

5.7.1. In the case of stranded conductor containing more than 7 wires, a joint in any wire shall be permitted provided that distance between two joints (other than those in wires before stranding permitted under Clause 5.6) in the stranded conductors shall not be less than 15m. Joints shall be hard soldered or butt welded.

5.7.2. Not more than two joints during stranding in 1 km length of conductor shall be permitted.

5.8 Resistance of the wires shall be as under :

	Diameter	Resistance at 20° C ohms/km
Minimum	1.006	21.690
Nominal	1.016	21.1265
Maximum	1.026	20.853
Minimum	1.23	14.346
Nominal	1.25	14.049
Maximum	1.263	13.761
Minimum	1.782	6.912
Nominal	1.80	6.775
Maximum	1.818	6.641
Minimum	0.941	24.80
Nominal	0.950	24.33
Maximum	0.960	23.83

## 6 SIZE OF CONDUCTOR AND CONSTRUCTION

6.1. The nominal area of cross section, numbers and diameters of wires, type of construction, overall diameter, weight of the conductors and resistance/km shall be as under. The tolerance on diameter & weight of the stranded conductor is +1 percent & -0 percent.

S.No.	Nominal area of conductor (mm <sup>2</sup> )	No. of strands/ wire dia. (mm)	Construction	Nominal overall dia (mm)	Weight (kg/km)	Resistance at 20°C (ohm/km)	
						Std.	Max.
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
1.	50	19/1.80	Concentric lay	9.00	438.00	0.3633	0.3705
2.	105	19/7/1.016	Rope lay	15.24	993.60	0.1657	0.1689
3.	160	19/7/1.25	Rope lay	18.75	1504.0	0.1090	0.1117
4.	304	61/7/0.95	Rope lay	25.7	2840	0.0595	0.0607