



LT Power Cables

Power cables with PVC/XLPE insulation for Power Transmission in voltage grade 650/1100 Volts (U./U) provided with ISI marking IS 1554 (Pt.-I). Available with or without HR/FRLS properties screening can be provided if desired. Confirming to standard specifications like IS 1554 (Pt.-I), IEC 502, BS 6436/87.

Configuration: Single core upto 1000 sq mm. Multi-core upto 400 sq mm x 3.5 Cores

Construction

Conductor: Aluminium / Copper Solid / Stranded Circular / Compacted / Sector-shaped conductor.

Insulation: PVC or XLPE (Heat Resistant PVC on request)

Mechanical Protection: Galvanised steel wire / strips / double helical steel tape. Aluminium wire armouring for single core cable.

Inner & Outer Sheath: PVC/FRLS black / grey.

1.1 kV Twin Core, Aluminium Conductor, PVC Insulated, Inner Sheathed, Armoured PVC Sheathed Cables Conforming To IS: 1554 (Part I) Amended Up to Date

Nominal cross sectional area	Nominal thickness of insulation	Minimum thickness of inner sheath	ARMOUR		Min. outer sheath thick.	Approx. overall dia.	Approx. wt of cable	Max. DC Conductor resistance at 20°C	Current Ratings		
			Galv. round steel wire nom. dia.	Galv. flat steel strip nom. thick.					Direct in ground amps	In Ducts amps	In Air amps
Sq mm	mm	mm	mm	mm	mm	mm	kg/km	Ohm/km			
*1.5	0.8	0.3	1.4	—	1.24	12.2	320	18.1000	18	16	16
*2.5	0.9	0.3	1.4	—	1.24	13.4	380	12.1000	25	21	21
*4.0	1.0	0.3	1.4	—	1.24	14.7	450	7.4100	32	27	27
*6.0	1.0	0.3	1.4	—	1.24	15.8	500	4.6100	40	34	35
*10	1.0	0.3	1.4	—	1.24	17.9	600	3.0800	55	45	47
16	1.0	0.3	—	0.8	1.40	17.0	500	1.9100	70	58	59
25	1.2	0.3	—	0.8	1.40	20.1	650	1.2000	90	76	78
35	1.2	0.3	—	0.8	1.40	21.7	750	0.8680	110	92	99
50	1.4	0.3	—	0.8	1.40	24.5	950	0.6410	135	115	125
70	1.4	0.3	—	0.8	1.56	27.1	1150	0.4430	160	140	150
95	1.6	0.4	—	0.8	1.56	30.8	1460	0.3200	190	170	185
120	1.6	0.4	—	0.8	1.56	32.9	1670	0.2530	210	190	210
150	1.8	0.4	—	0.8	1.72	36.3	2010	0.2060	240	210	240
185	2.0	0.5	—	0.8	1.88	40.3	2450	0.1640	275	240	275
240	2.2	0.5	—	0.8	2.04	44.8	2950	0.1250	320	275	325
300	2.4	0.6	—	0.8	2.20	49.6	3560	0.1000	355	305	365
400	2.6	0.7	—	0.8	2.36	55.9	4500	0.0778	385	345	420
500	3.0	0.7	—	0.8	2.68	62.5	5600	0.0605	410	370	450

1.1 kV Three Core, Aluminium Conductor, PVC Insulated, Inner Sheathed, Armoured PVC Sheathed Cables Conforming To IS: 1554 (Part I) Amended Up to Date

*1.5	0.8	0.30	1.4	—	1.24	12.7	375	18.1000	16	14	13
*2.5	0.9	0.30	1.4	—	1.24	14.0	425	12.1000	21	18	18
*4.0	1.0	0.30	1.4	—	1.24	15.6	500	7.4100	28	23	23
*6.0	1.0	0.30	1.4	—	1.24	17.3	575	4.6100	35	30	30
*10	1.0	0.30	1.4	—	1.40	19.0	700	3.0800	46	39	40
16	1.0	0.30	—	0.80	1.40	19.3	650	1.9100	60	50	51
25	1.2	0.30	—	0.80	1.40	22.0	800	1.2000	76	63	70
35	1.2	0.30	—	0.80	1.40	24.0	950	0.8680	92	77	86
50	1.4	0.30	—	0.80	1.56	27.6	1200	0.6410	110	95	105
70	1.4	0.40	—	0.80	1.56	30.8	1500	0.4430	135	115	130
95	1.6	0.40	—	0.80	1.56	34.6	1900	0.3200	165	140	155
120	1.6	0.40	—	0.80	1.72	37.5	2240	0.2530	185	155	180
150	1.8	0.50	—	0.80	1.88	41.9	2700	0.2060	210	175	205
185	2.0	0.50	—	0.80	1.88	45.6	3200	0.1640	235	200	240
240	2.2	0.60	—	0.80	2.20	51.6	3990	0.1250	275	235	280
300	2.4	0.60	—	0.80	2.36	56.7	4850	0.1000	305	260	315
400	2.6	0.70	—	0.80	2.52	64.1	6100	0.0778	335	290	375
500	3.0	0.70	—	0.80	2.84	71.5	7600	0.0605	350	310	410



**1.1 kV Four Core, Aluminium Conductor, PVC Insulated, Inner Sheathed,
 Armoured PVC Sheathed Cables Conforming To IS: 1554 (Part I) Amended Up to Date**

Nominal cross sectional area	Nominal thickness of insulation	Minimum thickness of inner sheath	ARMOUR		Min. outer sheath thick.	Approx. overall dia.	Approx. wt of cable	Max. DC Conductor resistance at 20°C	Current Ratings		
			Galv. round steel wire nom. dia. mm	Galv. flat steel strip nom. thick. mm					Direct in ground amps	In Ducts amps	In Air amps
Sq mm	mm	mm	mm	mm	mm	mm	kg/km	Ohm/km			
*1.5	0.8	0.3	1.4	—	1.24	15.0	400	18.1000	16	14	13
*2.5	0.9	0.3	1.4	—	1.24	16.5	480	12.1000	21	18	18
*4.0	1.0	0.3	1.4	—	1.24	18.0	550	7.4100	28	23	23
*6.0	1.0	0.3	1.4	—	1.24	19.5	650	4.6100	35	30	30
*10	1.0	0.3	—	0.8	1.40	20.0	660	3.0800	46	39	40
16	1.0	0.3	—	0.8	1.40	23.0	750	1.9100	60	50	51
25	1.2	0.3	—	0.8	1.40	23.7	950	1.2000	76	63	70
35	1.2	0.3	—	0.8	1.40	25.9	1165	0.8680	92	77	86
50	1.4	0.4	—	0.8	1.56	30.4	1540	0.6410	110	95	105
70	1.4	0.4	—	0.8	1.56	33.5	1800	0.4430	135	115	130
95	1.6	0.4	—	0.8	1.72	38.1	2400	0.3200	165	140	155
120	1.6	0.5	—	0.8	1.88	41.9	2800	0.2530	185	155	180
150	1.8	0.5	—	0.8	1.88	45.9	3350	0.2060	210	175	205
185	2.0	0.6	—	0.8	2.04	50.9	4000	0.1640	235	200	240
240	2.2	0.6	—	0.8	2.36	57.1	5050	0.1250	275	235	280
300	2.4	0.7	—	0.8	2.52	63.2	6200	0.1000	305	260	315
400	2.6	0.7	—	0.8	2.84	71.4	7850	0.0778	335	290	375
500	3.0	0.7	—	0.8	3.00	79.2	9600	0.0605	350	310	410

**1.1 kV 3½ Core, Aluminium Conductor, PVC Insulated, Inner Sheathed,
 Armoured PVC Sheathed Cables Conforming To IS: 1554 (Part I) Amended Up to Date**

Nominal cross sectional area		Nominal thickness of insulation		Minimum thickness of inner sheath	ARMOUR Galvanised flat steel strip nom. thick. mm	Min. thickness of outer sheath	Approx. overall diameter	Approx. wt of cable	Max. DC Conductor resistance at 20°C		Current Ratings		
Main	Neutral	Main	Neutral						Main	Neutral	Direct in Ground amps	In Ducts amps	In Air amps
Sq mm	Sq mm	mm	mm	mm	mm	mm	mm	kg/km	Ohm/km	Ohm/km			
25	16	1.2	1.0	0.3	0.8	1.40	23.1	900	1.200	1.910	76	63	70
35	16	1.2	1.0	0.3	0.8	1.40	24.9	1030	0.868	1.910	92	77	86
50	25	1.4	1.2	0.3	0.8	1.56	28.8	1350	0.641	1.200	100	95	105
70	35	1.4	1.2	0.4	0.8	1.56	32.2	1725	0.443	0.868	135	115	130
95	50	1.6	1.4	0.4	0.8	1.56	36.3	2130	0.320	0.641	165	140	155
120	70	1.6	1.4	0.5	0.8	1.72	40.1	2580	0.253	0.443	185	155	180
150	70	1.8	1.4	0.5	0.8	1.88	43.8	3050	0.206	0.443	210	175	205
185	95	2.0	1.6	0.5	0.8	2.04	48.4	3650	0.164	0.320	235	200	240
240	120	2.2	1.6	0.6	0.8	2.20	54.3	4580	0.125	0.253	275	235	280
300	150	2.4	1.8	0.6	0.8	2.36	59.7	5500	0.100	0.206	305	260	315
400	185	2.6	2.0	0.7	0.8	2.68	67.6	7000	0.0778	0.164	335	290	375
500	240	3.0	2.2	0.7	0.8	2.84	75.2	8600	0.0605	0.125	350	310	410

These cables can be supplied with HR (Heat Resistant), FR (Fire Retardant), FRLS (Flame Retardant Low Smoke), Halogen Free Insulation and Sheath, and FS (Fire Survival) characteristics.

