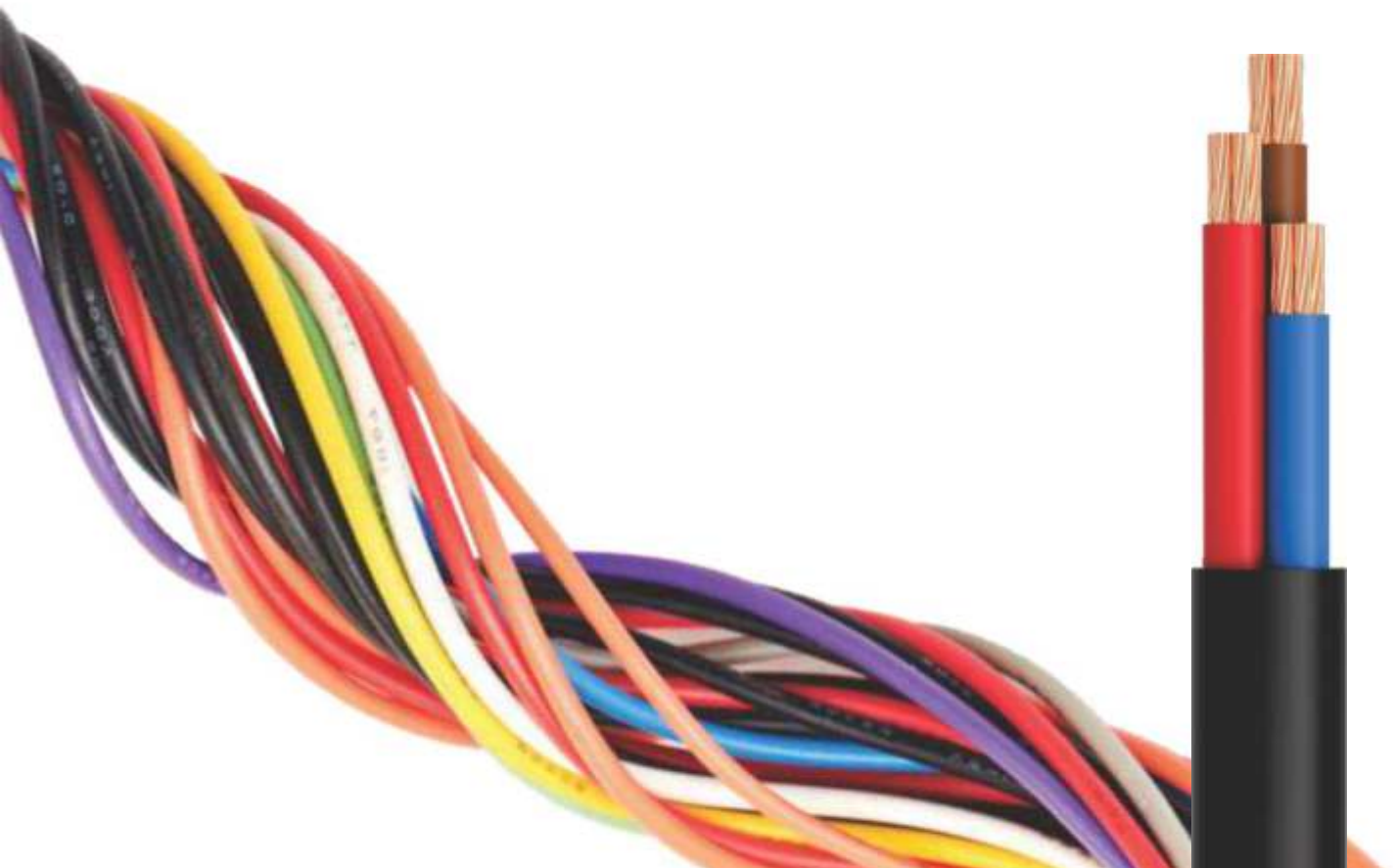




UNIWIRED CABLES LT (PVC) POWER CABLES



1554(Pt-1) CM/
L NO. 8400009005



LT (PVC) POWER CABLE

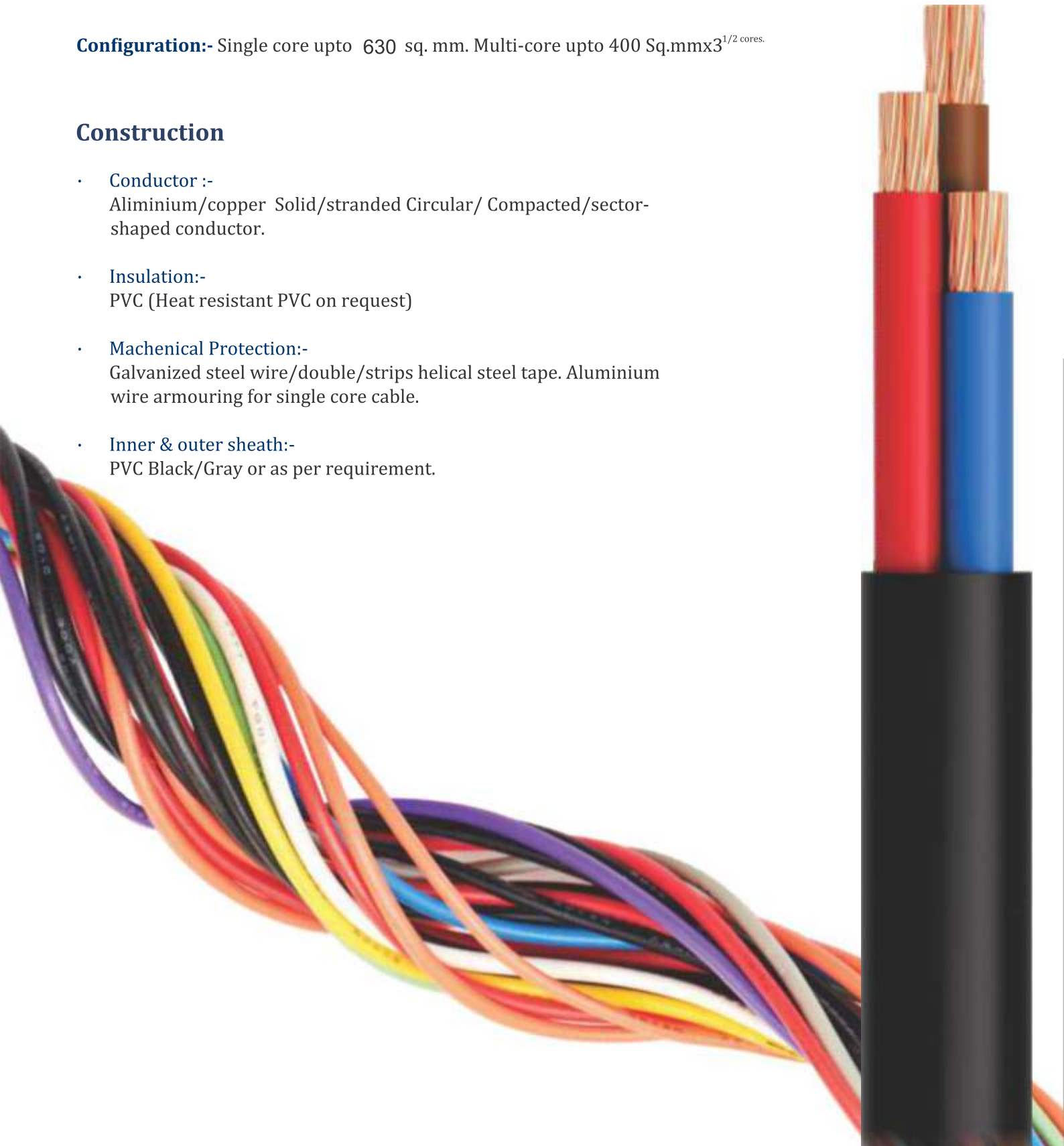


Power Cables with **PVC** insulation for power transmission. Voltage grade 650/1100 volts (U/ U) provided with ISI marking IS 1554(Pt.1), IEC502, BS6436/87.

Configuration:- Single core upto 630 sq. mm. Multi-core upto 400 Sq.mm $\times 3^{1/2}$ cores.

Construction

- **Conductor :-**
Aluminium/copper Solid/stranded Circular/ Compacted/sector-shaped conductor.
- **Insulation:-**
PVC (Heat resistant PVC on request)
- **Machanical Protection:-**
Galvanized steel wire/double/strips helical steel tape. Aluminium wire armouring for single core cable.
- **Inner & outer sheath:-**
PVC Black/Gray or as per requirement.



LT (PVC) POWER CABLE



1 Core, Aluminium Conductor, PVC insulated, PVC sheathed, Unarmoured (AYY)/ Armoured (AYWY)/ Cable-650/1100 volts as per is : 1554 (Pt-1)/88

Nominal cross sectional area	UNARMoured			ARMoured				Max. D.C. Conductor Resistance at 20° C	A.C CURRENT RATING (AMPS.)							
	nominal thickness of pvc insulation	app. Overall dia	app. Weight	nominal thickness of pvc insulation	nominal dia. Of aluminium wire	app. Overall dia	app. Weight		In Air				In ground			
									GPPVC Insulation Cables		HRPVC Insulation Cables		GPPVC Insulation Cables		HRPVC Insulation Cables	
sq. mm	mm	mm	kg/km	mm	mm	kg/km	kg/km	Ohm/km.	2	3	2	3	2	3	2	3
1.5	0.8	6.7	68	1.1	1.4	10	108	18.1	18	15	21	18	21	17	24	20
2.5	0.9	7.4	70	1.2	1.4	10.8	115	12.1	5	21	30	26	28	24	33	28
4	1	8.2	81	1.3	1.4	11.5	126	7.41	32	27	38	33	36	31	41	35
6	1	8.8	90	1.3	1.4	12.2	164	4.61	41	35	50	42	44	39	52	46
10	1	9.7	115	1.3	1.4	13	197	3.08	56	47	69	57	59	51	69	60
16	1	10.7	155	1.3	1.4	14.1	238	1.91	72	64	88	78	75	66	88	77
25	1.2	12.3	195	1.5	1.4	16	295	1.2	99	84	121	103	97	86	112	101
35	1.2	14.1	270	1.5	1.4	17.2	375	0.868	120	105	146	129	120	100	140	117
50	1.4	15	334	1.7	1.4	18.7	566	0.641	150	130	184	158	145	120	170	140
70	1.4	16.7	427	1.7	1.4	20.9	608	0.443	185	155	226	190	170	140	199	163
95	1.6	19	546	1.9	16	23	732	0.32	215	190	264	233	205	175	240	205
120	1.6	20.8	643	1.9	16	25	844	0.253	240	220	292	270	230	195	268	228
150	1.8	23	760	2.1	16	26.2	979	0.206	270	250	330	305	265	220	310	258
185	2	25	950	2.3	16	28.5	1151	0.164	305	290	374	356	300	240	351	278
240	2.2	28	1150	2.5	16	31.9	1429	0.125	350	335	430	410	335	270	392	316
300	2.4	32	1420	2.7	2	35.5	1784	0.1	395	380	484	464	370	295	434	345
400	2.6	35.5	1731	3	2	40	2226	0.0778	455	435	557	534	410	325	480	378
500	3	39	2200	3.4	2	43	2671	0.0605	490	480	600	589	435	345	510	403
630	3.4	45	2850	3.5	2	49	3337	0.0469	560	550	680	674	485	390	565	456
800	3.4	48.5	3450	3.9	2	52.8	4210	0.0367	640	630	774	785	530	440	620	515
1000	3.4	55	4150	3.9	2	58	5024	0.0291	740	720	895	800	580	490	680	570

Technical Data of Cables with copper can be supplied on request.

2 Core, Aluminium Conductor, PVC insulated, PVC sheathed, Unarmoured (AYY)/ Armoured (AYWY)/ Cable-650/1100 volts as per is : 1554 (Pt-1)/88

Nominal cross sectional area	Nominal thickness of pvc	UNARMoured		ARMoured				Max. D.C. Conductor Resistance	A.C CURRENT RATING (AMPS.)			
		app. Overall	app. Weight	Nominal Steel Armour Size mm		app. Overall	app. Weight		In Air		In ground	
									GPPVC	HRPVC	GPPVC	HRPVC
sq. mm	mm	mm	kg/km	W	F	mm	kg/km	Ohm/km.	Amps	Amps	2	3
1.5	0.8	11.5	175	1.4	-	14.5	435	18.1	16	20	18	21
2.5	0.9	13	210	1.4	-	16	500	12.1	21	26	25	29
1	1	14.5	270	1.4	-	17.5	600	7.41	27	33	32	36
6	1	16	310	1.4	-	18.5	650	4.61	35	42	40	47
10	1	18.1	400	1.4	-	20.9	720	3.08	47	57	55	64
16	1	19	470	-	4x0.8	21	840	1.91	59	72	70	82
25	1.2	20	498	-	4x0.8	22	770	1.2	78	95	90	105
35	1.2	21.5	590	-	4x0.8	23	910	0.868	99	120	110	128
50	1.4	24	730	-	4x0.8	25.6	110	0.641	125	153	135	158
70	1.4	26.5	880	-	4x0.8	28	1345	0.443	150	183	160	187
95	1.6	29	1190	-	4x0.8	30.6	1685	0.32	185	225	190	222
120	1.6	31.9	1350	-	4x0.8	33.5	1890	0.253	210	256	210	245
150	1.8	35	1650	-	4x0.8	36	2265	0.206	240	294	240	280
185	2	37.3	1950	-	4x0.8	39.8	2685	0.164	275	334	275	322
240	2.2	43.7	2500	-	4x0.8	45.7	3400	0.125	325	397	320	374
300	2.4	45.8	3100	-	4x0.8	47.6	44330	0.1	365	445	355	416
400	2.6	51	4000	-	4x0.8	52.5	4950	0.0778	420	515	385	450

Cables with conductor area upto 10 Sq.mm can be substituted with copper conductor of one size lower.

LT (PVC) POWER CABLE



3 Core, Aluminium Conductor, PVC insulated, PVC sheathed, Unarmoured (Ayy)/ Armoured (AYWY)/ Cable-650/1100 volts as per is : 1554 (Pt-1)/88

Nominal cross sectional area sq.mm	Nominal thickness of pvc insulation	Unarmoured		Armoured				Max. D.C. conductor resistance at 20°C	A.C. current rating (Amps.)			
		app. Overall dia.	app. Weight	nominal steel armour size mm		app. Overall dia.	app. Weight		In air		In ground	
	mm	mm	kg/km	W	F	mm	kg/km	ohm/km	GPPVC insulation Amps.	HRPVC insulation Amps.	GPPVC insulation Amps.	HRPVC insulation Amps.
1.5	0.8	11.5	200	1.4	-	14.5	485	18.1	13	16	16	18
2.5	0.9	13.5	240	1.4	-	16	560	12.1	18	22	21	24
4	1	15.4	290	1.4	-	17.5	610	7.41	23	28	28	32
6	1	16.5	338	1.4	-	19	690	4.61	30	38	35	41
10	1	18.5	420	1.4	-	22.5	850	3.08	40	49	46	54
16	1	21.2	560	-	4x0.8	23	970	1.91	51	63	60	69
25	1.2	22	620	-	4x0.8	23.5	1050	1.2	70	86	76	89
35	12	24	770	-	4x0.8	25.5	1145	0.868	86	105	92	108
50	1.4	27.5	970	-	4x0.8	29	1450	0.641	105	127	110	129
70	14	30.5	1270	-	4x0.8	31.5	1700	0.443	130	159	135	157
95	1.6	34.5	1640	-	4x0.8	36	2200	0.32	155	190	165	193
120	1.6	37	1865	-	4x0.8	38.5	2490	0.253	180	218	185	215
150	1.8	40.8	2370	-	4x0.8	42.8	3080	0.206	205	251	210	246
185	2	45.2	2875	-	4x0.8	46.8	3615	0.164	240	294	235	276
240	2.2	50.6	3820	-	4x0.8	52.5	4550	0.125	280	340	275	322
300	2.4	58.5	4635	-	4x0.8	59.5	5500	0.1	315	386	305	358
400	2.6	63.3	5600	-	4x0.8	65	6700	0.0778	375	445	335	390

Cables with conductor area upto 10 Sq.mm can be substituted with copper conductor of one size lower.

3.5 Core, Aluminium Conductor, PVC insulated, PVC sheathed, Unarmoured (Ayy)/ Armoured (AYWY)/ Cable-650/1100 volts as per is : 1554 (Pt-1)/88

Nominal cross sectional area sq.mm	Nominal thickness of pvc insulation	unarmoured		armoured			Max. D.C. conductor resistance at 20°C	A.C. current rating (Amps.)			
		app. Overall dia.	app. Weight	nominal steel armour size mm	app. Overall dia.	app. Weight		In air		In ground	
	mm	mm	kg/km	W	mm	kg/km	1.2	GPPVC insulation Amps.	HRPVC insulation Amps.	GPPVC insulation Amps.	HRPVC insulation Amps.
25/16	1.2/1.0	25	760	4x0.8	26	1170	1.2	70	86	76	89
35/16	1.2/1.0	27	880	4x0.8	28	1300	0.868	86	105	92	108
50/25	1.4/1.2	30	1145	4x0.8	31.6	1660	0.641	105	127	110	129
70/35	1.4/1.2	34.5	1470	4x0.8	35	2020	0.443	130	159	135	157
95/50	1.6/1.4	38.5	1890	4x0.8	40	2520	0.32	155	190	165	193
120/70	1.6/1.4	42	2300	4x0.8	43	2990	0.253	180	218	185	215
150/70	1.8/1.4	46	2710	4x0.8	47	3515	0.206	205	251	210	246
185/95	2.0/1.6	50.2	3210	4x0.8	52	4170	0.164	240	294	235	276
240/120	2.2/1.6	56.5	4230	4x0.8	58	5275	0.125	280	340	275	322
300/150	2.4/1.8	62.5	5385	4x0.8	64	6300	0.1	315	386	305	358
400/185	2.6/2.0	69.5	6650	4x0.8	71.5	7800	0.1778	375	445	335	390

Cables with conductor area upto 10 Sq.mm can be substituted with copper conductor of one size lower.

LT (PVC) POWER CABLE



4 Core, Aluminium Conductor, PVC insulated, PVC sheathed, Unarmoured (Ayy)/ Armoured (AYWY)/ Cable-650/1100 volts as per is : 1554 (Pt-1)/88

Nominal cross sectional area	Nominal thickness of pvc insulation	Unarmoured		Armoured				Max. D.C. conductor resistance at 20°C	A.c. current rating (amps.)			
		app. Overall dia	app. Overall weight	Nominal steel armour size mm		app. Overall dia	app. Weight		in air		In ground	
sq.mm	mm	mm	kg/km	W	F	mm	kg/km	ohm/km	GPPVC insulation Amps.	HRPVC insulation Amps.	GPPVC insulation Amps.	HRPVC insulation Amps.
2.5	0.9	14	230	1.4	-	17	560	12.1	18	22	21	24
4	1	16.6	320	1.4	-	19	700	7.41	23	28	28	32
6	1	18	350	1.4	-	20.5	800	4.61	30	38	35	41
10	1	20	450	-	4x0.8	21	810	3.08	40	49	46	54
16	1	23	650	-	4x0.8	23.5	1000	1.91	51	63	60	69
25	1.2	25.5	765	-	4x0.8	26	1210	1.2	70	86	76	89
35	1.2	28	930	-	4x0.8	28.5	1420	0.868	86	105	92	108
50	1.4	32.9	1250	-	4x0.8	34	1800	0.641	105	127	110	129
70	1.4	36.4	1600	-	4x0.8	37.5	2220	0.443	130	159	135	157
95	1.6	41.3	2180	-	4x0.8	42.5	2830	0.32	155	190	165	193
120	1.6	44.8	2560	-	4x0.8	45	3250	0.253	180	218	185	215
150	1.8	49.7	3120	-	4x0.8	51	3820	0.206	205	251	210	246
185	2	54.6	3700	-	4x0.8	56.2	4550	0.164	240	294	235	276
240	2.2	61	4760	-	4x0.8	63	5930	0.125	280	340	275	322
300	2.4	67	5900	-	4x0.8	68.5	6970	0.1	315	386	305	358
400	2.6	76.2	7425	-	4x0.8	78	8800	0.0778	375	445	335	390

Cables with conductor area upto 10 Sq.mm can be substituted with copper conductor of one size lower.

1.1 KV Copper Conductor, PVC insulated & Sheathed, Armoured/Unarmoured Cable Conformed to IS: 1554 (Pt-1)

No. of core	Nominal area of conductor	Nominal thickness of insulation	Unarmoured		Armoured			Max. D.C. conductor resistance at	A.C. curret rating			
			AYY		AYWY				In air at 40°C		In ground at 30°C	
	sq.mm	mm	App. Overall dia of cable (mm)	App. Weight of cable (kg/km)	Nominal armour size (mm)	App. Overall dia (mm)	app. Weight (kg/km)	ohm/km	PVC insulation (Amps.)	HR PVC insulation (Amps.)	PVC insulation (Amps.)	HR PVC insulation (Amps.)
	4	1	14	235	1.4	16	510	4.61	35	42	41	47
	6	1	15	290	1.4	17	600	3.06	45	54	50	57
2core	10	1	18	430	1.4	20	785	1.86	60	72	70	80
	16	1	20	580	4x0.8	21	800	1.15	48	94	90	103
	4	1	15	290	1.4	17	580	4.61	30	36	36	41
3core	6	1	16	365	1.4	18	695	3.08	39	47	45	51
	10	1	18	565	1.4	20	980	1.83	52	62	60	68
	16	1	19	660	4x0.8	21	955	1.15	66	79	77	88
4 core	4	1	16	370	1.4	18	680	4.61	30	36	36	41
	6	1	17	470	1.4	19	870	3.08	39	47	45	51
	10	1	20	720	4x0.8	22	950	1.83	52	35	60	68
	16	1	21	850	4x0.8	22	1140	1.15	66	79	77	88

Cables with conductor area upto 10 Sq.mm can be substituted with copper conductor of one size lower.

CONTROL CABLE



Cables for control circuits in power plants and other similar industrial installation and signaling network of railways, with or without FR/FRLS properties in sizes normally upto 61 cores. Voltage grade 650/1100 Volts (U/U). Conforming to standard specifications like IS 1554(Pt1), Bs 6346, IEC227-I, III, IRS 63/89.

Configuration:- Multi Core/ Multi-pair.

Construction

- **Conductor :-**
solid/ stranded, circular annealed, bare/tinned copper wire of 1.5 sq. mm, 2.5sq.mm, 4.0sq.mm, 6.0sq.mm.
- **Insulation:-**
PVC fully color coded cores. Core identification by printed numerals / letters also available on request.
- **Screen(if desired) :-**
Screening by copper braid or aluminium mylar tape or aluminium wire for reinforced armour types.
- **Drain Wire (if desired) :-**
Drain wire of solid / stranded, bare/tinned copper wire normally provided for screened cables.
- **Machanical Protection:-**
Galvanized steel wire or strip or double helical steel tape armour.
- **Inner & Outer Sheath :-**
PVC black/grey.



CONTROL CABLES



1.5 sq.mm. solid (1/1.38mm) conductor multicore Control cable-1.1 KV Grade as per IS : 1554 (Pt-1):88

No. of cores	Unarmoured const.		Round wire armoured const.		Flat strip armoured const.		current rating in air D.C.		current rating in air A.C.	
	O.D. app. In mm	Net Wt. app. Kg/km	O.D. app in mm	Net Wt. app. In kg/km	O.D. app. In mm	Net Wt. app. In kg/km	amp. Armoured	Amp. Unarmoured	amp. Armoured	Amp. Unarmoured
2	13.1	150	15.35	390	-	-	21	20	19	18
3	13.5	180	15.8	430	-	-	20	18	18	16
4	14.3	205	16.6	465	-	-	18	17	17	16
5	15.2	240	17.5	520	-	-	18	16	16	15
6	16.5	280	18.45	585	-	-	17	16	16	15
7	16.5	290	18.45	595	-	-	16	15	15	14
8	17.4	330	19.7	670	-	-	16	15	15	13
9	18	370	20.5	730	-	-	16	15	14	13
10	19.2	400	21.7	800	-	-	15	15	14	13
12	19.7	440	22.2	850	21	740	15	14	13	12
14	21.35	530	23.85	1025	22.25	810	14	13	13	11
15	21.8	560	24.3	1055	22	840	14	13	13	11
16	22.3	590	24.8	1100	23.2	895	13	12	12	11
18	23.6	650	26.1	1190	24.5	965	13	12	12	11
19	23.6	670	26.1	1225	24.5	995	13	12	11	11
20	24.05	710	26.55	1280	24.95	1040	13	11	11	11
21	24.45	725	26.95	1295	25.35	1050	13	11	11	10
24	25.6	805	28.1	1420	26.5	1150	12	11	11	10
27	26.7	885	29.2	1530	27.6	1260	12	11	11	10
29	27.4	940	29.9	1600	28.3	1330	11	11	11	10
30	28.75	965	30.25	1640	28.65	1360	11	11	10	10
37	30	1150	32.7	1900	31.1	1610	11	10	10	9
40	28.9	1230	33.6	1925	32	1680	11	10	10	9
42	31.95	1315	34.15	2075	32.55	1760	10	10	10	8
44	32.5	1370	34.7	2140	33.1	1810	10	9	10	8
52	34.85	1595	37.85	2650	35.45	2080	10	9	9	8
61	37.1	1825	40.1	2980	37.7	2330	9	8	8	8

1.5 sq. mm. (7/0.53mm) multistrand conductor multicore Control cable-1.1 KV Grade as per IS : 1554 (Pt-1):88

No. of cores	Unarmoured const.		Round wire armoured		Flat strip armoured const.		Current rating in air D.C.		Current rating in air A.C.	
	O.D. app. In mm	Net Wt. app. Kg/km	O.D. app in mm	Net Wt. app. In kg/km	O.D. app. In mm	Net Wt. app. In kg/km	amp. Armoured	Amp. Unarmoured	amp. Armoured	Amp. Unarmoured
2	13.4	160	15.7	410	-	-	23	21	21	19
3	13.9	190	16.2	450	-	-	21	19	19	18
4	14.8	210	17.5	480	-	-	16	18	18	16
5	15.7	250	18	540	-	-	16	18	17	16
6	16.7	290	19	620	-	-	18	17	17	16
7	16.7	300	19	630	-	-	8	16	16	14
8	18	340	20.5	700	-	-	17	16	16	14
9	18.65	380	21.15	770	-	-	16	16	15	14
10	20.15	430	23.05	910	-	-	16	15	15	14
12	20.65	470	23.55	970	21.95	770	16	14	14	13
14	22.15	550	24.65	1060	23.05	850	15	14	13	13
15	22.65	580	25.15	1100	23.55	880	14	13	13	12
16	23.15	610	25.65	1150	24.05	910	14	13	13	12
18	24.55	670	27.05	1230	25.45	1010	14	13	13	12
19	24.55	690	27.05	1270	25.45	1020	14	13	13	11
20	25	740	27.5	1300	25.9	1090	14	13	13	11
21	25.45	750	27.95	1350	26.35	1100	14	13	13	11
24	26.65	830	29.15	1480	27.55	1200	13	12	12	11
27	27.85	910	30.35	1590	28.7	1310	13	12	11	11
29	28.6	970	31.3	1670	29.5	1360	13	11	11	11
30	28.95	1000	31.65	1720	29.8	1420	12	11	11	10
37	31.8	1220	34	1970	32.4	1670	11	11	11	9
40	32.75	1310	34.95	2080	33.35	1750	11	10	10	9
42	33.55	1380	36.55	2390	34.15	1840	11	10	10	9
44	34.15	1430	37.15	2470	34.75	1890	11	10	10	9
52	36.4	1650	39.4	2780	37	2150	11	9	9	9
61	38.75	1890	42.15	3120	39.35	2440	10	9	9	8

CONTROL CABLES



2.5 sq.mm.(I/1.78mm) solid conductor multicore Control cable - I.I KV grade as per IS: 1554 (pt-I) :88

No. of cores	UNARMoured CONST.		ROUND WIRE ARMoured CONST.		FLAT STRIP ARMoured CONST.		CURRENT RATING IN AIR (D.C.)		CURRENT RATING IN AIR (A.C.)	
	O.D. app in mm	Net. Wt. app. Kg/km	O.D. App in mm	Net wt. app. Kg/km.	O.D. App in mm	Net wt. app. Kg/km.	Amp. Armoured	Amp. Unarmoured	Amp. Armoured	Amp. Unarmoured
2	14.15	190	16.45	450	-	-	28	26	25	24
3	14.7	230	17	500	-	-	26	24	23	22
4	15.65	270	17.95	560	-	-	24	23	23	21
5	16.7	320	19	640	-	-	24	23	21	20
6	17.7	370	20.1	720	-	-	23	22	21	19
7	17.7	390	20.1	740	-	-	22	21	20	19
8	19.25	450	21.7	840	20.55	640	21	21	19	18
9	20.2	510	23.05	1000	21.45	790	21	20	19	18
10	22	580	24.5	1090	22.9	880	21	19	19	18
12	22.6	640	25.1	1160	23.5	940	20	18	18	16
14	23.8	730	26.3	1280	24.7	1050	19	18	17	16
15	24.4	770	26.85	1340	25.25	1100	19	18	17	16
16	24.9	810	27.4	1400	25.8	1160	19	17	17	16
18	26.5	900	29	1520	27.4	1280	19	17	16	15
19	26.5	930	29	1560	27.4	1300	18	16	16	15
20	27	990	29.45	1640	27.9	1360	18	16	16	15
21	27.45	1010	29.95	1670	28.35	1410	18	16	16	14
24	28.85	1130	31.5	1850	29.75	1550	17	16	15	14
27	30.1	1250	32.8	2000	31.2	1700	16	15	14	14
29	30.95	1330	33.65	2100	32.05	1780	16	15	14	14
30	31.85	1400	34.05	2140	32.45	1850	16	14	14	13
37	34.7	1690	37.7	2750	35.3	2180	15	14	13	13
40	35.75	1810	38.75	2920	36.35	2300	15	13	13	12
42	36.4	1890	39.4	3020	37	2400	14	13	13	12
44	37.1	1970	40.1	3120	37.7	2480	14	13	13	12
52	39.6	2280	43	3560	40.2	2830	14	13	12	11
61	40.6	2660	45.6	3980	43.2	3260	13	12	11	11

2.5 sq. mm. (7/0.6mm) multistrand conductor multicore Control cable- 1.1 KV grade as per IS : 1554 (Pt-1) : 88

NO. OF CORES	UNARMoured CONST.		ROUND WIRE ARMoured CONST.		FLAT STRIP ARMoured CONST.		CURRENT RATING IN AIR (D.C.)		CURRENT RATING IN AIR (A.C.)	
	O.D. APP IN MM	NET. WT. APP. KG/KM	O.D. APP IN MM	NET WT. APP. KG/KM.	O.D. APP IN MM	NET WT. APP. KG/KM.	AMP. ARMoured	AMP. UNARMoured	AMP. ARMoured	AMP. UNARMoured
2	14.6	200	16.9	470	-	-	29	27	26	24
3	15.2	240	17.5	520	-	-	27	25	24	23
4	16.2	280	18.5	590	-	-	25	24	23	21
5	17.3	330	19.6	670	-	-	24	23	22	20
6	18.45	390	21	760	-	-	23	22	21	19
7	18.45	400	21	7800	-	-	22	21	20	19
8	20.2	470	23.1	960	21.5	750	22	21	19	18
9	21.4	550	23.9	1050	2.3	830	21	20	19	18
10	22.9	600	25.45	1140	23.85	900	20	19	19	18
12	23.55	660	26.05	1220	24.45	990	20	19	18	16
14	24.8	750	27.3	1340	25.7	1100	19	18	18	16
15	25.4	800	27.95	1400	26.35	1150	19	18	17	16
16	26	840	28.5	1450	26.9	1210	19	18	17	16
18	27.7	940	30.2	1580	28.6	1300	18	17	16	15
19	27.7	960	30.2	1620	28.6	1360	18	17	16	15
20	28.2	1030	30.9	1720	29.1	1420	18	17	16	15
21	28.7	1040	31.4	1750	29.6	1460	17	16	16	14
24	30.2	1160	32.9	1910	31.3	1620	17	16	15	14
27	32.05	1320	34.3	2080	32.65	1770	16	15	15	13
29	32.95	1410	35.95	2420	33.55	1850	16	15	14	13
30	33.55	1460	36.6	2480	34.2	1930	15	14	14	13
37	36.4	1750	39.35	2880	37	2260	15	14	14	13
40	37.5	1870	40.5	3020	38.1	2400	15	14	13	12
42	38.2	1950	41.6	3160	38.8	2480	15	14	13	12
44	38.9	2030	42.3	3260	39.5	2480	14	13	13	12
52	41.6	2350	45	3700	42.6	2980	14	13	12	11
61	45	2760	48.35	4230	45.6	3400	13	12	11	11

CONTROL CABLES



1. Insulation thickness (nom)- 0.8mm for 1.5 sq. mm & 0.9mm for 2.5 sq.mm
2. Thickness of inner sheath (minimum)
0.3mm upto including 48 cores & 0.4mm above 48 cores for table 1
0.3mm upto including 43 cores & 0.4mm above 43 cores for table 2
0.3mm upto including 33 cores & 0.4mm above 33 cores for table 3
0.3mm upto including 29 cores & 0.4mm above 29 cores for table 4
3. Standard drum length -500/1000mtrs+/-5% upto & including 19 cores & 500 mtrs.+/-5% above 19 cores
4. Maximum DC resistance of cond. at 20° C in ohm/km-12.1 for 1.5 sq.mm & 7.41 for 2.5sq.mm
5. Maximum AC resistance of cond. at 70°C in ohm/km-17.42 for 1.5 sq.mm. & 10.67 for 2.5sq.mm
6. Maximum mutual capacitance between core to core in nF/km-100 at 0.8khz.
7. Short circuit current in amp. for 1 sec. duration-176 for 1.5sq. mm & 287 for 2.5 sq.mm.
8. Minimum bending radius for unarmoured cable in mm=10x cable dia in mm.

Rating factor for variation in ground temperature (for cable laid direct in the ground)

GROUND TEMPERATURE °	15	20	25	30	35	40	45
RATING FACTOR	1.17	1.12	1.06	1	0.94	0.87	0.79

Rating factor for variation in ground temperature (for cable laid direct in the duct)

GROUND TEMPERATURE °	15	20	25	30	35	40	45
RATING FACTOR	1.17	1.12	1.06	1	0.91	0.87	0.79

Rating factor for variation in ambient air temperature

GROUND TEMPERATURE °	25	30	35	40	45
RATING FACTOR	1.25	1.16	1.09	1	0.9

Rating factor for multicore cable laid in air (spacing between cables equal to dia of the cable)

NO. OF RACKS	NO. OF CABLES PER PACK				
	1	2	3	6	9
1	1	0.98	0.96	0.93	0.92
2	1	0.95	0.93	0.9	0.89
3	1	0.94	0.92	0.89	0.88
4	1	0.93	0.9	0.87	0.86

Rating factor for multicore cable laid on racks in air (with cable touching)

NO. OF RACKS	NO. OF CABLES PER PACK				
	1	2	3	6	9
1	1	0.84	0.8	0.75	0.73
2	1	0.8	0.76	0.71	0.69
3	1	0.78	0.74	0.7	0.68
6	1	0.76	0.72		0.66

FLEXIBLE MULTI STRAND HOUSE WIRING



Nominal cross sectional area of conductor	No. nom. Dia. Of wires	Thickness of insulation (nom.)	Appr. Overall dia.	Current carrying capacity* 2 wire single phase	D.C. resistance (max.) per Km. at 20°C
sq.mm	mm	mm	mm	mm	mm
1	14/0.30	0.7	2.8	12	18.1
1.5	22/0.30	0.7	3.1	16	12.1
2.5	36/0.30	0.8	3.8	22	7.41
4.6	56/0.30	0.8	4.4	29	4.95
6	84/0.30	0.8	5.2	37	3.3

Standard colour : Red, yellow, blue, black & green (for earthing).
Supplied in 90 mtr coils in attractive cartons, conforms to IS 694:1990

No. & dia of wire, No./inch	No. & dia of wire, No./SWG	No. & dia of wire, No./mm	Thickness		Appr. Overall dia. mm	appr. Weight of cable mm	current rating Amps.	Standard length of coil mtrs.
			PV insulation mm	PVC outersheath mm				

Single core unsheathed

1/0.044	1/18	1/1.2	1	-	3.2	18.1	19	91.44
3/0.029	3/32	3/0.73	1	-	3.7	23.5	22	91.44
3/0.036	3/20	3/0.91	1	-	4.12	31.2	28	91.44
7/0.029	7/22	7/0.73	1.1	-	4.5	41.5	38	91.44
7/0.036	7/20	7/0.91	1.2	-	5.2	60	46	91.44
7/0.044	7/18	7/1.12	1.2	-	5.8	81.5	57	91.44
7/0.052	-	7/1.32	1.2	-	6.4	108	70	91.44
7/0.064	7/16	7/1.62	1.3	-	7.5	156	88	91.44
19/0.044	19/18	19/1.12	1.3	-	8.3	197	110	91.44
19/0.025	-	19/1.42	1.3	-	9.3	365	127	91.44
19/0.064	19/16	19/1.62	1.4	-	11	390	160	91.44
19/0.083	19/14	19/2.11	1.4	-	13.4	640	220	91.44
37/0.064	37/16	37/1.64	1.5	-	14.5	725	245	91.44
37/0.083	37/14	37/2.11	1.5	-	17.9	1210	320	91.44

Single core Sheathed

1/0.044	1/18	1/1.12	1	0.7	4.7	30	19	91.44
3/0.029	3/32	3/0.73	1	0.7	5.2	37	22	91.44
3/0.036	3/20	3/0.91	1	0.7	5.6	45.5	28	91.44
7/0.029	7/22	7/0.73	1.1	0.7	6	58	38	91.44
7/0.036	7/20	7/0.91	1.2	0.7	6.6	74	46	91.44
7/0.044	7/18	7/1.12	1.2	0.7	7.2	100.5	57	91.41

Two Core Flat

1/0.044	1/18	1/1.12	1	0.9	5.10x8.40	71	14	91.44
3/0.029	3/32	3/0.73	1	0.9	5.60x9.40	87	18	91.44
3/0.036	3/20	3/0.91	1	1	6.20x10.40	113	24	91.44
7/0.029	7/22	7/0.73	1.1	1	6.60x11.20	140	31	91.44
7/0.036	7/20	7/0.91	1.2	1	7.20x12.40	182	37	91.44
7/0.044	7/18	7/1.12	1.2	1	8.00x13.80	239	46	91.41