

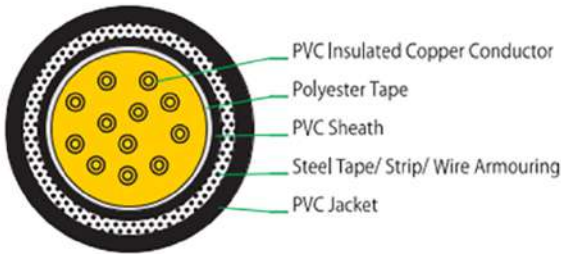
## SIGNALING CABLE

### Applications

- Railway Signalling



### Typical Cross section for Armoured Cable



### Cable Construction Details

**Conductor** Each conductor shall consist of a solid round/stranded wire(s) of annealed high conductivity copper, smoothly drawn, nominally circular in section, uniform in quality and resistance and free from defects.

**Insulation** Insulation shall be of PVC Compound conforming to requirements of Type-A compound of IS 5831:1984. Insulation color shall be as per customer specification.

**Core Formation** The insulated cores shall be laid up together with suitable lay. The outer most layer shall have right hand lay and the successive layers shall be laid with opposite lay. A polyester tape of suitable thickness shall be helically applied normally in cables with double steel tape with suitable overlap.

**Inner Sheath** The inner sheath shall be of PVC Compound conforming to requirements of Type- ST1 as per IS 5831:1984.

**Armouring** Armouring shall consist of the either Galvanised Round Wire strip/Double Steel Tape.

**Jacket** The outer sheath shall be of PVC Compound conforming to requirements of Type- ST1 as per IS 5831:1984.

### Technical Details

Nominal Cross Sectional Area	No. of Wires in Conductors	Nom. Dia of Wire	Max. Resistance at 20°C		Nom. Thickness of Insulation	
			Single Core	Multi Core	Single Core	Multi Core
Sqmm	No(s)	mm	Ω/Km	Ω/Km	mm	mm
1.0	1	1.13	17.689	18.04	1.5	0.8
1.5	1	1.4	11.54	11.77	1.5	0.8
2.5	1	1.80	6.978	7.118	1.5	0.9
2.5	3	1.06	6.843	6.980	1.5	0.9
4	1	2.24	4.506	4.596	1.5	1.0
4	7	0.85	4.591	4.683	1.5	1.0
6	1	2.8	2.884	2.942	1.5	1.0
10	7	1.4	1.660	1.693	1.5	1.0
16	7	1.70	1.124	1.149	1.5	1.0
25	7	2.24	0.6484	0.6614	1.5	1.2
35	7	2.50	0.5205	0.5309	1.5	1.2
50	19	1.8	0.3706	0.3780	1.5	1.4

Insulation Resistance (M-Ω/Km) (Dry) (500 V DC for 1 Min. at 50° C)	10 M-Ω/Km upto 2.5 mm <sup>2</sup> Conductor 5 M-Ω/Km More than 2.5 mm <sup>2</sup> Conductor
Insulation Resistance (M-Ω/Km) (Wet) (500 V DC for 1 Min. at 50° C)	7.5 M-Ω/Km upto 2.5 mm <sup>2</sup> Conductor 5 M-Ω/Km More than 2.5 mm <sup>2</sup> Conductor
HV Test at Room Temp.	4 KV AC (rms) or 12 KV DC (for 5 Min.)

### Features:

- Availability of conductor sizes ranging from 1.13 mm to 2.80 mm diameter. Cable size ranging from 2 core to 100 cores with 1.0 Sqmm to 50 Sqmm.
- Suitable for use on AC systems (Earthed or unearthed) for rated voltage upto 1100 volts
- Suitable for use on DC systems for rated voltage upto 1500 volts