

2. Domestic Cables

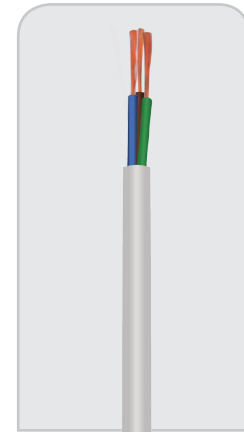
2.6

Multi Core Insulated and Sheathed - Flexible Conductor

Application: PVC insulated cables intended for use with appliances and equipment in domestic or similar environments

Specifications

Type		: Cu/PVC/PVC
Standard		: SLS 1143, BS 6500
Nominal Voltage		: Light Duty - 300/300V : Ordinary Duty - 300/500V
Conductor		: Class 5 Annealed Copper
Insulation	Material	: PVC TI 2
	Colour	: Refer last page - "CABLE CORE COLOURS"
Sheathing	Material	: PVC TM 2
	Colour	: Not Specified



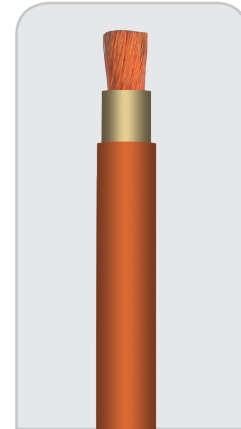
Nominal Cross Sectional Area	No. & Dia. of wires	Nominal Insulation Thickness	Nominal Sheathing Thickness	Mean Overall Diameter		Minimum Insulation Resistance at 70 °C	Max. d.c. Resistance at 20 °C	Approx. Weight
				Lower Limit	Upper Limit			
mm ²	x/mm	mm	mm	mm		MΩ.km	Ω/km	kg/km
Parallel Twin - Light Duty								
2 x 0.5	16/0.20	0.5	0.6	3.0 x 4.9	3.7 x 5.9	0.011	39.0	37
2 x 0.75	24/0.20	0.5	0.6	3.2 x 5.2	3.8 x 6.3	0.010	26.0	46
Parallel Twin - Ordinary Duty								
2 x 0.75	24/0.20	0.6	0.8	3.7 x 6.0	4.5 x 7.2	0.011	26.0	57
2 x 1	32/0.20	0.6	0.8	3.9 x 6.2	4.7 x 7.5	0.010	19.5	66
Circular Flexible Cords - Light Duty								
2 x 0.5	16/0.20	0.5	0.6	4.6	5.9	0.011	39.0	37
2 x 0.75	24/0.20	0.5	0.6	4.9	6.3	0.010	26.0	46
3 x 0.5	16/0.20	0.5	0.6	4.9	6.3	0.011	39.0	43
3 x 0.75	24/0.20	0.5	0.6	5.2	6.7	0.010	26.0	54
4 x 0.5	16/0.20	0.5	0.6	5.4	6.9	0.011	39.0	53
4 x 0.75	24/0.20	0.5	0.6	5.7	7.3	0.010	26.0	67
Circular Flexible Cords - Ordinary Duty								
2 x 0.75	24/0.20	0.6	0.8	5.7	7.2	0.011	26.0	57
2 x 1	32/0.20	0.6	0.8	5.9	7.5	0.010	19.5	66
2 x 1.5	30/0.25	0.7	0.8	6.8	8.6	0.010	13.3	89
2 x 2.5	50/0.25	0.8	1.0	8.4	10.6	0.0095	7.98	137
3 x 0.75	24/0.20	0.6	0.8	6.0	7.6	0.011	26.0	67
3 x 1	32/0.20	0.6	0.8	6.3	8.0	0.010	19.5	78
3 x 1.5	30/0.25	0.7	0.9	7.4	9.4	0.010	13.3	109
3 x 2.5	50/0.25	0.8	1.0	9.2	11.4	0.0095	7.98	163
4 x 0.75	24/0.20	0.6	0.8	6.6	8.3	0.011	26.0	81
4 x 1	32/0.20	0.6	0.8	7.1	9.0	0.010	19.5	95
4 x 1.5	30/0.25	0.7	1.0	8.4	10.5	0.010	13.3	138
4 x 2.5	50/0.25	0.8	1.1	10.1	12.5	0.0095	7.98	207
5 x 0.75	24/0.20	0.6	0.9	7.4	9.3	0.011	26.0	100
5 x 1	32/0.20	0.6	0.9	7.8	9.8	0.010	19.5	117
5 x 1.5	30/0.25	0.7	1.1	9.3	11.6	0.010	13.3	169
5 x 2.5	50/0.25	0.8	1.2	11.2	13.9	0.0095	7.98	253

5. Miscellaneous

5.2 Welding Cables

For welding; Fabricated for hand-held metal arc welding electrodes where high current is generated during secondary connection.

Application: Touch condition on conveyor system assembly lines in automatically operated line in machine tool and spot welding machines.



- Reference Standards** : IS 9857, IS 6380, BS 638
- Voltage Rating** : 100V a.c. r.m.s.
- Conductor** : Flexible annealed Copper conductor
- Sheath Material** : Elastomeric compound
- Colour of Sheath** : Black or Orange

Cross-Sectional Area Max.	Maximum Diameter of wires	Conductor Resistance at 20°C	Nominal Thickness of Covering	Min. Overall Diameter	Max. Overall Diameter	Current Ratings Welding Application Duty Cycle				d.c. Voltage Drop in/ 100A/10m 90°C
						100%	85%	60%	30%	
mm ²	mm	Ω/km	mm	mm	mm	A	A	A	A	V
16	0.20	1.21	2.0	8.8	11	135	146	174	246	1.587
25	0.20	0.78	2.0	10.1	12.7	177	192	228	343	1.018
35	0.20	0.554	2.0	11.4	14.2	221	240	285	403	0.723
50	0.20	0.386	2.2	13.2	16.5	279	303	360	509	0.503
70	0.20	0.272	2.4	15.3	19.2	352	382	454	643	0.355
95	0.20	0.206	2.6	17.1	21.4	424	460	547	774	0.269

Ambient air temperature = 30 °C
Maximum conductor temperature = 90 °C

Ambient Air Temperature (°C)	25	30	35	40	45	50
Rating Factor	1.04	1.00	0.96	0.91	0.87	0.82

5. Miscellaneous

5.8

Multi Core Insulated and Sheathed - Screen Cables

Application: For signal transmission and other similar applications

Specifications

Type		: Cu/PVC/SCR/PVC
Standard		: SLS 1143, BS 6500
Nominal Voltage		: 300/500V
Conductor		: Class 5 Annealed Copper
Insulation	Material	: PVC TI 2
	Colour	: Refer last page - "CABLE CORE COLOURS"
Sheathing	Material	: PVC TM 2
	Colour	: Not Specified



Conductor		Cable								
Nominal Cross Sectional Area	No. & Dia. of wires	Nominal Insulation Thickness	Nominal Bedding Thickness	Nominal Diameter of Copper wire for Braid	Nominal Sheathing Thickness	Approx. Overall Diameter		Minimum insulation resistance at 70 °C	Max. d.c. Resistance at 20 °C	Approx. Weight
						Lower limit	Upper limit			
mm ²	x/mm	mm	mm	mm	mm	mm	mm	MΩ.km	Ω/km	kg/km
Two Core Cables										
2 x 0.75	24/0.20	0.6	0.8	0.2	1.1	8.7	11.3	0.011	26.0	138
2 x 1.0	32/0.20	0.6	0.8	0.2	1.1	9.2	11.9	0.010	19.5	140
2 x 1.5	30/0.25	0.7	0.8	0.2	1.2	10.8	13.9	0.010	13.3	200
2 x 2.5	50/0.25	0.8	1.0	0.2	1.2	12.5	15.7	0.0095	7.98	261
Three Core Cables										
3 x 0.75	24/0.20	0.6	0.8	0.2	1.1	9.3	12.0	0.011	26.0	147
3 x 1.0	32/0.20	0.6	0.8	0.2	1.1	9.6	12.4	0.010	19.5	173
3 x 1.5	30/0.25	0.7	0.9	0.2	1.2	11.3	14.5	0.010	13.3	225
3 x 2.5	50/0.25	0.8	1.1	0.2	1.3	13.0	16.7	0.0095	7.98	303
Four Core Cables										
4 x 0.75	24/0.20	0.6	0.8	0.2	1.1	9.8	12.7	0.011	26.0	179
4 x 1.0	32/0.20	0.6	0.9	0.2	1.2	10.4	13.4	0.010	19.5	203
4 x 1.5	30/0.25	0.7	1.0	0.2	1.2	12.3	15.7	0.010	13.3	270
4 x 2.5	50/0.25	0.8	1.1	0.2	1.3	14.2	18.1	0.0095	7.98	374

5. Miscellaneous

5.8

Multi Core Insulated and Sheathed - Screen Cables (Continued)

Application: For signal transmission and other similar applications

Specifications

Type		:Cu/PVC/SCR/PVC
Standard		: SLS 1143, BS 6500
Nominal Voltage		: 300/300V
Conductor		: Class 5 Annealed Copper
Insulation	Material	: PVC TI 2
	Colour	: Refer last page -“CABLE CORE COLOURS”
Sheathing	Material	: PVC TM 2
	Colour	: Not Specified



Nominal Cross Sectional Area	No. & Dia. of wires	Nominal Insulation Thickness	Nominal Bedding Thickness	Nominal Diameter of Copper wire for Braid	Nominal Sheathing Thickness	Approx. Overall Diameter		Max. d.c. Resistance at 20 °C	Approx. Weight
						Lower limit	Upper limit		
mm ²	x/mm	mm	mm	mm	mm	mm	mm	Ω/km	kg/km
Two Core Cables									
2 x 0.5	16/0.20	0.5	0.6	0.2	0.7	7.2	8.4	39.0	104
Three Core Cables									
3 x 0.5	16/0.20	0.5	0.6	0.2	0.7	7.4	8.8	39.0	116