

Swadeshi[®] CABLES



(AN ISO 9001 COMPANY)

PVC/XLPE POWER & CONTROL CABLES
PRODUCT CATALOGUE



Our commitment to service means you'll receive goods where and when you need them. With constant pressure to keep prices as low as possible it is essential to maintain Quality and Standards and this has become our mission. Keeping your costs down and reducing the environmental impact through reduced wastage. For special and modified products we offer realistic lead times and sensible minimum order quantities.

Innovation and future orientated solutions have always been a top priority with Swadeshi Cables. For Swadeshi Cables, customer focus means giving the customer exactly what they need. This applies both to products and to services. To achieve this, we always listen to our customers, understand their requirements and develop appropriate solutions. This encompasses expert advice to make sure that our customers receive no less than they need and that they don't pay for more than they really require. Our efforts are focussed on continuous optimization of all our processes and the empowerment of our employees so that we can deliver our high quality Products and Services to our customers at competitive prices.

A handwritten signature in black ink, appearing to read 'Mahavir Bansal'.

Mahavir Bansal

Managing Director

ABOUT US

We came into being in 1994, with the name and spirit of "Swadeshi Cables", with a background of over three decades in the industry. Though we're relatively young, our products have been able to take on the industry giants.

Our products are manufactured in a state-of-the-art plant, equipped with the latest machinery and equipment. We also have an ultra-modern Research & Development Department, and we follow the latest Quality Control Techniques. Our entire enterprise, including the Production Department and the Quality Control Wing, is managed by qualified and experienced professionals drawn from related fields from the industries. Also, our Products leave the factory only after being subjected to quality control measures and tests even more stringent than those laid down in BIS specifications.

The Quality of our Products has brought us appraisal from all corners. From BIS in the form of licenses, specifically IS : 694, IS : 1554 and IS : 7098, and from our clients, both domestic and foreign, who have entrusted us with orders worth crores of rupees. Our clientele consists mainly of Government Departments, Central and State Government Undertakings, Defence Establishment, Railways, Coal India Limited, ONGC, Nuclear Power Plants, Central and State PWDs, State Electricity Boards/Undertakings and various MNCs, Corporates and other reputable entities in the Public and Private Sectors, such as Steel Plants, Sugar Mills, Reliance Group and many others.

The success we've had over the years has done anything but make us complacent. We still strive for better quality in our Products, a larger client base and complete satisfaction for our customers.

We're Obsessed with : Quality Products at reasonable prices.

Our ethics lie in : Fair Trade Practices.

Our Motto is : Customer Satisfaction.

PRODUCT RANGE

- LT XLPE Power / Control Cables
- LT PVC Power / Control Cables
- FR/ FRLS / HR PVC Cables
- House Wiring / Multicore Flexible / Industrial Cables
- Hook-up Wires, Three Core Flat Submersible Cables
- Telecommunication Cables
- Co-axial / Instrumentation / Computer Cables
- Aerial Bunched Cables
- TRS /TRS Braided / Welding Cables
- CCTV, Cat-5 & Lan Cables
- Moulded Plugs
- All kind of Special Cables





The following colour code is used for identification.

Single Core	Red	Black	Yellow	or	Blue
Two Core	Red	and	Black		
Three Core	Red	Yellow	and	Blue	
Three & Half Core	Red	Yellow	Blue	and	Black
Four Core	Red	Yellow	Blue	and	Black
Five Core	Red	Yellow	Blue	Black	and Grey
Six Core & above	Two adjacent Cores. Blue and Yellow (Counting and Direction Core) and remaining Grey in each layer or by printing numbers on each core.				

Cable Code : The following codes are used for designating the cables as per IS: 1554.

CONSTITUENT	CODE LETTER
COPPER CONDUCTOR	—
ALUMINIUM CONDUCTOR	A
PVC INSULATION	Y
STEEL ROUND WIRE ARMOUR	W
ALUMINIUM ROUND WIRE ARMOUR	Wa
STEEL STRIP ARMOUR	F
ALUMINIUM FLAT STRIP ARMOUR	Fa
STEEL DOUBLE ROUND WIRE ARMOUR	WW
STEEL DOUBLE STRIP ARMOUR	FF
PVC OUTER SHEATH	Y
COPPER CONDUCTOR, ROUND WIRE ARMoured AND PVC SHEATHED CABLE	YWY
ALUMINIUM CONDUCTOR, STEEL STRIP ARMoured AND PVC SHEATHED CABLE	AYFY

The weights of the cables mentioned in the following tables are approximate and given for guidance only. They should never be used as criteria to check the lengths of the cables supplied. The best way to check the length of the supplied cable is by resistance only. Take the resistance of the full drum and divide the reading by the resistance of 1 mtr. Length. To decide the size of the conductor, particularly that of the sector shaped conductor, we recommend the following method. Take weight of a small conductor piece and measure its weight in grams. Then find out the weight of the conductor in gms per metre length. Divide it by 2.7 in case of Aluminium and by 8.9 in case of Copper. It will give the area of the conductor in sq. mm.



COMPARATIVE CURRENT RATINGS OF 650/1100 VOLTS MULTICORE HEAVY DUTY PVC INSULATED CABLES & XLPE INSULATED CABLES. (3, 3.5 & 4 CORE UNARMoured / ARMoured PVC SHEATHED CABLES WITH ALUMINIUM CONDUCTOR)

Nominal Size of Cable	3, 3.5 & 4 Core PVC Insulated & Sheathed Cables as per IS - 1554 (Part - 1) 1988			3, 3.5 & 4 Core XLPE Insulated & Sheathed Cables as per IS - 7098 (Part - 1) 1988		
	In Ground	In Air	Approx. Voltage Drop	In Ground	In Air	Approx. Voltage Drop
Sq.mm	Amp.	Amp.	Mv/Amp./Mtr.	Amp.	Amp.	Mv/Amp./Mtr.
16	60	51	4.0	73	70	4.20
25	76	70	2.5	94	96	2.70
35	92	86	1.8	113	117	1.90
50	110	105	1.3	133	142	1.40
70	135	130	0.93	164	179	0.99
95	165	155	0.68	196	221	0.72
120	185	180	0.54	223	257	0.58
150	210	205	0.46	249	292	0.48
185	235	240	0.38	282	337	0.39
240	275	280	0.28	326	399	0.31
300	305	315	0.25	367	455	0.26
400	335	375	0.20	420	530	0.21

COMPARISON OF SHORT CIRCUIT RATING FOR 1 SECOND DURATION FOR * PVC & XLPE INSULATED CABLES ** WITH COPPER AND ALUMINIUM CONDUCTORS (Current in kAmps)

Nominal Size	PVC Insulated		XLPE Insulated	
	Copper	Aluminium	Copper	Aluminium
Sq.mm				
1.5	0.173	-	0.21	-
2.5	0.283	-	0.36	-
4	0.46	0.303	0.57	0.38
6	0.690	0.455	0.86	0.57
10	1.15	0.758	1.40	0.94
16	1.84	1.21	2.30	1.50
25	2.88	1.90	3.60	2.40
35	4.03	2.65	5.00	3.30
50	5.75	3.79	7.10	4.70
70	8.05	5.31	10.00	6.60
95	10.90	7.20	13.60	9.00
120	13.80	9.10	17.10	11.30
150	17.30	11.40	21.40	14.20
185	21.30	14.02	26.40	17.50
240	27.60	18.20	34.30	22.60
300	34.50	22.80	42.90	28.30
400	46.00	30.40	57.10	37.70
500	57.50	38.00	71.40	47.20
630	72.50	47.25	90.00	59.40
800	92.00	60.00	114.30	75.50
1000	115.00	75.00	142.90	94.30

SHORT CIRCUIT RATING FOR ALUMINIUM CONDUCTOR CABLES

With a high increase in kVA capacity of the power distribution system, cable are expected to carry short circuit currents of high magnitude. Normally rated at 70°C, our insulating materials permit a short circuit temperature of 160°C. With the high interrupting capacity expected of a cable under short circuit, it is essential that protective fuses in the system are designed to minimise the duration as far as possible. Short circuit rating of a cable can be calculated as under

$$\text{Where } I_{sh} = \frac{75.8 \times A}{\sqrt{t}}$$

I_{sh} : Short circuit current in r.m.s. amps.

t : Duration of short circuit in seconds.

A : Area of conductor in sq. mm

Constants are tabulated below for different duration of short circuit.

Duration of Short circuit in seconds	1 cycle = 0.02 sec.	2 cycle = 0.04 sec.	5 cycle = 0.01 sec.	10 cycle = 0.02 sec.	25 cycle = 0.02 sec.	50 cycle = 0.02 sec.	2 sec.	3 sec.	4 sec.	5 sec.
Short circuits constant per unit area	536	378	239	169	107	75.7	53.0	43.6	37.8	34.0

Example : Short circuit rating of 150 sq.mm conductor area with a short circuit duration of 0.5 seconds = $150 \times 107 = 16050$ amps.

SHORT CIRCUIT RATING FOR COPPER CONDUCTOR CABLES

The following formula gives the Short Circuit Rating of Copper conductor, PVC insulated cables

$$\text{Where } I_{sh} = \frac{113 \times A}{\sqrt{t}}$$

I_{sh} : Short circuit current in r.m.s. amps.

t : Duration of short circuit in seconds.

A : Area of conductor in sq. mm



TABLE-1 "Swadeshi" 1.1 KV SINGLE CORE, ALUMINIUM CONDUCTOR, PVC INSULATED ALUMINIUM WIRE / STRIP
ARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Armour		Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings					
		Aluminium Wire Dia	Aluminium Strip Thickness					Direct In Ground		In Duct		In Air	
								2 Cables	3 Cables	2 Cables	3 Cables	2 Cables	3 Cables
Sq.mm	mm	mm	mm	mm	mm	kg/mm	ohm/km	Amps	Amps	Amps	Amps	Amps	Amps
*4	1.3	1.4	-	1.24	11.0	155	7.410	36	31	33	30	32	27
*6	1.3	1.4	-	1.24	12.0	175	4.610	44	39	42	37	41	35
*10	1.3	1.4	-	1.24	13.0	205	3.080	50	51	56	51	56	47
16	1.3	1.4	-	1.24	14.0	230	1.910	75	66	71	65	72	64
25	1.5	1.4	-	1.24	15.0	300	1.200	97	86	93	84	99	84
35	1.5	1.4	-	1.24	16.0	350	0.868	97	100	110	100	120	105
50	1.7	1.4	-	1.24	18.0	430	0.641	120	120	130	115	150	130
70	1.7	1.4	-	1.40	20.0	530	0.443	145	140	155	135	185	155
95	1.9	-	4 x 0.80	1.40	21.0	610	0.320	170	175	180	155	215	190
120	1.9	-	4 x 0.80	1.40	22.0	710	0.253	205	195	200	170	240	220
150	2.1	-	4 x 0.80	1.40	24.0	840	0.206	230	220	220	190	270	250
185	2.3	-	4 x 0.80	1.40	26.0	1020	0.164	265	240	240	210	305	290
240	2.5	-	4 x 0.80	1.40	29.0	1250	0.125	300	270	270	225	350	335
300	2.7	-	4 x 0.80	1.56	32.0	1500	0.100	335	295	295	245	395	380
400	3.0	-	4 x 0.80	1.56	36.0	1910	0.078	370	325	335	275	455	435
500	3.4	-	4 x 0.80	1.56	40.0	2350	0.061	410	345	355	295	490	480
630	3.9	-	4 x 0.80	1.72	44.0	2920	0.047	435	390	395	320	560	550
800	3.9	-	4 x 0.80	1.88	48.0	3510	0.037	525	440	420	350	650	640
1000	3.9	-	4 x 0.80	2.04	53.0	4300	0.029	570	490	445	380	735	720

* If required, these sizes can be offered with stranded conductors also

TABLE 2 "Swadeshi" 1.1 KV SINGLE CORE, ALUMINIUM CONDUCTOR, PVC INSULATED
UNARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Nominal Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings					
						Direct In Ground		In Duct		In Air	
						2 Cables	3 Cables	2 Cables	3 Cables	2 Cables	3 Cables
Sq.mm	mm	mm	mm	kgs./km	ohm/km	Amps.	Amps.	Amps.	Amps.	Amps.	Amps.
*1.5	0.8	1.8	7.0	55	18.100	21	17	19	17	18	15
*2.5	0.9	1.8	7.5	65	12.100	28	24	25	24	25	21
*4.0	1.0	1.8	8.0	75	7.410	36	31	33	30	32	27
*6.0	1.0	1.8	9.0	90	4.610	44	39	42	37	41	35
*10	1.0	1.8	10.0	105	3.080	54	51	56	51	56	47
16	1.0	1.8	11.0	140	1.910	75	66	71	65	72	64
25	1.2	1.8	12.5	195	1.200	97	86	93	84	99	84
35	1.2	1.8	13.5	235	0.868	120	100	110	100	120	105
50	1.4	1.8	15.0	305	0.641	145	120	130	115	150	130
70	1.4	1.8	17.0	385	0.443	170	140	155	135	185	155
95	1.6	1.8	19.0	515	0.320	205	175	180	155	215	190
120	1.6	2.0	21.0	610	0.253	230	195	200	170	240	220
150	1.8	2.0	22.5	735	0.206	265	220	220	190	270	250
185	2.0	2.0	25.0	885	0.164	300	240	240	210	305	290
240	2.2	2.0	28.0	1100	0.125	335	270	270	225	350	335
300	2.4	2.0	30.0	1335	0.100	370	295	295	245	395	380
400	2.6	2.2	34.0	1665	0.078	410	325	335	275	455	435
500	3.0	2.2	38.0	2130	0.061	435	345	355	295	490	480
630	3.4	2.4	43.0	2685	0.047	485	390	395	320	560	550
800	3.4	2.4	47.0	3255	0.037	525	440	420	350	650	640
1000	3.4	2.6	51.5	3960	0.029	570	490	445	380	735	720

* If required, these sizes can be offered with stranded conductors also


TABLE-3 "Swadeshi" 1.1 KV SINGLE CORE, COPPER CONDUCTOR, PVC INSULATED ALUMINIUM WIRE / STRIP

ARMOURED & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Armour		Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings					
		Aluminium Wire Dia	Aluminium Strip Thickness					Direct In Ground		In Duct		In Air	
								2 Cables	3 Cables	2 Cables	3 Cables	2 Cables	3 Cables
Sq.mm	mm	mm	mm	mm	mm	kgs/km	ohm/km	Amps.	Amps.	Amps.	Amps.	Amps.	Amps.
*4	1.3	1.4	-	1.24	11.0	180	4.610	46	39	42	38	43	35
*6	1.3	1.4	-	1.24	12.0	215	3.080	57	49	54	48	54	44
*10	1.3	1.4	-	1.24	13.0	270	1.830	75	65	72	64	72	60
16	1.3	1.4	-	1.24	14.0	330	1.150	94	85	92	83	92	82
25	1.5	1.4	-	1.24	15.0	460	0.727	125	110	120	110	125	110
35	1.5	1.4	-	1.24	16.0	575	0.524	150	130	140	125	155	130
50	1.7	1.4	-	1.24	18.0	740	0.387	180	155	165	150	190	165
70	1.7	1.4	-	1.40	20.0	970	0.268	220	190	200	175	235	205
95	1.9	-	4 x 0.80	1.40	21.0	1200	0.193	265	220	230	200	275	245
120	1.9	-	4 x 0.80	1.40	22.0	1460	0.153	300	250	255	220	310	280
150	2.1	-	4 x 0.80	1.40	24.0	1770	0.124	340	280	280	245	345	320
185	2.3	-	4 x 0.80	1.40	26.0	2170	0.099	380	305	305	260	390	370
240	2.5	-	4 x 0.80	1.40	29.0	2740	0.075	420	345	340	285	445	425
300	2.7	-	4 x 0.80	1.56	32.0	3360	0.060	465	375	370	310	500	475
400	3.0	-	4 x 0.80	1.56	36.0	4400	0.047	500	400	405	335	570	550
500	3.4	-	4 x 0.80	1.56	40.0	5450	0.037	540	425	430	355	610	590
630	3.9	-	4 x 0.80	1.72	44.0	6820	0.028	590	470	465	375	680	660

* If required, these sizes can be offered with stranded conductors also

TABLE-4 "Swadeshi" 1.1 KV SINGLE CORE, COPPER CONDUCTOR, PVC INSULATED

UNARMOURED & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Nominal Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings					
						Direct In Ground		In Duct		In Air	
						2 Cables	3 Cables	2 Cables	3 Cables	2 Cables	3 Cables
Sq.mm	mm	mm	mm	kgs./km	ohm/km	Amps.	Amps.	Amps.	Amps.	Amps.	Amps.
*1.5	0.8	1.8	7.0	65	12.100	25	22	23	21	24	20
*2.5	0.9	1.8	7.5	82	7.410	35	30	31	29	32	27
*4.0	1.0	1.8	8.0	100	4.610	46	39	42	38	43	35
*6.0	1.0	1.8	9.0	130	3.080	57	49	54	48	54	44
*10	1.0	1.8	10.0	170	1.830	75	65	72	64	72	60
16	1.0	1.8	11.0	240	1.150	94	85	92	83	92	82
25	1.2	1.8	12.5	350	0.727	125	110	120	110	125	110
35	1.2	1.8	13.5	455	0.524	150	130	140	125	155	130
50	1.4	1.8	15.0	620	0.387	180	155	165	150	190	165
70	1.4	1.8	17.0	820	0.268	220	190	200	175	235	205
95	1.6	1.8	19.0	1105	0.193	265	220	230	200	275	245
120	1.6	2.0	21.0	1355	0.153	300	250	255	220	310	280
150	1.8	2.0	22.5	1665	0.124	340	280	280	245	345	320
185	2.0	2.0	25.0	2040	0.099	380	305	305	260	390	370
240	2.2	2.0	28.0	2590	0.075	420	345	340	285	445	425
300	2.4	2.0	30.0	3200	0.060	465	375	370	310	500	475
400	2.6	2.2	34.0	4150	0.047	500	400	405	335	570	550
500	3.0	2.2	38.0	5230	0.0370	540	425	430	355	610	590
630	3.4	2.4	43.0	6600	0.0280	590	470	465	375	680	660

* If required, these sizes can be offered with stranded conductors also



TABLE-5 "Swadeshi" 1.1 KV TWIN CORE, ALUMINIUM CONDUCTOR, PVC INSULATED, INNER SHEATHED

ARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Armour		Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings		
			Galv. Round Steel Wire Nominal Dia.	Galv. Flat Steel Strip Nominal Thickness					Direct In Ground	In Duct	In Air
Sq.mm	mm	mm	mm	mm	mm	mm	kgs/km	ohm/km	Amps.	Amps.	Amps.
*1.5	0.8	0.3	1.4	-	1.24	12.5	320	18.100	18	16	16
*2.5	0.9	0.3	1.4	-	1.24	13.5	380	12.100	25	21	21
*4.0	1.0	0.3	1.4	-	1.24	15.0	450	7.410	32	27	27
*6.0	1.0	0.3	1.4	-	1.24	16.0	500	4.610	40	34	35
*10	1.0	0.3	1.4	-	1.24	18.0	600	3.080	55	45	47
16	1.0	0.3	-	0.8	1.40	18.0	500	1.910	70	58	59
25	1.2	0.3	-	0.8	1.40	20.0	650	1.200	90	76	78
35	1.2	0.3	-	0.8	1.40	21.5	750	0.868	110	92	99
50	1.4	0.3	-	0.8	1.40	24.5	950	0.641	135	115	125
70	1.4	0.3	-	0.8	1.56	28.0	1150	0.443	160	140	150
95	1.6	0.4	-	0.8	1.56	31.0	1460	0.320	190	170	185
120	1.6	0.4	-	0.8	1.56	33.0	1670	0.253	210	190	210
150	1.8	0.4	-	0.8	1.72	37.0	2010	0.206	240	210	240
185	2.0	0.5	-	0.8	1.88	40.5	2450	0.164	275	240	275
240	2.2	0.5	-	0.8	2.04	45.0	2950	0.125	320	275	325
300	2.4	0.6	-	0.8	2.20	50.0	3560	0.100	355	305	365
400	2.6	0.7	-	0.8	2.36	56.0	4500	0.0778	385	345	420
500	3.0	0.7	-	0.8	2.68	62.5	5600	0.0605	410	370	450

* If required, these sizes can be offered with stranded conductors also

TABLE-6 "Swadeshi" 1.1 KV TWIN CORE, ALUMINIUM CONDUCTOR, PVC INSULATED INNER SHEATHED

UNARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE.

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings		
							Direct In Ground	In Duct	In Air
Sq.mm	mm	mm	mm	mm	kgs./km	ohm/km	Amps.	Amps.	Amps.
*1.5	0.8	0.3	1.8	11.0	115	18.100	18	16	16
*2.5	0.9	0.3	1.8	12.0	150	12.100	25	21	21
*4.0	1.0	0.3	1.8	13.5	185	7.410	32	27	27
*6.0	1.0	0.3	1.8	14.5	220	4.610	40	34	35
*10	1.0	0.3	1.8	16.0	275	3.080	55	45	47
16	1.0	0.3	1.8	17.5	285	1.910	70	58	59
25	1.2	0.3	2.0	19.5	405	1.200	90	76	78
35	1.2	0.3	2.0	20.5	490	0.868	110	92	99
50	1.4	0.3	2.0	24.0	650	0.641	135	115	125
70	1.4	0.3	2.0	27.0	800	0.443	160	140	150
95	1.6	0.4	2.2	28.5	1065	0.320	190	170	185
120	1.6	0.4	2.2	33.0	1250	0.253	210	190	210
150	1.8	0.4	2.4	34.0	1550	0.206	240	210	240
185	2.0	0.5	2.4	37.0	1880	0.164	275	240	275
240	2.2	0.5	2.6	42.5	2400	0.125	320	275	325
300	2.4	0.6	2.8	45.5	2920	0.100	355	305	365
400	2.6	0.7	3.2	51.5	3815	0.0778	385	345	420
500	3.0	0.7	3.4	57.0	4750	0.0605	410	370	450

* If required, these sizes can be offered with stranded conductors also



TABLE-7 "Swadeshi" 1.1 KV TWIN CORE, COPPER CONDUCTOR, PVC INSULATED, INNER SHEATHED

ARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Armour		Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings		
			Galv. Round Steel Wire Nominal Dia.	Galv. Flat Steel Strip Nominal Thickness					Direct In Ground	In Duct	In Air
Sq.mm	mm	mm	mm	mm	mm	mm	kgs/km	ohm/km	Amps.	Amps.	Amps.
*1.5	0.8	0.3	1.4	-	1.24	12.5	350	12.100	23	20	20
*2.5	0.9	0.3	1.4	-	1.24	13.5	415	7.410	32	27	27
*4.0	1.0	0.3	1.4	-	1.24	15.0	500	4.610	41	35	35
*6.0	1.0	0.3	1.4	-	1.24	16.0	580	3.080	50	44	45
*10	1.0	0.3	1.4	-	1.24	18.0	730	1.830	70	58	60
16	1.0	0.3	-	0.8	1.40	18.0	740	1.150	90	75	78
25	1.2	0.3	-	0.8	1.40	20.0	960	0.727	115	97	105
35	1.2	0.3	-	0.8	1.40	21.5	1200	0.524	140	120	125
50	1.4	0.3	-	0.8	1.40	24.5	1580	0.387	165	145	155
70	1.4	0.3	-	0.8	1.56	28.0	2020	0.268	205	180	195
95	1.6	0.4	-	0.8	1.56	31.0	2650	0.193	240	215	230
120	1.6	0.4	-	0.8	1.56	33.0	3160	0.153	275	235	265
150	1.8	0.4	-	0.8	1.72	37.0	3870	0.124	310	270	305
185	2.0	0.5	-	0.8	1.88	40.5	4750	0.099	350	300	350
240	2.2	0.5	-	0.8	2.04	45.0	5930	0.075	405	345	410
300	2.4	0.6	-	0.8	2.20	56.0	7300	0.060	450	385	465
400	2.6	0.7	-	0.8	2.36	55.9	9450	0.047	490	425	530

* If required, these sizes can be offered with stranded conductors also

TABLE-8 "Swadeshi" 1.1 KV TWIN CORE, COPPER CONDUCTOR, PVC INSULATED, INNER SHEATHED

UNARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE.

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings		
							Direct In Ground	In Duct	In Air
Sq.mm	mm	mm	mm	mm	kgs./km	ohm/km	Amps.	Amps.	Amps.
*1.5	0.8	0.3	1.8	11.0	135	12.100	23	20	20
*2.5	0.9	0.3	1.8	12.0	185	7.410	32	27	27
*4.0	1.0	0.3	1.8	13.5	235	4.610	41	35	35
*6.0	1.0	0.3	1.8	14.5	295	3.080	50	44	45
*10	1.0	0.3	1.8	16.0	400	1.830	70	58	60
16	1.0	0.3	1.8	17.5	485	1.150	90	75	78
25	1.2	0.3	2.0	19.5	715	0.727	115	97	105
35	1.2	0.3	2.0	20.5	925	0.524	140	120	125
50	1.4	0.3	2.0	24.0	1270	0.387	165	145	155
70	1.4	0.3	2.0	27.0	1670	0.268	205	180	195
95	1.6	0.4	2.2	28.5	2250	0.193	240	215	230
120	1.6	0.4	2.2	33.0	2750	0.153	275	235	265
150	1.8	0.4	2.4	34.0	3410	0.124	310	270	305
185	2.0	0.5	2.4	37.0	4170	0.099	350	300	350
240	2.2	0.5	2.6	42.5	5370	0.075	405	345	410
300	2.4	0.6	2.8	45.5	6640	0.060	450	385	465
400	2.6	0.7	3.2	51.5	8770	0.047	490	425	530

* If required, these sizes can be offered with stranded conductors also



TABLE-9 "Swadeshi" 1.1 KV THREE CORE, ALUMINIUM CONDUCTOR, PVC INSULATED, INNER SHEATHED
ARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Armour		Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings		
			Galv. Round Steel Wire Nominal Dia.	Galv. Flat Steel Strip Nominal Thickness					Direct In Ground	In Duct	In Air
Sq.mm	mm	mm	mm	mm	mm	mm	kgs/km	ohm/km	Amps.	Amps.	Amps.
*1.5	0.8	0.3	1.4	-	1.24	12.5	375	18.100	16	14	13
*2.5	0.9	0.3	1.4	-	1.24	14.0	425	12.100	21	18	18
*4.0	1.0	0.3	1.4	-	1.24	15.5	500	7.410	28	23	23
*6.0	1.0	0.3	1.4	-	1.24	17.0	575	4.610	35	30	30
*10	1.0	0.3	1.4	-	1.40	19.0	700	3.080	46	39	40
16	1.0	0.3	-	0.8	1.40	20.0	650	1.910	60	50	51
25	1.2	0.3	-	0.8	1.40	22.0	800	1.200	76	63	70
35	1.2	0.3	-	0.8	1.40	25.0	950	0.868	92	77	86
50	1.4	0.3	-	0.8	1.56	27.0	1200	0.641	110	95	105
70	1.4	0.4	-	0.8	1.56	31.0	1500	0.443	135	115	130
95	1.6	0.4	-	0.8	1.56	34.0	1900	0.320	165	140	155
120	1.6	0.4	-	0.8	1.72	38.0	2240	0.253	185	155	180
150	1.8	0.5	-	0.8	1.88	42.0	2700	0.206	210	175	205
185	2.0	0.5	-	0.8	1.88	46.0	3200	0.164	235	200	240
240	2.2	0.6	-	0.8	2.20	52.0	3990	0.125	275	235	280
300	2.4	0.6	-	0.8	2.36	56.5	4850	0.100	305	260	315
400	2.6	0.7	-	0.8	2.52	64.0	6100	0.0778	335	290	375
500	3.0	0.7	-	0.8	2.84	72.0	7600	0.0605	350	310	410

* If required, these sizes can be offered with stranded conductors also

TABLE-10 "Swadeshi" 1.1 KV THREE CORE, ALUMINIUM CONDUCTOR, PVC INSULATED INNER SHEATHED
UNARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE.

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings		
							Direct In Ground	In Duct	In Air
Sq.mm	mm	mm	mm	mm	kgs./km	ohm/km	Amps.	Amps.	Amps.
*1.5	0.8	0.3	1.8	11.5	130	18.100	16	14	13
*2.5	0.9	0.3	1.8	12.5	170	12.100	21	18	18
*4.0	1.0	0.3	1.8	13.5	210	7.410	28	23	23
*6.0	1.0	0.3	1.8	15.0	255	4.610	35	30	30
*10	1.0	0.3	1.8	16.5	325	3.080	46	39	40
16	1.0	0.3	1.8	17.5	360	1.910	60	50	51
25	1.2	0.3	2.0	22.0	520	1.200	76	63	70
35	1.2	0.3	2.0	23.0	640	0.868	92	77	86
50	1.4	0.3	2.0	27.0	850	0.641	110	95	105
70	1.4	0.4	2.2	31.0	1110	0.443	135	115	130
95	1.6	0.4	2.2	33.0	1425	0.320	165	140	155
120	1.6	0.4	2.2	36.0	1690	0.253	185	155	180
150	1.8	0.5	2.4	41.0	2120	0.206	210	175	205
185	2.0	0.5	2.6	45.0	2600	0.164	235	200	240
240	2.2	0.6	2.8	50.0	3290	0.125	275	235	280
300	2.4	0.6	3.0	55.5	4050	0.100	305	260	315
400	2.6	0.7	3.4	63.5	5290	0.0778	335	290	375
500	3.0	0.7	3.8	71.0	6570	0.0605	350	310	410

* If required, these sizes can be offered with stranded conductors also



TABLE-11 "Swadeshi" 1.1 KV THREE CORE, COPPER CONDUCTOR, PVC INSULATED, INNER SHEATHED
ARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Armour		Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings		
			Galv. Round Steel Wire Nominal Dia.	Galv. Flat Steel Strip Nominal Thickness					Direct In Ground	In Duct	In Air
Sq.mm	mm	mm	mm	mm	mm	mm	kgs/km	ohm/km	Amps.	Amps.	Amps.
*1.5	0.8	0.3	1.4	-	1.24	12.5	405	12.100	21	17	17
*2.5	0.9	0.3	1.4	-	1.24	14.0	475	7.410	27	24	24
*4.0	1.0	0.3	1.4	-	1.24	15.5	580	4.610	36	30	30
*6.0	1.0	0.3	1.4	-	1.24	17.0	700	3.080	45	38	39
*10	1.0	0.3	1.4	-	1.40	19.0	890	1.830	60	50	52
16	1.0	0.3	-	0.8	1.40	20.0	950	1.150	77	64	66
25	1.2	0.3	-	0.8	1.40	22.0	1270	0.727	99	81	90
35	1.2	0.3	-	0.8	1.40	25.0	1600	0.524	120	99	110
50	1.4	0.3	-	0.8	1.56	27.0	2150	0.387	145	125	135
70	1.4	0.4	-	0.8	1.56	31.0	2800	0.268	175	150	165
95	1.6	0.4	-	0.8	1.56	34.0	3670	0.193	210	175	200
120	1.6	0.4	-	0.8	1.72	38.0	4470	0.153	240	195	230
150	1.8	0.5	-	0.8	1.88	42.0	5500	0.124	270	225	265
185	2.0	0.5	-	0.8	1.88	46.0	6650	0.099	300	255	305
240	2.2	0.6	-	0.8	2.20	52.0	8450	0.075	345	295	355
300	2.4	0.6	-	0.8	2.36	56.5	10450	0.060	385	335	400
400	2.6	0.7	-	0.8	2.52	64.0	13525	0.047	425	360	455

* If required, these sizes can be offered with stranded conductors also

TABLE-12 "Swadeshi" 1.1 KV THREE CORE, COPPER CONDUCTOR, PVC INSULATED, INNER SHEATHED
UNARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART 1) AMENDED UPTO DATE.

Nominal Cross Sectional Area	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20 °C	Current Ratings		
							Direct In Ground	In Duct	In Air
Sq.mm	mm	mm	mm	mm	kgs./km	ohm/km	Amps.	Amps.	Amps.
*1.5	0.8	0.3	1.8	11.5	160	12.100	21	17	17
*2.5	0.9	0.3	1.8	12.5	220	7.410	27	24	24
*4.0	1.0	0.3	1.8	13.5	290	4.610	36	30	30
*6.0	1.0	0.3	1.8	15.0	370	3.080	45	38	39
*10	1.0	0.3	1.8	16.5	510	1.830	60	50	52
16	1.0	0.3	1.8	17.5	660	1.150	77	64	66
25	1.2	0.3	2.0	22.0	990	0.727	99	81	90
35	1.2	0.3	2.0	23.0	1290	0.524	120	99	110
50	1.4	0.3	2.0	27.0	1780	0.387	145	125	135
70	1.4	0.4	2.2	31.0	2410	0.268	175	150	165
95	1.6	0.4	2.2	33.0	3190	0.193	210	175	200
120	1.6	0.4	2.2	36.0	3920	0.153	240	195	230
150	1.8	0.5	2.4	41.0	4910	0.124	270	225	265
185	2.0	0.5	2.6	45.0	6040	0.099	300	255	305
240	2.2	0.6	2.8	50.0	7750	0.075	345	295	355
300	2.4	0.6	3.0	55.5	9620	0.060	385	335	400
400	2.6	0.7	3.4	63.5	12715	0.047	425	360	455

* If required, these sizes can be offered with stranded conductors also



TABLE-13 "Swadeshi" 1.1 KV 3½ CORE, ALUMINIUM CONDUCTOR, PVC INSULATED, INNER SHEATHED
ARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART I) AMENDED UPTO DATE

Nominal Cross Sectional Area		Nominal Thickness of Insulation		Minimum Thickness of Inner Sheath	Armour Galv. Flat Steel Strip Nominal Thickness	Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20°C		Current Ratings		
Main	Neutral	Main	Neutral						Main	Neutral	Direct In Ground	In Ducts	In Air
Sq. mm	Sq. mm	mm	mm	mm	mm	mm	mm	Kgs./Km	Ohm/Km	Ohm/Km	Amps.	Amps.	Amps.
25	16	1.2	1.0	0.3	0.8	1.40	23.5	900	1.200	1.910	76	63	70
35	16	1.2	1.0	0.3	0.8	1.40	26.0	1030	0.868	1.910	92	77	86
50	25	1.4	1.2	0.3	0.8	1.56	30.0	1350	0.641	1.200	100	95	105
70	35	1.4	1.2	0.4	0.8	1.56	32.5	1725	0.443	0.868	135	115	130
95	50	1.6	1.4	0.4	0.8	1.56	36.5	2130	0.320	0.641	165	140	155
120	70	1.6	1.4	0.5	0.8	1.72	40.5	2580	0.253	0.443	185	155	180
150	70	1.8	1.4	0.5	0.8	1.88	44.0	3050	0.206	0.443	210	175	205
185	95	2.0	1.6	0.5	0.8	2.04	50.0	3650	0.164	0.320	235	200	240
240	120	2.2	1.6	0.6	0.8	2.20	55.0	4580	0.125	0.253	275	235	280
300	150	2.4	1.8	0.6	0.8	2.36	61.0	5500	0.100	0.206	305	260	315
400	185	2.6	2.0	0.7	0.8	2.68	68.0	7000	0.0778	0.164	335	290	375
500	240	3.0	2.2	0.7	0.8	2.84	75.0	8600	0.0605	0.125	350	310	410

TABLE-14 "Swadeshi" 1.1 KV 3½ CORE, ALUMINIUM CONDUCTOR, PVC INSULATED, INNER SHEATHED
UNARMoured & PVC SHEATHED CABLES CONFORMING TO IS : 1554 (PART I) AMENDED UPTO DATE

Nominal Cross Sectional Area		Nominal Thickness of Insulation		Minimum Thickness of Inner Sheath	Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20°C		Current Ratings		
Main	Neutral	Main	Neutral					Main	Neutral	Direct in Ground	In Ducts	In Air
Sq. mm	Sq. mm	Sq. mm	Sq. mm	mm	mm	mm	Kgs./Km	Ohm/Km	Ohm/Km	Amps.	Amps.	Amps.
25	16	1.2	1.0	0.3	2.0	22.5	615	1.200	1.910	76	63	70
35	16	1.2	1.0	0.3	2.0	25.0	715	0.868	1.910	92	77	86
50	25	1.4	1.2	0.3	2.2	29.0	955	0.641	1.200	110	95	105
70	35	1.4	1.2	0.4	2.2	33.0	1290	0.443	0.868	135	115	130
95	50	1.6	1.4	0.4	2.2	36.5	1640	0.320	0.641	165	140	155
120	70	1.6	1.4	0.5	2.4	39.0	2020	0.253	0.443	185	155	180
150	70	1.8	1.4	0.5	2.4	42.5	2380	0.206	0.443	210	175	205
185	95	2.0	1.6	0.5	2.6	47.0	2945	0.164	0.320	235	200	240
240	120	2.2	1.6	0.6	3.0	54.0	3800	0.125	0.253	275	235	280
300	150	2.4	1.8	0.6	3.2	58.0	4650	0.100	0.206	305	260	315
400	185	2.6	2.0	0.7	3.4	65.0	6000	0.0778	0.164	335	290	375
500	240	3.0	2.2	0.7	3.8	74.0	7400	0.0605	0.125	350	310	410



TABLE-15 "Swadeshi" 1.1 KV 3½ CORE, COPPER CONDUCTOR, PVC INSULATED, INNER SHEATHED
ARMoured & PVC SHEATHED CABLES CONFORMING TO IS:1554 (PART I) AMENDED UPTO DATE

Nominal Cross Sectional Area		Nominal Thickness of Insulation		Minimum Thickness of Inner Sheath	Armour Galv. Flat Steel Strip Nominal Thickness	Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20°C		Current Ratings		
Main	Neutral	Main	Neutral						Main	Neutral	Direct In Ground	In Ducts	In Air
Sq. mm	Sq. mm	mm	mm	mm	mm	mm	mm	Kgs./Km	Ohm/Km	Ohm/Km	Amps.	Amps.	Amps.
25	16	1.2	1.0	0.3	0.8	1.40	23.5	1465	0.727	1.150	99	81	90
35	16	1.2	1.0	0.3	0.8	1.40	26.0	1780	0.524	1.150	120	99	110
50	25	1.4	1.2	0.3	0.8	1.56	30.0	2435	0.387	0.727	145	125	135
70	35	1.4	1.2	0.4	0.8	1.56	32.5	3245	0.268	0.524	175	150	165
95	50	1.6	1.4	0.4	0.8	1.56	36.5	4210	0.193	0.387	210	175	200
120	70	1.6	1.4	0.5	0.8	1.72	40.5	5240	0.153	0.268	240	195	230
150	70	1.8	1.4	0.5	0.8	1.88	44.0	6270	0.124	0.268	270	225	265
185	95	2.0	1.6	0.5	0.8	2.04	50.0	7675	0.099	0.193	300	255	305
240	120	2.2	1.6	0.6	0.8	2.20	55.0	9780	0.075	0.153	345	295	355
300	150	2.4	1.8	0.6	0.8	2.36	61.0	12000	0.060	0.124	385	335	400
400	185	2.6	2.0	0.7	0.8	2.68	68.0	15570	0.047	0.099	425	360	455

TABLE-16 "Swadeshi" 1.1 KV 3½ CORE, COPPER CONDUCTOR, PVC INSULATED, INNER SHEATHED
UNARMoured & PVC SHEATHED CABLES CONFORMING TO IS : 1554 (PART I) AMENDED UPTO DATE

Nominal Cross Sectional Area		Nominal Thickness of Insulation		Minimum Thickness of Inner Sheath	Minimum Thickness of Outer Sheath	Approx. Overall Diameter	Approx. Weight of Cable	Max. Dc Conductor Resistance at 20°C		Current Ratings		
Main	Neutral	Main	Neutral					Main	Neutral	Direct in Ground	In Ducts	In Air
Sq. mm	Sq. mm	Sq. mm	Sq. mm	mm	mm	mm	Kgs./Km	Ohm/Km	Ohm/Km	Amps.	Amps.	Amps.
25	16	1.2	1.0	0.3	2.0	22.5	1180	0.727	1.150	99	81	90
35	16	1.2	1.0	0.3	2.0	25.0	1465	0.524	1.150	120	99	110
50	25	1.4	1.2	0.3	2.2	29.0	2040	0.387	0.727	145	125	135
70	35	1.4	1.2	0.4	2.2	33.0	2810	0.268	0.524	175	150	165
95	50	1.6	1.4	0.4	2.2	36.5	3715	0.193	0.387	210	175	200
120	70	1.6	1.4	0.5	2.4	39.0	4680	0.153	0.268	240	195	230
150	70	1.8	1.4	0.5	2.4	42.5	5600	0.124	0.268	270	225	265
185	95	2.0	1.6	0.5	2.6	47.0	6970	0.099	0.193	300	255	305
240	120	2.2	1.6	0.6	3.0	54.0	9000	0.075	0.153	345	295	355
300	150	2.4	1.8	0.6	3.2	58.0	11150	0.060	0.124	385	335	400
400	185	2.6	2.0	0.7	3.4	65.0	14570	0.047	0.099	425	360	455



TABLE-21 "Swadeshi" 1.1 KV ANNEALED HIGH CONDUCTIVITY SOLID COPPER CONDUCTOR, 1.5 SQ. MM
PVC INSULATED, INNER SHEATHED, ARMoured / UNARMoured PVC SHEATHED CONTROL CABLES
CONFORMING TO IS:1554 (PART I) AMENDED UPTO DATE

Number of Cores	Nominal Thickness of Insulation	Min. Thickness of Inner Sheath	Armour		Nominal Sheath Thickness Unarmoured	Minimum Sheath Thickness Armoured	Approx. Overall Diameter		Approx. Weight of Cable		Max. Dc Conductor Resistance at 20°C	Current Ratings		
			Galv. Round Steel Wire Nom. Dia	Galv. Flat Steel Strip Nom. Thick			Unarmoured	Armoured	Unarmoured	Armoured		Direct In Ground	In Ducts	In Air
	mm	mm	mm	mm	mm	mm	mm	mm	Kgs./Km	Kgs./Km	Ohm/Km	Amps.	Amps.	Amps.
2	0.8	0.3	1.4	-	1.80	1.24	10.50	13.50	130	350	12.1	23	20	20
3	0.8	0.3	1.4	-	1.80	1.24	11.00	14.00	160	400	12.1	21	17	17
4	0.8	0.3	1.4	-	1.80	1.24	11.50	15.00	190	450	12.1	21	17	17
5	0.8	0.3	1.4	-	1.80	1.24	12.50	15.50	225	500	12.1	21	17	17
6	0.8	0.3	1.4	-	1.80	1.24	13.00	16.00	250	550	12.1	15	13	13
7	0.8	0.3	1.4	-	1.80	1.24	13.50	16.50	265	565	12.1	14	13	13
10	0.8	0.3	1.4	-	1.80	1.40	16.50	19.00	350	750	12.1	13	11	11
12	0.8	0.3	-	0.8	1.80	1.24	17.50	19.50	400	650	12.1	12	10	10
14	0.8	0.3	-	0.8	1.80	1.40	18.00	20.00	450	760	12.1	11	10	10
16	0.8	0.3	-	0.8	1.80	1.40	19.50	21.00	500	800	12.1	11	9	9
19	0.8	0.3	-	0.8	2.00	1.40	20.00	22.00	600	850	12.1	10	9	9
24	0.8	0.3	-	0.8	2.00	1.40	23.00	25.00	725	1050	12.1	9	8	8
30	0.8	0.3	-	0.8	2.00	1.40	24.50	26.50	860	1200	12.1	9	7	7
37	0.8	0.3	-	0.8	2.00	1.40	26.00	28.00	1050	1400	12.1	8	7	7
61	0.8	0.4	-	0.8	2.00	1.56	33.00	35.00	1650	2100	12.1	7	6	6

TABLE-22 "Swadeshi" 1.1 KV ANNEALED HIGH CONDUCTIVITY SOLID COPPER CONDUCTOR, 2.5 SQ. MM
PVC INSULATED, INNER SHEATHED, ARMoured / UNARMoured PVC SHEATHED CONTROL CABLES
CONFORMING TO IS:1554 (PART I) AMENDED UPTO DATE

Number of Cores	Nominal Thickness of Insulation	Minimum Thickness of Inner Sheath	Armour		Nominal Sheath Thickness Unarmoured	Minimum Sheath Thickness Armoured	Approx. Overall Diameter		Approx. Weight of Cable		Max. Dc Conductor Resistance at 20°C	Current Ratings		
			Galv. Round Steel Wire Nom. Dia	Galv. Flat Steel Strip Nom. Thick			Unarmoured	Armoured	Unarmoured	Armoured		Direct In Ground	In Ducts	In Air
	mm	mm	mm	mm	mm	mm	mm	mm	Kgs./Km	Kgs./Km	Ohm/Km	Amps.	Amps.	Amps.
2	0.9	0.3	1.4	-	1.8	1.24	11.00	14.50	160	425	7.41	32	27	27
3	0.9	0.3	1.4	-	1.8	1.24	11.50	15.50	225	475	7.41	27	24	24
4	0.9	0.3	1.4	-	1.8	1.24	11.50	16.50	250	530	7.41	27	24	24
5	0.9	0.3	1.4	-	1.8	1.24	14.00	17.50	300	600	7.41	27	24	24
6	0.9	0.3	1.4	-	1.8	1.24	15.50	18.50	340	675	7.41	20	18	18
7	0.9	0.3	1.4	-	1.8	1.24	15.50	18.50	375	700	7.41	20	17	17
10	0.9	0.3	-	0.8	1.8	1.40	19.00	21.00	500	780	7.41	18	15	15
12	0.9	0.3	-	0.8	2.0	1.40	20.00	22.00	600	850	7.41	17	14	14
14	0.9	0.3	-	0.8	2.0	1.40	21.00	23.00	650	950	7.41	16	13	13
16	0.9	0.3	-	0.8	2.0	1.40	22.00	24.00	750	1050	7.41	15	13	13
19	0.9	0.3	-	0.8	2.0	1.40	23.00	25.00	850	1150	7.41	14	12	12
24	0.9	0.3	-	0.8	2.0	1.40	27.00	29.00	1050	1400	7.41	13	11	11
30	0.9	0.3	-	0.8	2.0	1.56	28.50	30.50	1250	1700	7.41	12	10	10
37	0.9	0.4	-	0.8	2.2	1.56	31.00	33.00	1550	2000	7.41	11	10	10
61	0.9	0.4	-	0.8	2.2	1.56	38.50	41.00	2450	3100	7.41	9	8	8



TABLE-1 "Swadeshi" SINGLE CORE ALUMINIUM CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988

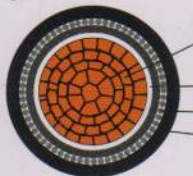
650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular	Nominal Thickness of XLPE Insulation for U/A	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Nominal Thickness of XLPE Insulation for Armoured Cable	Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable		Nominal Dimension of Aluminium Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of Aluminium Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.	○	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid	0.7	-NA-	1.8	7.5	60	-	-	-	-	-	-	-	-	-	36	31
4	Stranded	0.7	-NA-	1.8	8.0	65	-	-	-	-	-	-	-	-	-	36	31
6	Solid	0.7	-NA-	1.8	8.0	70	-	-	-	-	-	-	-	-	-	44	39
6	Stranded	0.7	-NA-	1.8	8.5	75	-	-	-	-	-	-	-	-	-	44	39
10	Solid	0.7	-NA-	1.8	9.0	80	1.0	-	-	-	-	-	-	-	-	59	53
10	Stranded	0.7	-NA-	1.8	9.5	90	1.0	-	-	-	-	-	-	-	-	59	53
16	Stranded	0.7	-NA-	1.8	10.0	115	1.0	-	-	-	-	1.4	1.24	13.0	220	76	73
25	Stranded	0.9	-NA-	1.8	12.0	155	1.2	-	-	-	-	1.4	1.24	14.0	260	96	98
35	Stranded	0.9	-NA-	1.8	13.0	180	1.2	-	-	-	-	1.4	1.24	15.0	310	114	121
50	Stranded	1.0	-NA-	1.8	14.0	240	1.3	-	-	-	-	1.4	1.24	17.0	380	135	150
70	Stranded	1.1	-NA-	1.8	16.0	310	1.4	-	-	-	-	1.4	1.24	19.0	480	166	187
95	Stranded	1.1	-NA-	1.8	17.5	385	1.4	4 x 0.80	1.40	21.0	560	1.6	1.40	22.0	640	198	230
120	Stranded	1.2	-NA-	1.8	19.0	470	1.5	4 x 0.80	1.40	22.0	660	1.6	1.40	23.5	745	225	268
150	Stranded	1.4	-NA-	2.0	21.5	600	1.7	4 x 0.80	1.40	23.0	750	1.6	1.40	24.5	850	253	309
185	Stranded	1.6	-NA-	2.0	23.5	710	1.9	4 x 0.80	1.40	25.0	900	1.6	1.40	26.5	1000	286	360
240	Stranded	1.7	-NA-	2.0	26.0	900	2.0	4 x 0.80	1.40	27.5	1100	1.6	1.40	29.0	1215	332	433
300	Stranded	1.8	-NA-	2.0	28.5	1075	2.1	4 x 0.80	1.56	30.0	1350	1.6	1.56	31.5	1475	376	501
400	Stranded	2.0	-NA-	2.2	33.0	1385	2.4	4 x 0.80	1.56	34.0	1725	2.0	1.56	36.5	1925	431	596
500	Stranded	2.2	-NA-	2.2	36.0	1650	2.6	4 x 0.80	1.56	37.5	2090	2.0	1.56	39.5	2300	490	693
630	Stranded	2.4	-NA-	2.2	40.0	2100	2.8	4 x 0.80	1.72	40.5	2525	2.0	1.72	43.0	2800	557	814
800	Stranded	2.6	-NA-	2.4	46.0	2730	3.1	4 x 0.80	1.72	46.5	3150	2.0	1.88	49.5	3450	600	890
1000	Stranded	2.8	-NA-	2.6	52.0	3350	3.3	4 x 0.80	1.88	54.0	3963	2.5	2.04	58.0	4475	650	1050

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 CONDUCTOR : Material - Aluminium
*Shape : ~ AL. Cond :- 6 & 10 SQ.MM -Solid circular, 16 SQ.MM & above : Stranded Compacted circular
- 2 INSULATION : Crosslinked Polyethylene (XLPE), Colour: Natural
- 3 ARMOURING : Single layer of Aluminium Round Wires/Flat Strips
- 4 OUTER SHEATH : PVC TYPE ST-2 OF IS:5831 - OPTIONS: PVC Type
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.



TABLE-2 "Swadeshi" SINGLE CORE COPPER CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988

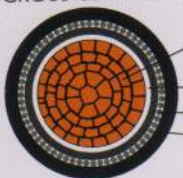
650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular	Nominal Thickness of XLPE Insulation for U/A	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Nominal Thickness of XLPE Insulation for Armoured Cable	Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable		Nominal Dimension of Aluminium Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of Aluminium Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.	Ø	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid	0.7	-NA-	1.8	7.5	91	-	-	-	-	-	-	-	-	-	47	42
4	Stranded	0.7	-NA-	1.8	8.0	95	-	-	-	-	-	-	-	-	-	47	42
6	Solid	0.7	-NA-	1.8	8.0	115	-	-	-	-	-	-	-	-	-	59	53
6	Stranded	0.7	-NA-	1.8	8.5	125	-	-	-	-	-	-	-	-	-	59	53
10	Stranded	0.7	-NA-	1.8	9.5	170	1.0	-	-	-	-	1.4	1.24	12.0	245	78	72
16	Stranded	0.7	-NA-	1.8	10.0	220	1.0	-	-	-	-	1.4	1.24	13.0	315	102	98
25	Stranded	0.9	-NA-	1.8	12.0	325	1.2	-	-	-	-	1.4	1.24	14.0	415	132	132
35	Stranded	0.9	-NA-	1.8	13.0	420	1.2	-	-	-	-	1.4	1.24	16.0	525	156	156
50	Stranded	1.0	-NA-	1.8	14.0	550	1.3	-	-	-	-	1.4	1.24	17.0	690	186	198
70	Stranded	1.1	-NA-	1.8	16.0	750	1.4	-	-	-	-	1.4	1.24	19.0	910	228	246
95	Stranded	1.1	-NA-	1.8	17.5	1010	1.4	4 x 0.80	1.40	21.0	1150	1.6	1.40	22.0	1325	264	294
120	Stranded	1.2	-NA-	1.8	19.0	1250	1.5	4 x 0.80	1.40	22.0	1400	1.6	1.40	23.5	1485	300	336
150	Stranded	1.4	-NA-	2.0	21.5	1550	1.7	4 x 0.80	1.40	23.0	1680	1.6	1.40	24.5	1780	336	384
185	Stranded	1.6	-NA-	2.0	23.5	1900	1.9	4 x 0.80	1.40	25.0	2040	1.6	1.40	26.5	2140	366	444
240	Stranded	1.7	-NA-	2.0	26.0	2450	2.0	4 x 0.80	1.40	27.5	2580	1.6	1.40	29.0	2700	414	510
300	Stranded	1.8	-NA-	2.0	28.5	3050	2.1	4 x 0.80	1.56	30.0	3200	1.6	1.56	31.5	3325	450	570
400	Stranded	2.0	-NA-	2.2	33.0	4035	2.4	4 x 0.80	1.56	34.0	4200	2.0	1.56	36.5	4400	480	660
500	Stranded	2.2	-NA-	2.2	36.0	5020	2.6	4 x 0.80	1.56	37.5	5180	2.0	1.56	39.5	5400	564	708
630	Stranded	2.4	-NA-	2.2	40.0	6250	2.8	4 x 0.80	1.72	40.5	6425	2.0	1.72	43.0	6700	570	825
800	Stranded	2.6	-NA-	2.4	46.0	7900	3.1	4 x 0.80	1.72	46.5	8100	2.0	1.88	49.5	8400	660	945
1000	Stranded	2.8	-NA-	2.6	52.0	9850	3.3	4 x 0.80	1.88	54.0	10150	2.5	2.04	58.0	10660	723	1063

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 CONDUCTOR : Material - Copper
~Copper. Cond. : 4 & 6 SQ.MM-solid / stranded non compacted circular, 10 SQ.MM : Stranded compacted circular
- 2 INSULATION : Crosslinked Polyethylene (XLPE), Colour: Natural
- 3 ARMOURING : Single layer of Aluminium Round Wires/Flat Strips
- 4 OUTER SHEATH : PVC TYPE ST-2 OF IS:5831 'A' OPTIONS: PVC Type
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.



**TABLE-1 "Swadeshi" SINGLE CORE ALUMINIUM CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988**

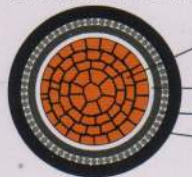
650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular	Nominal Thickness of XLPE Insulation for U/A	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Nominal Thickness of XLPE Insulation for Armoured Cable	Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable		Nominal Dimension of Aluminium Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of Aluminium Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.	○	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid	0.7	-NA-	1.8	7.5	60	-	-	-	-	-	-	-	-	-	36	31
4	Stranded	0.7	-NA-	1.8	8.0	65	-	-	-	-	-	-	-	-	-	36	31
6	Solid	0.7	-NA-	1.8	8.0	70	-	-	-	-	-	-	-	-	-	44	39
6	Stranded	0.7	-NA-	1.8	8.5	75	-	-	-	-	-	-	-	-	-	44	39
10	Solid	0.7	-NA-	1.8	9.0	80	1.0	-	-	-	-	-	-	-	-	59	53
10	Stranded	0.7	-NA-	1.8	9.5	90	1.0	-	-	-	-	-	-	-	-	59	53
16	Stranded	0.7	-NA-	1.8	10.0	115	1.0	-	-	-	-	1.4	1.24	13.0	220	76	73
25	Stranded	0.9	-NA-	1.8	12.0	155	1.2	-	-	-	-	1.4	1.24	14.0	260	96	98
35	Stranded	0.9	-NA-	1.8	13.0	180	1.2	-	-	-	-	1.4	1.24	15.0	310	114	121
50	Stranded	1.0	-NA-	1.8	14.0	240	1.3	-	-	-	-	1.4	1.24	17.0	380	135	150
70	Stranded	1.1	-NA-	1.8	16.0	310	1.4	-	-	-	-	1.4	1.24	19.0	480	166	187
95	Stranded	1.1	-NA-	1.8	17.5	385	1.4	4 x 0.80	1.40	21.0	560	1.6	1.40	22.0	640	198	230
120	Stranded	1.2	-NA-	1.8	19.0	470	1.5	4 x 0.80	1.40	22.0	660	1.6	1.40	23.5	745	225	268
150	Stranded	1.4	-NA-	2.0	21.5	600	1.7	4 x 0.80	1.40	23.0	750	1.6	1.40	24.5	850	253	309
185	Stranded	1.6	-NA-	2.0	23.5	710	1.9	4 x 0.80	1.40	25.0	900	1.6	1.40	26.5	1000	286	360
240	Stranded	1.7	-NA-	2.0	26.0	900	2.0	4 x 0.80	1.40	27.5	1100	1.6	1.40	29.0	1215	332	433
300	Stranded	1.8	-NA-	2.0	28.5	1075	2.1	4 x 0.80	1.56	30.0	1350	1.6	1.56	31.5	1475	376	501
400	Stranded	2.0	-NA-	2.2	33.0	1385	2.4	4 x 0.80	1.56	34.0	1725	2.0	1.56	36.5	1925	431	596
500	Stranded	2.2	-NA-	2.2	36.0	1650	2.6	4 x 0.80	1.56	37.5	2090	2.0	1.56	39.5	2300	490	693
630	Stranded	2.4	-NA-	2.2	40.0	2100	2.8	4 x 0.80	1.72	40.5	2525	2.0	1.72	43.0	2800	557	814
800	Stranded	2.6	-NA-	2.4	46.0	2730	3.1	4 x 0.80	1.72	46.5	3150	2.0	1.88	49.5	3450	600	890
1000	Stranded	2.8	-NA-	2.6	52.0	3350	3.3	4 x 0.80	1.88	54.0	3963	2.5	2.04	58.0	4475	650	1050

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 → CONDUCTOR : Material - Aluminium
*Shape : ~ AL. Cond :- 6 & 10 SQ.MM -Solid circular, 16 SQ.MM & above : Stranded Compacted circular
- 2 → INSULATION : Crosslinked Polyethylene (XLPE), Colour: Natural
- 3 → ARMOURING : Single layer of Aluminium Round Wires/Flat Strips
- 4 → OUTER SHEATH : PVC TYPE ST-2 OF IS:5831 - OPTIONS: PVC Type
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.



**TABLE-2 "Swadeshi" SINGLE CORE COPPER CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988**

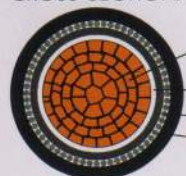
650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular	Nominal Thickness of XLPE Insulation for U/A	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Nominal Thickness of XLPE Insulation for Armoured Cable	Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable		Nominal Dimension of Aluminium Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of Aluminium Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.	○	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid	0.7	-NA-	1.8	7.5	91	-	-	-	-	-	-	-	-	-	47	42
4	Stranded	0.7	-NA-	1.8	8.0	95	-	-	-	-	-	-	-	-	-	47	42
6	Solid	0.7	-NA-	1.8	8.0	115	-	-	-	-	-	-	-	-	-	59	53
6	Stranded	0.7	-NA-	1.8	8.5	125	-	-	-	-	-	-	-	-	-	59	53
10	Stranded	0.7	-NA-	1.8	9.5	170	1.0	-	-	-	-	1.4	1.24	12.0	245	78	72
16	Stranded	0.7	-NA-	1.8	10.0	220	1.0	-	-	-	-	1.4	1.24	13.0	315	102	98
25	Stranded	0.9	-NA-	1.8	12.0	325	1.2	-	-	-	-	1.4	1.24	14.0	415	132	132
35	Stranded	0.9	-NA-	1.8	13.0	420	1.2	-	-	-	-	1.4	1.24	16.0	525	156	156
50	Stranded	1.0	-NA-	1.8	14.0	550	1.3	-	-	-	-	1.4	1.24	17.0	690	186	198
70	Stranded	1.1	-NA-	1.8	16.0	750	1.4	-	-	-	-	1.4	1.24	19.0	910	228	246
95	Stranded	1.1	-NA-	1.8	17.5	1010	1.4	4 x 0.80	1.40	21.0	1150	1.6	1.40	22.0	1325	264	294
120	Stranded	1.2	-NA-	1.8	19.0	1250	1.5	4 x 0.80	1.40	22.0	1400	1.6	1.40	23.5	1485	300	336
150	Stranded	1.4	-NA-	2.0	21.5	1550	1.7	4 x 0.80	1.40	23.0	1680	1.6	1.40	24.5	1780	336	384
185	Stranded	1.6	-NA-	2.0	23.5	1900	1.9	4 x 0.80	1.40	25.0	2040	1.6	1.40	26.5	2140	366	444
240	Stranded	1.7	-NA-	2.0	26.0	2450	2.0	4 x 0.80	1.40	27.5	2580	1.6	1.40	29.0	2700	414	510
300	Stranded	1.8	-NA-	2.0	28.5	3050	2.1	4 x 0.80	1.56	30.0	3200	1.6	1.56	31.5	3325	450	570
400	Stranded	2.0	-NA-	2.2	33.0	4035	2.4	4 x 0.80	1.56	34.0	4200	2.0	1.56	36.5	4400	480	660
500	Stranded	2.2	-NA-	2.2	36.0	5020	2.6	4 x 0.80	1.56	37.5	5180	2.0	1.56	39.5	5400	564	708
630	Stranded	2.4	-NA-	2.2	40.0	6250	2.8	4 x 0.80	1.72	40.5	6425	2.0	1.72	43.0	6700	570	825
800	Stranded	2.6	-NA-	2.4	46.0	7900	3.1	4 x 0.80	1.72	46.5	8100	2.0	1.88	49.5	8400	660	945
1000	Stranded	2.8	-NA-	2.6	52.0	9850	3.3	4 x 0.80	1.88	54.0	10150	2.5	2.04	58.0	10660	723	1063

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 CONDUCTOR : Material - Copper
~Copper. Cond. : 4 & 6 SQ.MM-solid / stranded non compacted circular, 10 SQ.MM : Stranded compacted circular
- 2 INSULATION : Crosslinked Polyethylene (XLPE), Colour: Natural
- 3 ARMOURING : Single layer of Aluminium Round Wires/Flat Strips
- 4 OUTER SHEATH : PVC TYPE ST-2 OF IS:5831 - OPTIONS: PVC Type
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.



**TABLE-3 "Swadeshi" TWO CORE ALUMINIUM CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988**

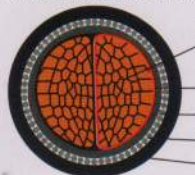
650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular Shaped	Nominal Thickness of XLPE Insulation	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.	o/□	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid ○	0.7	0.3	1.8	12.5	140	-NA-	-NA-	-NA-	-NA-	1.40	1.24	14.5	400	40	34
4	Stranded ○	0.7	0.3	1.8	13.0	150	-NA-	-NA-	-NA-	-NA-	1.40	1.24	15.5	430	40	34
6	Solid ○	0.7	0.3	1.8	13.5	170	-NA-	-NA-	-NA-	-NA-	1.40	1.24	15.5	470	50	44
6	Stranded ○	0.7	0.3	1.8	14.0	180	-NA-	-NA-	-NA-	-NA-	1.40	1.24	16.5	485	50	44
10	Stranded ○	0.7	0.3	1.8	15.0	205	-NA-	-NA-	-NA-	-NA-	1.40	1.24	17.0	545	69	59
10	Stranded ○	0.7	0.3	1.8	16.0	225	-NA-	-NA-	-NA-	-NA-	1.40	1.24	18.0	565	69	59
16	Stranded □	0.7	0.3	1.8	14.0	225	-NA-	-NA-	-NA-	-NA-	1.40	1.40	17.0	570	88	74
25	Stranded □	0.9	0.3	2.0	17.0	330	4 x 0.8	1.40	18.5	600	1.60	1.40	20.0	790	112	98
35	Stranded □	0.9	0.3	2.0	19.0	410	4 x 0.8	1.40	20.0	690	1.60	1.40	22.0	910	138	124
50	Stranded □	1.0	0.3	2.0	21.0	510	4 x 0.8	1.40	22.5	820	1.60	1.40	24.0	1050	169	156
70	Stranded □	1.1	0.3	2.0	23.0	675	4 x 0.8	1.56	25.5	1050	1.60	1.56	27.0	1325	200	188
95	Stranded □	1.1	0.4	2.2	26.5	900	4 x 0.8	1.56	28.0	1300	2.00	1.56	30.5	1750	238	231
120	Stranded □	1.2	0.4	2.2	28.5	1050	4 x 0.8	1.56	30.5	1500	2.00	1.56	33.0	2000	262	262
150	Stranded □	1.4	0.4	2.2	32.0	1215	4 x 0.8	1.72	34.0	1750	2.00	1.72	36.0	2250	300	300
185	Stranded □	1.6	0.5	2.4	35.5	1510	4 x 0.8	1.72	37.0	2200	2.00	1.88	40.0	2750	344	344
240	Stranded □	1.7	0.5	2.6	39.5	1900	4 x 0.8	1.88	41.0	2600	2.50	2.04	45.0	3700	400	406
300	Stranded □	1.8	0.6	2.8	43.5	2360	4 x 0.8	2.04	45.5	3200	2.50	2.20	49.0	4400	444	456
400	Stranded □	2.0	0.6	3.0	49.0	3100	4 x 0.8	2.36	51.0	4000	2.50	2.36	54.4	5300	481	525
500	Stranded □	2.2	0.7	3.4	55.5	4000	4 x 0.8	2.52	56.5	5000	3.15	2.68	61.5	7000	523	678
630	Stranded □	2.4	0.7	3.6	61.5	5000	4 x 0.8	2.68	62.5	6050	3.15	2.84	67.5	8560	592	786

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 CONDUCTOR : Material - Aluminium
*Shape: ~AL. Cond. 6 & 10SQ.MM -Solid circular, 16SQ.MM & above : Stranded compacted shaped
- 2 INSULATION : Crosslinked Polyethylene (XLPE), Colour: Red & Black
- 3 INNER SHEATH : PVC as per IS : 7098 PT-1
- 4 ARMOURING : Single layer of Galvanized Steel Round Wires/Flat Strips
- 5 OUTER SHEATH : PVC TYPE ST-2 OF IS:5831- OPTIONS: FR TYPE / FRLS TYPE
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.

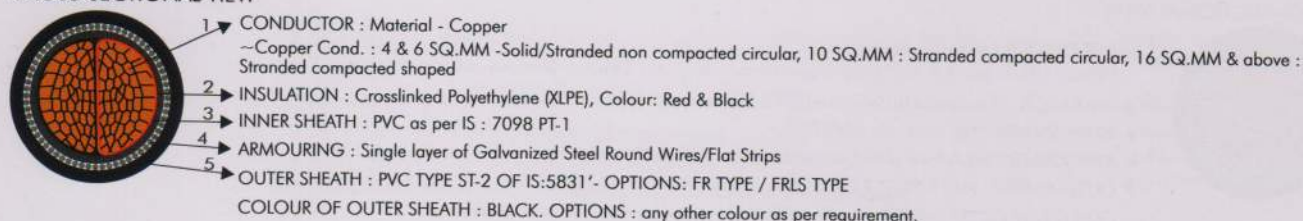
**TABLE-4 "Swadeshi" TWO CORE COPPER CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988
650/1100 VOLTS**

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular Shaped o/□	Nominal Thickness of XLPE Insulation	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.		mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid ○	0.7	0.3	1.8	12.5	165	-NA-	-NA-	-NA-	-NA-	1.4	1.24	14.5	480	51	44
4	Stranded ○	0.7	0.3	1.8	13.0	175	-NA-	-NA-	-NA-	-NA-	1.4	1.24	15.5	525	51	44
6	Solid ○	0.7	0.3	1.8	13.5	210	-NA-	-NA-	-NA-	-NA-	1.4	1.24	15.5	564	63	56
6	Stranded ○	0.7	0.3	1.8	14.0	225	-NA-	-NA-	-NA-	-NA-	1.4	1.24	16.5	610	63	56
10	Stranded ○	0.7	0.3	1.8	16.0	300	-NA-	-NA-	-NA-	-NA-	1.4	1.24	18.0	740	88	75
16	Stranded □	0.7	0.3	1.8	14.0	425	-NA-	-NA-	-NA-	-NA-	1.4	1.40	17.0	770	113	98
25	Stranded □	0.9	0.3	2.0	17.0	640	4 x 0.8	1.40	18.5	910	1.6	1.40	20.0	1100	144	131
35	Stranded □	0.9	0.3	2.0	19.0	840	4 x 0.8	1.40	20.0	1025	1.6	1.40	22.0	1350	175	150
50	Stranded □	1.0	0.3	2.0	21.0	1120	4 x 0.8	1.40	22.5	1435	1.6	1.40	24.0	1670	206	194
70	Stranded □	1.1	0.3	2.0	23.0	1540	4 x 0.8	1.56	25.5	1910	1.6	1.56	27.0	2200	256	244
95	Stranded □	1.1	0.4	2.2	26.5	2075	4 x 0.8	1.56	28.0	2475	2.0	1.56	30.5	2925	300	288
120	Stranded □	1.2	0.4	2.2	28.5	2535	4 x 0.8	1.56	30.5	2985	2.0	1.56	33.0	3485	344	331
150	Stranded □	1.4	0.4	2.2	32.0	3070	4 x 0.8	1.72	34.0	3600	2.0	1.72	36.0	4100	388	381
185	Stranded □	1.6	0.5	2.4	35.5	3800	4 x 0.8	1.72	37.0	4490	2.0	1.88	40.0	5040	438	438
240	Stranded □	1.7	0.5	2.6	39.5	4870	4 x 0.8	1.88	41.0	5575	2.5	2.04	45.0	7370	506	512
300	Stranded □	1.8	0.6	2.8	43.5	6075	4 x 0.8	2.04	45.5	6910	2.5	2.20	49.0	9010	562	581
400	Stranded □	2.0	0.6	3.0	49.0	8050	4 x 0.8	2.36	51.0	8950	2.5	2.36	54.4	10250	612	662

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW





**TABLE-5 "Swadeshi" THREE CORE ALUMINIUM CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988**

650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular Shaped ○/△	Nominal Thickness of XLPE Insulation	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.		mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid ○	0.7	0.3	1.8	14.0	140	-NA-	-NA-	-NA-	-NA-	1.40	1.24	15.0	460	34	31
4	Stranded ○	0.7	0.3	1.8	15.5	160	-NA-	-NA-	-NA-	-NA-	1.40	1.24	16.0	510	34	31
6	Solid ○	0.7	0.3	1.8	15.5	170	-NA-	-NA-	-NA-	-NA-	1.40	1.24	16.0	530	43	50
6	Stranded ○	0.7	0.3	1.8	16.0	190	-NA-	-NA-	-NA-	-NA-	1.40	1.24	17.0	580	43	50
10	Solid ○	0.7	0.3	1.8	17.0	220	-NA-	-NA-	-NA-	-NA-	1.40	1.24	18.0	640	57	67
10	Stranded ○	0.7	0.3	1.8	18.0	230	-NA-	-NA-	-NA-	-NA-	1.40	1.24	19.0	680	57	67
16	Stranded △	0.7	0.3	1.8	18.0	310	4 x 0.8	1.24	18.5	530	1.60	1.40	21.0	750	73	70
25	Stranded △	0.9	0.3	2.0	20.0	460	4 x 0.8	1.40	20.5	770	1.60	1.40	23.0	990	94	96
35	Stranded △	0.9	0.3	2.0	21.5	575	4 x 0.8	1.40	23.0	900	1.60	1.40	25.0	1150	113	117
50	Stranded △	1.0	0.3	2.0	24.5	700	4 x 0.8	1.40	25.5	1100	1.60	1.56	27.5	1400	133	142
70	Stranded △	1.1	0.4	2.2	29.0	990	4 x 0.8	1.56	30.0	1425	2.00	1.56	32.0	1950	164	179
95	Stranded △	1.1	0.4	2.2	32.5	1250	4 x 0.8	1.56	33.5	1735	2.00	1.56	37.5	2300	196	221
120	Stranded △	1.2	0.4	2.2	34.5	1525	4 x 0.8	1.56	35.5	2050	2.00	1.72	39.5	2700	223	257
150	Stranded △	1.4	0.5	2.4	38.5	1900	4 x 0.8	1.72	40.5	2100	2.00	1.88	43.5	3200	249	292
185	Stranded △	1.6	0.5	2.6	43.5	2380	4 x 0.8	1.88	44.5	2500	2.50	2.04	48.5	4200	282	337
240	Stranded △	1.7	0.6	2.8	48.5	3000	4 x 0.8	2.04	49.0	3700	2.50	2.20	53.0	5100	326	399
300	Stranded △	1.8	0.6	3.0	51.5	3750	4 x 0.8	2.20	53.0	4500	2.50	2.36	57.5	5900	367	455
400	Stranded △	2.0	0.7	3.2	59.5	4760	4 x 0.8	2.52	58.5	5700	3.15	2.68	65.0	7900	418	530
500	Stranded △	2.2	0.7	3.6	66.0	6000	4 x 0.8	2.68	67.0	6900	3.15	2.84	73.0	9550	470	612
630	Stranded △	2.4	0.7	3.8	72.0	7550	4 x 0.8	2.84	73.0	8700	4.00	3.00	78.0	12500	529	707

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 → CONDUCTOR : Material - Aluminium
*Shape: ~AL. Cond. 6 & 10SQ.MM -Solid circular, 16SQ.MM & above : Stranded compacted shaped
- 2 → INSULATION : Crosslinked Polyethylene (XLPE), Colour: Red, Yellow and Blue
- 3 → INNER SHEATH : PVC as per IS : 7098 PT-1
- 4 → ARMOURING : Single layer of Galvanized Steel Round Wires/Flat Strips
- 5 → OUTER SHEATH : PVC TYPE ST-2 OF IS:5831'- OPTIONS: FR TYPE / FRLS TYPE
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.



**TABLE-6 "Swadeshi" THREE CORE COPPER CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988**

650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular Shaped	Nominal Thickness of XLPE Insulation	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.	o/△	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid o	0.7	0.3	1.8	14.0	210	-NA-	-NA-	-NA-	-NA-	1.40	1.24	15.0	530	43	36
4	Stranded o	0.7	0.3	1.8	15.5	235	-NA-	-NA-	-NA-	-NA-	1.40	1.24	16.0	580	43	36
6	Solid o	0.7	0.3	1.8	15.5	280	-NA-	-NA-	-NA-	-NA-	1.40	1.24	16.0	640	54	47
6	Stranded o	0.7	0.3	1.8	16.0	300	-NA-	-NA-	-NA-	-NA-	1.40	1.24	17.0	680	54	47
10	Stranded o	0.7	0.3	1.8	18.0	415	-NA-	-NA-	-NA-	-NA-	1.40	1.24	19.0	865	72	62
16	Stranded △	0.7	0.3	1.8	18.0	425	4 x 0.8	1.24	18.5	825	1.60	1.40	21.0	1040	92	79
25	Stranded △	0.9	0.3	2.0	20.0	920	4 x 0.8	1.40	20.5	1235	1.60	1.40	23.0	1450	119	108
35	Stranded △	0.9	0.3	2.0	21.5	1225	4 x 0.8	1.40	23.0	1550	1.60	1.40	25.0	1800	144	132
50	Stranded △	1.0	0.3	2.0	24.5	1620	4 x 0.8	1.40	25.5	2020	1.60	1.56	27.5	2320	174	162
70	Stranded △	1.1	0.4	2.2	29.0	2290	4 x 0.8	1.56	30.0	2720	2.00	1.56	32.0	3250	210	198
95	Stranded △	1.1	0.4	2.2	32.5	3010	4 x 0.8	1.56	33.5	3500	2.00	1.56	37.5	4060	252	240
120	Stranded △	1.2	0.4	2.2	34.5	3750	4 x 0.8	1.56	35.5	4320	2.00	1.72	39.5	4920	288	276
150	Stranded △	1.4	0.5	2.4	38.5	4760	4 x 0.8	1.72	40.5	5280	2.00	1.88	43.5	5980	324	318
185	Stranded △	1.6	0.5	2.6	43.5	5810	4 x 0.8	1.88	44.5	6385	2.50	2.04	48.5	7630	360	366
240	Stranded △	1.7	0.6	2.8	48.5	7450	4 x 0.8	2.04	49.0	8150	2.50	2.20	53.0	9550	414	426
300	Stranded △	1.8	0.6	3.0	51.5	9310	4 x 0.8	2.20	53.0	10060	2.50	2.36	57.5	11460	462	480
400	Stranded △	2.0	0.7	3.2	59.5	12200	4 x 0.8	2.52	58.5	13125	3.15	2.68	65.0	15320	510	546

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 → CONDUCTOR : Material - Copper
~Copper. Cond. : 4 & 6 SQ.MM-solid/ stranded non compacted circular, 10 SQ.MM :Stranded compacted circular, 16 SQ.MM & above: Stranded compacted shaped
- 2 → INSULATION : Crosslinked Polyethylene (XLPE), Colour: Red, Yellow and Blue
- 3 → INNER SHEATH : PVC as per IS : 7098 PT-1
- 4 → ARMOURING : Single layer of Galvanized Steel Round Wires/Flat Strips
- 5 → OUTER SHEATH : PVC TYPE ST-2 OF IS:5831'- OPTIONS: FR TYPE / FRLS TYPE
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.



**TABLE-7 "Swadeshi" THREE AND HALF CORE ALUMINIUM CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988**

650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular Shaped O/Δ	Nominal Thickness of XLPE Insulation Main / Neutral		Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
		mm	mm		Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.		mm	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
25/16	Stranded Δ	0.9	0.7	0.3	2.0	22.0	525	4 x 0.80	1.40	23.0	850	1.60	1.40	25.5	1050	94	96
35/16	Stranded Δ	0.9	0.7	0.3	2.0	24.0	625	4 x 0.80	1.40	25.0	980	1.60	1.40	26.5	1200	113	117
50/25	Stranded Δ	1.0	0.9	0.3	2.0	27.5	800	4 x 0.80	1.40	28.0	1240	1.60	1.56	29.5	1500	133	142
70/35	Stranded Δ	1.1	0.9	0.4	2.2	31.0	1100	4 x 0.80	1.56	32.0	1600	2.00	1.56	34.0	2050	164	179
95/50	Stranded Δ	1.1	1.0	0.4	2.2	35.0	1400	4 x 0.80	1.56	36.0	1900	2.00	1.56	38.0	2450	196	221
120/70	Stranded Δ	1.2	1.1	0.4	2.2	37.5	1650	4 x 0.80	1.72	39.0	2300	2.00	1.72	41.0	2800	223	257
150/70	Stranded Δ	1.4	1.1	0.5	2.4	41.0	2000	4 x 0.80	1.72	42.0	2650	2.00	1.88	45.0	3350	249	292
185/95	Stranded Δ	1.6	1.1	0.5	2.6	46.5	2550	4 x 0.80	1.88	47.5	3250	2.50	2.04	50.0	4500	282	337
240/120	Stranded Δ	1.7	1.2	0.6	2.8	52.5	3200	4 x 0.80	2.04	53.5	4100	2.50	2.20	56.0	5450	326	399
300/150	Stranded Δ	1.8	1.4	0.6	3.0	56.0	4000	4 x 0.80	2.20	57.0	4950	2.50	2.36	61.0	6400	367	455
400/185	Stranded Δ	2.0	1.6	0.7	3.4	64.0	5250	4 x 0.80	2.52	65.0	6150	3.15	2.68	70.0	8300	418	530
500/240	Stranded Δ	2.2	1.7	0.7	3.6	72.5	6500	4 x 0.80	2.68	73.5	7600	3.15	2.84	77.0	10000	470	612

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 → CONDUCTOR : Material - Aluminium
*Shape : Stranded compacted shaped as per Class-2 of IS:8130
- 2 → INSULATION : Crosslinked Polyethylene (XLPE), (Phase, Red, Yellow, Blue & Natural - Black Colour)
- 3 → INNER SHEATH : PVC as per IS : 7098 PT-1
- 4 → ARMOURING : Single layer of Galvanized Steel Round Wires/Flat Strips
- 5 → OUTER SHEATH : PVC TYPE ST-2 OF IS:5831'- OPTIONS: FR TYPE / FRLS TYPE
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.

**TABLE-8 "Swadeshi" THREE AND HALF CORE COPPER CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988**

650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Shaped	Nominal Thickness of XLPE Insulation Main / Neutral		Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
					Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.		mm	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
25/16	Stranded Δ	0.9	0.7	0.3	2.0	22.0	1080	4 x 0.80	1.40	23.0	1410	1.60	1.40	24.0	1610	119	108
35/16	Stranded Δ	0.9	0.7	0.3	2.0	24.0	1370	4 x 0.80	1.40	25.0	1725	1.60	1.40	26.0	1950	144	132
50/25	Stranded Δ	1.0	0.9	0.3	2.0	27.5	1875	4 x 0.80	1.40	28.0	2325	1.60	1.56	29.0	2580	174	162
70/35	Stranded Δ	1.1	0.9	0.4	2.2	31.0	2620	4 x 0.80	1.56	32.0	3110	2.00	1.56	34.0	3560	210	198
95/50	Stranded Δ	1.1	1.0	0.4	2.2	35.0	3475	4 x 0.80	1.56	36.0	3975	2.00	1.56	37.5	4525	252	240
120/70	Stranded Δ	1.2	1.1	0.4	2.2	39.0	4315	4 x 0.80	1.72	40.0	4960	2.00	1.72	41.0	5460	288	276
150/70	Stranded Δ	1.4	1.1	0.5	2.4	43.0	5220	4 x 0.80	1.72	44.0	5870	2.00	1.88	45.0	6570	324	318
185/95	Stranded Δ	1.6	1.1	0.5	2.6	48.0	6575	4 x 0.80	1.88	50.0	7275	2.50	2.04	50.0	8520	360	366
240/120	Stranded Δ	1.7	1.2	0.6	2.8	54.0	8400	4 x 0.80	2.04	55.0	9300	2.50	2.20	56.0	10650	414	426
300/150	Stranded Δ	1.8	1.4	0.6	3.0	57.0	10500	4 x 0.80	2.20	58.0	11500	2.50	2.36	61.0	12400	462	480
400/185	Stranded Δ	2.0	1.6	0.7	3.4	65.0	13820	4 x 0.80	2.52	66.0	14720	3.15	2.68	70.0	16875	510	546

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 CONDUCTOR : Material - Copper
*Shape : Stranded compacted shaped as per Class-2 of IS:8130
- 2 INSULATION : Crosslinked Polyethylene (XLPE), (Phase, Red, Yellow, Blue & Natural - Black Colour)
- 3 INNER SHEATH : PVC as per IS : 7098 PT-1
- 4 ARMOURING : Single layer of Galvanized Steel Round Wires/Flat Strips
- 5 OUTER SHEATH : PVC TYPE ST-2 OF IS:5831'- OPTIONS: FR TYPE / FRLS TYPE
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.



**TABLE-9 "Swadeshi" FOUR CORE ALUMINIUM CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988**

650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular Shaped ○/△	Nominal Thickness of XLPE Insulation	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.		mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid ○	0.7	0.3	1.8	15.0	160	-NA-	-NA-	-NA-	-NA-	1.40	1.24	16.5	510	34	31
4	Stranded ○	0.7	0.3	1.8	16.0	180	-NA-	-NA-	-NA-	-NA-	1.40	1.24	17.5	560	34	31
6	Solid ○	0.7	0.3	1.8	16.5	200	-NA-	-NA-	-NA-	-NA-	1.40	1.24	17.5	580	43	50
6	Stranded ○	0.7	0.3	1.8	17.5	215	-NA-	-NA-	-NA-	-NA-	1.40	1.24	18.5	625	43	50
10	Solid ○	0.7	0.3	1.8	18.0	250	-NA-	-NA-	-NA-	-NA-	1.40	1.40	19.0	700	57	67
10	Stranded ○	0.7	0.3	1.8	18.5	260	-NA-	-NA-	-NA-	-NA-	1.40	1.40	20.5	765	57	67
16	Stranded △	0.7	0.3	1.8	17.5	350	4 x 0.8	1.40	20.0	715	1.60	1.40	21.0	895	73	70
25	Stranded △	0.9	0.3	2.0	21.0	550	4 x 0.8	1.40	23.0	940	1.60	1.40	25.0	1150	94	96
35	Stranded △	0.9	0.3	2.0	23.5	680	4 x 0.8	1.40	25.0	1050	1.60	1.40	26.5	1325	113	117
50	Stranded △	1.0	0.3	2.0	26.0	875	4 x 0.8	1.56	28.0	1280	1.60	1.56	29.5	1640	133	142
70	Stranded △	1.1	0.4	2.2	30.5	1200	4 x 0.8	1.56	32.0	1700	2.00	1.56	34.0	2175	164	179
95	Stranded △	1.1	0.4	2.2	33.5	1530	4 x 0.8	1.56	35.0	2100	2.00	1.72	38.0	2775	196	221
120	Stranded △	1.2	0.5	2.4	37.5	1850	4 x 0.8	1.72	39.0	2600	2.00	1.88	42.0	3250	223	257
150	Stranded △	1.4	0.5	2.6	42.0	2280	4 x 0.8	1.88	43.5	3000	2.50	2.04	47.0	4175	249	292
185	Stranded △	1.6	0.5	2.8	46.5	2800	4 x 0.8	2.04	48.0	3650	2.50	2.20	52.0	5000	282	337
240	Stranded △	1.7	0.6	3.0	52.5	3700	4 x 0.8	2.20	54.0	4700	2.50	2.36	57.5	6050	326	399
300	Stranded △	1.8	0.7	3.2	58.0	4600	4 x 0.8	2.36	59.5	5600	3.15	2.52	64.5	7850	367	455
400	Stranded △	2.0	0.7	3.6	65.5	6000	4 x 0.8	2.68	66.5	7000	3.15	2.84	71.5	9500	418	530

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 CONDUCTOR : Material - Aluminium
*Shape : ~AL. Cond. : 6 & 10 SQ.MM - Solid circular, 16 SQ.MM & above : Stranded compacted shaped
- 2 INSULATION : Crosslinked Polyethylene (XLPE), (Red, Yellow, Blue & Black Colour)
- 3 INNER SHEATH : PVC as per IS : 7098 PT-1
- 4 ARMOURING : Single layer of Galvanized Steel Round Wires/Flat Strips
- 5 OUTER SHEATH : PVC TYPE ST-2 OF IS:5831'- OPTIONS: FR TYPE / FRLS TYPE
COLOUR OF OUTER SHEATH : BLACK. OPTIONS : any other colour as per requirement.



**TABLE-10 "Swadeshi" FOUR CORE COPPER CONDUCTOR, XLPE INSULATED
UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988**

650/1100 VOLTS

WEIGHT & DIMENSIONS

Nominal Size of Conductor	Form of Conductor Circular Shaped ○/△	Nominal Thickness of XLPE Insulation	Minimum Thickness of PVC Inner Sheath	Unarmoured Cable			Formed Wire/ Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
				Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
Sq.mm.		mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
4	Solid ○	0.7	0.3	1.8	15.0	260	-NA-	-NA-	-NA-	-NA-	1.40	1.24	16.5	610	43	36
4	Stranded ○	0.7	0.3	1.8	16.0	280	-NA-	-NA-	-NA-	-NA-	1.40	1.24	17.5	660	43	36
6	Solid ○	0.7	0.3	1.8	16.5	350	-NA-	-NA-	-NA-	-NA-	1.40	1.24	17.5	730	54	47
6	Stranded ○	0.7	0.3	1.8	17.5	365	-NA-	-NA-	-NA-	-NA-	1.40	1.24	18.5	775	54	47
10	Stranded ○	0.7	0.3	1.8	18.5	510	-NA-	-NA-	-NA-	-NA-	1.40	1.40	20.5	1010	72	62
16	Stranded △	0.7	0.3	1.8	17.5	750	4 x 0.8	1.40	20.0	1050	1.60	1.40	21.0	1275	92	79
25	Stranded △	0.9	0.3	2.0	21.0	1170	4 x 0.8	1.40	23.0	1520	1.60	1.40	25.0	1770	119	108
35	Stranded △	0.9	0.3	2.0	23.5	1550	4 x 0.8	1.40	25.0	1915	1.60	1.40	26.5	2190	144	132
50	Stranded △	1.0	0.3	2.0	26.0	2110	4 x 0.8	1.56	28.0	2510	1.60	1.56	29.5	2875	174	162
70	Stranded △	1.1	0.4	2.2	30.5	2925	4 x 0.8	1.56	32.0	3430	2.00	1.56	34.0	3900	210	198
95	Stranded △	1.1	0.4	2.2	33.5	3880	4 x 0.8	1.56	35.0	4450	2.00	1.72	38.0	5125	252	240
120	Stranded △	1.2	0.5	2.4	37.5	4825	4 x 0.8	1.72	39.0	5575	2.00	1.88	42.0	6225	288	276
150	Stranded △	1.4	0.5	2.6	42.0	6000	4 x 0.8	1.88	43.5	6710	2.50	2.04	47.0	7890	324	318
185	Stranded △	1.6	0.5	2.8	46.5	7380	4 x 0.8	2.04	48.0	8225	2.50	2.20	52.0	9580	360	366
240	Stranded △	1.7	0.6	3.0	52.5	9650	4 x 0.8	2.20	54.0	10340	2.50	2.36	57.5	12000	414	426
300	Stranded △	1.8	0.7	3.2	58.0	12025	4 x 0.8	2.36	59.5	13025	3.15	2.52	64.5	15275	462	480

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW

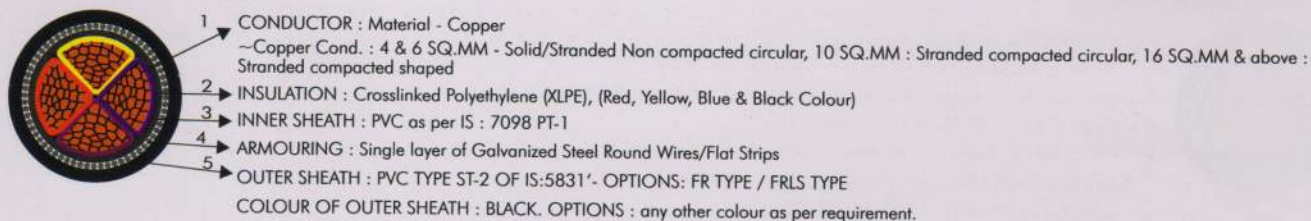




TABLE-11 "Swadeshi" 650/1100 VOLTS MULTICORE CONTROL CABLE WITH SOLID COPPER CONDUCTOR OF SIZE 1.5 SQ. MM XLPE INSULATED UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988

Number of Cores	Nominal Thickness of XLPE Insulation	Minimum Thickness of PVC Inner Sheath	Solid & Stranded										WEIGHT & DIMENSIONS		
			Unarmoured Cable			Formed Wire / Strip Armoured Cable				Round Wire Armoured Cable				Current Rating	
			Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire.	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air
No. s	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.
2	0.7	0.3	1.8	10.0	140	-NA-	-NA-	-NA-	-NA-	1.4	1.24	12.5	370	33	29
3	0.7	0.3	1.8	10.5	160	-NA-	-NA-	-NA-	-NA-	1.4	1.24	13.0	390	25	22
4	0.7	0.3	1.8	11.5	200	-NA-	-NA-	-NA-	-NA-	1.4	1.24	13.5	415	25	22
5	0.7	0.3	1.8	12.5	225	-NA-	-NA-	-NA-	-NA-	1.4	1.24	14.5	465	24	21
6	0.7	0.3	1.8	13.5	250	-NA-	-NA-	-NA-	-NA-	1.4	1.24	15.5	500	22	19
7	0.7	0.3	1.8	13.5	260	-NA-	-NA-	-NA-	-NA-	1.4	1.24	15.5	520	21	18
8	0.7	0.3	1.8	14.5	280	-NA-	-NA-	-NA-	-NA-	1.4	1.24	16.5	580	20	18
9	0.7	0.3	1.8	15.5	315	-NA-	-NA-	-NA-	-NA-	1.4	1.24	17.5	630	19	17
10	0.7	0.3	1.8	17.0	340	-NA-	-NA-	-NA-	-NA-	1.4	1.24	18.5	655	18	16
12	0.7	0.3	1.8	17.5	390	-NA-	-NA-	-NA-	-NA-	1.4	1.24	19.0	720	17	15
14	0.7	0.3	1.8	18.0	430	-NA-	-NA-	-NA-	-NA-	1.4	1.40	20.0	825	16	14
16	0.7	0.3	1.8	18.5	475	4 x 0.80	1.40	19.0	750	1.6	1.40	21.0	925	16	14
19	0.7	0.3	1.8	19.5	540	4 x 0.80	1.40	20.0	815	1.6	1.40	22.0	1010	15	13
21	0.7	0.3	2.0	20.5	600	4 x 0.80	1.40	21.0	900	1.6	1.40	23.0	1150	14	12
24	0.7	0.3	2.0	22.5	665	4 x 0.80	1.40	23.0	1000	1.6	1.40	25.0	1250	13	12
27	0.7	0.3	2.0	23.0	750	4 x 0.80	1.40	23.5	1050	1.6	1.40	25.5	1330	13	11
30	0.7	0.3	2.0	23.5	820	4 x 0.80	1.40	24.0	1125	1.6	1.40	26.0	1400	12	11
33	0.7	0.3	2.0	24.0	910	4 x 0.80	1.40	25.0	1225	1.6	1.40	27.0	1475	12	10
37	0.7	0.3	2.0	25.0	975	4 x 0.80	1.40	26.0	1325	1.6	1.40	28.0	1550	11	10
44	0.7	0.3	2.0	28.0	1150	4 x 0.80	1.40	28.5	1500	1.6	1.56	30.5	1850	11	9
52	0.7	0.3	2.0	29.0	1300	4 x 0.80	1.56	30.5	1700	1.6	1.56	32.0	2050	10	9
61	0.7	0.4	2.2	31.0	1500	4 x 0.80	1.56	32.0	1950	2.0	1.56	34.5	2550	9	8

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW

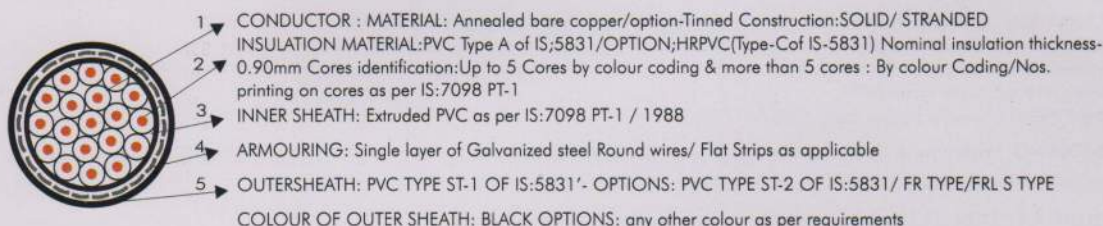


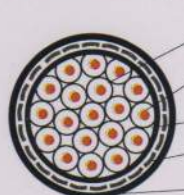


TABLE-12 "Swadeshi" 650/1100 VOLTS MULTICORE CONTROL CABLE WITH SOLID COPPER CONDUCTOR OF SIZE 2.5 SQ. MM XLPE INSULATED UNARMoured & ARMoured CABLES CONFORMING TO IS 7098 PART-1/1988

Number of Cores	Nominal Thickness of XLPE Insulation	Minimum Thickness of PVC Inner Sheath	Solid & Stranded										WEIGHT & DIMENSIONS			
			Unarmoured Cable			Formed Wire / Strip Armoured Cable				Round Wire Armoured Cable				Current Rating		
			Nominal Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Flat Strip	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	Nominal Dimension of GI Round Wire.	Minimum Thickness of PVC Outer Sheath	Approx. Overall Diameter of Cable	Approx. Weight of Cable	In Ground	In Air	
No. s	mm	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	mm	mm	mm	Kgs./Km	Amps.	Amps.	
2	0.7	0.3	1.8	11.5	185	-NA-	-NA-	-NA-	-NA-	1.4	1.24	13.5	380	39	32	
3	0.7	0.3	1.8	12.0	220	-NA-	-NA-	-NA-	-NA-	1.4	1.24	14.0	425	34	30	
4	0.7	0.3	1.8	13.0	260	-NA-	-NA-	-NA-	-NA-	1.4	1.24	14.5	500	34	30	
5	0.7	0.3	1.8	14.0	300	-NA-	-NA-	-NA-	-NA-	1.4	1.24	15.5	525	31	28	
6	0.7	0.3	1.8	15.0	340	-NA-	-NA-	-NA-	-NA-	1.4	1.24	16.5	600	29	26	
7	0.7	0.3	1.8	15.0	360	-NA-	-NA-	-NA-	-NA-	1.4	1.24	16.5	625	27	25	
8	0.7	0.3	1.8	16.0	400	-NA-	-NA-	-NA-	-NA-	1.4	1.24	18.0	700	26	24	
9	0.7	0.3	1.8	16.5	450	-NA-	-NA-	-NA-	-NA-	1.4	1.40	19.5	800	25	22	
10	0.7	0.3	1.8	17.5	475	4 x 0.80	1.24	19.0	700	1.6	1.40	21.0	875	24	21	
12	0.7	0.3	1.8	18.0	550	4 x 0.80	1.40	19.5	760	1.6	1.40	21.5	975	22	20	
14	0.7	0.3	1.8	19.0	625	4 x 0.80	1.40	20.0	850	1.6	1.40	22.0	1050	21	19	
16	0.7	0.3	2.0	20.5	680	4 x 0.80	1.40	21.5	920	1.6	1.40	23.5	1160	20	18	
19	0.7	0.3	2.0	21.5	770	4 x 0.80	1.40	22.5	1025	1.6	1.40	24.5	1250	19	17	
21	0.7	0.3	2.0	22.5	860	4 x 0.80	1.40	23.5	1140	1.6	1.40	25.5	1350	18	16	
24	0.7	0.3	2.0	24.5	950	4 x 0.80	1.40	25.5	1250	1.6	1.40	27.5	1500	17	16	
27	0.7	0.3	2.0	25.5	1050	4 x 0.80	1.40	26.5	1350	1.6	1.40	28.5	1625	16	16	
30	0.7	0.3	2.0	26.0	1150	4 x 0.80	1.40	27.5	1550	1.6	1.40	29.0	1760	16	14	
33	0.7	0.3	2.0	27.0	1250	4 x 0.80	1.40	28.5	1630	1.6	1.56	30.5	1950	15	14	
37	0.7	0.3	2.0	28.0	1350	4 x 0.80	1.40	29.5	1710	1.6	1.56	31.5	2080	15	13	
44	0.7	0.4	2.2	32.0	1650	4 x 0.80	1.56	33.0	2100	2.0	1.56	35.5	2600	14	12	
52	0.7	0.4	2.2	33.5	1950	4 x 0.80	1.56	34.5	2350	2.0	1.56	37.5	2900	13	12	
61	0.7	0.4	2.2	35.0	2150	4 x 0.80	1.56	36.0	2625	2.0	1.56	39.0	3400	12	11	
The above data is approximate and subject to manufacturing tolerances.																

The above data is approximate and subject to manufacturing tolerance.

CROSS-SECTIONAL VIEW



- 1 CONDUCTOR : MATERIAL: Annealed bare copper/option-Tinned Construction:SOLID/ STRANDED
 - 2 INSULATION MATERIAL:PVC Type A of IS:5831/OPTION:HRPVC(Type-Cof IS-5831) Nominal insulation thickness- 0.90mm Cores identification:Up to 5 Cores by colour coding & more than 5 cores :By colour Coding/Nos.
 - 3 INNER SHEATH: Extruded PVC as per IS:7098 PT-1/1988
 - 4 ARMOURING: Single layer of Galvanized steel Round wires/ Flat Strips as applicable
 - 5 OUTERSHEATH: PVC TYPE ST-1 OF IS:5831'- OPTIONS: PVC TYPE ST-2 OF IS:5831/ FR TYPE/FRL S TYPE
- COLOUR OF OUTER SHEATH: BLACK OPTIONS: any other colour as per requirements

Advantage of PVC Cables

1. A non-hygroscopic insulation almost unaffected by moisture.
2. Non-migration of compound permitting vertical installation.
3. Complete protection against most forms of electrolytic and chemical corrosion.
4. A tough and resilient sheath with excellent fire-resisting qualities.
5. Good ageing characteristics.
6. Not affected by vibration.

Advantages of XLPE Cables

1. Higher Current Rating.
2. Higher Short Circuit Rating.
3. Longer Service Life.
4. For a short time it can withstand maximum 130°C and is favourable to endure short circuit stresses.
5. It is less sensitive to the setting of the network protection.
6. Because of the thermosetting process taking place due the effect of cross linking, the crack resistance is increased.
7. Due to the chemical cross-linking internal stresses are reduced. Consequently the material is less sensitive during manufacturing process to the setting of the cooling gradient.
8. The thermal resistivity of cross-linked material is favourably low, compared to thermoplastic material.
9. The low dielectric loss is a significant advantage.
10. The excellent mechanical features of the insulation improves the protection against external effects.
11. The resistance of the XLPE to acids, alkalies is outstanding and is often compensating the adverse environmental influences.

Recommended Minimum Bending Radius for Heavy Duty Cables.

Single Core : $20 \times D$

Multicore : $15 \times D$

Where D = Diameter of Cable in mm

Recommended Safe Pulling Force with Stockings

a) For Unarmoured Cable : $P = 5 D^2$

b) For Armoured Cable : $P = 9 D^2$

Where P = Pulling Force

Where D = Diameter of Cable in mm

Recommended Safe Pulling Force when Pulled with Pulling Eye

a) For Aluminium Conductor : 30 N/mm^2

b) For Copper Conductor : 50 N/mm^2

MAJOR CUSTOMERS

- | | |
|---|---|
| <i>M/s. Agrasain Bhawan, Banbori Devi,
Haryana</i> | <i>M/s. Department of Atomic Energy, CAT
(Indore)</i> |
| <i>M/s. Aggarwal Welfare Society</i> | <i>M/s. Department of Atomic Energy.
(KOTA)</i> |
| <i>M/s. Amrapali Group</i> | <i>M/s. Delhi Metro Rail Corporation</i> |
| <i>M/s. Ansal Housing Group</i> | <i>M/s. Department of Space, Shri Hari Kota.</i> |
| <i>M/s. Airport Authority of India</i> | <i>M/s. DLF Industries Ltd.</i> |
| <i>M/s. Birla Group</i> | <i>M/s. Era Infra Engineering Ltd.</i> |
| <i>M/s. Bharat Heavy Electricals Ltd.</i> | <i>M/s. Engineers India Ltd.</i> |
| <i>M/s. Bhartia Cutler Hammer Ltd.</i> | <i>M/s. Escorts Group</i> |
| <i>M/s. Bhilai Steel Plant</i> | <i>M/s. Flex Industries Ltd.</i> |
| <i>M/s. Bhiwani Textiles Mills</i> | <i>M/s. Gammon India Ltd.</i> |
| <i>M/s. Bhilwara Processors Ltd.</i> | <i>M/s. Gujrat Heavy Chemicals Ltd.</i> |
| <i>M/s. Bhilwara Spinners Ltd.</i> | <i>M/s. Horizon Engineers</i> |
| <i>M/s. Bhushan Power & Steel Ltd.
Chandigarh</i> | <i>M/s. Hero Honda Motors Ltd.</i> |
| <i>M/s. Bohara Synthetic Pvt. Ltd.</i> | <i>M/s. Hindustan Mach. Tools Ltd.</i> |
| <i>M/s. Bharat Petroleum Corp. Ltd.</i> | <i>M/s. Hotel Le Meridien</i> |
| <i>M/s. C.P. W.D.</i> | <i>M/s. Hotel Centaur</i> |
| <i>M/s. Cochin Port Trust</i> | <i>M/s. Hotel Maurya Sheraton</i> |
| <i>M/s. Control & Switchgear Ltd.</i> | <i>M/s. Hyderabad Allwyn Ltd.</i> |
| <i>M/s. Century Pulp & Papers</i> | <i>M/s. Hindustan Fertilizer Corporation Ltd.</i> |
| <i>M/s. Chennai Port Trust</i> | <i>Ms/ IDEB</i> |
| <i>M/s. Central Coal Field Ltd. (CCL)
Ranchi, (Jharkhand)</i> | <i>M/s. Indian Telephone Ind. Ltd.</i> |
| <i>M/s. Continental Construction Co. Ltd.</i> | <i>M/s. Indian Airlines</i> |
| <i>M/s. Delhi International Airport</i> | <i>M/s. Indian Institute of Technology</i> |
| <i>M/s. Dwarkadish Group</i> | <i>M/s. Indian Railways</i> |
| <i>M/s. Dhyan Chand National Stadium</i> | <i>M/s. Indian Oil Corporation Ltd.</i> |
| <i>M/s. Derby Textiles Ltd.</i> | <i>M/s. Instrumentation Ltd.</i> |
| <i>M/s. Delhi Jal Board</i> | <i>M/s. Jindal Strips Ltd.</i> |
| <i>M/s. DLF Limited</i> | <i>M/s. Jindal Saw Ltd.</i> |
| <i>M/s. Durgapur Steel Plant.</i> | <i>M/s. Jawahar Lal Nehru Stadium</i> |
| | <i>M/s. Jai Prakash Industries Ltd.</i> |
| | <i>M/s. Kaithal Co-operative Sugar Mills Ltd.</i> |

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|---|--|
| <i>M/s. Kapoorthala Coach Factory</i> | <i>M/s. Rajasthan Petro Synthetics Ltd.</i> |
| <i>M/s. Larsen & Toubro Ltd.</i> | <i>M/s. Rajasthan Textile Mills</i> |
| <i>M/s. Lakshmi Cement</i> | <i>M/s. Rathii Alloys & Steel Ltd.</i> |
| <i>M/s. LIC of India Ltd.</i> | <i>M/s. Reliance Group</i> |
| <i>M/s. Milkfood Ltd.</i> | <i>M/s. Rohtak Sugar Mills Ltd.</i> |
| <i>M/s. Maruti Udyog Ltd.</i> | <i>M/s. Sona Textiles Ltd. (Swastik Group, Bhilwara)</i> |
| <i>M/s. Modi Group</i> | <i>M/s. Samta Synthetic Ltd.</i> |
| <i>M/s. Mangalam Cement Ltd.</i> | <i>M/s. Simplex Infrastructures Ltd.</i> |
| <i>M/s. Mathura Refinery/Panipat Refinery</i> | <i>M/s. SRS Housing</i> |
| <i>M/s. Mavana Sugar Mills Ltd.</i> | <i>M/s. Shree Cement Ltd., Rajasthan</i> |
| <i>M/s. MES</i> | <i>M/s. Steel Strips Wheel Ltd.</i> |
| <i>M/s. Nanglamal Sugar Mills</i> | <i>M/s. Shree Rajasthan Syntex Ltd.</i> |
| <i>M/s. National Hydel Power Corp. Ltd.</i> | <i>M/s. Steel Authority of India Ltd.</i> |
| <i>M/s. Nuclear Power Corp. of India Ltd.</i> | <i>M/s. Sangam Group of Industries</i> |
| <i>M/s. Nahar Spinning Mills Ltd.</i> | <i>M/s. The Metropolitan Hotel, New Delhi</i> |
| <i>M/s. N.D.P. L.</i> | <i>M/s. Tehri Hydro Development Corp. Ltd.</i> |
| <i>M/s. N.D.M.C.</i> | <i>M/s. Triveni Engineering & Industries Ltd.</i> |
| <i>M/s. N.T.P.C. (Badarpur)</i> | <i>M/s. Tehri Pulp & Papers Ltd.</i> |
| <i>M/s. N.B.C.C. Ltd.</i> | <i>M/s. Uttar Pradesh Rajkiya Nirman Nigam Ltd.</i> |
| <i>M/s. Nitin Spinners Ltd.</i> | <i>M/s. Unitech Ltd.</i> |
| <i>M/s. Odeon Builders</i> | <i>M/s. Unity Infra Projects Ltd.</i> |
| <i>M/s. Oil & Natural Gas Commission</i> | <i>M/s. Ujjain Development Authority</i> |
| <i>M/s. Omexe Constructions Co. Ltd.</i> | <i>M/s. U.K. Udaipur Udyog Ltd.</i> |
| <i>M/s. Patanjali Yogpith, Haridwar</i> | <i>M/s. U.P. State Sugar Corp. (Meerut)</i> |
| <i>M/s. Prakash Industries Ltd.</i> | <i>M/s. U.P. State Sugar Corp. (Saharanpur)</i> |
| <i>M/s. PCCPL, Punjab</i> | <i>M/s. U.P. State Bridge Corp. Ltd.</i> |
| <i>M/s. Punjab University</i> | <i>M/s. USA Embassy</i> |
| <i>M/s. PNC Infratech Ltd., U.P.</i> | <i>M/s. Vem Organic Ltd.</i> |
| <i>M/s. Phoenix Lamps Ltd.</i> | <i>M/s. Vishakhapatnam Port Trust</i> |
| <i>M/s. PSEB</i> | |
| <i>M/s. PWD</i> | |
| <i>M/s. PCI Ltd.</i> | |



FR

FRLS

FIA

TAC

IS : 694



IS : 1554



IS : 7098



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