upon.

5.3.1 For conductors to be used in covered or insulated wires or cables, the lay length shall be not less than 8 nor more than 16 times the outer diameter of the finished conductor. For conductors of 37 wires or more, this requirement shall apply to the wires in the outer two layers. The lay of the layers other than the two outer layers shall be at the option of the manufacturer, unless otherwise agreed upon.

5.4 For Class AA and A bare conductors having multiple layers of copper wires, the length of lay of any copper layer shall not be less than the length of lay of the copper layer immediately beneath it.

5.5 Other lays for special purposes shall be furnished by special agreement between the manufacturer and the purchaser (Explanatory Note 3).

5.6 The direction of lay of the outer layer shall be left-hand, and for conductors having a nominal cross-sectional area larger than No. 8 AWG, shall be reversed in successive layers, unless otherwise specified by the purchaser.

5.6.1 For conductors to be used in covered or insulated wires or cables, the direction of lay of the outer layer shall be left hand and shall be reversed in successive layers, unidirectional, or unilay, unless otherwise agreed upon.

6. Construction

6.1 The areas of cross section, numbers, and diameters of wires in the various classes of concentric-lay-stranded conductors shall conform to the requirements prescribed in Table 1 (Explanatory Notes 3 and ~~10~~9).

6.2 The diameters of the wires listed in Table 1 are nominal. Where "combination strand" is required in order to insulate the conductor properly (strands in the outer layer having a larger diameter than those in the inner layers) the diameters shall be subject to a tolerance of ±5 %, provided that the area of cross section after stranding is in accordance with Section ~~11~~12.

6.3 Where compressed stranding is required in order to insulate the conductor properly, one or more layers of any stranded conductor consisting of 7 wires or more may be slightly compressed, thereby reducing the outside diameter of the conductor to the nominal values shown in Table 3, provided that the area of cross section after stranding is in accordance with Section ~~11~~12.

7. Physical and Electrical Tests of Conductors Stranded of Soft Wires

7.1 Tests for the electrical properties of wires composing conductors made from soft or annealed copper wire, bare or coated, shall be made before stranding.

7.2 Tests for the physical properties of soft or annealed copper wire, bare or coated, may be made upon the wires before stranding

TABLE 3 Diameters, Areas, and Mass of Concentric-Lay-Stranded Copper Conductors (Explanatory Note ~~8~~7)

Size of Conductor,		Nominal Conductor Diameter, in.[A]					Area, in.[2]	Mass		dc Resistance at ~~20°C~~20 °C[B]	
		Concentric Strand									
cmil or AWG numbers	mm[2]	Class AA	Class A	Class B	Reverse Concentric Compressed Class B Diameter, in.	Unilay Compressed[C] Diameter, in.		lbs/1000 ft	kg/km	Ω/1000 ft	Ω/km
*5 000 000 cmil	2530	...	2.580	2.581	...	...	3.927	15 890	23 649	0.00218	0.00715
4 500 000 cmil	2280	...	2.448	2.448	...	...	3.534	14 300	21 283	0.00242	0.00794
4 000 000 cmil	2030	...	2.307	2.309	...	...	3.142	12 590	18 738	0.00270	0.00886
3 500 000 cmil	1770	...	2.158	2.159	...	...	2.749	11 020	16 401	0.00308	0.0101
*3 000 000 cmil	1520	...	1.998	1.998	...	...	2.356	9 353	13 920	0.00356	0.0117
*2 500 000 cmil	1270	...	1.823	1.824	...	...	1.963	7 794	11 600	0.00427	0.0140
*2 000 000 cmil	1010	...	1.630	1.632	1.583	1.533	1.571	6 175	9 190	0.00529	0.0174
1 900 000 cmil	963	...	1.590	1.590	1.542	1.494	1.492	5 866	8 730	0.00557	0.0183
1 800 000 cmil	912	...	1.547	1.548	1.502	1.454	1.414	5 558	8 272	0.00588	0.0193
*1 750 000 cmil	887	...	1.526	1.526	1.480	1.434	1.374	5 403	8 041	0.00604	0.0198
1 700 000 cmil	861	...	1.504	1.504	1.459	1.413	1.335	5 249	7 812	0.00622	0.0204
1 600 000 cmil	801	...	1.459	1.459	1.415	1.371	1.257	4 940	7 352	0.00661	0.0217
*1 500 000 cmil	760	...	1.411	1.412	1.370	1.327	1.178	4 631	6 892	0.00705	0.0231
1 400 000 cmil	709	...	1.364	1.364	1.323	1.282	1.100	4 323	6 435	0.00756	0.0248
1 300 000 cmil	659	...	1.314	1.315	1.275	1.236	1.021	4 014	5 974	0.00814	0.0267
*1 250 000 cmil	633	...	1.288	1.289	1.250	1.212	0.9817	3 859	5 743	0.00846	0.0278
1 200 000 cmil	608	...	1.263	1.263	1.225	1.187	0.9425	3 705	5 514	0.00882	0.0289
1 100 000 cmil	557	...	1.209	1.209	1.173	1.137	0.8639	3 396	5 054	0.00962	0.0316
*1 000 000 cmil	507	1.151	1.152	1.152	1.117	1.084	0.7854	3 088	4 596	0.0106	0.0348
900 000 cmil	456	1.092	1.094	1.094	1.060	1.028	0.7069	2 779	4 136	0.0118	0.0387
*800 000 cmil	405	1.029	1.031	1.031	1.000	0.969	0.6283	2 470	3 676	0.0132	0.0433
*750 000 cmil	380	0.997	0.998	0.998	0.968	0.939	0.5890	2 316	3 447	0.0141	0.0462
*700 000 cmil	355	0.963	0.964	0.964	0.935	0.907	0.5498	2 161	3 216	0.0151	0.0495
650 000 cmil	329	0.928	0.929	0.929	0.901	0.874	0.5105	2 007	2 987	0.0163	0.0535
*600 000 cmil	304	0.891	0.891	0.893	0.866	0.840	0.4712	1 853	2 758	0.0176	0.0578
550 000 cmil	279	0.853	0.853	0.855	0.829	0.804	0.4320	1 698	2 527	0.0192	0.0630
*500 000 cmil	253	0.811	0.813	0.813	0.789	0.766	0.3927	1 544	2 298	0.0212	0.0695
450 000 cmil	228	0.770	0.772	0.772	0.749	0.727	0.3534	1 389	2 067	0.0235	0.0771
*400 000 cmil	203	0.726	0.726	0.728	0.706	0.685	0.3142	1 235	1 838	0.0264	0.0866
*350 000 cmil	177	0.710	0.679	0.681	0.661	0.641	0.2749	1 081	1 609	0.0302	0.0991
*300 000 cmil	152	0.657	0.629	0.630	0.611	0.594	0.2356	926.3	1 378.6	0.0353	0.116
*250 000 cmil	127	0.600	0.574	0.575	0.558	0.542	0.1963	771.9	1 148.8	0.0423	0.139
* No. 0000	107	0.522	0.522	0.528	0.512	0.498	0.1662	653.1	972.0	0.0500	0.164
* No. 000	85.0	0.464	0.464	0.470	0.456	0.443	0.1318	518.1	771.1	0.0630	0.207
* No. 00	67.4	0.414	0.414	0.419	0.405	0.395	0.1045	410.9	611.5	0.0795	0.261
* No. 0	53.5	0.368	0.368	0.373	0.362	0.352	0.08289	325.8	484.9	0.100	0.328
* No. 1, 3 wire	42.4	0.360	...	...	...	...	0.06573	255.9	380.9	0.126	0.413
* No. 1	42.4	...	0.328	0.332	0.322	0.313	0.06573	258.4	384.6	0.126	0.413
* No. 2, 3 wire	33.6	0.320	...	...	...	...	0.05213	202.9	301.9	0.159	0.522
* No. 2	33.6	...	0.292	0.292	0.283	...	0.05213	204.9	304.9	0.159	0.522
* No. 3, 3 wire	26.7	0.285	...	...	...	...	0.04134	160.9	239.5	0.201	0.659
* No. 3	26.7	...	0.260	0.260	0.252	...	0.04134	162.5	241.9	0.201	0.659
* No. 4, 3 wire	21.2	0.254	...	...	...	...	0.03278	127.6	189.9	0.253	0.830
* No. 4	21.2	...	0.232	0.232	0.225	...	0.03278	128.9	191.8	0.253	0.830
* No. 5	16.8	...	...	0.206	0.200	...	0.02600	102.2	152.1	0.319	1.05
* No. 6	13.3	...	...	0.184	0.178	...	0.02062	81.05	120.63	0.403	1.32
* No. 7	10.6	...	...	0.164	0.159	...	0.01635	64.28	95.67	0.509	1.67
* No. 8	8.37	...	...	0.146	0.142	...	0.01297	50.97	75.86	0.640	2.10
* No. 9	6.63	...	...	0.130	0.126	...	0.01028	40.42	60.16	0.809	2.65
* No. 10	5.26	...	...	0.116	0.113	...	0.008155	32.06	47.72	1.02	3.35
* No. 12	3.31	...	...	0.0915	0.089	...	0.005129	20.16	30.00	1.63	5.35
* No. 14	2.08	...	...	0.0726	0.071	...	0.003225	12.68	18.87	2.58	8.46
* No. 16	0.823	...	...	0.0576	...	...	0.002028	7.974	11.868	4.10	13.45
* No. 18	0.519	...	...	0.0456	...	...	0.001276	5.015	7.464	6.54	21.46
* No. 20	0.519	...	...	0.0363	...	...	0.0008023	3.154	4.694	10.3	33.8
* No. 22	0.324	...	...	0.0288	...	...	0.0005067	1.992	2.965	16.4	53.8
* No. 24	0.205	...	...	0.0228	...	...	0.0003176	1.249	1.859	26.1	85.6

* The sizes of conductors which have been marked with a single asterisk provide for one or more schedules of preferred series, and are commonly used in the industry. The sizes not marked are given simply as a matter of reference, and it is suggested that their use be discouraged.

[A] To calculate the nominal diameters of Class C or Class D conductors or of any concentric-lay-stranded conductors made from round wires of uniform diameters, multiply the diameter of an individual wire (as given in Table 1) by that one of the following factors which applies:

[B] Resistances (dc) apply to Class B, C, and D stranding. For other classes of stranding, refer to Test Method B193. Resistance (dc) based on annealed copper.

[C] For conductors manufactured for subsequent covering or insulating.

Number of Wires in Conductor	Factor to Calculate Conductor Diameter

3	2.155
7	3
12	4.155
19	5
37	7
61	9
91	11
127	13
169	15
217	17
271	19

or upon wires removed from the complete stranded conductor, but need not be made upon both. Care shall be taken to avoid mechanical injury to wire removed from the conductor for the purpose of testing.

7.3 The physical properties of wire when tested before stranding shall conform to the applicable requirements of ~~13.2~~14.2.

7.4 The physical properties of wires removed from the completed stranded conductor shall be permitted to vary from the applicable requirements of ~~13.2~~14.2 by the following amounts (Explanatory Note 4):

7.4.1 *Average of Results Obtained on All Wires Tested*—The minimum elongation required shall be reduced in numerical value 5 (for example, from ~~30~~30 % to 25 %) from the numerical requirements for the wire before stranding.

7.4.2 *Results Obtained on Individual Wires*—The elongation of individual wires shall be reduced in numerical value 15 from the minimum requirements before stranding (that is, 10 in addition to the 5 allowed in 7.4.1), but in no case shall the elongation of any individual wire be less than 5 %.

7.5 In the event that the requirements prescribed in 7.4.2 are met but those prescribed in 7.4.1 are not met, a retest shall be permitted wherein all wires of the conductor shall be tested for the purpose of final determination of conformance to 7.4.

7.6 Elongation tests to determine compliance shall not be made on the conductor as a unit.

7.7 If a tinning, lead-coating, or lead-alloy-coating test is required, it shall be made on the wires prior to stranding.

8. Rated Strength of Conductor

8.1 The rated strength of hard-drawn copper conductors shall be taken as 90 % of the sum of the strengths of the component wires, calculated using the nominal wire diameters and the specified nominal tensile strength given in Specification B1 (Explanatory Note 11).

8.2 The minimum rated strength of medium-hard-drawn copper conductors shall be taken as 90 % of the sum of the strengths of the component wires, calculated using the nominal wire diameters and the specified minimum tensile strength given in Specification B2 (Explanatory Note 11). The maximum rated strength of medium-hard-drawn copper conductors shall be taken as the sum of the strengths of the component wires, calculated using the nominal wire diameters and the specified maximum tensile strength given in Specification B2 (Explanatory Note 11).

8.3 Since no tensile strength requirements are specified for soft-drawn copper wires in Specification B3, the rated strength of soft-drawn copper conductors is not applicable.

8.4 In the case of compressed conductors, the nominal wire diameter should be that of the corresponding non-compressed construction as listed in Table 1.

8.5 Rated-strength and breaking-strength values shall be rounded to three significant figures, in the final value only, in accordance with the rounding method of Practice E29.