

# TECHNICAL CATALOGUE

IS : 694

IS : 5950

IS : 1554 (Part-1)



*POWER CABLE*

*CONTROL CABLE*

*FLEXIBLE CABLE*

*SHOT FIRING CABLE*

*FIXED WIRING CABLE*

*TELECOMMUNICATION CABLE*

**LOAD KING**



## INTRODUCTION

'LOAD KING Wire Industries' was started in 1978 and since then has been continuously producing high quality ISI marked goods. We are equipped with latest technological equipment in production and quality control departments. Our management includes selected group of professionals with vast experience in manufacturing of cables. Our firm is duly registered with National Small Scale Industrial Corporation, Directorate of Industries, Municipal Corporation of Delhi & Bureau of Indian Standards since last two decades. We also have approvals from D.G.M.S. Dhanbad, Tariff Advisory Committee, Fire Insurance Authority, Quality Control Authority etc.. Our products are inspected exhaustively at every stage of production and meet stringent quality standards.

## STANDARD WIRE SIZES

NOMINAL DIAMETER			CALCULATED AREA MM <sup>2</sup>	RESISTANCE OF PLAIN ANNEALED WIRE AT 20°C OHM/Km.	NOMINAL DIAMETER			CALCULATED AREA MM <sup>2</sup>	RESISTANCE OF PLAIN ANNEALED WIRE AT 20°C OHM/Km.
SWG	METRIC	INCH			SWG	METRIC	INCH		
-	.025	.00098	.0004909	36124.0	-	.265	.01043	.05516	312.60
50	-	.0010	.000567	34026.0	32	-	.0108	.05910	291.70
-	.030	.00118	.0007069	24392.0	-	.280	.01102	.06158	280.00
49	-	.0012	.0007297	23629.0	31	-	.0116	.06818	252.90
-	.036	.00142	.0010179	16939.0	-	.300	.01181	.07069	243.90
-	.040	.00158	.001257	13720.0	-	-	.0120	.07297	236.30
48	-	.0016	.001297	13291.0	-	.307	.01209	.07402	232.90
-	.045	.00177	.001590	10841.0	30	.315	.0124	.07791	221.30
-	.050	.00197	.001964	8781.0	-	.335	.01319	.08814	195.61
47	-	.0020	.002027	8506.0	-	-	-	-	-
-	.056	.00220	.002463	7000.0	29	-	.0136	.09372	183.96
-	.060	.00236	.002827	6098.0	-	.355	.01398	.09898	174.19
46	-	.0024	.002919	5907.0	-	.375	.01476	.11045	156.10
-	.071	.00279	.003959	4355.0	28	-	.0148	.11099	155.34
45	-	.0028	.003973	4340.0	-	.400	.01575	.12566	137.20
-	.080	.00315	.005027	3430.0	27	-	.0164	.13628	126.51
44	-	.0032	.005189	3323.0	-	.425	.01673	.14186	121.53
-	.090	.00354	.006362	2710.0	-	.450	.01772	.15904	108.41
43	-	.0036	.006567	2625.0	26	-	.018	.16417	105.02
-	.100	.00394	.007854	2195.0	-	.462	.018189	.16764	102.85
42	-	.004	.008107	2127.0	-	.475	.01870	.17720	97.29
41	-	.0044	.009810	1757.5	-	.500	.01968	.19635	87.81
-	.112	.00441	.09852	1750.0	25	-	.020	.2027	85.07
-	.118	.00464	.01094	1576.0	-	.515	.020276	.2083	82.75
40	-	.0048	.01168	1476.8	-	.530	.020866	.2206	78.15
-	.125	.00492	.01227	1404.9	24	-	.022	.2452	70.30
39	-	.0052	.01370	1258.4	-	.560	.022047	.2463	70.00
-	.132	.0052	.01370	1258.4	-	.600	.02362	.2827	60.98
-	.140	.00551	.01539	1120.0	23	-	.024	.2919	59.07
-	.150	.00591	.01767	975.7	-	.630	.024803	.3117	53.31
38	-	.0060	.01824	945.2	-	-	.025	.3267	54.44
-	.160	.0063	.02011	857.5	-	.670	.026378	.3526	48.90
-	-	.00669	.02270	759.6	-	.710	.027953	.3959	43.55
37	.170	.0068	.02343	735.9	22	-	.028	.3973	43.40
-	.180	.0071	.02545	677.5	-	.730	.028740	.4185	41.19
-	.190	.00748	.02835	608.1	-	-	.029	.4261	40.46
36	-	.0076	.02927	589.1	-	.750	.02953	.4418	36.03
-	.195	.00768	.02987	577.3	-	.800	.03150	.5027	34.30
-	.200	.00787	.03142	548.8	21	-	.032	.5189	33.23
-	.212	.00835	.03530	488.4	-	.850	.03346	.5675	30.38
35	-	.0084	.03575	482.2	-	.900	.03543	.6362	27.10
-	.224	.00882	.03941	437.50	20	-	.036	.6567	26.26
34	-	.0092	.04289	402.00	-	.925	.03642	.6720	25.66
-	.236	.00929	.04374	394.10	-	.950	.03740	.7088	24.32
-	.250	.00984	.04909	351.20	-	1.00	.03937	.7854	21.95
33	-	.0100	.05067	340.30	19	-	.040	.8107	21.27
-	.258	.0102	.05228	329.80	-	1.06	.04173	.8825	19.538





## "LOAD KING" UNARMoured SINGLE CORE POWER CABLES TYPE AYY 1.1 KV

IS : 1554



PART - 1

No. of cores & cross sectional area No. x mm <sup>2</sup>	Conductor (Al.) min. No. of wires No.	Thickness of PVC Insulation (Nom.) mm	Thickness of PVC outer sheath (Nom) mm	Approx. O.D. mm	Approx. net wt. of Cable Kg/Km	Max. D.C. resistance at 20° C Ohm/Km	Approx. A.C. resistance at operating temp. 70° Ohm/Km	Approx. reactance at 50 Hz Ohm/Km	Current rating			Short Circuit rating for 1 sec. KA(rms)
									in ground Amps	In Duct Amps	In air Amps	
1x1.5	1	0.8	1.8	7.4	63	18.1	21.74	0.156	17	17	15	0.200
1x2.5	1	0.9	1.8	8.0	74	12.1	14.54	0.147	24	24	21	0.235
1x4	1	1.0	1.8	8.7	88	7.41	8.90	0.139	31	30	27	0.304
1x6	1	1.0	1.8	9.2	101	4.61	5.54	0.130	39	37	35	0.456
1x10	1	1.0	1.8	10.0	122	3.08	3.70	0.120	51	51	47	0.760
1x16	6	1.0	1.8	11.5	161	1.91	2.30	0.108	66	65	64	1.220
1x25	6	1.2	1.8	12.9	209	1.20	1.44	0.103	86	84	84	1.900
1x35	6	1.2	1.8	14.0	251	0.868	1.04	0.100	100	100	105	2.660
1x50	6	1.4	1.8	15.5	295	0.641	0.770	0.097	120	115	130	3.800
1x70	12	1.4	1.8	17.0	375	0.443	0.532	0.091	140	135	155	5.320
1x95	15	1.6	1.8	19.5	485	0.320	0.385	0.089	175	155	190	7.220
1x120	15	1.6	2.0	21.5	600	0.253	0.305	0.087	195	170	220	9.120
1x150	15	1.8	2.0	23.5	710	0.206	0.249	0.086	220	190	250	11.400
1x185	30	2.0	2.0	25.5	860	0.164	0.199	0.085	240	210	290	14.100
1x240	30	2.2	2.0	28.5	1090	0.125	0.152	0.083	270	225	335	18.200
1x300	30	2.4	2.0	32.0	1320	0.100	0.123	0.083	295	245	380	22.800
1x400	53	2.6	2.2	36.0	1670	0.0778	0.0975	0.082	325	275	435	30.400
1x500	53	3.0	2.2	40.0	2100	0.0605	0.0767	0.081	345	295	480	38.000
1x630	53	3.4	2.4	45.0	2680	0.0469	0.0614	0.081	390	320	550	47.900
1x800	53	3.4	2.4	49.0	3250	0.0367	0.0501	0.079	440	345	600	60.800
1x1000	53	3.4	2.6	54.0	3980	0.0291	0.0420	0.077	490	370	720	76.000

## "LOAD KING" PVC INSULATED ALUMINIUM WIRE ARMoured AND PVC SHEATHED SINGLE CORE POWER CABLE 1.1 KV

Number of cores and cross-sectional area of conductor mm	Min No. no. wires	Thickness of insulation (nom.) mm	Armour wire diameter mm	Thickness of outer sheath (minimum) mm	Approx. overall diameter mm	Approx. Net weight Kg/Km	Maximum resistance of conductor 20° C Ohm/Km	Current in ground Amp.	Current in air Amp.	Short Circuit rating for 1 sec. KA (rms)
1x1.5 ◆	1	1.1	1.4	1.24	9.6	109	18.1	18	20	0.11
1x2.5 ●	1	1.2	1.4	1.24	10.2	124	12.1	25	27	0.19
1x4 ●	1	1.3	1.4	1.24	10.8	142	7.41	32	34	0.28
1x6 ●	1	1.3	1.4	1.24	11.3	156	4.61	40	41	0.43
1x10 ●	1	1.3	1.4	1.24	12.1	185	3.08	52	54	0.72
1x16	7	1.3	1.4	1.24	13.7	242	1.91	67	70	1.1
1x25	6	1.5	1.4	1.24	15.4	310	1.20	87	95	1.5
1x35	6	1.5	1.4	1.24	16.6	358	0.868	116	113	2.5
1x50	6	1.7	1.4	1.24	18.7	456	0.641	137	138	3.2
1x70	12	1.7	1.6	1.40	21.0	590	0.443	169	174	5.0
1x95	15	1.9	1.6	1.40	23.2	730	0.320	181	210	6.5
1x120	15	1.9	1.6	1.40	24.9	848	0.253	231	244	8.0
1x150	15	2.1	1.6	1.40	26.7	988	0.206	259	281	10
1x185	30	2.3	1.6	1.56	29.7	1203	0.164	294	320	14
1x240	30	2.5	1.6	1.56	32.1	1500	0.125	344	378	17
1x300	30	2.7	2.0	1.56	36.3	1832	0.100	389	433	21
1x400	53	3.0	2.0	1.72	40.1	2242	0.0778	451	523	31
1x500	53	3.4	2.0	1.72	44.0	2786	0.0605	511	603	39
1x630	53	3.9	2.5	2.04	50.6	3620	0.0469	888	765	43
1x800	53	3.9	2.5	2.04	55.1	4275	0.0367	996	905	63
1x1000	53	3.9	2.5	2.20	60.0	5110	0.0291	1382	1310	79

◆ only Solid

● Stranded is also permissible

POWER CABLES





## "LOAD KING" UNARMoured SINGLE CORE POWER CABLES TYPE AYY 1.1 KV

IS : 1554



PART - 1

No. of cores & cross sectional area No. x mm <sup>2</sup>	Conductor (Al.) min. No. of wires No.	Thickness of PVC Insulation (Nom.) mm	Thickness of PVC outer sheath (Nom) mm	Approx. O.D. mm	Approx. net wt. of Cable Kg/Km	Max. D.C. resistance at 20° C Ohm/Km	Approx. A.C. resistance at operating temp. 70° Ohm/Km	Approx. reactance at 50 Hz Ohm/Km	Current rating			Short Circuit rating for 1 sec. KA(rms)
									in ground Amps	In Duct Amps	In air Amps	
1x1.5	1	0.8	1.8	7.4	63	18.1	21.74	0.156	17	17	15	0.200
1x2.5	1	0.9	1.8	8.0	74	12.1	14.54	0.147	24	24	21	0.235
1x4	1	1.0	1.8	8.7	88	7.41	8.90	0.139	31	30	27	0.304
1x6	1	1.0	1.8	9.2	101	4.61	5.54	0.130	39	37	35	0.456
1x10	1	1.0	1.8	10.0	122	3.08	3.70	0.120	51	51	47	0.760
1x16	6	1.0	1.8	11.5	161	1.91	2.30	0.108	66	65	64	1.220
1x25	6	1.2	1.8	12.9	209	1.20	1.44	0.103	86	84	84	1.900
1x35	6	1.2	1.8	14.0	251	0.868	1.04	0.100	100	100	105	2.660
1x50	6	1.4	1.8	15.5	295	0.641	0.770	0.097	120	115	130	3.800
1x70	12	1.4	1.8	17.0	375	0.443	0.532	0.091	140	135	155	5.320
1x95	15	1.6	1.8	19.5	485	0.320	0.385	0.089	175	155	190	7.220
1x120	15	1.6	2.0	21.5	600	0.253	0.305	0.087	195	170	220	9.120
1x150	15	1.8	2.0	23.5	710	0.206	0.249	0.086	220	190	250	11.400
1x185	30	2.0	2.0	25.5	860	0.164	0.199	0.085	240	210	290	14.100
1x240	30	2.2	2.0	28.5	1090	0.125	0.152	0.083	270	225	335	18.200
1x300	30	2.4	2.0	32.0	1320	0.100	0.123	0.083	295	245	380	22.800
1x400	53	2.6	2.2	36.0	1670	0.0778	0.0975	0.082	325	275	435	30.400
1x500	53	3.0	2.2	40.0	2100	0.0605	0.0767	0.081	345	295	480	38.000
1x630	53	3.4	2.4	45.0	2680	0.0469	0.0614	0.081	390	320	550	47.900
1x800	53	3.4	2.4	49.0	3250	0.0367	0.0501	0.079	440	345	600	60.800
1x1000	53	3.4	2.6	54.0	3980	0.0291	0.0420	0.077	490	370	720	76.000

## "LOAD KING" PVC INSULATED ALUMINIUM WIRE ARMoured AND PVC SHEATHED SINGLE CORE POWER CABLE 1.1 KV

Number of cores and cross-sectional area of conductor mm	Min No. no. wires	Thickness of insulation (nom.) mm	Armour wire diameter mm	Thickness of outer sheath (minimum) mm	Approx. overall diameter mm	Approx. Net weight Kg/Km	Maximum resistance of conductor 20° C Ohm/Km	Current in ground Amp.	Current in air Amp.	Short Circuit rating for 1 sec. KA (rms)
1x1.5 ◆	1	1.1	1.4	1.24	9.6	109	18.1	18	20	0.11
1x2.5 ●	1	1.2	1.4	1.24	10.2	124	12.1	25	27	0.19
1x4 ●	1	1.3	1.4	1.24	10.8	142	7.41	32	34	0.28
1x6 ●	1	1.3	1.4	1.24	11.3	156	4.61	40	41	0.43
1x10 ●	1	1.3	1.4	1.24	12.1	185	3.08	52	54	0.72
1x16	7	1.3	1.4	1.24	13.7	242	1.91	67	70	1.1
1x25	6	1.5	1.4	1.24	15.4	310	1.20	87	95	1.5
1x35	6	1.5	1.4	1.24	16.6	358	0.868	116	113	2.5
1x50	6	1.7	1.4	1.24	18.7	456	0.641	137	138	3.2
1x70	12	1.7	1.6	1.40	21.0	590	0.443	169	174	5.0
1x95	15	1.9	1.6	1.40	23.2	730	0.320	181	210	6.5
1x120	15	1.9	1.6	1.40	24.9	848	0.253	231	244	8.0
1x150	15	2.1	1.6	1.40	26.7	988	0.206	259	281	10
1x185	30	2.3	1.6	1.56	29.7	1203	0.164	294	320	14
1x240	30	2.5	1.6	1.56	32.1	1500	0.125	344	378	17
1x300	30	2.7	2.0	1.56	36.3	1832	0.100	389	433	21
1x400	53	3.0	2.0	1.72	40.1	2242	0.0778	451	523	31
1x500	53	3.4	2.0	1.72	44.0	2786	0.0605	511	603	39
1x630	53	3.9	2.5	2.04	50.6	3620	0.0469	888	765	43
1x800	53	3.9	2.5	2.04	55.1	4275	0.0367	996	905	63
1x1000	53	3.9	2.5	2.20	60.0	5110	0.0291	1382	1310	79

◆ only Solid

● Stranded is also permissible

POWER CABLES





**"LOAD KING" UNARMoured TWIN AND MULTICORE  
POWER CABLES TYPE AYY 1.1 K.V.**

IS : 1554



PART - 1

**POWER CABLES**

No. of cores & cross sectional area	Cond. Al Min. No. of wires	Thickness of PVC Insulation (Nom.) mm	Thick-ness of PVC inner sheath extruded (min.) mm	Thick-ness of PVC outer sheath (nom.) mm	Approx. O.D. mm	App-rox net wt. of cable Kg./Km	Max D.C. resistance at 20°C Ohm/Km	Approx A.C. resistance at operating temp 70°C Ohm/Km	Approx reactance at 50 Hz Ohm/Km	Current Rating			Short circuit rating for 1 sec. KA(rms)
										In ground Amps	In duct Amps	In air Amps	
2x1.5	1	0.8	0.3	1.8	11.5	150	18.10	21.70	0.241	18	16	16	0.144
2x2.5	1	0.9	0.3	1.8	13.0	185	12.10	14.50	0.204	25	21	21	0.190
2x4	1	1.0	0.3	1.8	14.0	225	7.41	8.90	0.198	32	27	27	0.304
2x6	1	1.0	0.3	1.8	15.5	290	4.61	5.54	0.185	40	34	35	0.456
2x10	1	1.0	0.3	1.8	17.0	335	3.08	3.70	0.176	55	45	47	0.760
2x16	7	1.0	0.3	1.8	20.0	470	1.91	2.30	0.160	70	58	59	1.220
2x25	6	1.2	0.3	2.0	23.0	650	1.20	1.44	0.157	90	76	78	1.900
2x35	6	1.2	0.3	2.0	25.5	790	0.868	1.04	0.154	110	92	99	2.660
2x50	6	1.4	0.3	2.0	28.5	1010	0.641	0.770	0.154	135	115	125	3.800
3x1.5	1	0.8	0.3	1.8	12.0	165	18.10	21.70	0.107	16	14	13	0.114
3x2.5	1	0.9	0.3	1.8	13.5	205	12.10	14.50	0.102	21	18	18	0.190
3x4	1	1.0	0.3	1.8	15.0	250	7.41	8.90	0.099	28	23	23	0.304
3x6	1	1.0	0.3	1.8	16.5	320	4.61	5.54	0.093	35	30	30	0.456
3x10	1	1.0	0.3	1.8	17.5	380	3.08	3.70	0.088	46	39	40	0.760
3x16	1	1.0	0.3	1.8	21.0	530	1.91	2.30	0.080	60	50	51	1.220
4x1.5	1	0.8	0.3	1.8	13.0	185	18.10	21.70	0.113	16	14	13	0.114
4x2.5	1	0.9	0.3	1.8	14.5	230	12.10	14.50	0.108	21	18	18	0.190
4x4	1	1.0	0.3	1.8	16.0	285	7.41	8.90	0.105	28	23	23	0.304
4x6	1	1.0	0.3	1.8	18.0	370	4.61	5.54	0.099	35	30	30	0.456
4x10	1	1.0	0.3	1.8	19.0	440	3.08	3.70	0.094	46	39	40	0.760
4x16	7	1.0	0.3	2.0	23.5	640	1.91	2.30	0.086	60	50	51	1.220
3x25	6	1.2	0.3	2.0	21.5	520	1.20	1.44	0.079	76	63	70	1.90
3x35	6	1.2	0.3	2.0	23.5	640	0.868	1.04	0.077	92	77	86	2.66
3x50	6	1.4	0.3	2.0	27.0	830	0.641	0.770	0.077	110	95	105	3.80
3x70	12	1.4	0.4	2.2	31.0	1100	0.443	0.532	0.074	135	115	130	5.32
3x95	15	1.6	0.4	2.2	35.0	1440	0.320	0.385	0.074	165	140	155	7.22
3x120	15	1.6	0.4	2.2	37.0	1690	0.253	0.305	0.072	185	155	180	9.12
3x150	15	1.8	0.5	2.4	41.0	2060	0.206	0.249	0.072	210	175	205	11.40
3x185	30	2.0	0.5	2.6	45.0	2560	0.164	0.198	0.072	235	200	240	14.10
3x240	30	2.2	0.6	2.8	51.0	3330	0.125	0.152	0.071	275	235	280	18.20
3x300	30	2.4	0.6	3.0	58.0	4100	0.100	0.123	0.071	305	260	315	22.80
3x400	53	2.6	0.7	3.4	65.0	5200	0.0778	0.0975	0.071	335	290	375	30.40
3x500	53	3.0	0.7	3.6	74.0	6580	0.0605	0.0767	0.071	355	315	405	38.00
3½x25/16	6	1.2/1.0	0.3	2.0	24.0	620	1.20	1.44	0.083	76	63	70	1.90
3½x35/16	6	1.2/1.0	0.3	2.0	25.0	940	0.868	1.04	0.082	92	77	86	2.66
3½x50/25	6	1.4/1.2	0.3	2.0	29.0	950	0.641	0.770	0.082	110	95	105	3.80
3½x70/35	12	1.4/1.2	0.4	2.2	33.0	1250	0.443	0.532	0.079	135	115	130	5.32
3½x95/50	15	1.6/1.4	0.4	2.2	38.0	1650	0.320	0.385	0.079	165	140	155	7.22
3½x120/70	15	1.6/1.4	0.5	2.4	41.0	2010	0.253	0.305	0.077	185	155	180	9.12
3½x150/70	15	1.8/1.4	0.5	2.4	44.0	2360	0.206	0.249	0.077	210	175	205	11.40
3½x185/95	30	2.0/1.6	0.5	2.6	50.0	2980	0.164	0.198	0.077	235	200	240	14.10
3½x240/120	30	2.2/1.6	0.6	3.0	57.0	3930	0.125	0.152	0.075	275	235	280	18.20
3½x300/150	30	2.4/1.8	0.6	3.2	63.0	4820	0.100	0.123	0.075	305	260	315	22.80
3½x400/185	53	2.6/2.0	0.7	3.4	70.0	6020	0.0778	0.0975	0.075	335	290	375	30.40
3½x500/240	53	3.0/2.20	0.7	3.8	80.0	7670	0.0605	0.0767	0.075	355	315	405	38.00
4x25	6	1.2	0.3	2.0	24.0	650	1.20	1.44	0.085	76	63	70	1.90
4x35	6	1.2	0.3	2.0	27.0	800	0.868	1.04	0.083	92	77	86	2.66
4x50	6	1.4	0.4	2.2	32.0	1090	0.641	0.770	0.082	110	95	105	3.80





**"LOAD KING" ARMoured TWIN AND MULTICORE  
POWER CABLES TYPE AYWY & AYFY 1.1 K.V.**

IS : 1554



PART - 1

TYPE	No. of cores & cross sectional area	Cond. Al Min. No. of wires	Thick ness of PVC Insula tion (Nom) mm	Thick ness of PVC inner sheath extruded (min.) mm	Armouring		Thick ness of PVC outer sheath (min.) mm	Approx. O.D. mm	App rox net wt. of cable Kg.	Max D.C. resista nce at 20°C Ohm/Km	Approx A.C. resista nce at operating temp 70°C Ohm/Km	Approx reactan ce at 50 Hz Ohm/Km	App rox capac itance per phase F/Km.	Current Rating			Short circuit rating for 1 sec. KA(rms)
					Flat Strip	Round Wire								In ground	In duct	In air	
	No. x mm <sup>2</sup>	No.	mm	mm	mm	mm	mm	mm	Kg.	Ohm/Km	Ohm/Km	Ohm/Km	F/Km.	Amps	Amps	Amps	KA(rms)
AYWY	2x1.5	1	0.8	0.3		1.4	1.24	15.0	400	18.10	21.70	0.239	0.165	18	16	16	0.114
	2x2.5	1	0.9	0.3		1.4	1.24	16.0	460	12.10	14.50	0.229	0.180	25	21	21	0.190
	2x4	1	1.0	0.3		1.4	1.24	17.5	530	7.41	8.90	0.223	0.200	32	27	27	0.304
	2x6	1	1.0	0.3		1.4	1.24	18.5	610	4.61	5.54	0.207	0.220	40	34	35	0.456
	2x10	1	1.0	0.3		1.4	1.24	20.0	710	3.08	3.70	0.198	0.250	55	45	47	0.760
	3x1.5	1	0.8	0.3		1.4	1.24	15.5	430	18.10	21.70	0.119	0.330	16	14	13	0.114
	3x2.5	1	0.9	0.3		1.4	1.24	17.0	490	12.10	14.50	0.115	0.355	21	18	18	0.190
	3x4	1	1.0	0.3		1.4	1.24	18.0	580	7.41	8.90	0.112	0.395	28	23	23	0.304
	3x6	1	1.0	0.3		1.4	1.24	19.5	670	4.61	5.54	0.104	0.435	35	30	30	0.456
	3x10	1	1.0	0.3		1.4	1.24	21.5	800	3.08	3.70	0.099	0.495	46	39	40	0.760
	4x1.5	1	0.8	0.3		1.4	1.24	16.0	460	18.10	21.70	0.127	0.330	16	14	13	0.114
	4x2.5	1	0.9	0.3		1.4	1.24	17.5	540	12.10	14.50	0.123	0.355	21	18	18	0.190
	4x4	1	1.0	0.3		1.4	1.24	19.0	640	7.41	8.90	0.119	0.395	28	23	23	0.304
	4x6	1	1.0	0.3		1.4	1.24	20.5	740	4.61	5.54	0.112	0.435	35	30	30	0.456
AYFY	2x16	7	1.0	0.3	4.0x0.8		1.40	22.5	790	1.910	2.300	0.179	0.280	70	58	59	1.220
	2x25	6	1.2	0.3	4.0x0.8		1.40	25.5	990	1.200	1.440	0.176	0.310	90	76	78	1.900
	2x35	6	1.2	0.3	4.0x0.8		1.40	27.5	1160	0.868	1.040	0.173	0.330	110	92	99	2.660
	2x50	6	1.4	0.3	4.0x0.8		1.40	31.0	1460	0.641	0.770	0.173	0.350	135	115	125	3.800
	3x16	7	1.0	0.3	4.0x0.8		1.40	23.5	870	1.910	2.300	0.090	0.560	60	50	51	1.220
	4x10	1	1.0	0.3	4.0x0.8		1.40	21.5	730	3.080	3.700	0.107	0.495	46	39	40	0.760
	4x16	7	1.0	0.3	4.0x0.8		1.40	25.5	990	1.910	2.300	0.097	0.560	60	50	51	1.220
AYFY	3x25	6	1.2	0.3	4.0x0.8		1.40	23.5	820	1.20	1.44	0.088	0.620	76	63	70	1.90
	3x35	6	1.2	0.3	4.0x0.8		1.40	25.5	960	0.868	1.04	0.086	0.660	92	77	85	2.66
	3x50	6	1.4	0.3	4.0x0.8		1.56	29.5	1210	0.641	0.770	0.086	0.700	110	95	105	3.80
	3x70	12	1.4	0.4	4.0x0.8		1.56	33.0	1500	0.443	0.532	0.083	0.730	135	115	130	5.32
	3x95	15	1.6	0.4	4.0x0.8		1.56	37.0	1900	0.320	0.385	0.083	0.760	165	140	155	7.22
	3x120	15	1.6	0.4	4.0x0.8		1.72	39.0	2230	0.253	0.305	0.082	0.780	185	155	180	9.12
	3x150	15	1.8	0.5	4.0x0.8		1.88	43.0	2650	0.206	0.249	0.082	0.795	210	175	205	11.40
	3x185	30	2.0	0.5	4.0x0.8		1.88	47.0	3180	0.164	0.199	0.082	0.810	235	200	240	14.10
	3x240	30	2.2	0.6	4.0x0.8		2.20	54.0	4070	0.125	0.152	0.079	0.820	275	235	280	18.20
	3x300	30	2.4	0.6	4.0x0.8		2.36	60.0	4900	0.100	0.123	0.079	0.825	305	260	315	22.80
	3x400	53	2.6	0.7	4.0x0.8		2.52	66.0	6070	0.0778	0.0975	0.079	0.830	335	290	375	30.40
3x500	53	3.0	0.7	4.0x0.8		2.84	76.0	7620	0.0605	0.0767	0.079	1.100	355	315	405	38.00	
AYFY	3½x25/16	6	1.2/1.0	0.3	4.0x0.8		1.40	26.0	930	1.20	1.44	0.094	0.620	76	63	70	1.90
	3½x35/16	6	1.2/1.0	0.3	4.0x0.8		1.40	27.0	1060	0.868	1.04	0.093	0.660	92	77	86	2.66
	3½x50/25	6	1.4/1.2	0.3	4.0x0.8		1.56	31.0	1340	0.641	0.770	0.093	0.700	110	95	105	3.80
	3½x70/35	12	1.4/1.2	0.4	4.0x0.8		1.56	34.0	1690	0.443	0.532	0.090	0.730	135	115	130	5.32
	3½x95/50	15	1.6/1.4	0.4	4.0x0.8		1.56	39.0	2150	0.320	0.384	0.090	0.760	165	140	155	7.22
	3½x120/70	15	1.6/1.4	0.5	4.0x0.8		1.72	42.0	2570	0.253	0.305	0.088	0.780	185	155	180	9.12
	3½x150/70	15	1.8/1.4	0.5	4.0x0.8		1.88	47.0	3000	0.206	0.249	0.088	0.795	210	175	205	11.40
	3½x185/95	30	2.0/1.6	0.5	4.0x0.8		2.04	52.0	3700	0.164	0.199	0.088	0.810	235	200	240	14.10
	3½x240/120	30	2.2/1.6	0.6	4.0x0.8		2.20	58.0	4660	0.125	0.152	0.085	0.820	275	235	280	18.20
	3½x300/150	30	2.4/1.8	0.6	4.0x0.8		2.36	65.0	5630	0.100	0.123	0.085	0.825	305	260	315	22.80
	3½x400/185	53	2.6/2.0	0.7	4.0x0.8		2.68	72.0	6990	0.0778	0.0975	0.085	0.830	335	290	375	30.40
3½x500/240	53	3.0/2.2	0.7	4.0x0.8		2.84	82.0	8710	0.0605	0.0767	0.085	1.100	355	315	405	38.00	
AYFY	4x25	6	1.2	0.3	4.0x0.8		1.40	26.0	970	1.20	1.44	0.097	0.620	76	63	70	1.90
	4x35	6	1.2	0.3	4.0x0.8		1.40	28.5	1170	0.868	1.04	0.094	0.660	92	77	86	2.66
	4x50	6	1.4	0.4	4.0x0.8		1.56	33.0	1510	0.641	0.770	0.093	0.700	110	95	105	3.80

- These Cables have been approved by Directorate General of Mines safety.
- Double wire armoured can also be supplied on demand.

POWER CABLES





## "LOAD KING" UNARMoured MULTI CORE CONTROL CABLES TYPE YY 1.1 K.V.

IS : 1554



PART - 1

CONTROL CABLES

No. of cores & Cross Sectional Area No. x mm <sup>2</sup>	Thickness of PVC Insulation (Nom.) mm	Thickness of PVC Innersheath (Min.) extruded mm	Thickness of PVC Outer sheath (Nom.) mm	Approx. O.D. mm	Approx. net wt. of Cable Kg/Km.	Standard Delivery Length in mtrs.	Current Rating	
							Direct in ground Amps.	In air/ Duct Amps.
2x1.5	0.8	0.3	1.8	11.5	177	500/1000	23	20
3x1.5	0.8	0.3	1.8	12.0	200	"	21	17
4x1.5	0.8	0.3	1.8	12.9	232	"	21	17
5x1.5	0.8	0.3	1.8	13.8	268	"	16	14
6x1.5	0.8	0.3	1.8	14.7	292	"	15	13
7x1.5	0.8	0.3	1.8	14.7	302	"	14	13
10x1.5	0.8	0.3	1.8	17.9	407	500	13	11
12x1.5	0.8	0.3	1.8	18.4	457	"	12	10
14x1.5	0.8	0.3	1.8	19.2	510	"	11	10
16x1.5	0.8	0.3	1.8	20.1	566	"	11	9
19x1.5	0.8	0.3	2.0	21.8	684	"	10	9
24x1.5	0.8	0.3	2.0	25.0	838	"	9	8
27x1.5	0.8	0.3	2.0	25.5	911	"	9	8
30x1.5	0.8	0.3	2.0	26.3	988	"	9	7
37x1.5	0.8	0.3	2.0	28.2	1170	"	8	7
44x1.5	0.8	0.3	2.0	30.5	1260	"	7	6
52x1.5	0.8	0.4	2.2	33.0	1490	"	7	6
61x1.5	0.8	0.4	2.2	34.0	1670	"	6	6
2x2.5	0.9	0.3	1.8	12.9	229	500/1000	32	27
3x2.5	0.9	0.3	1.8	13.5	264	"	27	24
4x2.5	0.9	0.3	1.8	14.5	309	"	27	24
5x2.5	0.9	0.3	1.8	15.5	364	"	23	19
6x2.5	0.9	0.3	1.8	16.7	395	"	21	18
7x2.5	0.9	0.3	1.8	16.7	412	"	20	17
10x2.5	0.9	0.3	1.8	20.9	581	500	18	15
12x2.5	0.9	0.3	2.0	21.9	679	"	17	14
14x2.5	0.9	0.3	2.0	22.8	760	"	16	13
16x2.5	0.9	0.3	2.0	24.0	844	"	15	13
19x2.5	0.9	0.3	2.0	25.1	962	"	14	12
24x2.5	0.9	0.3	2.0	29.0	1188	"	13	11
27x2.5	0.9	0.3	2.0	29.5	1298	"	12	10
30x2.5	0.9	0.3	2.0	30.5	1415	"	12	10
37x2.5	0.9	0.4	2.2	33.2	1717	"	11	9
44x2.5	0.9	0.4	2.2	35.2	1880	"	10	9
52x2.5	0.9	0.4	2.2	37.2	2160	"	10	8
61x2.5	0.9	0.4	2.2	39.1	2480	"	9	8

### Construction :

1. Solid/Stranded annealed copper conductor.
2. General purpose/HR PVC insulation
3. Cores laid up (filled if needed).
4. HR PVC/ General purpose PVC innersheath.
5. HR PVC/General purpose PVC outer sheath.

Cond. size	Max. D.C. Resistance at 20° C (Ohm/Km.)	Approx. A.C. Resistance at 70° C (Ohms/Km)	Approx Reactance at 50 Hz. (Ohms/Km)	Approx. Capacitance per phase (µF/Km.)	Short Circuit rating for 1s
1.5 mm <sup>2</sup>	12.1	14.5	0.218	0.1	0.173
2.5 mm <sup>2</sup>	7.41	8.87	0.208	0.1	0.228





## "LOAD KING" ARMoured MULTICORE CONTROL CABLE TYPE : YWY/YFY 1.1 KV

IS : 1554



PART - 1

No. of cores & cross sectional Area	Thickness of PVC insulation (Nom.)	Thickness of Inner Sheath (min.) Extruded	STRIP ARMoured CABLE				WIRE ARMoured CABLE				Standard delivery length in mtrs.	Current Rating	
			Strip size	Thickness of PVC outer Sheath (min.) mm	Approx. O.D. mm	Approx. Net Wt. of cable Kg/Km.	Round Wire dia. mm	Thickness of PVC Outer Sheath mm	Approx. O.D. mm	Approx. Net Wt. of Cable Kg./Km.		Direct in ground Amps	in air/ Duct Amps
2x1.5	0.8	0.3	-	-	-	-	1.4	1.24	14.3	454	500/1000	23	20
3x1.5	0.8	0.3	-	-	-	-	1.4	1.24	14.8	492	"	21	17
4x1.5	0.8	0.3	-	-	-	-	1.4	1.24	15.7	546	"	21	17
5x1.5	0.8	0.3	-	-	-	-	1.4	1.24	16.6	604	"	16	14
6x1.5	0.8	0.3	-	-	-	-	1.4	1.24	17.5	655	"	15	13
7x1.5	0.8	0.3	-	-	-	-	1.4	1.24	17.5	665	"	14	13
10x1.5	0.8	0.3	-	-	-	-	1.4	1.4	21.5	904	"	13	11
12x1.5	0.8	0.3	4x0.8	1.24	20.4	803	1.6	1.4	22.4	1043	"	12	10
14x1.5	0.8	0.3	4x0.8	1.4	21.6	894	1.6	1.4	23.2	1123	"	11	10
16x1.5	0.8	0.3	4x0.8	1.4	22.5	969	1.6	1.4	24.1	1209	"	11	9
19x1.5	0.8	0.3	4x0.8	1.4	23.4	1067	1.6	1.4	25.0	1317	"	10	9
24x1.5	0.8	0.3	4x0.8	1.4	26.6	1284	1.6	1.4	28.2	1569	"	9	8
27x1.5	0.8	0.3	4x0.8	1.4	27.1	1366	1.6	1.4	28.7	1657	500	9	8
30x1.5	0.8	0.3	4x0.8	1.4	28.3	1493	1.6	1.4	29.9	1796	"	9	7
37x1.5	0.8	0.3	4x0.8	1.4	30.2	1712	1.6	1.4	31.8	2037	"	8	7
44x1.5	0.8	0.3	4x0.8	1.56	33.0	1780	-	-	-	-	"	7	6
52x1.5	0.8	0.4	4x0.8	1.56	34.0	1990	-	-	-	-	"	7	6
61x1.5	0.8	0.4	4x0.8	1.56	36.0	2120	-	-	-	-	"	6	6
2x2.5	0.9	0.3	-	-	-	-	1.4	1.24	15.7	541	500/1000	32	27
3x2.5	0.9	0.3	-	-	-	-	1.4	1.24	16.3	593	"	27	24
4x2.5	0.9	0.3	-	-	-	-	1.4	1.24	17.3	666	"	27	24
5x2.5	0.9	0.3	-	-	-	-	1.4	1.24	18.3	750	"	23	19
6x2.5	0.9	0.3	-	-	-	-	1.4	1.24	19.9	838	"	21	18
7x2.5	0.9	0.3	-	-	-	-	1.4	1.24	19.9	855	"	20	17
10x2.5	0.9	0.3	4x0.8	1.4	22.9	973	1.6	1.40	24.5	1217	"	18	15
12x2.5	0.9	0.3	4x0.8	1.4	23.5	1063	1.6	1.40	25.1	1313	"	17	14
14x2.5	0.9	0.3	4x0.8	1.4	24.5	1164	1.6	1.40	26.1	1425	"	16	13
16x2.5	0.9	0.3	4x0.8	1.4	25.6	1270	1.6	1.40	27.2	1543	"	15	13
19x2.5	0.9	0.3	4x0.8	1.4	26.7	1411	1.6	1.40	28.3	1698	"	14	12
24x2.5	0.9	0.3	4x0.8	1.4	30.9	1750	1.6	1.56	32.9	2112	500	13	11
27x2.5	0.9	0.3	4x0.8	1.4	31.5	1870	1.6	1.56	33.5	2241	"	12	10
30x2.5	0.9	0.3	4x0.8	1.56	32.9	2038	1.6	1.56	34.5	2391	"	12	10
37x2.5	0.9	0.4	4x0.8	1.56	35.2	2358	2.0	1.56	37.6	3000	"	11	9
44x2.5	0.9	0.4	4x0.8	1.56	37.0	2450	-	-	-	-	"	10	9
52x2.5	0.9	0.4	4x0.8	1.56	38.0	2650	-	-	-	-	"	10	8
61x2.5	0.9	0.4	4x0.8	1.56	40.0	3030	-	-	-	-	"	9	8

### Construction :

1. Solid/Stranded annealed copper conductor.
2. General purpose/HR PVC insulation
3. Cores laid up (filled if needed).
4. HR PVC/ General purpose PVC innersheath.
5. Armouring round galvanised steel wire/strip.
6. HR PVC/General purpose PVC outer sheath.

Cond. size	Max. D.C. Resistance at 20°C (Ohm/Km.)	Approx. A.C. Resistance at 70°C (Ohms/Km)	Approx Reactance at 50 Hz. (Ohms/Km)	Approx. Capacitance per phase (µF/Km.)	Short Circuit rating for 1s
1.5 mm <sup>2</sup>	12.1	14.5	0.244	0.1	0.173
2.5 mm <sup>2</sup>	7.41	8.87	0.234	0.1	0.228

CONTROL CABLES





**"Load King" Single Core plain copper/Aluminium  
Conductor with PVC Insulation, Unsheathed  
and PVC Sheathed 1.1 K.V. House service wires  
conforming to IS : 694**

IS : 694



**FIXED WIRING CABLES**

Conductor Area Sq. mm.	Conductor Construction no./dia.	Max. DC Conductor resistance at 20° C		Unsheathed Cable		Sheathed Cable			Current Rating	
		Copper ohm/km	Aluminium ohm/km	Insulation thickness Nominal mm	Overall Diameter Approx. mm	Insulation thickness nominal mm	Sheath thickness nominal mm	Overall Diameter Approx. mm	Copper	Aluminium
									Amp.	Amp.
1.0	1/1.12	18.1		0.7	2.60	0.6	0.8	4.10	10	8
1.5	1/1.38	12.1	18.10	0.7	2.90	0.6	0.8	4.40	13	10
2.5	1/1.78	7.41	12.10	0.8	3.50	0.7	0.8	5.00	20	15
4	1/2.24	4.61	7.41	0.8	4.00	0.8	0.9	5.85	26	20
6	1/2.76	3.08	4.61	0.8	4.50	0.8	0.9	6.40	35	27
10	1/3.55Al. 7/1.35Cu.	1.83	3.08	1.0	5.70 6.20	1.0	0.9	7.55 8.05	44 45	34 35
16	7/1.70	1.15	1.91	1.0	7.20	1.0	1.0	9.30	55	43
25	7/2.14	0.727	1.20	1.2	8.90	1.2	1.1	11.20	75	58
35	7/2.50	0.524	0.868	1.2	10.00	1.2	1.1	12.30	90	70
50	7/3.00	0.387	0.641	1.4	11.90	1.4	1.2	14.40	120	92
70	19/1.78				11.90			14.40	120	92
70	19/2.14	0.268	0.443	1.4	13.60				150	116
95	19/2.50	0.193	0.320	1.6	15.80				175	135
120	37/2.03	0.153	0.253	1.6	17.50				200	155
150	37/2.24	0.124	0.206	1.8	19.40				230	175
185	37/2.50	0.0991	0.164	2.0	21.70				265	205
240	61/2.24	0.0754	0.125	2.2	24.80				315	245
300	61/2.50	0.0601	0.100	2.4	27.50				370	285
400	61/2.85	0.0470	0.0778	2.6	31.10				450	350
500	61/3.20	0.0366	0.0605	2.8	34.60				530	410
630	91/3.00	0.0283	0.0469	2.8	38.80				590	455

**"LOAD KING" TWIN CORE FLAT PLAIN  
COPPER/ALUMINIUM CONDUCTOR WITH PVC  
INSULATION & PVC SHEATH 1.1 KV**

Conductor Area Sq. mm.	Conductor Construction no./dia.	Max. DC Conductor resistance at 20° C		Sheathed Cable			Current Rating (Amp.)	
		Copper ohm/Km	Aluminium ohm/Km	Insulation thickness nominal (mm)	Sheath thickness nominal (mm)	Overall Diameter Approx. (mm)	Copper	Aluminium
							Amp.	Amp.
1.0	1/1.12	18.10		0.6	0.9	6.8 X 4.2	8.5	6.5
1.5	1/1.38	12.10	18.1	0.6	0.9	7.4 X 4.6	10.7	8.5
2.5	1/1.78	7.41	12.1	0.7	1.0	8.6 X 5.3	16.5	12.5
4	1/2.24	4.61	7.41	0.8	1.0	10.1 X 5.95	21.5	16.5
6	1/2.76	3.08	4.61	0.8	1.1	11.2 X 6.5	29.0	23
10	1/3.55Al. 7/1.35Cu.	1.83	3.08	1.0	1.2	13.7 X 7.95 14.5 X 8.45	36.0	28
16	7/1.70	1.15	1.91	1.0	1.3	16.8 X 9.7	37.0	27
25	7/2.14	0.727	1.20	1.2	1.4	20.5 X 11.65	46.0	36
35	7/2.50	0.524	0.868	1.2	1.5	22.8 X 12.9	62.0	48
50	7/3.00	0.387	0.641	1.4	1.6	26.8 X 15.0	74.0	58

● AREA = mm x mm x 0.785,      INCHES = mm/25.4





**"LOAD KING" SINGLE / MULTI SHOT FIRING CABLES CONFORMING TO IS: 5950**

IS : 5950




**CONDUCTOR :** The conductor is composed of plain annealed copper wires in compliance with the requirement for class - 2 conductors as specified in IS: 8130 except that the minimum number of wires will be 7 (seven) and the wires shall be bunched together to form almost round cross-section. The nominal cross-sectional area of conductor shall be 1sq. mm.

**INSULATION :** The insulation will be of PVC compound in compliance with the requirements of type-A compound as specified in IS-5831 and the insulation will be applied by extrusion so as to make a cross-section of figure-8. Both the cores of the cable will be easily separable without damaging the conductor and the insulation.

**LENGTH :** The cables will be supplied in 100 metre coils.

**APPROVAL :** These Cables have been approved by Directorate General of Mines Safety.

**"LOAD KING" SINGLE CORE / MULTI CORE FLEXIBLE CABLES CONFORMING TO IS: 694 1.1 KV GRADE**

Area Sq. mm.		0.5	0.75	1.0	1.5	2.5	4.0	6.0	10.0	16.0	25.0	35.0	50.0
CONDUCTOR	No. & size of wire Nominal mm	16/.2	24/.2	32/.2	30/.25	50/.25	56/.3	84/.3	80/.4	126/.4	196/.4	276/.4	396/.4
	Max. Resistance @ 20°C ohm/km	39.0	26.0	19.5	13.3	7.98	4.95	3.30	1.91	1.21	0.780	0.554	0.386
	Current Rating DC or 10/30 AC amp.	4	7	12	15	20	27	35	46	62	80	102	138
INSULATION	Thickness Nominal mm	0.6	0.6	0.6	0.6	0.7	0.8	0.8	1.0	1.0	1.2	1.2	1.4
SINGLE CORE UNSHEATHED	Overall Diameter mm	2.30	2.50	2.75	2.95	3.65	4.30	5.30	6.8	8.2	10.0	11.2	13.5
SINGLE CORE SHEATHED	Sheath Thickness mm	0.9	0.9	0.9	0.9	1.0	1.0	<div style="text-align: center;"> <p><b>IS : 694</b></p>  <p><b>Fire Insurance Authority/Tariff Advisory Committee approved</b></p> </div>					
	Overall Diameter mm	4.1	4.35	4.5	4.75	5.65	6.4						
TWIN FLAT SHEATHED	Overall Width mm	4.2	4.45	-	-	-	-						
	Overall Height mm	6.50	7.00	-	-	-	-						
2 CORE	Sheath Thickness mm	0.9	0.9	0.9	0.9	1.0	1.0						
	Overall Diameter mm	6.6	7.0	7.5	8.0	9.5	11.0						
3 CORE	Sheath Thickness mm	0.9	0.9	0.9	0.9	1.0	1.0						
	Overall Diameter mm	7.0	7.60	7.90	8.50	10.20	11.70						
4 CORE	Sheath Thickness mm	0.9	0.9	0.9	1.0	1.0	1.0						
	Overall Diameter mm	7.60	8.25	8.60	9.50	11.05	12.80						
5 CORE	Sheath Thickness mm	0.9	0.9	1.0	1.0	1.0	1.1						
	Overall Diameter mm	8.30	9.10	9.60	10.3	11.7	13.95						

SHOT FIRING/FLEXIBLE CABLES





**FLEXIBLE MULTICORE CABLES (6 TO 30 CORES)  
GENERALLY AS PER IS: 694 , 1.1 KV GRADE**

IS : 694



FLEXIBLE CABLES

CORES	Area Sq. mm.	0.5	0.75	1.0	1.5	2.5	4.0
	No. & size	16/2	24/2	32/2	30/25	50/25	56/3
	Conductor Dia. mm	0.94	1.20	1.34	1.64	2.08	2.61
	Nominal Insulation Thickness mm	0.6	0.6	0.6	0.6	0.7	0.8
	Core Dia. mm	2.30	2.50	2.60	2.90	3.50	4.30
	Max. Resistance @ 20° C ohm/km	39.0	26.0	19.5	13.3	7.98	4.95
	Current Rating amps.	4	7	12	15	20	27
6	Sheath Thickness mm	0.9	1.0	1.0	1.0	1.1	1.2
	O.D. mm	8.85	9.80	10.25	11.00	13.30	15.70
7	Sheath Thickness mm	0.9	1.0	1.0	1.0	1.1	1.2
	O.D. mm	8.85	9.80	10.25	11.00	13.30	15.70
8	Sheath Thickness mm	1.0	1.0	1.0	1.1	1.2	1.3
	O.D. mm	9.55	10.40	10.85	11.90	14.35	16.90
10	Sheath Thickness mm	1.0	1.1	1.1	1.1	1.3	1.4
	O.D. mm	11.35	12.55	13.15	14.15	17.35	20.40
12	Sheath Thickness mm	1.0	1.1	1.1	1.1	1.3	1.4
	O.D. mm	11.70	13.00	13.55	14.60	17.90	21.10
14	Sheath Thickness mm	1.1	1.1	1.1	1.2	1.3	1.4
	O.D. mm	12.55	13.65	14.30	15.60	18.90	22.20
16	Sheath Thickness mm	1.1	1.2	1.2	1.2	1.4	1.5
	O.D. mm	13.30	14.70	15.40	16.55	20.25	23.70
19	Sheath Thickness mm	1.1	1.2	1.3	1.3	1.4	1.5
	O.D. mm	14.10	15.55	16.50	17.75	21.45	25.00
24	Sheath Thickness mm	1.2	1.3	1.3	1.4	1.4	1.5
	O.D. mm	15.60	17.60	18.20	20.20	23.80	28.80
30	Sheath Thickness mm	1.3	1.3	1.3	1.4	1.4	1.5
	O.D. mm	16.8	18.7	19.3	21.5	25.7	30.6

**SINGLE CORE HEAVY DUTY FLEXIBLE CABLES  
GENERALLY AS PER IS: 694,1.1 KV GRADE**

Area Sq. mm.	70.0	95.0	120.0	150.0	185.0	240.0
CONDUCTOR No. & Size of Wire no./mm	360/5	475/5	608/5	750/5	925/5	1221/5
Max. Res. @ 20° C ohms/km	0.272	0.206	0.161	0.129	0.106	0.0801
Current AC/DC amps	214	254	300	340	390	460
INSULATION Thickness mm	1.80	1.90	2.10	2.10	2.50	2.50
O.D. mm	16.15	18.75	21.25	22.25	25.50	28.50

**SINGLE CORE HEAVY DUTY FLEXIBLE CABLES  
GENERALLY AS PER IS :694, 1.1 KV GRADE**

Area Sq. mm.	6.0	10.0	16.0	25.0	35.0	50.0	70.0	95.0	120.0	
CONDUCTOR No. & Size of Wire mm	84/3	140/3 or 80/4	226/3 or 126/4	354/3 or 196/4	495/3 or 276/4	703/3 or 396/4	360/5	475/5	608/5	
Max. Res Ohm/Km	3.3	1.91	1.21	0.78	0.554	0.386	0.272	0.206	0.161	
Current Amps.	31	42	57	72	91	120	165	200	225	
INSULATION Thickness mm	1.0	1.0	1.0	1.2	1.2	1.4	1.4	1.6	1.6	
SHEATH	2-core Thickness mm	1.20	1.30	1.30	1.50	1.60	1.60	1.80	1.80	2.00
	O.D. mm	12.8	16.4	18.9	24.0	26.4	30.9	34.3	40.2	42.0
	3-core Thickness mm	1.20	1.30	1.30	1.50	1.60	1.60	1.80	1.80	2.00
	O.D. mm	14.05	18.00	20.60	25.12	28.40	32.87	37.78	43.55	47.95
	4-core Thickness mm	1.50	1.50	1.50	1.60	1.80	1.80	2.00	2.00	2.00
	O.D. mm	15.80	19.00	23.00	28.00	31.44	36.87	41.93	48.81	53.30





## PVC SHEATHED SWITCH BOARD CABLES



<b>Conductor</b>	:	Solid annealed plain* or tinned copper wire.
<b>Insulation</b>	:	Hard grade PVC with nominal radial thickness according to table given below
<b>Colour Scheme</b>	:	Table I for type 113 - B & 114 - B. Table II for type D-3003.
<b>Twinning</b>	:	Two three or four insulated conductors are uniformly twisted together.
<b>Stranding</b>	:	The pairs, triads or quads are stranded in concentric layers and the cable core is wrapped with PVC/polyethylene/polyester tape.
<b>Sheath</b>	:	PVC, of thickness according to the table below.
<b>Application</b>	:	Suitable for use in indoor permanent installations, telephone exchanges and communication equipments situated in both tropical & non tropical locations.

### CONSTRUCTION OF PVC SWITCH BOARD CABLES

Type	No. of insulated Conductors	Conductor Diameter (mm)	Nominal Insulation Thickness Tolerance +0.05 -0.02	MAKE-UP				Min. Thickness of PVC Sheath (mm)	Max. Overall Dia. (mm)	
				Centre	1st Layer	2nd Layer	3rd Layer			
1	2	3	4	5	6	7	8	9	10	
113-B	6	0.5	0.2	3P	.....	.....	.....	0.60	5.60	
	12	0.5	0.2	6P	.....	.....	.....	0.60	6.80	
	21	0.5	0.2	1S+10P	.....	.....	.....	0.60	8.60	
	22	0.5	0.2	11P	.....	.....	.....	0.75	8.90	
	33	0.5	0.2	11T	.....	.....	.....	0.75	10.10	
	42	0.5	0.2	21P	.....	.....	.....	0.75	11.20	
	52	0.5	0.2	20P+12S	.....	.....	.....	0.75	11.40	
	63	0.5	0.2	1T	7T	13T	.....	0.75	12.70	
	75	0.5	0.2	3T	8T	14T	.....	0.90	13.70	
	84	0.5	0.2	1P	8P	14P	19P	0.90	15.00	
	102	0.5	0.2	3P	10P	16P	22P	1.10	16.20	
	105	0.5	0.2	3S	8S	10S+5P	16P	1.10	16.50	
		125	0.5	0.2	4P	10P	11P+5T	(4th Layer) 21P	1.10	17.30
		6	0.6	0.2	3P	.....	.....	.....	0.60	6.60
		12	0.6	0.2	6P	.....	.....	.....	0.60	7.80
		21	0.6	0.2	1S+10P	.....	.....	.....	0.60	9.10
		22	0.6	0.2	11P	.....	.....	.....	0.75	10.10
		33	0.6	0.2	11T	.....	.....	.....	0.75	10.70
	42	0.6	0.2	21P	.....	.....	.....	0.75	11.70	
	52	0.6	0.2	20P+12S	.....	.....	.....	0.75	12.70	
113-B	63	0.6	0.2	1T	7T	13T	.....	0.90	13.50	
	75	0.6	0.2	3T	8T	14T	.....	1.00	15.20	
	84	0.6	0.2	1P	8P	14P	19P	1.10	16.20	
	102	0.6	0.2	3P	10P	16P	22P	1.10	18.30	
	105	0.6	0.2	3S	8S	10S+5P	16P	1.10	18.50	
							4th Layer 21P			

Contd....





## CONSTRUCTION OF SWITCH BOARD CABLES



TELECOMMUNICATION CABLES

Type	No. of Insulated Conductors	Conductor diameter (mm)	Nominal Insulation Thickness (mm)	MAKE UP				Min. Thickness of PVC Sheath (mm)	Max. Over all Dia. (mm)
				Centre	1st Layer	2nd Layer	3rd Layer		
1	2	3	4	5	6	7	8	9	10
113-B	125	0.6	0.20	4P	10P	11P+5T	20T	1.10	19.30
114-B	8	0.71	0.28	4P	....	....	....	0.65	7.90
	20	0.71	0.28	10P	....	....	....	0.75	10.40
	40	0.71	0.28	20P	....	....	....	0.90	14.00
	60	0.71	0.28	4P	10P	16P	....	1.00	16.50
	100	0.71	0.28	3P	9P	16P	22P	1.10	21.00
D-3003	2	0.50	0.28	1P	....	....	....	0.50 (Nom)	4.3
	4	0.50	0.28	2P	....	....	....	0.50 (Nom)	4.8
	6	0.50	0.28	3P	....	....	....	0.50 (Nom)	5.6
	8	0.50	0.28	4P	....	....	....	0.50 (Nom)	5.8
	10	0.50	0.28	1P	4P	....	....	0.50 (Nom)	6.6
	12	0.50	0.28	1P	5P	....	....	0.63 (Nom)	7.1
	14	0.50	0.28	1P	6P	....	....	0.63 (Nom)	7.6
	16	0.50	0.28	1P	7P	....	....	0.63 (Nom)	8.1
	20	0.50	0.28	2P	8P	....	....	0.75 (Nom)	9.1
	24	0.50	0.28	3P	9P	....	....	0.75 (Nom)	9.4
	28	0.50	0.28	4P	10P	....	....	0.75 (Nom)	9.7
	30	0.50	0.28	4P	11P	....	....	0.75 (Nom)	9.9
	32	0.50	0.28	5P	11P	....	....	0.75 (Nom)	10.1
	40	0.50	0.28	1P	6P	13P	....	0.75 (Nom)	11.2
	42	0.50	0.28	1P	7P	13P	....	0.88 (Nom)	11.40
	CBL-7000	52	0.50	0.28	2P	9P	15P	....	1.01 (Nom)
60		0.50	0.28	4P	10P	16P	....	1.14 (Nom)	13.20
62		0.50	0.28	4P	10P	17P	....	1.14 (Nom)	13.20
80		0.50	0.28	1P	6P	13P	20P	1.40 (Nom)	15.50
100		0.50	0.28	3P	9P	16P	22P	1.80 (Nom)	18.50
2		0.50	0.25	1P	....	....	....	1.00 (Nom)	4.2
6		0.50	0.25	3P	....	....	....	1.00 (Nom)	6.0
14		0.50	0.25	7P	....	....	....	1.00 (Nom)	7.4
28		0.50	0.25	4P	10P	....	....	1.00 (Nom)	9.6
42		0.50	0.25	1P	7P	13P	....	1.00 (Nom)	10.6
56		0.50	0.25	3P	9P	16P	....	1.00 (Nom)	12.6
70		0.50	0.25	5P	12P	18P	....	1.00 (Nom)	13.6
84		0.50	0.25	1P	7P	14P	20P	1.00 (Nom)	14.5
106		0.50	0.25	4P	10P	16P	23P	1.00 (Nom)	16.0

**N.B.** : 'S' stands for Single 'P' stands for Pair 'T' stands for Triad

**Rip Cords** : A rip cord of suitable and approved quality shall be laid under the sheath for easy stripping of PVC sheaths.

**Electrical Data** : Insulation Resistance of finished cable - 8 M. Ohms/Km at 50° C between two insulated conductors.

Maximum Conductor Resistance at 20° C	Minimum Elongation	Conductor Diameter	Tolerance
92.2 Ohms / Km.	15%	0.5 mm	
64.0 Ohms / Km	20%	0.6 mm	± 0.0127 MM
45.7 Ohms / Km.	20%	0.71 mm	

**Voltage Test** : 3 KV DC or 2 KV RMS between each conductor and remaining conductors bunched and earthed

**Sealing of Ends** : The ends of the cable shall be sealed to prevent ingress of moisture.

**Packing & Delivery** : The cable shall be delivered in 100 meter length or as ordered. The non-standard lengths on any order should be restricted to 50% of the supply and any such lengths shall not be less than 20 meters.





Table - 1  
113-B and 114-B



### Colours of PVC for Identification of Cores

1	-	Blue	14	-	Orange (Grey) Slate
2	-	Orange	15	-	Green White
3	-	Green	16	-	Green Brown
4	-	Brown	17	-	Green Grey
5	-	(Grey) Slate	18	-	Brown White
6	-	Blue White	19	-	Brown (Grey) Slate
7	-	Blue Orange	20	-	(Grey) Slate White
8	-	Blue Green	21	-	White
9	-	Blue Brown	22	-	Red
10	-	Blue (Grey) Slate	23	-	Black
11	-	Orange White	24	-	Yellow
12	-	Orange Green	25	-	Red White
13	-	Orange Brown			

**No. of Cores**

**Colour Scheme**

6	(21,1) to (21,3)
12	(21,1) to (21,6)
21	(25) + (21,1) to (21,10)
22	(21,1) to (21,11)
33	(21,1,22) to (21,11,22)
42	(21,1) to (21,20) + (24,1)
52	1 to 12 + (21,1) to (21,22)
63	(21,1,22) to (21,20,22) + (24,1,22)
75	(21,1,22) to (21,20,22) + (24,1,22) to (24,5,22)
84	(21,1) to (21,20) + (24,1) to (24,20) + (23,1) to (23,2)
102	(21,1) to (21,20) + (24,1) to (24,20) + (23,1) to (23,11)
105	25 + (1 to 20) + (21,1) to (21,20) + (24,1) to (24,20) + (23,1) to (23,2)
125	(21,1) to (21,20) + (24,1) to (24,5) + (21,1,22) to (21,20,22) + (24,1,22) to (24,5,22)

Table - 2 (I.T.I.D. -3003)

### Colours of PVC to be used for Wire Identification

1	-	Blue	21	-	White
2	-	Orange	22	-	Red
3	-	Green	23	-	Black
4	-	Brown			
5	-	Slate			

**No. of Pairs**

**Colour Scheme**

5	(21,1) - (21,5)
10	(21,1) - (21,5) & (22,1) - (22,5)
20	(21,1) - (21,5) & (22,1) - (22,5) & (23,1) - (23,5) & (1,2) - (1,5) & (2,3)
50	(21,1) - (21,5) & (22,1) - (22,5) & (23,1) - (23,5) & (1,2) - (1,5) & (2,3) - (2,5) & (3,4) - (3,5) & (4,5) THE SAME SEQUENCE IS REPEATED AGAIN 1st layer of 25 pairs and second layer of the same sequence of 25 pairs.





## TELEPHONE SWITCH BOARD CABLES



No. of Pairs	Conductor Diameter	Nominal thickness of Sheath	Nominal outer Diameter	Approx. Wt.
	mm	mm	mm	Kgs. / Km.
1 pair	0.50	0.50	3.3	17.940
2 pair	0.50	0.50	4.1	26.160
3 pair	0.50	0.50	5.3	34.450
4 pair	0.50	0.50	5.8	41.790
5 pair	0.50	0.50	6.6	52.120
6 pair	0.50	0.63	7.1	62.630
7 pair	0.50	0.63	7.6	74.440
8 pair	0.50	0.63	8.1	78.340
10 pair	0.50	0.75	9.1	99.330
12 pair	0.50	0.75	9.4	113.770
14 pair	0.50	0.75	9.7	130.450
16 pair	0.50	0.75	10.1	146.675
20 pair	0.50	0.75	11.2	175.480
21 pair	0.50	0.88	11.4	191.870
26 pair	0.50	1.01	12.7	235.280
30 pair	0.50	1.14	13.2	272.810
31 pair	0.50	1.14	13.2	283.290

### PVC INSULATED WIRES WITH BARE COPPER CONDUCTOR

*Suitable as Installation Wire for Telephone.*

*Signalling and Bell Telecommunication system.*

No. of Wires	Conductor Diameter	Nominal thickness of Insulation	Nominal outer Diameter	Approx Wt.
	mm	mm	mm	Kgs. / Km.
Single Wire	0.5	0.4	1.3	3.1
Twin Wire Twisted	0.5	0.4	2.6	6.3
Three Wire Twisted	0.5	0.4	2.8	9.6
Four Wire Twisted	0.5	0.4	3.1	13.0
Single Wire	0.6	0.4	1.4	4.5
Twin Wire Twisted	0.6	0.4	2.8	9.1
Three Wire Twisted	0.6	0.4	3.0	13.8
Four Wire Twisted	0.6	0.4	3.4	18.5
Single Wire	0.8	0.4	1.6	6.5
Twin Wire Twisted	0.8	0.4	3.2	13.5
Three Wire Twisted	0.8	0.4	3.5	20.5
Four Wire Twisted	0.8	0.4	3.9	27.5

*Std. Length : in coils of 100 or 200 metres.*





## LOW FREQUENCY PAIR CABLES FOR TELEPHONE & TELEGRAPH EXCHANGES



**PVC Insulated / PVC Sheathed**

**Aluminium Foil Screened with Earth Continuity Conductor**

**Specification : Internation Electro-Technical Commission (189-1,2)**

**(can also be offered to other standard specifications)**

No. of Pairs	0.5mm Solid Conductor 0.15mm Insulation Thickness		0.6mm Solid Conductor 0.15 mm Insulation Thickness	
	Thickness of Sheath mm	Overall Diameter mm	Thickness of Sheath mm	Overall Diameter mm
	5 pairs	0.70	6.9	0.70
10 pairs	0.90	9.7	0.90	10.50
15 pairs	0.90	10.8	0.90	11.70
20 pairs	0.90	12.0	0.90	13.00
25 pairs	1.10	14.0	1.10	15.10
30 pairs	1.10	14.5	1.10	15.70
40 pairs	1.10	16.3	1.10	17.60
50 pairs	1.10	18.2	1.30	20.10

### Core Dimensions and Resistances as per I.T.D. Spn. S/WS-114C

Type	Nominal Dia. of conductor (mm)	Wt. of Conductor (Kg/Km.)	Max. Resistance at 20 C (Ohms /Km.)	Radial Thickness of PVC Insulation(mm) Tolerance +0.05 -0.02	Max Dia. of Insulated Conductor(mm)
A	0.50	1.84	91.00	0.2	1.0
B	0.60	2.80	57.00	0.25	1.24
C	0.71	3.52	45.70	0.28	1.37
D	0.90	5.65	28.45	0.33	1.66
E	1.12	8.75	18.64	0.41	2.04





## G.I. WIRE ARMoured TELECOMMUNICATION CABLES MANUFACTURED AS PER BS - 3573 - 1972



### Armouring Wires

The armouring wires shall consist of galvanised steel wires having nominal diameter of 1.4 mm. for cables having inner sheathed diameter of upto 13mm. In cables where the diameter of inner sheathing exceeds 13 mm steel strip of size 4 x 0.8 mm is to be used. These wires shall conform to IS specification 3975.

### Outer Protection :

The outer protection over the armouring wires shall be PVC.

### COLOUR SCHEME BS - 3573 - 1972

PAIR NO.	PAIR 1		PAIR 2		PAIR 3		PAIR 4		PAIR 5		PAIR 6	
	A	B	A	B	A	B	A	B	A	B	A	B
1 Pair Centre	Orange	White										
2 Pair Centre	Orange	White	Green	Black								
3 Pair Centre	Orange	White	Red	Grey	Green	Black						
4 Pair Centre	Orange	White	Red	Grey	Blue	Brown	Green	Black				
5 Pair Centre	Orange	White	Red	Grey	Blue	Brown	Red	Grey	Green	Black		
Layer	Orange	White	Red	Grey	Blue	Brown	Red	Grey	Green	Black	Brown	

*and so on with even and odd pairs to Green Black*

### CABLE MAKE - UP

SIZE	NUMBERS OF PAIRS IN CENTRE AND SUCCESSIVE LAYERS					
	CENTRE	1ST LAYER	2ND LAYER	3RD LAYER	4TH LAYER	5TH LAYER
1 ♦	1	-	-	-	-	-
2 ♦	2	-	-	-	-	-
4	4	-	-	-	-	-
5 ♦	-	5	-	-	-	-
7	1	6	-	-	-	-
10 ♦	2	8	-	-	-	-
15	4	11	-	-	-	-
20 ♦	1	6	13	-	-	-
30	2	10	16	-	-	-
50 ♦	3	9	16	22	-	-
75	3	9	15	21	27	-
100	2	8	14	20	25	31

❖ Preferred sizes





## Cable Dimensions for 0.5 mm Conductors



Size of cable	Average Thick-ness of Sheath	Over all Dia. of unarmoured Cable	Diameter of armour wire		Average Thick-ness of outer protection	overall Dia. of protected cable
	Minimum		Nominal		Minimum	Nominal
Pairs	mm	mm	mm		mm	mm
1 ❖	1.1	5.3	1.4	0.9	1.2	9.7
2 ❖	1.1	6.1	1.4	0.9	1.2	10.5
4	1.1	7.6	1.4	0.9	1.2	12.0
5 ❖	1.1	8.0	1.4	0.9	1.2	12.4
7	1.1	8.4	1.4	0.9	1.2	12.8
10 ❖	1.1	9.2	1.4	0.9	1.2	13.6
15	1.2	10.6	1.4	0.9	1.2	15.0
20 ❖	1.2	11.6	1.4	0.9	1.2	16.0
30	1.2	13.3	1.7	1.25	1.2	18.4
50 ❖	1.3	16.2	1.7	1.6	1.5	22.7
75	1.3	18.8	1.7	1.6	1.5	25.3
100 ❖	1.4	21.5	1.7	1.6	1.5	27.9

## Cable Dimensions for 0.63 mm Conductors

Size of cable	Average Thick-ness of Sheath	Over all Dia. of unarmoured Cable	Diameter of armour wire		Average Thick-ness of outer protection	overall Dia. of protected cable
	Minimum		Nominal		Minimum	Nominal
Pairs	mm	mm	mm		mm	mm
1 ❖	1.1	6.0	1.4	0.9	1.2	10.4
2 ❖	1.1	7.0	1.4	0.9	1.2	11.4
4	1.1	8.8	1.4	0.9	1.2	13.2
5 ❖	1.1	9.4	1.4	0.9	1.2	13.8
7	1.1	9.9	1.4	0.9	1.2	14.3
10 ❖	1.2	11.2	1.4	0.9	1.2	15.6
15	1.2	12.7	1.4	1.25	1.2	17.8
20 ❖	1.2	13.9	1.4	1.25	1.2	19.0
30	1.3	16.3	1.7	1.6	1.5	22.8
50 ❖	1.3	19.8	1.7	1.6	1.5	26.3
75	1.4	23.2	1.7	1.6	1.5	29.7
100 ❖	1.5	26.6	1.7	2.0	1.7	34.3

❖ Preferred sizes





## COLOUR SCHEME AS PER I.T.D. S/WT-129/C



### COLOUR CODE FOR TAPE OR BINDER FOR UNIT IDENTIFICATION

UNIT NUMBER	COLOUR OF BINDER
1	Blue
2	Orange
3	Green
4	Brown
5	Slate
6	White
7	Red
8	Black
9	Yellow
10	Violet

### COLOUR CODE FOR CONDUCTOR INSULATION

PAIR NO	COLOUR	
	<i>1st Wire</i>	<i>2nd Wire</i>
1	White	Blue
2	"	Orange
3	"	Green
4	"	Brown
5	"	Slate
6	Red	Blue
7	"	Orange
8	"	Green
9	"	Brown
10	"	Slate
11	Black	Blue
12	"	Orange
13	"	Green
14	"	Brown
15	"	Slate
16	Yellow	Blue
17	"	Orange
18	"	Green
19	"	Brown
20	"	Slate

- Note :**
- In 5 pair cables colour code specified for pair 1 to 5 shall be used.
  - In 10 pair cable as well as 10 pair units of the 50 pairs & 100 pair cable colour code specified for pair 1 to 10 shall be used.
  - In 20 pair cables colour code specified for pair 1 to 20 shall be used.

## MAKE -UP OF UNIT & CORE OF THE CABLES I.T.D. S/WT-129/C

Cable Size	No. of Units	Lay up of pairs within units			Layup of Units	
		Centre	1st Layer	2nd Layer	Centre	First Layer
5 pairs	-	1	4	-	-	-
	-	5	0	-	1	-
10 pairs	1	2	8	-	1	-
20 pairs	1	1	6	13	1	-
50 pairs	5	2	8	-	5	-
100 pairs	10	2	8	-	2	8

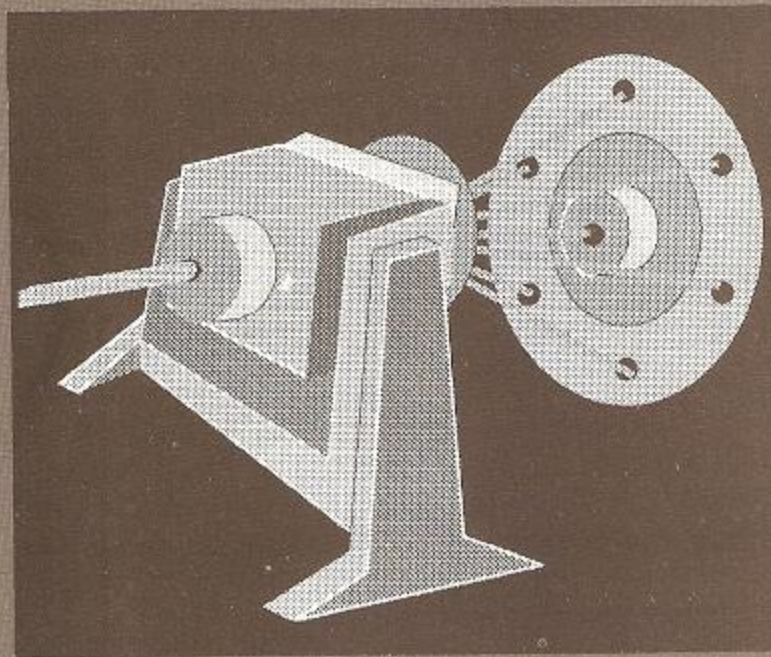


NOMINAL DIAMETER			CALCULATED AREA	RESISTANCE OF PLAIN ANNEALED WIRE AT 20°C	NOMINAL DIAMETER			CALCULATED AREA	RESISTANCE OF PLAIN ANNEALED WIRE AT 20°C
SWG	METRIC	INCH			MM²	OHM/Km.	SWG		
-	-	.044	.9810	17.575	-	-	.136	9.372	1.8396
-	1.12	.04409	.9852	17.499	-	-	.137	9.510	1.8129
-	1.18	.04647	1.094	15.765	-	-	.139764	9.898	1.7419
18	-	.048	1.168	14.768	-	3.55	-	-	-
-	1.25	.0492	1.227	14.050	-	3.65	.143701	10.48	1.6478
-	-	.050	1.267	13.610	9	-	.144	10.51	1.6409
-	1.32	.051969	1.368	12.598	-	-	.147	10.95	1.5746
-	-	.052	1.370	12.584	-	3.75	.147638	11.05	1.5610
-	1.36	.053543	1.453	11.870	-	-	.152	11.71	1.4727
-	1.40	.0551	1.539	11.200	-	4.00	.1575	12.57	1.3720
17	-	.056	1.589	10.850	-	-	.1582	12.68	1.3596
-	1.50	.0591	1.767	9.757	8	-	.160	12.97	1.3291
-	1.60	.063	2.011	8.575	-	-	.162	13.30	1.2960
16	-	.064	2.076	8.307	-	-	.166	13.96	1.2348
-	-	.0661	2.221	7.764	-	4.25	.167323	14.19	1.2153
-	1.70	.0669	2.270	7.596	7	-	.176	15.70	1.0985
-	1.80	.0709	2.545	6.775	-	4.50	.1772	15.90	1.0841
15	-	.0720	2.627	6.564	-	-	.178	16.06	1.0739
-	1.85	.072835	2.688	6.413	-	4.75	.18701	17.72	0.9729
-	1.90	.0748	2.835	6.061	6	-	.192	18.68	0.9230
-	-	.0791	3.170	5.438	-	-	.193	18.87	0.9135
14	-	.080	3.243	5.317	-	-	.1938	19.03	0.9060
-	2.06	.081102	3.333	5.173	-	5.00	.1969	19.64	0.8781
-	-	.083	3.499	4.939	-	5.30	.20866	22.06	0.7815
-	2.12	.083465	3.530	4.884	5	-	.212	22.77	0.7571
-	2.18	.085827	3.732	4.619	-	-	.215	23.42	0.7361
-	2.24	.088189	3.941	4.375	-	5.60	.22047	24.63	0.7000
13	-	.092	4.289	4.020	-	-	.2237	25.36	0.6799
-	2.36	.092913	4.374	3.941	4	-	.232	27.27	0.6322
-	-	.093	4.383	3.934	-	6.00	.2362	28.27	0.6098
-	-	.0969	4.758	3.624	-	6.30	.24803	31.17	0.5331
-	2.50	.0984	4.909	3.512	3	-	.252	32.18	0.5358
-	-	.103	5.376	3.207	-	6.50	.2559	33.18	0.5196
12	-	.104	5.480	3.146	2	-	.276	38.60	0.4467
-	2.65	.104331	5.516	3.126	-	7.10	.27953	39.59	0.4355
-	2.80	.1102	6.158	2.800	-	7.50	.2953	44.18	0.3903
-	-	.1119	6.345	2.717	1	-	.300	45.60	0.3781
-	2.90	.1142	6.605	2.610	1/0	-	.324	53.19	0.3241
11	-	.116	6.818	2.529	2/0	-	.348	61.36	0.2810
-	3.00	.1181	7.069	2.439	3/0	-	.372	70.12	0.2459
-	3.15	.124	7.791	2.212	-	9.50	.374	70.88	0.2432
10	-	.128	8.302	2.077	4/0	-	.400	81.07	0.2127
-	-	.131	8.696	1.9828	5/0	-	.432	94.56	0.18232
-	3.35	.13189	8.814	1.9561	-	-	.460	107.20	0.16080
-	3.45	.135827	9.348	1.8443	6/0	-	.464	109.10	0.15804
-	-	-	-	-	7/0	-	.500	126.70	0.13610

**MOTOR CURRENT RATINGS**

B.H.P.	KW	1 Ph. A.C.		3 Ph. A.C.		B.H.P.	KW	1 Ph. A.C.		3 Ph. A.C.	
		230 V (Amps.)	400 V (Amps.)	220 V (Amps.)	400 V (Amps.)			230 V (Amps.)	400 V (Amps.)	220 V (Amps.)	
1/8	0.094	1.5	0.40	0.9	10	7.460	60.0	15.4	42.0		
1/4	0.186	2.6	0.65	1.5	15	11.200	72.0	22.0	61.0		
1/2	0.373	4.0	1.20	2.5	20	14.920	90.0	29.0	80.0		
3/4	0.560	5.6	1.60	3.7	25	18.650	110.0	36.0	97.0		
1	0.746	7.0	2.0	4.8	30	22.380	130.0	42.0	117.0		
1½	1.120	9.0	2.80	7.0	40	29.840	-	56.0	155.0		
2	1.492	11.0	3.50	8.8	50	37.300	-	70.0	188.0		
3	2.240	16.0	5.0	12.5	60	44.760	-	84.0	225.0		
5	3.730	26.0	8.0	21.0	75	56.000	-	104.0	275.0		
7½	5.600	38.0	11.5	32.0	100	74.600	-	138.0	370.0		





#### OUR RANGE ALSO INCLUDES

- Auto Cables
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- Domestic Cables
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- Railway Signalling Cable
- Submersible Cables
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- Silicon Rubber Cables
- Winding Wire
- Trailing Cables

*Other Cables as per customers specifications.*

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- South Eastern Coal Fields Ltd.
- Western Coalfields Ltd.
- Hindustan Zinc Ltd.
- Manganese Ore India Ltd.
- Bharat Cooking Coal Ltd.
- North Eastern Coal Fields Ltd.
- Central Coal Fields Ltd.
- Eastern Coal Fields Ltd.
- Rajasthan State Mines & Minerals Ltd.

- Northern Coal Fields Ltd.
- Pyrites, Phosphates & Chemicals Ltd.
- Mahanadi Coal Fields Ltd.

##### PUBLIC SECTOR ORGANIZATIONS

- National Thermal Power Corporation
- Electronic Corporation of India Ltd.
- Oil & Natural Gas Commission
- Military Engineering Services
- Central Public Works Deptt.
- Public Health Engineering Deptt.
- Punjab State Electricity Board

- Neyveli Lignites Ltd.

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- South Eastern Railways
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- Bokaro Steel Plant

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