



Feature

The conductors are applied for overhead power transmission purposes.

CONSTRUCTION

Conductor

Seven or more copper wires the same nominal diameter are twisted together in concentric layers.

When conductor consists of more than one layer, alternate layers are twisted in opposite directions which is defined as right-hand lay (Z) or left-hand lay (S).

Bare Copper Conductor - Hard (BCC-H)

The conductor has mechanic characteristic minimum 428 N/mm². The maximum resistivity at 20° C is 0.01786 ohm.mm²/m.

Bare Copper Conductor - Half Hard (BCC-1/2H)

The conductor has mechanic characteristic between minimum 340 N/mm². Maximum 410 N/mm². The maximum resistivity at 20° C is 0.01784 ohm.mm²/m.

Annealed Copper Wire (BCC Soft)

The conductor has maximum resistivity at 20° C is 0.017241 ohm.mm²/m.

- Type :-** Bare Copper Conductor - Half Hard (BCC-1/2H)
- Bare Copper Conductor - Hard (BCC-H)
- Annealed Copper Wire (BCC-Soft)

Specification : SPLN 41-4:1981
SPLN 41-5:1981
JIS C 3102

(Other specification are available upon request)

BARE COPPER CONDUCTOR - HALF HARD
(BCC - 1/2 H)
 Specification : SPLN 41 - 4.1981 & SNI 04 - 3895:1995



PHYSICAL AND ELECTRICAL PROPERTIES

Nom. cross section	No. of wire/diameter	Approx. overall diameter	Approx. net weight of conductor	Calculated breaking force	D.C. resistance at 20°C	Current carrying capacity	Standard weight per reel
mm ²	n/m	mm	kg/km	kg	ohm/km	A	kg
6	1/2.80	2.80	55	196	2.8961	71	500
10	1/3.50	3.50	86	300	1.8545	90	500
10	7/1.35	4.05	92	329	1.8160	90	500
16	7/1.70	5.10	145	518	1.1452	125	1,000
25	7/2.10	6.30	220	782	0.7504	160	1,000
35	7/2.50	7.50	315	1,098	0.5296	200	1,000
50	19/1.80	9.00	440	1,572	0.3781	250	1,000
70	19/2.10	10.50	600	2,122	0.2778	310	1,000
95	19/2.50	12.50	850	2,980	0.1961	380	1,000
120	19/2.80	14.00	1,075	3,718	0.1563	440	1,000
150	37/2.25	15.70	1,340	4,728	0.1243	510	1,000
185	37/2.50	17.50	1,660	5,804	0.1007	585	1,000
240	61/2.25	20.20	2,250	7,795	0.0754	700	1,000
300	61/2.50	22.50	2,750	9,569	0.0611	800	1,000
400	61/2.89	26.00	3,636	12,676	0.0457	960	1,000
500	61/3.23	29.10	4,542	15,721	0.0366	1,110	1,000

BARE COPPER CONDUCTOR - HARD
(BCC - H)
 Specification : SPLN 41-5:1981 & SNI 04-3894:1995



PHYSICAL AND ELECTRICAL PROPERTIES

Nom. cross section	No. of wire/diameter	Approx. overall diameter	Approx. net weight of conductor	Calculated breaking force	D.C. resistance at 20° C	Current carrying capacity	Standard weight per reel
mm ²	n/m	mm	kg/km	kg	ohm/km	A	kg
6	1/2.80	2.80	55	248	2.8994	71	500
10	1/3.50	3.50	86	378	1.8565	90	500
10	7/1.35	4.05	92	413	1.8181	90	500
16	7/1.70	5.10	145	655	1.1465	125	1,000
25	7/2.10	6.30	220	987	0.7512	160	1,000
35	7/2.50	7.50	315	1,382	0.5302	200	1,000
50	19/1.80	9.00	440	1,967	0.3785	250	1,000
70	19/2.10	10.50	600	2,678	0.2781	310	1,000
95	19/2.50	12.50	850	3,752	0.1963	380	1,000
120	19/2.80	14.00	1,075	4,706	0.1565	440	1,000
150	37/2.25	15.70	1,340	5,985	0.1244	510	1,000
185	37/2.50	17.50	1,660	7,305	0.1008	585	1,000
240	61/2.25	20.20	2,250	9,866	0.0755	700	1,000
300	61/2.50	22.50	2,750	12,043	0.0611	800	1,000
400	61/2.89	26.00	3,636	16,094	0.0458	960	1,000
500	61/3.23	29.10	4,542	19,801	0.0367	1,110	1,000

ANNEALED COPPER WIRE
(BCC-SOFT)
Specification : JIS C 3102-1984



PHYSICAL AND ELECTRICAL PROPERTIES

Diameter	Tolerance for diameters	Conductivity (20° C) min	Electric resistance 20° C	Tensile load max.	Tensile strength max.	Elongation (gauge length 250 mm) min.	Approx. weight of conductor
mm ²	mm	%	ohm/km	kg	kg/mm ²	%	kg/km
0.10	±0.008	98.0	2240.0000	-	-	15	0.06982
0.11	±0.008	98.0	1851.0000	-	-	15	0.08448
0.12	±0.008	98.0	1556.0000	-	-	15	0.10050
0.13	±0.008	98.0	1326.0000	-	-	15	0.11800
0.14	±0.008	98.0	1143.0000	-	-	15	0.13680
0.15	±0.008	98.0	995.7000	-	-	15	0.15710
0.16	±0.008	98.0	874.9000	-	-	15	0.17880
0.17	±0.008	98.0	775.0000	-	-	15	0.20180
0.18	±0.008	98.0	691.3000	-	-	15	0.22630
0.19	±0.008	98.0	620.6000	-	-	15	0.25200
0.20	±0.008	98.0	559.9000	-	-	15	0.27930
0.21	±0.008	98.0	507.9000	-	-	15	0.30790
0.22	±0.008	98.0	462.9000	-	-	15	0.33790
0.23	±0.008	98.0	423.4000	-	-	15	0.36940
0.24	±0.008	98.0	388.9000	-	-	15	0.40220
0.25	±0.01	98.0	358.4000	-	-	15	0.43640
0.26	±0.01	98.0	331.4000	-	-	15	0.47200
0.27	±0.01	98.0	307.3000	-	-	15	0.50900
0.28	±0.01	98.0	285.7000	-	-	15	0.54740
0.29	±0.01	98.0	266.4000	-	-	20	0.58720
0.30	±0.01	99.3	245.6000	-	-	20	0.62840
0.32	±0.01	99.3	215.9000	-	-	20	0.71490
0.35	±0.01	99.3	180.5000	-	-	20	0.85530
0.37	±0.01	99.3	161.5000	-	-	20	0.95570
0.40	±0.01	99.3	138.1000	-	-	20	1.11700
0.45	±0.01	99.3	109.2000	-	-	20	1.41400
0.50	±0.01	100.0	87.7900	5.50	28	20	1.74600
0.55	±0.02	100.0	72.5600	6.65	28	20	2.11200
0.60	±0.02	100.0	60.9900	7.92	28	20	2.51300
0.65	±0.02	100.0	51.9600	9.29	28	20	2.95000
0.70	±0.02	100.0	44.8100	10.80	28	20	3.42100
0.75	±0.02	100.0	39.0300	12.40	28	20	3.92800
0.80	±0.02	100.0	34.3000	14.10	28	25	4.46900
0.85	±0.02	100.0	30.3800	15.90	28	25	5.04500
0.90	±0.02	100.0	27.1000	17.80	28	25	5.65600

**ANNEALED COPPER WIRE
(BCC-SOFT)
Specification : JIS C 3102-1984**



PHYSICAL AND ELECTRICAL PROPERTIES

Diameter	Tolerance for diameters	Conductivity (20° C) min	Electric resistance 20° C	Tensile load max.	Tensile strength max.	Elongation (gauge length 250 mm) min.	Approx. weight of conductor
mm ²	mm	%	ohm/km	kg	kg/mm ²	%	kg/km
0.95	±0.02	100.0	24.3200	19.80	28	25	6.30100
1.00	±0.03	100.0	21.9500	22.00	28	25	6.98200
1.10	±0.03	100.0	18.1400	26.60	28	25	8.44800
1.20	±0.03	100.0	15.2400	31.70	28	25	10.05000
1.30	±0.03	100.0	12.9900	37.20	28	25	11.80000
1.40	±0.03	100.0	11.2000	41.60	27	25	13.68000
1.50	±0.03	100.0	9.7570	47.70	27	25	15.71000
1.60	±0.03	100.0	8.5730	54.30	27	25	17.88000
1.70	±0.03	100.0	7.5950	61.30	27	25	20.18000
1.80	±0.03	100.0	6.7740	68.70	27	25	22.63000
1.90	±0.03	100.0	6.0820	76.50	27	25	25.20000
2.00	±0.03	100.0	5.4870	84.80	27	30	27.93000
2.10	±0.03	100.0	4.9770	93.50	27	30	30.79000
2.20	±0.03	100.0	4.5360	103.00	27	30	33.79000
2.30	±0.03	100.0	4.1490	112.00	27	30	36.94000
2.40	±0.03	100.0	3.8110	122.00	27	30	40.22000
2.50	±0.03	100.0	3.5120	133.00	27	30	43.64000
2.60	±0.03	100.0	3.2480	143.00	27	30	47.20000
2.70	±0.03	100.0	3.0110	155.00	27	30	50.90000
2.80	±0.03	100.0	2.8000	166.00	27	30	54.74000
2.90	±0.03	100.0	2.6100	172.00	26	30	58.72000
3.00	±0.03	100.0	2.4390	184.00	26	30	62.84000
3.20	±0.04	100.0	2.1440	209.00	26	30	71.49000
3.50	±0.04	100.0	1.7920	250.00	26	30	85.53000
3.70	±0.04	100.0	1.6040	280.00	26	30	95.57000
4.00	±0.04	100.0	1.3720	327.00	26	30	111.70000
4.50	±0.04	100.0	1.0840	413.00	26	30	141.40000
5.00	±0.04	100.0	0.8779	511.00	26	30	174.64000