



Power Cables

Master Flex manufacture high quality heavy duty power cable confirming to IS : 1554 (Part -1) L.T. 1100 volts grade

CONSTRUCTION DETAILS :

- CONDUCTOR** Plain bright annealed copper / aluminum, solid / stranded conductor confirming to IS : 8130 : 1984.
- INSULATION** Type A, B, & C (HR) grade according to IS : 5831 : 1984 amended up dated.
- INNER SHEATH** Inner sheathing shall done by extrusion or by PVC tape binding that laid up cores shall nc. loose and prevent to water entering.
- ARMOUR** GI armour wire I strip provides not only mechanical support but also earthing. The material use an according to IS : 3975 : 1974 amended up dated. For single core cable non magnetic material is used that to reduce magnetic losses.
- OUTER SHEATH** Extruded Stl / ST2(HR, FRLS, Halogenfree FRLS) type PVC is used according to IS : 5831 : 1984.
- APPLICATION** In Thermal Power Station; Petrochemical Refineries; Steel & Cement Plant; Distribution System; Digital Control and Monitoring & Information systems; Air Ports; Building Towers; etc.

Master Flex manufacture heavy duty Power Cable comprising of cores Single / Two / Three / Three & Half / Four Of Copper / Aluminium Conductor, PVC Insulated cores laid up, PVC Inner Sheathed OR PVC tape binding, GI wire / StripArmoured & overall PVC sheathed cable confirming to IS : 1554 : Part-1.

POWER CABLE - TWO CORE

Nominal Cross sectional Area in mm ² & Cores	Nominal Insulation Thickness mm	Min. Inner Sheath Thickness mm	Annour		Min. Outer Sheath Thickness mm	Overall Diameter Approx. mm	Weight of Cable Approx Kg/Km	Max. DC Resist. At 20°C Q/Km	Current Ratings		
			GI Rd. Wire	GI Flat Strip 4x0.8mm					Direct in Ground Amps	In Ducts Amps.	In Air Amps.
2.5 x 2	0.9	0.30	1.4	---	1.24	13.8	350	12.1	25	21	21
4.0 x 2	1.0	0.30	1.4	---	1.24	15.2	425	7.41	32	27	27
6.0 x 2	1.0	0.30	1.4	---	1.24	16.6	475	4.61	40	34	35
10.0 x 2	1.0	0.30	1.4	---	1.24	18.6	565	3.08	55	45	47
16.0 x 2	1.0	0.30	---	0.8	1.40	17.0	500	1.91	70	58	59
25.0 x 2	1.2	0.30	---	0.8	1.40	19.5	650	1.20	90	76	78
35.0 x 2	1.2	0.30	---	0.8	1.40	21.0	750	0.868	110	92	99
50.0 x 2	1.4	0.30	---	0.8	1.40	24.0	950	0.641	135	115	125
70.0 x 2	1.4	0.30	---	0.8	1.56	26.0	1150	0.443	160	140	150
95.0 x 2	1.6	0.40	---	0.8	1.56	29.5	1460	0.320	190	170	185
120.0 x 2	1.6	0.40	---	0.8	1.56	31.5	1670	0.253	210	190	210
150.0 x 2	1.8	0.40	---	0.8	1.72	34.5	2010	0.206	240	210	240
185.0 x 2	2.0	0.50	---	0.8	1.88	38.5	2450	0.164	275	240	275



POWER CABLES - THREE CORE

Nominal Cross sectional Area in mm ² & Cores	Nominal Insulation Thickness mm	Min. Inner Sheath Thickness mm	Annour		Min. Outer Sheath Thickness mm	Overall Diameter Approx. mm	Weight of Cable Approx Kg/Km	Max. DC Resist. At 20°C Q/Km	Current Ratings		
			GI Rd. Wire	GI Flat Strip 4x0.8mm					Direct in Ground Amps	In Ducts Amps.	In Air Amps.
2.5 x 3	0.9	0.30	1.4	---	1.24	14.6	400	12.1	21	18	18
4.0 x 3	1.0	0.30	1.4	---	1.24	16.0	480	7.41	28	23	23
6.0 x 3	1.0	0.30	1.4	---	1.24	17.6	560	4.61	35	30	30
10.0 x 3	1.0	0.30	1.4	---	1.40	19.5	675	3.08	46	39	40
16.0 x 3	1.0	0.30	---	0.8	1.40	20.0	650	1.91	60	50	51
25.0 x 3	1.2	0.30	---	0.8	1.40	22.5	800	1.20	76	63	70
35.0 x 3	1.2	0.30	---	0.8	1.40	24.5	950	0.868	92	77	86
50.0 x 3	1.4	0.30	---	0.8	1.56	26.5	1200	0.641	110	95	105
70.0 x 3	1.4	0.40	---	0.8	1.56	31.0	1500	0.443	135	115	130
5.0 x 3	1.6	0.40	---	0.8	1.56	35.0	1900	0.320	165	140	155
120.0 x 3	1.6	0.40	---	0.8	1.72	38.0	2240	0.253	185	155	180
150.0 x 3	1.8	0.50	---	0.8	1.88	42.0	2700	0.206	210	175	205
185.0 x 3	2.0	0.50	---	0.8	1.88	46.0	3200	0.164	235	200	240

POWER CABLES - THREE & HALF CORE

Nominal Cross sectional Area in mm ² & Cores	Nominal Insulation Thickness mm	Min. Inner Sheath Thickness mm	Annour		Min. Outer Sheath Thickness mm	Overall Diameter Approx. mm	Weight of Cable Approx Kg/Km	Max. DC Resist. At 20°C Q/Km	Current Ratings		
			GI Rd. Wire	GI Flat Strip 4x0.8mm					Direct in Ground Amps	In Ducts Amps.	In Air Amps.
25.0 x 3.5	1.2 1.0	0.30	---	0.8	1.40	25.0	900	1.20/ 1.91	76	63	70
35.0 x 3.5	1.2 1.0	0.30	---	0.8	1.40	27.0	1030	0.868/ 1.91	92	77	86
50.0 x 3.5	1.4 1.2	0.30	---	0.8	1.56	31.0	1350	0.641/ 1.20	100	95	105
70.0 x 3.5	1.4 1.2	0.40	---	0.8	1.56	34.0	1725	0.443/0.868	135	115	130
95.0 x 3.5	1.6 1.4	0.40	---	0.8	1.56	39.0	2130	0.320/0.641	165	140	155
120.0 x 3.5	1.6 1.4	0.50	---	0.8	1.72	42.0	2580	0.253/0.443	185	155	180
150.0 x 3.5	1.8 / 1.4	0.50	---	0.8	1.88	46.5	3050	0.206/0.443	210	175	205
185.0 x 3.5	2.0 1.6	0.50	---	0.8	2.04	51.5	3650	0.164/0.320	285	200	240

POWER CABLES - FOUR CORE

Nominal Cross sectional Area in mm ² & Cores	Nominal Insulation Thickness mm	Min. Inner Sheath Thickness mm	Annour		Min. Outer Sheath Thickness mm	Overall Diameter Approx. mm	Weight of Cable Approx Kg/Km	Max. DC Resist. At 20°C Q/Km	Current Ratings		
			GI Rd. Wire	GI Flat Strip 4x0.8mm					Direct in Ground Amps	In Ducts Amps.	In Air Amps.
2.5 x 4	0.9	0.30	1.4	---	1.24	16.5	480	12.1	21	18	18
4.0 x 4	1.0	0.30	1.4	---	1.24	18.0	550	7.41	28	23	23
6.0 x 4	1.0	0.30	1.4	---	1.24	19.5	650	4.61	35	30	30
10.0 x 4	1.0	0.30	---	0.8	1.40	20.0	660	3.08	46	39	40
16.0 x 4	1.0	0.30	---	0.8	1.40	23.0	750	1.91	60	50	51
25.0 x 4	1.2	0.30	---	0.8	1.40	26.5	950	1.20	76	63	70
35.0 x 4	1.2	0.30	---	0.8	1.40	29.0	1165	0.868	92	77	86
50.0 x 4	1.4	0.40	---	0.8	1.56	33.5	1540	0.641	110	95	105
70.0 x 4	1.4	0.40	---	0.8	1.56	37.0	1800	0.443	135	115	130
95.0 x 4	1.6	0.40	---	0.8	1.72	42.0	2400	0.320	165	140	155
120.0 x 4	1.6	0.50	---	0.8	1.88	46.0	2800	0.253	185	155	180
150.0 x 4	1.8	0.50	---	0.8	1.88	50.5	3350	0.206	210	175	205
185.0 x 4	2.0	0.60	---	0.8	2.04	55.5	4000	0.164	235	200	240

NOTE : We also manufacture XLPE (Cross Link Polyethylene) Cable for LT grade according to ISI : 7098 Part-1

1.1 KV SINGLE CORE ALUMINUM CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE

CONFORMING SPECIFICATION IS 7098 (PART-I)

Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	UNARMoured CABLE A2XY			ARMoured CABLE A2XWαY				Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
			Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	Diameter of Armoured Wire (W)	Minimum Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km		Direct to Ground Amps.	In Air Amps.
4	1	0.7	1.8	7.50	70	1.4	1.24	10.00	115	7.410	36	31
6	1	0.7	1.8	8.00	80	1.4	1.24	10.50	135	4.610	44	39
10	1	0.7	1.8	9.00	90	1.4	1.24	11.00	165	3.080	59	53
16	7	0.7	1.8	10.50	130	1.4	1.24	12.50	200	1.910	76	73
25	7	0.9	1.8	12.00	180	1.4	1.24	14.50	260	1.200	96	98
35	7	0.9	1.8	13.00	230	1.4	1.24	15.50	310	0.868	114	121
50	7	1.0	1.8	14.50	300	1.4	1.24	17.00	390	0.641	135	150
70	19	1.1	1.8	16.50	370	1.4	1.24	19.00	505	0.443	166	187
95	19	1.1	1.8	18.50	470	1.6	1.40	20.00	620	0.320	198	230
120	19	1.2	2.0	21.00	580	1.6	1.40	22.50	740	0.253	225	268
150	19	1.4	2.0	23.00	720	1.6	1.40	24.00	860	0.206	250	309
185	37	1.6	2.0	25.00	840	1.6	1.40	26.50	1010	0.164	286	360
240	37	1.7	2.0	27.50	1040	1.6	1.56	29.50	1225	0.125	332	433
300	37	1.8	2.0	30.00	1260	1.6	1.56	32.00	1450	0.100	376	501
400	61	2.0	2.2	33.00	1550	1.6	1.56	35.00	1900	0.0778	431	596
500	61	2.2	2.2	36.00	1900	2.0	1.56	38.00	2325	0.0665	490	693
630	61	2.4	2.4	40.50	2450	2.0	1.72	43.00	2810	0.0469	557	814
800	91	2.6	2.4	44.00	2900	2.0	1.88	48.00	3550	0.0367	632	890
1000	91	2.8	2.6	49.50	3700	2.5	2.04	51.00	4450	0.0291	701	1102

1.1 KV TWO CORE ALUMINUM CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE

CONFORMING SPECIFICATION IS 7098 (PART-I)

Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE A2XY			ARMoured CABLE A2XWY & A2XFY				Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
				Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	Diameter of Armoured Wire-Strip (W) (F) mm	Minimum Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km		Direct to Ground Amps.	In Air Amps.
4	1	0.7	0.3	1.8	13.00	190	1.4	1.24	15.00	460	7.410	43	39
6	1	0.7	0.3	1.8	14.00	230	1.4	1.24	16.00	550	4.610	55	50
10	1	0.7	0.3	1.8	15.00	290	1.4	1.24	18.00	650	3.080	74	67
16	7	0.9	0.3	1.8	15.00	280	4 x 0.8	1.40	17.50	580	1.910	91	88
25	7	0.9	0.3	2.0	17.00	320	4 x 0.8	1.40	19.50	650	1.200	120	117
35	7	1.0	0.3	2.0	19.00	390	4 x 0.8	1.40	21.00	760	0.868	143	145
50	7	1.1	0.3	2.0	22.00	380	4 x 0.8	1.56	24.00	900	0.641	167	176
70	19	1.1	0.3	2.0	26.00	630	4 x 0.8	1.56	27.00	1100	0.443	204	221
95	19	1.2	0.4	2.2	29.00	820	4 x 0.8	1.56	30.00	1350	0.320	245	271
120	19	1.4	0.4	2.2	32.00	990	4 x 0.8	1.72	33.00	1600	0.253	278	316
150	19	1.6	0.4	2.2	35.00	1190	4 x 0.8	1.72	36.00	1900	0.206	315	362
185	37	1.6	0.5	2.4	39.00	1500	4 x 0.8	1.88	40.00	2300	0.164	356	421
240	37	1.8	0.5	2.6	42.00	1900	4 x 0.8	2.04	45.00	2550	0.125	407	497
300	37	2.0	0.6	2.8	48.00	2330	4 x 0.8	2.20	50.00	3300	0.100	463	578
400	61	2.0	0.6	3.0	51.50	3600	4 x 0.8	2.30	54.50	4250	0.078	528	678

1.1 KV THREE CORE ALUMINUM CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE

CONFORMING SPECIFICATION IS 7098 (PART-I)

Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE A2XY			ARMoured CABLE A2XWY & A2XFY				Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
				Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	Diameter of Armoured Wire-Strip (W) (F) mm	Minimum Thickness of Inner Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km		Direct to Ground Amps.	In Air Amps.
4	1	0.7	0.3	1.8	13.50	200	1.4	1.24	16.00	495	7.4100	34	31
6	1	0.7	0.3	1.8	14.50	225	1.4	1.24	17.00	560	4.6100	43	40
10	1	0.7	0.3	1.8	16.00	300	1.4	1.24	19.00	665	3.0800	57	53
16	7	0.7	0.3	1.8	17.50	365	4 x 0.8	1.24	20.00	700	1.9100	73	70
25	7	0.9	0.3	1.8	20.00	480	4 x 0.8	1.24	21.00	760	1.2000	94	96
35	7	0.9	0.3	1.8	21.00	580	4 x 0.8	1.24	21.60	890	0.8680	113	117
50	7	1.0	0.3	1.8	24.10	700	4 x 0.8	1.24	25.40	1000	0.6410	133	142
70	19	1.1	0.3	1.8	28.00	980	4 x 0.8	1.24	29.00	1375	0.4430	164	179
95	19	1.1	0.4	1.8	32.00	1250	4 x 0.8	1.40	33.00	1650	0.3200	196	221
120	19	1.2	0.4	1.8	34.10	1500	4 x 0.8	1.40	35.00	2000	0.2530	223	257
150	19	1.4	0.4	2.0	38.00	1900	4 x 0.8	1.40	39.00	2300	0.2060	249	292
185	37	1.6	0.5	2.0	42.00	2300	4 x 0.8	1.40	43.00	2850	0.1640	282	337
240	37	1.7	0.5	2.0	48.20	2900	4 x 0.8	1.40	49.00	3500	0.1250	326	399
300	37	1.8	0.6	2.0	53.00	3550	4 x 0.8	1.56	54.00	4250	0.1000	367	456
400	61	2	0.7	2.2	60.00	4150	4 x 0.8	1.72	63.00	5800	0.0778	418	530



1.1 KV THREE AND HALF CORE ALUMINUM CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE													
CONFORMING SPECIFICATION IS 7098 (PART-I)													
Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE A2XY			ARMoured CABLE A2XWY & A2XFY				Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
				Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	Diameter of Armoured Wire-Strip (W) (F) mm	Minimum Thickness of Inner Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km		Direct to Ground Amps.	In Air Amps.
25/16	7	0.9/0.7	0.3	2.0	22.00	580	4 x 0.8	1.40	23.00	850	1.2000	94	96
35/16	7	0.9/0.7	0.3	2.0	24.00	690	4 x 0.8	1.40	25.00	1000	0.8680	113	117
50/25	7	1.0/0.9	0.3	2.0	27.00	890	4 x 0.8	1.40	28.00	1325	0.6410	133	142
70/35	19	1.0/0.9	0.3	2.2	32.00	1210	4 x 0.8	1.56	32.50	1575	0.4430	164	179
95/50	19	1.1/1.0	0.4	2.2	35.00	1540	4 x 0.8	1.56	36.50	1975	0.3200	196	221
120/70	19	1.2/1.1	0.4	2.2	39.00	1880	4 x 0.8	1.72	40.00	2390	0.2530	223	257
150/70	19	1.4/1.1	0.4	2.4	43.00	2270	4 x 0.8	1.72	44.00	2785	0.2060	249	292
185/95	37	1.6/1.1	0.5	2.6	48.00	2800	4 x 0.8	1.88	49.00	3300	0.1640	282	337
240/120	37	1.7/1.2	0.5	2.8	55.00	3600	4 x 0.8	2.04	56.00	4100	0.1250	326	399
300/150	37	1.8/1.4	0.6	3.0	58.00	4350	4 x 0.8	2.20	59.00	4900	0.1000	367	456
400/185	61	2.0/1.6	0.7	3.4	65.00	6100	4 x 0.8	2.52	67.00	6850	0.0778	418	530

1.1 KV FOUR CORE ALUMINUM CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE													
CONFORMING SPECIFICATION IS 7098 (PART-I)													
Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE A2XY			ARMoured CABLE A2XWY & A2XFY				Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
				Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	Diameter of Armoured Wire-Strip (W) (F) mm	Minimum Thickness of Inner Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km		Direct to Ground Amps.	In Air Amps.
4	1	0.7	0.3	1.6	15.00	250	1.4	1.24	17.00	540	7.4100	34	31
6	1	0.7	0.3	1.8	16.00	300	1.4	1.24	18.00	600	4.6100	43	40
10	1	0.7	0.3	1.8	19.00	385	4 x 0.8	1.40	19.00	650	3.0800	57	53
16	7	0.7	0.3	1.8	20.50	450	4 x 0.8	1.40	21.00	710	1.9100	73	70
25	7	0.9	0.3	2.0	22.50	560	4 x 0.8	1.40	25.00	860	1.2000	94	96
35	7	0.9	0.3	2.0	25.60	685	4 x 0.8	1.40	27.00	1050	0.8680	113	117
50	7	1.0	0.3	2.0	27.50	850	4 x 0.8	1.56	28.50	1325	0.6410	133	142
70	19	1.1	0.3	2.2	32.00	1100	4 x 0.8	1.56	33.00	1700	0.4430	164	179
95	19	1.1	0.4	2.2	35.00	1450	4 x 0.8	1.56	36.50	2100	0.3200	196	221
120	19	1.2	0.4	2.4	39.60	1880	4 x 0.8	1.72	41.00	2500	0.2530	223	257
150	19	1.4	0.4	2.6	44.00	2300	4 x 0.8	1.88	45.00	3000	0.2060	249	292
185	37	1.6	0.5	2.8	49.00	2900	4 x 0.8	2.04	50.00	3600	0.1640	282	337
240	37	1.7	0.5	3.0	55.00	3600	4 x 0.8	2.20	57.00	4450	0.1250	326	399
300	37	1.8	0.6	3.2	61.00	4450	4 x 0.8	2.36	62.00	5400	0.1000	367	456
400	61	2	0.7	3.6	66	6750	4 x 0.8	2.68	70.50	7600	0.0778	418	530

1.1 KV SINGLE CORE COPPER CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE													
CONFORMING SPECIFICATION IS 7098 (PART-I)													
Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE 2XY			ARMoured CABLE 2XWY				Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
				Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	Diameter of Armoured Wire-Strip (W) (F) mm	Minimum Thickness of Inner Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km		Direct to Ground Amps.	In Air Amps.
4	1	0.7	0.3	1.8	7.50	95	1.4	1.24	10.00	155	4.6100	46	40
6	1	0.7	0.3	1.8	8.00	128	1.4	1.24	10.50	192	3.0800	57	51
10	1	0.7	0.3	1.8	9.00	168	1.4	1.24	11.00	235	1.6300	75	71
16	7	0.7	0.3	1.8	10.50	225	1.4	1.24	12.50	290	1.1500	97	95
25	7	0.9	0.3	1.8	12.00	335	1.4	1.24	14.50	410	0.7270	124	126
35	7	0.9	0.3	1.8	13.00	430	1.4	1.24	15.50	510	0.5240	148	152
50	7	1.0	0.3	1.8	14.50	560	1.4	1.24	17.00	660	0.3870	174	189
70	19	1.1	0.3	1.8	16.50	760	1.4	1.24	19.00	925	0.2680	213	240
95	19	1.1	0.4	1.8	18.50	1010	1.6	1.40	20.00	1140	0.1930	256	297
120	19	1.2	0.4	2.0	21.00	1250	1.6	1.40	22.50	1365	0.1530	289	346
150	19	1.4	0.4	2.0	23.00	1560	1.6	1.40	24.00	1625	0.1240	326	390
185	37	1.6	0.5	2.0	25.00	1920	1.6	1.40	26.50	2000	0.0991	366	460
240	37	1.7	0.5	2.0	27.50	2300	1.6	1.56	29.50	2525	0.0754	425	552
300	37	1.8	0.6	2.0	30.00	2925	1.6	1.56	32.00	3200	0.0601	479	640

1.1 KV TWO CORE COPPER CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE

CONFORMING SPECIFICATION IS 7098 (PART-I)

Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE			ARMoured CABLE					Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
				Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	YVY & YFY						Direct to Ground Amps.	In Air Amps.
							Diameter of Armoured Wire-Strip (W) (F) mm	Minimum Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km				
4	1	0.7	0.3	1.8	13.00	260	1.4	1.24	15.00	500	4.6100	56	51	
6	1	0.7	0.3	1.8	14.00	330	1.4	1.24	16.00	630	3.0800	71	54	
10	7	0.7	0.3	1.8	15.00	425	1.4	1.24	18.00	780	1.6300	92	88	
16	7	0.9	0.3	1.8	15.00	470	1.4	1.40	17.50	760	1.1500	116	113	
25	7	0.9	0.3	2.0	17.00	700	4 x 0.8	1.40	19.50	910	0.7270	152	153	
35	7	1.0	0.3	2.0	19.00	900	4 x 0.8	1.40	21.00	1120	0.5240	180	186	
50	7	1.1	0.3	2.0	22.00	1200	4 x 0.8	1.56	24.00	1440	0.3870	218	226	
70	19	1.1	0.3	2.0	26.00	1600	4 x 0.8	1.56	27.00	1910	0.2680	264	284	
95	19	1.2	0.4	2.2	29.00	2100	4 x 0.8	1.56	30.00	2450	0.1930	314	348	
120	19	1.4	0.4	2.2	32.00	2600	4 x 0.8	1.56	33.00	3050	0.1530	357	402	
150	19	1.6	0.4	2.2	35.00	3250	4 x 0.8	1.72	36.00	3600	0.1240	403	461	
185	37	1.7	0.5	2.4	39.00	3900	4 x 0.8	1.88	40.00	4380	0.0991	453	533	
240	37	1.8	0.5	2.6	42.00	5000	4 x 0.8	1.88	45.00	5500	0.0754	518	533	
300	37	2.0	0.6	2.8	48.00	6400	4 x 0.8	2.04	50.00	6900	0.0601	583	732	

1.1 KV THREE CORE COPPER CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE

CONFORMING SPECIFICATION IS 7098 (PART-I)

Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE			ARMoured CABLE					Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
				Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	2XWY & 2XFY						Direct to Ground Amps.	In Air Amps.
							Diameter of Armoured Wire-Strip (W) (F) mm	Minimum Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km				
4	1	0.7	0.3	1.8	13.50	310	1.4	1.24	16.00	540	4.6100	44	40	
6	1	0.7	0.3	1.8	14.50	375	1.4	1.24	17.00	650	3.0800	55	51	
10	7	0.7	0.3	1.8	16.00	515	1.4	1.24	19.00	830	1.6300	73	70	
16	7	0.7	0.3	1.8	17.50	630	4 x 0.8	1.40	20.00	900	1.1500	97	90	
25	7	0.9	0.3	1.8	20.00	950	4 x 0.8	1.40	21.00	1210	0.7270	122	123	
35	7	0.9	0.3	2.0	21.00	1250	4 x 0.8	1.40	21.50	1540	0.5240	146	151	
50	7	1.0	0.3	2.0	24.10	1650	4 x 0.8	1.56	25.40	1950	0.3870	172	183	
70	19	1.1	0.4	2.0	28.00	2210	4 x 0.8	1.56	29.00	2700	0.2680	211	131	
95	19	1.1	0.4	2.2	32.00	3150	4 x 0.8	1.56	33.00	3600	0.1930	253	185	
120	19	1.2	0.4	2.2	34.10	3780	4 x 0.8	1.72	35.00	4200	0.1530	287	330	
150	19	1.4	0.5	2.4	38.00	4790	4 x 0.8	1.88	39.00	5250	0.1240	321	375	
185	37	1.6	0.5	2.6	42.00	5825	4 x 0.8	2.04	43.00	6400	0.0991	361	430	
240	37	1.7	0.6	2.8	48.20	7500	4 x 0.8	2.20	49.00	8100	0.0754	416	508	
300	37	1.8	0.6	3.0	53.00	9400	4 x 0.8	2.36	54.00	9900	0.0601	464	575	

1.1 KV THREE AND HALF CORE COPPER CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE

CONFORMING SPECIFICATION IS 7098 (PART-I)

Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE			ARMoured CABLE					Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
				Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	A2XWY & 2XFY						Direct to Ground Amps.	In Air Amps.
							Diameter of Armoured Wire-Strip (W) (F) mm	Minimum Thickness of Inner Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km				
25/16	7	0.9/0.7	0.3	2.0	22.00	1100	4 x 0.8	1.40	23.00	1390	0.7270	122	123	
35/16	7	0.9/0.7	0.3	2.0	24.00	1400	4 x 0.8	1.40	25.00	1710	0.5240	146	151	
50/25	7	1.0/0.9	0.3	2.0	27.00	1900	4 x 0.8	1.40	28.00	2200	0.3870	172	183	
70/35	19	1.1/0.9	0.4	2.2	32.00	2600	4 x 0.8	1.56	32.50	3050	0.2680	211	231	
95/50	19	1.1/1.0	0.4	2.2	35.00	3500	4 x 0.8	1.56	36.50	4000	0.1930	253	285	
120/70	19	1.2/1.1	0.4	2.2	39.00	4400	4 x 0.8	1.72	40.00	5000	0.1530	287	330	
150/70	19	1.4/1.1	0.5	2.4	43.00	5425	4 x 0.8	1.72	44.00	5980	0.1240	321	375	
185/95	37	1.6/1.1	0.5	2.6	48.00	6700	4 x 0.8	1.88	49.00	7350	0.0991	361	430	
240/120	37	1.7/1.2	0.5	2.6	55.00	8400	4 x 0.8	2.04	56.00	9260	0.0754	416	508	
300/150	37	1.8/1.4	0.6	3.0	58.00	10450	4 x 0.8	2.20	59.00	11450	0.0601	464	575	



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1.1 KV FOUR CORE COPPER CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CABLE
CONFORMING SPECIFICATION IS 7098 (PART-I)

Nominal Cross sectional Area mm ²	Minimum No of Wires	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE 2XY			ARMoured CABLE 2XWY & 2XFY				Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
				Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	Diameter of Armoured Wire-Strip (W) (F) mm	Minimum Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km		Direct to Ground Amps.	In Air Amps.
4	1	0.7	0.3	1.8	15.00	310	1.4	1.24	17.00	660	4.6100	44	40
6	1	0.7	0.3	1.8	16.00	400	1.4	1.24	18.00	810	3.0800	55	51
10	1	0.7	0.3	1.8	19.00	600	4 x 0.8	1.40	19.00	940	1.6300	73	70
16	7	0.7	0.3	1.8	20.50	800	4 x 0.8	1.40	21.00	1120	1.1500	97	90
25	7	0.9	0.3	2.0	22.50	1200	4 x 0.8	1.40	25.00	1570	0.7270	122	123
35	7	0.9	0.3	2.0	25.60	1510	4 x 0.8	1.40	27.00	1980	0.5240	148	151
50	7	1.0	0.4	2.0	27.50	2100	4 x 0.8	1.56	28.50	2510	0.3870	172	183
70	19	1.1	0.4	2.2	32.00	3000	4 x 0.8	1.56	33.00	3400	0.2680	211	231
95	19	1.1	0.4	2.2	35.00	4000	4 x 0.8	1.56	36.50	4440	0.1930	253	285
120	19	1.2	0.5	2.4	39.60	4850	4 x 0.8	1.72	41.00	5600	0.1530	287	330
150	19	1.4	0.5	2.6	44.00	6050	4 x 0.8	1.88	45.00	6800	0.1240	321	375
185	37	1.6	0.6	2.8	49.00	7550	4 x 0.8	2.04	50.00	8275	0.0991	418	430
240	37	1.7	0.6	3.0	55.00	9550	4 x 0.8	2.20	57.00	10400	0.0754	484	508
300	37	1.8	0.7	3.2	61.00	12100	4 x 0.8	2.36	62.00	13000	0.0601	521	575

1.1 KV 1.5 sqMM SOLID COPPER CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CONTROL CABLE
CONFORMING SPECIFICATION IS 7098 (PART-I)

No of Cores	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE 2XY			ARMoured CABLE 2XWY & 2XFY				Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
			Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	Diameter of Armoured Wire - Strip (W) (F) mm	Minimum Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km		Direct to Ground Amps.	In Air Amps.
2	0.7	0.3	1.8	11.50	180	1.4	1.24	13.00	390	12.10	26	26
3	0.7	0.3	1.8	11.90	200	1.4	1.24	14.00	435	12.10	24	24
4	0.7	0.3	1.8	13.00	225	1.4	1.24	14.60	460	12.10	24	24
5	0.7	0.3	1.8	13.80	250	1.4	1.24	15.10	500	12.10	20	24
6	0.7	0.3	1.8	15.00	300	1.4	1.24	16.50	560	12.10	14	16
7	0.7	0.3	1.8	14.90	305	1.4	1.24	16.50	575	12.10	14	16
10	0.7	0.3	1.8	18.00	410	1.4	1.24	19.80	780	12.10	13	14
12	0.7	0.3	1.8	18.60	460	4 x 0.8	1.24	20.00	700	12.10	12	13
14	0.7	0.3	1.8	19.00	500	4 x 0.8	1.24	21.00	780	12.10	11	13
16	0.7	0.3	1.8	20.00	580	4 x 0.8	1.40	20.80	830	12.10	11	11
19	0.7	0.3	1.8	21.50	650	4 x 0.8	1.40	22.00	890	12.10	10	11
24	0.7	0.3	2.0	24.00	835	4 x 0.8	1.40	25.00	1100	12.10	10	10
27	0.7	0.3	2.0	25.20	890	4 x 0.8	1.40	26.00	1150	12.10	8	9
30	0.7	0.3	2.0	26.50	970	4 x 0.8	1.40	26.90	1200	12.10	8	9
37	0.7	0.3	2.0	28.00	1100	4 x 0.8	1.40	28.00	1325	12.10	7	8

1.1 KV 2.5 sqMM SOLID COPPER CONDUCTOR, XLPE INSULATED UNARMoured / ARMoured CONTROL CABLE
CONFORMING SPECIFICATION IS 7098 (PART-I)

No of Cores	Nominal Thickness of Insulation mm	Minimum Thickness of Inner Sheath mm	UNARMoured CABLE 2XY			ARMoured CABLE 2XWY & 2XFY				Max. D.C Conductor Resistance at 20°C	CURRENT RATING	
			Nominal Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km	Diameter of Armoured Wire - Strip (W) (F) mm	Minimum Thickness of Outer Sheath mm	Approx. Overall Dia of Cable mm	Approx. Weight of Cable Kg/Km		Direct to Ground Amps.	In Air Amps.
2	0.7	0.3	1.8	12.00	225	1.4	1.24	14.50	455	7.41	36	32
3	0.7	0.3	1.8	12.50	274	1.4	1.24	15.00	485	7.41	31	29
4	0.7	0.3	1.8	13.00	310	1.4	1.24	16.00	570	7.41	31	29
5	0.7	0.3	1.8	14.00	350	1.4	1.24	17.00	640	7.41	31	29
6	0.7	0.3	1.8	15.00	375	1.4	1.24	17.60	730	7.41	23	20
7	0.7	0.3	1.8	15.00	385	1.4	1.24	17.60	745	7.41	23	20
10	0.7	0.3	1.8	19.00	525	4 x 0.8	1.24	20.00	810	7.41	19	17
12	0.7	0.3	1.8	20.00	600	4 x 0.8	1.40	21.00	890	7.41	18	17
14	0.7	0.3	1.8	21.00	670	4 x 0.8	1.40	22.00	975	7.41	17	16
16	0.7	0.4	1.8	22.00	750	4 x 0.8	1.40	23.00	1075	7.41	17	14
19	0.7	0.4	2.0	23.00	860	4 x 0.8	1.40	24.00	1225	7.41	16	13
24	0.7	0.4	2.0	27.00	1025	4 x 0.8	1.40	28.00	1425	7.41	14	12
27	0.7	0.4	2.0	28.00	1125	4 x 0.8	1.40	29.00	1575	7.41	14	12
30	0.7	0.4	2.0	29.00	1200	4 x 0.8	1.56	30.00	1700	7.41	13	11
37	0.7	0.4	2.0	31.00	1500	4 x 0.8	1.56	32.00	2050	7.41	11	11