

AN ISO 9001 : 2008 COMPANY

GRANDLAY
WIRES & CABLES

SINCE 1953



YOUR POWER - FUL CONNECTION



GRANDLAY 1.1 KV SINGLE CORE, ALUMINIUM CONDUCTOR, XLPE INSULATED, ARMoured CABLES CONFORMING TO IS : 7098 (PART-I) AMENDED UPTO DATE

Nominal Area of Conductor	Armoured					
	Nominal thickness of XLPE Insulation	Armour wire diameter or steel strip (dimension)	Min. thickness of PVC Outer Sheath	Approx. Overall diameter	Approx. wt. of Cable	Maximum DC resistance of conductor at 20°C
sq.mm	mm	mm	mm	mm	kg/Km	
10	1.0	1.4	1.24	14.0	220	3.08
16	1.0	1.4	1.24	15.0	255	1.91
25	1.2	1.4	1.24	16.0	320	1.20
35	1.2	1.4	1.24	18.0	370	0.868
50	1.3	1.4	1.24	19.0	445	0.641
70	1.4	1.4	1.40	21.0	540	0.443
95	1.4	4X0.80	1.40	22.0	620	0.320
120	1.5	4X0.8	1.40	23.0	725	0.253
150	1.7	4X0.8	1.40	25.0	865	0.206
185	1.9	4X0.8	1.40	27.0	1015	0.164
240	2.0	4X0.8	1.40	30.0	1250	0.125
300	2.1	4X0.8	1.56	33.0	1520	0.100
400	2.4	4X0.8	1.56	37.0	1890	0.0778
500	2.6	4X0.8	1.72	40.0	2260	0.0605
630	2.8	4X0.8	1.72	44.0	2855	0.0469
800	3.1	4X0.8	1.88	50.0	3580	0.0367
1000	3.3	4X0.8	2.04	54.0	4330	0.0291

GRANDLAY 1.1 KV SINGLE CORE, ALUMINIUM CONDUCTOR, XLPE INSULATED, UNARMoured CABLES CONFORMING TO IS : 7098 (PART-I) AMENDED UPTO DATE

Nominal Area of Conductor	Unarmoured				
	Nominal thickness of XLPE Insulation	Nominal thickness of PVC Outer sheath	Approx. Overall diameter	Approx. wt. of Cable	Maximum DC resistance of conductor at 20°C
sq.mm	mm	mm	mm	mm	kg/Km
10	0.7	1.8	10.0	110	3.08
16	0.7	1.8	11.0	140	1.91
25	0.9	1.8	12.0	180	1.20
35	0.9	1.8	14.0	220	0.868
50	1.0	1.8	15.0	280	0.641
70	1.1	1.8	17.0	360	0.443
95	1.1	1.8	18.0	460	0.320
120	1.2	2.0	20.0	550	0.253
150	1.4	2.0	23.0	690	0.206
185	1.6	2.0	24.0	830	0.164
240	1.7	2.0	27.0	1050	0.125
300	1.8	2.2	30.0	1270	0.100
400	2.0	2.2	34.0	1620	0.0778
500	2.2	2.2	37.0	1970	0.0605
630	2.4	2.2	41.0	2490	0.0469
800	2.6	2.4	46.0	3150	0.0367
1000	2.8	2.6	51.0	4000	0.0291

GRANDLAY 1.1 KV TWO CORE XLPE INSULATED UNARMoured AND ARMoured PVC SHEATHED CABLE WITH ALUMINIUM CONDUCTOR CONFORMING TO IS : 7098 (PART-I)

Nominal Area of Conductor	Nominal Insulation thickness	Min. PVC Inner sheath thickness	Unarmoured Cable			Armoured Cable				
			Nominal PVC outer sheath thickness	Approx. Overall diameter of cable	Approx. Total wt. of cable	Wire diameter/ Steel strip (dimensions)	Min. outer sheath thickness	Approx. overall diameter of cable	Approx. total wt. of cable	Max. DC resistance of conductor at 20°C
sq. mm	mm	mm	mm	mm	Kg/Km	mm	mm	mm	Kg/Km	Ohm/km
10	0.70	0.30	1.80	15.20	260	1.40	1.24	17.30	565	3.08
16	0.70	0.30	1.80	15.50	300	1.40	1.40	17.60	575	1.91
25	0.90	0.30	1.80	18.30	380	4.00x0.80	1.40	20.50	840	1.20
35	0.90	0.30	2.00	20.40	470	4x0.80	1.40	22.20	950	0.868
50	1.00	0.30	2.00	23.80	540	4x0.80	1.40	24.80	1060	0.641
70	1.10	0.30	2.00	26.80	687	4x0.80	1.40	27.50	1200	0.443
95	1.10	0.40	2.00	28.80	970	4x0.80	1.56	30.00	1390	0.320
120	1.20	0.40	2.20	32.10	1216	4x0.80	1.56	33.20	1710	0.253
150	1.40	0.40	2.20	35.00	1531	4x0.80	1.56	36.80	2110	0.206
185	1.60	0.50	2.20	38.30	1770	4x0.80	1.72	40.00	2375	0.164
240	1.70	0.50	2.40	42.40	2148	4x0.80	1.72	43.60	3121	0.125
300	1.80	0.60	2.60	45.00	2390	4x0.80	1.88	46.50	3200	0.100
400	2.00	0.60	2.80	52.00	3320	4x0.80	2.20	53.0	4090	0.0778

GRANDLAY 1.1 KV THREE-CORE XLPE INSULATED ARMoured PVC SHEATHED CABLE WITH ALUMINIUM CONDUCTOR CONFORMING TO IS : 7098 (PART- I)

Nominal Area of Conductor	Nominal Insulation Thickness	Min. PVC inner sheath thickness	Armoured Cable								
			Strip				Wire				
			Strip thickness	Minimum outer sh. thickness of PVC	Approx. Overall diameter of cable	Approx. total wt. of cable	Wire dia	Minimum outer sh. thickness of PVC	Approx. Overall diameter of cable	Approx. total weight of cable	Max. DC resistance of conductor at 20°C
mm	mm	mm	Kg/Km	mm	mm	mm	Kg/Km	Ohm/km			
10	0.70	0.30	-	-	-	-	1.40	1.24	18.5	650	3.08
16	0.70	0.30	0.80	1.40	20	750	1.60	1.40	21.5	980	1.91
25	0.90	0.30	0.80	1.40	21	915	1.60	1.40	22.5	1180	1.20
35	0.90	0.30	0.80	1.40	22	980	1.60	1.40	24.5	1300	0.868
50	1.00	0.30	0.80	1.40	25	1090	1.60	1.40	26.0	1390	0.641
70	1.10	0.40	0.80	1.40	28	1390	1.60	1.56	30.0	1760	0.443
95	1.10	0.40	0.80	1.56	32	1750	2.00	1.56	34.5	2400	0.320
120	1.20	0.40	0.80	1.56	35	2100	2.00	1.56	37.0	2770	0.253
150	1.40	0.50	0.80	1.56	38	2400	2.00	1.72	41.0	3300	0.206
185	1.60	0.50	0.80	1.72	43	3060	2.00	1.88	46.5	3960	0.164
240	1.70	0.60	0.80	1.88	48	3820	2.50	2.04	52.5	5330	0.125
300	1.80	0.60	0.80	2.04	52	4500	2.50	2.20	57.0	6220	0.100
400	2.00	0.70	0.80	2.20	59	5650	2.50	2.36	63.5	7500	0.0778
500	2.20	0.70	0.80	2.36	66	6960	3.15	2.52	71.0	9680	0.0605
630	2.40	0.70	0.80	2.68	74	8700	3.15	2.84	78.50	11700	0.0469

GRANDLAY 1.1 KV FOUR-CORE XLPE INSULATED ARMoured PVC SHEATHED CABLE WITH ALUMINIUM CONDUCTOR CONFORMING TO IS : 7098 (PART- I)

Nominal Area of Conductor	Nominal Insulation Thickness	Min. PVC Inner sheath thickness	Armoured Cable								
			Strip				Wire				
			Strip thickness	Minimum outer sh. Thickness of PVC	Approx. Overall diameter of cable	Approx. Total wt. of cable	Wire dia	Minimum outer sh. thickness of PVC	Approx. Overall diameter of cable	Approx. Total weight of cable	Max. DC resistance of conductor at 20°C
mm	mm	mm	Kg/Km	mm	mm	mm	mm	Kg/Km	Ohm/km		
10	0.70	0.30	0.80	1.40	19.0	590	1.60	1.40	20.0	792	3.08
16	0.70	0.30	0.80	1.40	21.5	778	1.60	1.40	23.0	975	1.91
25	0.90	0.30	0.80	1.40	25.0	1020	1.60	1.40	26.2	1235	1.20
35	0.90	0.30	0.80	1.40	26.70	1240	1.60	1.40	28.0	1480	0.868
50	1.00	0.30	0.80	1.56	31.0	1530	1.60	1.56	32.6	1866	0.641
70	1.10	0.40	0.80	1.56	35.5	2045	2.00	1.56	37.5	2600	0.443
95	1.10	0.40	0.80	1.56	39.0	2380	2.00	1.72	41.0	3090	0.320
120	1.20	0.40	0.80	1.72	43.0	2830	2.00	1.72	45.0	3668	0.253
150	1.40	0.50	0.80	1.88	47.5	3415	2.00	1.88	49.5	4260	0.206
185	1.60	0.50	0.80	2.04	52.7	4050	2.50	2.04	56.0	5640	0.164
240	1.70	0.60	0.80	2.20	58.5	5210	2.50	2.36	61.5	6800	0.125
300	1.80	0.60	0.80	2.36	64.0	6120	3.15	2.52	68.4	8352	0.100
400	2.00	0.70	0.80	2.68	72.5	7641	3.15	2.68	77.0	10428	0.0778
500	2.20	0.70	0.80	2.84	80.5	9200	3.15	3.00	85.0	12455	0.0605
630	2.40	0.70	0.80	3.00	88.7	11300	4.00	3.00	95.5	16680	0.0469

GRANDLAY 1.1 KV 3½-CORE XLPE INSULATED ARMoured CABLE WITH ALUMINIUM CONDUCTOR CONFORMING TO IS : 7098 (PART- I)

Nominal Area of Conductor	Nominal Insulation Thickness	Min. PVC Inner sheath thickness	Armoured Cable								
			Strip				Wire				
			Strip thickness	Minimum outer sh. thickness of PVC	Approx. Overall diameter of cable	Approx. total wt. of cable	Wire dia	Minimum outer sh. thickness of PVC	Approx. Overall diameter of cable	Approx. total weight of cable	Max. DC resistance of conductor at 20°C
mm	mm	mm	Kg/Km	mm	mm	mm	mm	Kg/Km	Ohm/km		
25/16	0.90/0.70	0.30	0.80	1.40	23.0	915	1.60	1.40	24.0	1170	1.20/1.91
35/16	0.90/0.70	0.30	0.80	1.40	25.0	1050	1.60	1.40	26.0	1320	0.868/1.91
50/25	1.00/0.90	0.30	0.80	1.40	28.5	1342	1.60	1.56	30.0	1670	0.641/1.20
70/35	1.10/0.90	0.40	0.80	1.56	32.0	1746	2.00	1.56	34.0	2340	0.443/0.868
95/50	1.10/1.00	0.40	0.80	1.56	36.0	2090	2.00	1.56	37.5	2830	0.320/0.641
120/70	1.20/1.10	0.40	0.80	1.72	40.0	2540	2.00	1.72	44.5	3340	0.253/0.443
150/70	1.40/1.10	0.50	0.80	1.72	44.0	2960	2.00	1.88	46.50	3940	0.206/0.443
185/95	1.60/1.10	0.50	0.80	1.88	49.0	3580	2.50	2.04	52.40	5170	0.164/0.320
240/120	1.70/1.20	0.60	0.80	2.04	55.5	4500	2.50	2.20	58.5	6210	0.125/0.253
300/150	1.80/1.40	0.60	0.80	2.20	59.5	5200	2.50	2.36	63.0	7310	0.100/0.206
400/185	2.00/1.60	0.70	0.80	2.52	68.0	6710	3.15	2.52	71.0	9500	0.0778/0.164
500/240	2.20/1.70	0.70	0.80	2.68	75.0	8210	3.15	2.84	79.0	11370	0.0605/0.125
630/300	2.40/1.80	0.70	0.80	3.00	82.30	9900	4.00	3.00	90.0	15050	0.0469/0.100