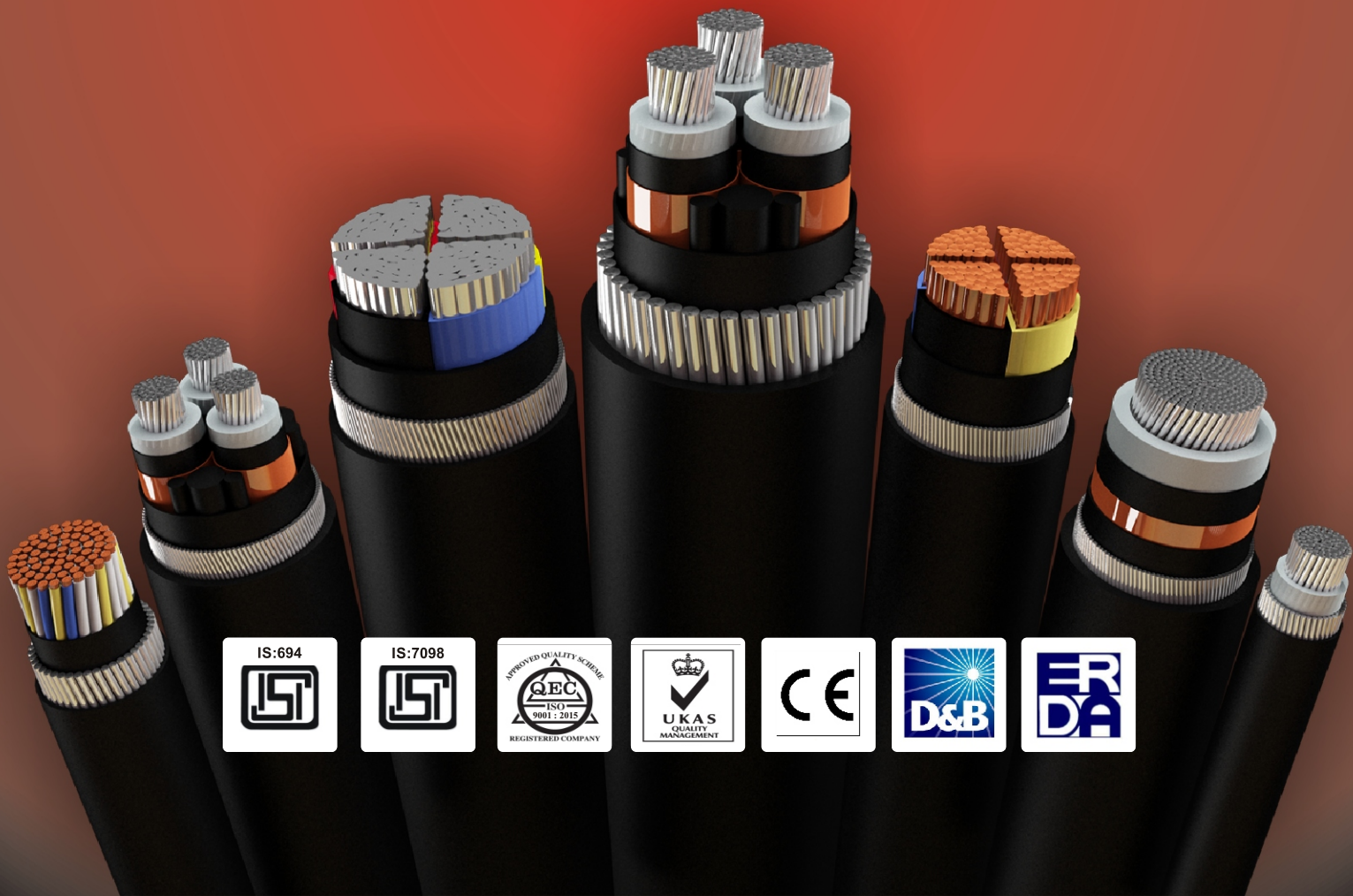


Beyond Your Expectations



WIRES & CABLES





WELCOME TO

NEON CABLES PVT. LTD.

We introduce ourselves as a leading manufacturer and supplier of electrical cables and wires under the brand name of MEGACAB. We are an ISO certified company with a strong presence in our industry. Our well established manufacturing setup is situated in the industrial area of Rajkot, Gujarat, India.

We have developed a state-of-the-art manufacturing unit that is spread over a wide area. For smoother work flow, we have segregated our infrastructure into different departments such as manufacturing, quality control, R&D and warehousing & packaging departments. Our production facility is well equipped with the ultra-modern machinery and latest technology that assists us in meeting the large-scale and urgent orders of our clients within the assured time frame.

Megacab Cables and Wires are tested as per the norms of the industry. 100% Inspection is done on all drums and all the equipments are well calibrated. Our ISO Certified laboratory is managed by a team of high skilled technicians and right from raw material to finished product, the product is checked for all quality parameters.

At Megacab, we constantly strive to bring greater happiness to our customers through best in class products and services. We at Megacab understand the importance of both aesthetics & performance. In an on-going process to improve Customer satisfaction, Megacab offers a variety of services :

- Reliable & consistent quality
- Competitive prices
- Reliable & just intime delivery
- Product development for a changing market
- Technical support for applications / Projects

Our Quality Policy



We are striving

Continuously to achieve

Quality and Excellence

Not only in all our products & Services

but also in

every aspect of our operations.

Customer Satisfaction

is our aim and motto.

Continuing Improvement

is our goal.

Dedicated Service

is our commitment to industry and to ourselves.

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INTRODUCTION



“MEGACAB” is our registered trade mark for power cables and wires insulate and sheathed with PVC or XLPE.

“MEGACAB” power cables have found a very wide field of application due to their technical and economical advantage and have proved highly satisfactory in carrying electric power in power station, distribution systems, utility networks, Railway signalling, Installation and Industrial plants (Including steel and petrochemicals).

THE MAIN ADVANTAGES OF PVC CABLES ARE AS UNDER:

- * The insulation resistance and breakdown strength are practically unaffected by moisture. These cables are thus suitable for laying even under water.
- * Cables can be overloaded for short periods without any appreciable effect on cable life.
- * The cables can be laid vertically and on steep slopes as there is no impregnating compound involved.
- * The cables are flame retardant since PVC ignites with great difficulty and is self extinguishing.
- * Due to their light weight, PVC cables are easy to install and handle. Small bending radius permits the termination of these cables in limited space.
- * Low tension PVC cables do not normally require sealing ends, when terminated indoor. The terminations can therefore be effected quickly and economically.
- * PVC cables have tough but smooth outer covering and are thus abrasion proof.
- * PVC cables are not affected by vibration.
- * PVC cables are high short circuit capacity since they can withstand a high transient temperature without any deformation of insulation or displacement of conductor.
- * PVC cables have long service life.

GENERAL INFORMATION

CONDUCTORS

The conductors for power cables are made from high conductivity EC grade Aluminium and are manufactured according to IS-1830/1984. The use of copper as conductor is allowed not only control cables, signalling cables, mining cables, etc but also for power cables as per the Government directive in force since 1991. The copper used is annealed and of high conductivity.

INSULATION

The conductors are insulated with suitable compound PVC which is applied to the conductor by extrusion process. General purpose PVC/H.R.PVC Conforming to IS:5831-1984 Core identification & Colour scheme cores are identified by colour scheme of PVC insulation.

The following colour scheme is adopted:

1. 1cores - Red, Black, Yellow or blue Red and Black
2. 2cores - Red and Black
3. 3cores - Red, Yellow and Blue
4. 4cores - Red, Yellow, blue and black (reduced neutral core is also black)
5. 5cores - Red, yellow, blue, black and light grey
6. >5cores - Two adjacent cores(counting and direction) in each layer are coloured Blue & yellow and the remaining cores are light.

Note: Control cables having more than 5 cores as identified with numbers also.

LAYING UP

All multi-core cables are laid-up as per the colour scheme indicated above the thermoplastic fillers in the inters tics wherever applicable to make the cable circular.

INNER SHEATH

For all cables having two more cores, a common covering (inner sheath) is provided over the laid up cores either by the extrusion or by wrapping of plastic or proofed tapes. Single core cables do not require inner sheath, (FRLS/LSZH/FS)

ARMOURING

Depending upon the application, the cables can be armoured. The armouring can be of steel strips/Round wire in case of cables where diameter over the inner sheath does not exceed 13mm. The armour shall consist of Galvanized Round steel wires; above this size, the armour can be Galvanized flat steel strips or Galvanized Round steel wires as per customers requirement. Armouring of PVC Mining Cables consists of Galvanized Round Steel

Wires/strips, but wherever necessary, a few tinned copper wires/strip[s] are also included to meet the conductor requirements for Mining Cables. In case of single core cables intended for use on a.c. system, the armouring shall be of non-magnetic material.

OUTER SHEATH

Over the armouring, or in case unarmoured cables, over the inner sheath (for single core cables over the insulation), a tough outer sheath of PVC cables. The trade mark "MEGACAB" along with the year/code of manufacture are embossed on the outer sheath. Wherever desired, the customer name can also be embossed on the cable. The embossing script repeats at desired length of cable. Sequential marking shall be provided if required by purchase of every meter of the cable.

TYPE DESIGNATION

The following code is used for designing the type of cable :

Aluminium Conductor	A
PVC insulation	Y
Steel round wire armour	W
Steel strip armour	F
PVC outer sheath	Y

Note:

FRLS : Fire Resistant Low Smoke

LSZH : Low Smoke Zero Halogen

FS: Fire Survival

PRODUCT RANGE



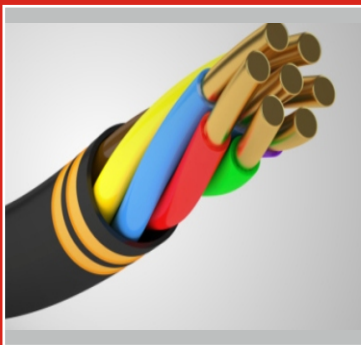
Ind. flexible cables



House wires



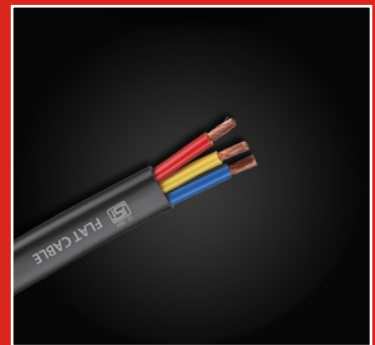
Welding cables



Ind. control cables



LT XLPE cables



Submersible flat cables





RECOMMENDATION FOR

INSTALLATION & TESTING

The following points should be kept in view during installation and testing of PVC insulated Heavy Duty Cables:

1. Before laying, the insulation of the cable should be checked with megger as a preliminary check against any transit damage.
2. The drum should be always rolled in the “direction of arrow for rolling” marked on the drum. In the absence of any such mark, the drum should be rolled in the direction same as that of inside end of the cable and opposite to that of the outside end.
3. Where the cable to be joined with existing cable, the sequence of core at the two ends to be joined should be in the opposite direction. i.e. if at our end it is clockwise direction, at the other end it should be in anticlockwise direction. This is necessary to avoid the crossing of cores while joining. This will also decide the direction in which the cable is to be pulled.
4. During the installation PVC installed heavy duty cables of 1100v grade, bending radius should not be less than the following :
 1. Single core cables :15 times the overall diameter of cable.
 2. Multicore cables :12 times the overall diameter of cable.
5. Where the cable are laid and jointed in very cold regions, both the cable and the ambient temperatures should be above 0°C and have remained so far the previous 24 hours. During such conditions, the cable should also not be bent to very small radii. This is for the reason that at very low temperature PVC Compounds become stiff and brittle. And are likely to crack and shatter when struck hard or bent to small radii.
6. A joint being the weakest point of the electric power transmission system, all jointing material and accessories like conductor ferrules, solder, insulating and protective tapes, protective filling compound, joint boxes, etc. Should be of right quality and sizes. A skilled jointer should be employed for making a joint and the working instructions of the supplier should be followed.

ARMoured CABLES

7. All bonding clamps at the joints and terminations and the armour wires should be thoroughly cleaned. The clamps should be adequately tightened. This is necessary to ensure proper electrical contact, because armour acts as the return path for earth fault current.

UNARMoured CABLES

8. All joints, terminations, armour wires and external metallic bonding should be connected to earth. In case of unarmoured cables, the external metallic earth bonding connector of adequate size should be used. Wherever possible, armour at one end of the cable should be connected to main earth system at the supplying end employing metallic conductors.

FILLING COMPOUNDS

- A) The design of the box and the composition of the filling compound should provide an effective sealing against entry of moisture to conductor ferrules and armour connectors.
- B) If hot pouring protective compound are used, the temperature of the compound while pouring should not exceed 150°C.

The following factor should be taken into account while selecting the correct size and type of cables:

1. SYSTEM VOLTAGE

- What is the system voltage and the type of system?
- Single phase, three phase, earthed or unearthed ac or dc ?

2. CURRENT CARRYING CAPACITY

The current rating is the main and basic criterion. Tables Nos. 1-22 give the carrying capacity of various types and size of cables, under different Condition of lying. These should be considered before the correct size and type of cables is decided upon. Suitable derating/uprating factor should be used depending on the conditions of laying as under.

2.1 : Depth of laying.

2.2 : Ambient temperature of ground or Air.

2.3 : Soil resistivity.

2.4 : Whether one or more groups the cables are laid together.

2.5 : Any heating source near cable run.

3. MODE OF INSTALLATION

The mode of installation determines the type of cable to be used. Electricity regulators require the use of armoured cables for underground applications. In general, armoured cables are recommended where there is any chance of mechanical damage. If subsequent mechanical damage after laying cables is not likely, cheaper, unarmoured cables can be used.

4. PERMISSION VOLTAGE DROP

For longer length of cable run is necessary to check that with the cable size selected the voltage drop does not exceed the prescribed regulations limit. A higher size cable may have to be used if the voltage drop limits are not to be exceeded.

5. LOAD CHARACTERISTICS

One should take into account the characteristics of load, it is essential to ensure that the cables selected is capable of handling temporary overloads. "MEGACAB" cables permit conductor temperatures of up to 130° C under temporary overload conditions. (if possible, the complete load cycle may be furnished).

6. SHORT CIRCUIT RATING

Short circuit rating depends on the expected level and the expected duration of the short circuit. In certain cases, a larger size of cable than the cable required for normal full load current may be needed. The cables with high KVA capacity are expected to carry short circuit of high magnitude. "MEGACAB" cables permit a short circuit temperature of 160°C.

7. ECONOMIC CONSIDERING

The most economical construction and size of cable persistent with current carrying capacity and laying conditions has to be selected. A detailed study of 3 or 4 approximate sizes is made. Actual running cost are worked out taking into consideration to loss and interest, depreciation of the total cost. The size which gives minimum running costs is to be preferred.

TESTING



TESTING is a vital part of a cable manufactured and all raw materials and finished cables are thoroughly tested to ensure quality. "MEGACAB" have a well equipped testing laboratory for carrying out electrical, mechanical and chemical tests which are required as per relevant specification. The various tests as provided in the Indian standard are carried out on "MEGACAB" cables. These are classified in three different group: (1) Routine Tests

(2) Type Tests

(3) Acceptance Tests.

ROUTINE TESTS

The test ensure routine tests which are carried out on each and every length of cable before it leaves the factory:

A) conductor resistance test: This test ensures that conductor resistance is within the specified limits thereby ensuring that the continuity of conductor is maintained throughout the cables length and that the conductor has the required cress section area . The DC resistance is measured at room temperature and is then corrected reference temperature at 20° c.

B) High voltage test: this test ensures that the insulation will safely withstand the rated voltage with permissible variation in normal operation.

MEGACAB cables of 1.1 KV grade are tested for 3KV/rms between conductors. The test is carried out as per procedure laid down in IS: 7098(part-1)1988

TYPE TESTS

These tests are carried out on samples taken from each production lot. They are carried out to prove conformity as regards the general qualities and design to the specification of particular type of cable. These tests are enumerated in the relevant Indian standard.

ACCEPTANCE TESTS

The customer can request the various acceptance test as provided in the relevant Indian standard to be carried out before accepting the cables.



XLPE



XLPE

CROSS LINKED POLYETHELENE

XLPE CABLE

(CROSS LINKED POLYETHELENE)

The XLPE insulated heavy duty cables were introduced worldwide in the mid sixties. These cables have overcome the limitations of PVC in the mid sixties. These cables have overcome the limitations of PVC Insulated Cables such as thermal degradation, poor moisture resistance and thermoplastic in nature.

TECHNICAL ADVANTAGES

- * Higher current rating, higher Short Circuit Rating Approx 1.2 times that of PVC.
- * Thermosetting in nature.
- * Higher insulation resistance – 1000 times more than PVC cables.
- * Higher resistance to moisture.
- * Better Resistance to surge currents.
- * Low Dielectric Losses.
- * Better resistance to chemicals.
- * Longer service life.
- * Comparatively higher cable operation temperature 90°C and short circuit temperature 250°C.

COMMERCIAL ADVANTAGES

- * Lower laying cost because of comparatively smaller diameter of cable and lighter weight.
- * Lower installation charges as the diameter of cable is comparatively lesser with smaller bending radius, requiring less space requirement for laying of cables.
- * One size lower cable can be used as compared to PVC insulated cable.
- * Density of XLPE is lower than PVC.
- * For longer cable length voltage drop shall be considered



WHY MEGACAB XLPE CABLES BETTER THAN PVC

NEON Cables Pvt. Ltd. Is manufacturing LT power cables with PVC or XLPE insulation of voltage grade up to 3.3KV confirming to various Indian and International Standard specifications. With “MEGACAB” Brand; with modern manufacturing plant and machineries and full fledged testing laboratory to supply quality cables.

CROSS LINKED POLYETHYLENE (XLPE)

XLPE means cross-linked polyethylene or vulcanized polyethylene. The basic material is low density polyethylene. Polyethylene is a thermoplastic material consisting of long chain of hydrocarbon molecules. At elevated temperatures these molecules tend to move relative by one another so that the material becomes increasingly and will eventually melt at the temperature around 100°C. By means of process similar to the vulcanization of rubber the polyethylene molecules can be cross-linked. The process of cross-linking or vulcanization consists of producing chemical bonds at interval between the long molecular chains to give a “ladder” effect which prevents slippage between molecules. As a result of cross-linking the material becomes heat resistant and does not soften at higher temperatures. Further it has better resistance to stress cracking and good cracking and good resistance to ageing in hot air. With the change of structure there is no adverse effect on electrical properties.

ADVANTAGES OF “MEGACAB” XLPE CABLES

- * Dielectric losses are very small.
- * Higher current carrying capacity.
- * Higher short circuit rating 250°C. As against 160°C. For PVC
- * XLPE can retain flexibility down up to -40°C.
- * Jointing and Termination is easy.
- * Light in Weight.
- * They are not prone to figure damages due to vibrations or loading cycles.
- * Has better resistance to most chemicals, oils, acids, etc.
- * Can be installed along cable routes without elevation limitations.



COMPARISON OF MAIN PROPERTIES BETWEEN PVC AND XLPE INSULATION

Characteristick	Unit	PVC	XLPE
Permittivity (50Hz, 20 °C)	-	4-6	2.3
Dielectric Loss Factor (50Hz, 20 °C)	-	0.05-0.007	0.0004
Volume Resistivity (27 °C)	ohms cm (min)	10 ¹³	10 ¹⁴
Max. Conductor Temp.	°C	70	90
Max Short Circuit Temp.	°C	160	250
Tensile Strength	N/mm2 (min)	12.5	12.5
Elongation at break	-	Excellent	Medium
Flexibility at - 10 °C	-	Poor	Good
Resistance to abrasion	-	Medium	Good

CURRENT RATING

Comparative Current Rating of 650/1100 Volts Multicore Heavy Duty PVC Insulated Cables & XLPE Insulated Cables (3,3.5 & 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 PVC 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 SECONDD DURATION FOR

* PVC & XLPE Insulated Cables ** with copper and Aluminium conductor (kAmps)

Nominal Size	PVC Insulated		XLPE Insulated	
	Copper	Aluminium	Copper	Aluminium
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

* PVC Type 'A' Insulation as per IS-5831 '84

** PVC Cables as per IS-1554 (part-1) 1988

** XLPE Cables as per IS-7098 (part-1) 1988

1. Max. conductor temperature during operation

PVC	XLPE
70°C	90°C

2. Max. Conductor Temperature during Short Circuit

PVC	XLPE
160°C	250°C

Formula relating Short Circuit Rating with duration

$$I_t = I_{sh} / t$$

Where

I_t = Short circuit Rating for t seconds

t = Duratin in seconds

I_{sh} = Short circuit rating for 1 second



TABLE-1 “MEGACAB” SINGLE CORE ALUMINIUM CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART-1/1988

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		* Normal Delivery Length
				Nominal Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable		Nominal Dimesn - sion of Aluminium flat strip	Minimum Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable	Nominal Dimesn - sion 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/mm	mm	mm	mm	kgs/km	Amps.	Amps.	Amps.
4	Solid	0.7	- NA -	1.8	7.5	60	-	-	-	-	-	-	-	-	-	36	31	1000
4	Stranded	0.7	- NA -	1.8	8.0	65	-	-	-	-	-	-	-	-	-	36	31	1000
6	Solid	0.7	- NA -	1.8	8.0	70	-	-	-	-	-	-	-	-	-	44	39	1000
6	Stranded	0.7	- NA -	1.8	8.0	75	-	-	-	-	-	-	-	-	-	44	39	1000
10	Solid	0.7	- NA -	1.8	9.0	80	1.0	-	-	-	-	-	-	-	-	59	53	1000
10	Stranded	0.7	- NA -	1.8	9.5	90	1.0	-	-	-	-	-	-	-	-	59	53	1000
16	Stranded	0.7	- NA -	1.8	10.0	115	1.0	-	-	-	-	1.4	1.24	13.0	220	76	73	1000
25	- - do - -	0.9	- NA -	1.8	12.0	155	1.2	-	-	-	-	1.4	1.24	14.0	260	96	98	1000
35	- - do - -	0.9	- NA -	1.8	13.0	180	1.2	-	-	-	-	1.4	1.24	15.0	310	114	121	1000
50	- - do - -	1.0	- NA -	1.8	14.0	240	1.3	-	-	-	-	1.4	1.24	17.0	380	135	150	1000
70	- - do - -	1.1	- NA -	1.8	16.0	310	1.4	-	-	-	-	1.4	1.24	19.0	480	166	187	1000
95	- - do - -	1.1	- NA -	1.8	17.5	385	1.4	4x0.80	1.40	21.0	560	1.6	1.40	22.0	640	198	230	1000
120	- - do - -	1.2	- NA -	1.8	19.0	470	1.5	4x0.80	1.40	22.0	660	1.6	1.40	23.5	745	225	268	1000
150	- - do - -	1.4	- NA -	2.0	21.5	600	1.7	4x0.80	1.40	23.0	750	1.6	1.40	24.5	850	253	309	1000
185	- - do - -	1.6	- NA -	2.0	23.5	710	1.9	4x0.80	1.40	25.0	900	1.6	1.40	26.5	1000	286	360	1000
240	- - do - -	1.7	- NA -	2.0	26.0	900	2.0	4x0.80	1.40	27.5	1100	1.6	1.40	29.0	1215	332	433	1000
300	- - do - -	1.8	- NA -	2.0	28.5	1075	2.1	4x0.80	1.56	30.0	1350	1.6	1.56	31.5	1475	376	501	1000
400	- - do - -	2.0	- NA -	2.2	33.0	1385	2.4	4x0.80	1.56	34.0	1725	2.0	1.56	36.5	1925	431	596	1000
500	- - do - -	2.2	- NA -	2.2	36.0	1650	2.6	4x0.80	1.56	37.5	2090	2.0	1.56	39.5	2300	490	693	500
630	- - do - -	2.4	- NA -	2.	40.0	2100	2.8	4x0.80	1.72	40.5	2525	2.0	1.72	43.0	2800	557	814	500
800	- - do - -	2.6	- NA -	2.4	46.0	2730	3.1	4x0.80	1.72	46.5	3150	2.0	1.88	49.5	3450	600	890	500
1000	- - do - -	2.8	- NA -	2.6	52.0	3350	3.3	4x0.80	1.88	54.0	3963	2.5	2.04	58.0	4475	650	1050	500

The above data is approximate and Subject to manufacturing tolerance
* Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.

TABLE-2 “MEGACAB” SINGLE CORE COPPER CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART-1/1988

Nominal Size of Conductor	Form of conductor	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		* Normal Delivery Length
				Nominal Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable		Nominal Dimesn - sion of Aluminium flat strip	Minimum Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable	Nominal Dimesn - sion 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/mm	mm	mm	mm	kgs/km	Amps.	Amps.	
4	Solid	0.7	- NA -	1.8	7.5	91	-	-	-	-	-	-	-	-	-	36	31	1000
4	Stranded	0.7	- NA -	1.8	8.0	95	-	-	-	-	-	-	-	-	-	36	31	1000
6	Solid	0.7	- NA -	1.8	8.0	115	-	-	-	-	-	-	-	-	-	44	39	1000
6	Stranded	0.7	- NA -	1.8	9.0	170	1.0	-	-	-	-	-	-	-	-	44	39	1000
10	Stranded	0.7	- NA -	1.8	9.5	220	1.0	-	-	-	-	-	-	-	-	59	53	1000
16	Stranded	0.7	- NA -	1.8	10.0	325	1.0	-	-	-	-	1.4	1.24	13.0	220	76	73	1000
25	Stranded	0.9	- NA -	1.8	12.0	420	1.2	-	-	-	-	1.4	1.24	14.0	260	96	98	1000
35	Stranded	0.9	- NA -	1.8	13.0	550	1.2	-	-	-	-	1.4	1.24	15.0	310	114	121	1000
50	Stranded	1.0	- NA -	1.8	14.0	750	1.3	-	-	-	-	1.4	1.24	17.0	380	135	150	1000
70	Stranded	1.1	- NA -	1.8	16.0	1010	1.4	-	-	-	-	1.4	1.24	19.0	480	166	187	1000
95	Stranded	1.1	- NA -	1.8	17.5	1250	1.4	4x 0.80	1.40	21.0	560	1.6	1.40	22.0	640	198	230	1000
120	Stranded	1.2	- NA -	1.8	19.0	1550	1.5	4x 0.80	1.40	22.0	660	1.6	1.40	23.5	745	225	268	1000
150	Stranded	1.4	- NA -	2.0	21.5	1900	1.7	4x 0.80	1.40	23.0	750	1.6	1.40	24.5	850	253	309	1000
185	Stranded	1.6	- NA -	2.0	23.5	2450	1.9	4x 0.80	1.40	25.0	900	1.6	1.40	26.5	1000	286	360	1000
240	Stranded	1.7	- NA -	2.0	26.0	3050	2.0	4x 0.80	1.40	27.5	1100	1.6	1.40	29.0	1215	332	433	1000
300	Stranded	1.8	- NA -	2.0	28.5	4035	2.1	4x 0.80	1.56	30.0	1350	1.6	1.56	31.5	1475	376	501	1000
400	Stranded	2.0	- NA -	2.2	33.0	5020	2.4	4x 0.80	1.56	34.0	1725	2.0	1.56	36.5	1925	431	596	1000
500	Stranded	2.2	- NA -	2.2	36.0	6250	2.6	4x 0.80	1.56	37.5	2090	2.0	1.56	39.5	2300	490	693	500
630	Stranded	2.4	- NA -	2.	40.0	7900	2.8	4x 0.80	1.72	40.5	2525	2.0	1.72	43.0	2800	557	814	500
800	Stranded	2.6	- NA -	2.4	46.0	9850	3.1	4x 0.80	1.72	46.5	3150	2.0	1.88	49.5	3450	600	890	500
1000	Stranded	2.8	- NA -	2.6	52.0		3.3	4x 0.80	1.88	54.0	3963	2.5	2.04	58.0	4475	650	1050	500

The above data is approximate and Subject to manufacturing tolerance
* Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.



TABLE-3 “MEGACAB” TWO CORE ALUMINIUM CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART-1/1988

Nominal Size of Conductor	Form of conductor Circular	Nominal thickness of XLPE Insulation for U/A	Minimum thickness of PVC Inner sheath	Unarmoured Cable			Formed Wire / Strip Armoured Cable				Round wire Armoured Cable				Current rating		* Normal Delivery Length
				Nominal Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable	Nominal Dimesn - sion of Aluminium flat strip	Minimum Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable	Nominal Dimesn - sion of 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/mm	mm	mm	mm	mm	Amps.	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	1000
4	Stranded	0.7	0.3	1.8	13.0	150	- NA -	- NA -	- NA -	- NA -	1.40	1.24	15.5	430	40	34	1000
6	Solid	0.7	0.3	1.8	13.5	170	- NA -	- NA -	- NA -	- NA -	1.40	1.24	15.5	485	50	44	1000
6	Stranded	0.7	0.3	1.8	14.0	180	- NA -	- NA -	- NA -	- NA -	1.40	1.24	16.5	545	69	59	1000
10	Solid	0.7	0.3	1.8	15.0	205	- NA -	- NA -	- NA -	- NA -	1.40	1.24	17.0	565	69	59	1000
10	Stranded	0.7	0.3	1.8	16.0	225	- NA -	- NA -	- NA -	- NA -	1.40	1.24	18.0	570	88	74	1000
16	Stranded	0.7	0.3	1.8	14.0	225	- NA -	- NA -	- NA -	- NA -	1.40	1.40	17.0	790	112	98	1000
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	1000
35	Stranded	0.9	0.3	2.0	19.0	410	- do -	1.40	20.0	690	1.60	1.40	22.0	910	138	124	1000
50	Stranded	1.0	0.3	2.0	21.0	510	- do -	1.40	22.5	820	1.60	1.40	24.0	1050	169	156	1000
70	Stranded	1.1	0.3	2.0	23.0	675	- do -	1.56	25.5	1050	1.60	1.56	27.0	1325	200	188	1000
95	Stranded	1.1	0.4	2.2	26.5	900	- do -	1.56	28.0	1300	2.00	1.56	30.5	1750	238	231	1000
120	Stranded	1.2	0.4	2.2	28.5	1050	- do -	1.56	30.5	1500	2.00	1.56	33.0	2000	262	262	500
150	Stranded	1.4	0.4	2.2	32.0	1215	- do -	1.72	34.0	1750	2.00	1.72	36.0	225	300	300	500
185	Stranded	1.6	0.5	2.4	35.5	1510	- do -	1.72	37.0	2200	2.00	1.88	40.0	2750	344	344	500
240	Stranded	1.7	0.5	2.6	39.5	1900	- do -	1.88	41.0	2600	2.50	2.04	45.0	3700	400	406	500
300	Stranded	1.8	0.6	2.8	43.5	2360	- do -	2.04	45.5	3200	2.50	2.20	49.0	4400	444	456	500
400	Stranded	2.0	0.6	3.0	49.0	3100	- do -	2.36	51.0	4000	2.50	2.36	54.4	5300	481	525	500
500	Stranded	2.2	0.6	3.4	55.5	4000	- do -	2.52	56.5	5000	3.15	2.68	61.5	7000	523	678	500
630	Stranded	2.4	0.7	3.6	61.5	5000	- do -	2.68	62.5	6050	3.15	2.84	67.5	8560	892	786	500

650/1100 VOLTS | Weight & Dimension

The above data is approximate and Subject to manufacturing tolerance

* Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.

TABLE-4 “MEGACAB” TWO CORE COPPER CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART-1/1988

Nominal Size of Conductor	Form of conductor	Nominal thickness of XLPE Insulation for U/A	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 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	Kgs/mm	mm	mm	mm	kgs/km	Amps.	Amps.
4	Solid	0.7	0.3	1.8	12.5	- NA -	1.4	1.24	14.5	480	1.40	1.24	14.5	400	40	34
4	Stranded	0.7	0.3	1.8	13.0	- NA -	1.4	1.24	15.5	252	1.40	1.24	15.5	430	40	34
6	Solid	0.7	0.3	1.8	13.5	- NA -	1.4	1.24	15.5	564	1.40	1.24	15.5	485	50	44
6	Stranded	0.7	0.3	1.8	14.0	- NA -	1.4	1.24	16.5	610	1.40	1.24	16.5	545	69	59
10	Stranded	0.7	0.3	1.8	16.0	- NA -	1.4	1.40	18.0	740	1.40	1.40	17.0	565	69	59
16	Stranded	0.7	0.3	1.8	14.0	- NA -	1.4	1.40	17.0	770	1.40	1.40	18.0	570	88	74
25	Stranded	0.9	0.3	2.0	17.0	910	1.6	1.40	20.0	1100	1.40	1.40	17.0	790	112	98
35	Stranded	0.9	0.3	2.0	19.0	1025	1.6	4.10	22.0	1350	1.60	1.40	20.0	790	112	98
50	Stranded	1.0	0.3	2.0	21.0	1435	1.6	1.56	24.0	1670	1.60	1.56	22.0	910	138	124
70	Stranded	1.1	0.3	2.0	23.0	1910	1.6	1.56	27.0	2200	1.60	1.56	24.0	1050	169	156
95	Stranded	1.1	0.4	2.2	26.5	2475	2.0	1.56	30.5	2925	1.60	1.56	27.0	1325	200	188
120	Stranded	1.2	0.4	2.2	28.5	2985	2.0	1.56	33.0	3585	2.00	1.72	30.5	1750	238	231
150	Stranded	1.4	0.4	2.2	32.0	3600	2.0	1.72	36.0	4100	2.00	1.88	33.0	2000	262	262
185	Stranded	1.6	0.5	2.4	35.5	4490	2.0	1.88	40.0	5040	2.00	2.04	36.0	225	300	300
240	Stranded	1.7	0.5	2.6	39.5	5575	2.5	2.04	45.0	7370	2.00	2.20	40.0	2750	344	344
300	Stranded	1.8	0.6	2.8	43.5	6910	2.5	2.20	49.0	9010	2.50	2.36	45.0	3700	400	406
400	Stranded	2.0	0.6	3.0	49.0	8950	2.5	2.36	54.4	1025	2.50	2.36	49.0	4400	444	456

650/1100 VOLTS | Weight & Dimension

The above data is approximate and Subject to manufacturing tolerance
* Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.



TABLE-5 “MEGACAB” THREE CORE ALUMINIUM CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART-1/1988

Nominal Size of Conductor	Form of conductor Circular	Nominal thickness of XLPE Insulation for U/A	Minimum thickness of PVC Inner sheath	Unarmoured Cable			Formed Wire / Strip Armoured Cable				Round wire Armoured Cable				Current rating		* Normal Delivery Length
				Nominal Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable	Nominal Dimens - sion of Aluminium flat strip	Minimum Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable	Nominal Dimens - sion of 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/mm	mm	mm	mm	mm	Amps.	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	1000
4	Stranded	0.7	0.3	1.8	15.5	160	- NA -	- NA -	- NA -	- NA -	1.40	1.24	16.0	510	34	31	1000
6	Solid	0.7	0.3	1.8	15.5	170	- NA -	- NA -	- NA -	- NA -	1.40	1.24	16.0	530	43	50	1000
6	Stranded	0.7	0.3	1.8	16.0	190	- NA -	- NA -	- NA -	- NA -	1.40	1.24	17.0	580	43	50	1000
10	Solid	0.7	0.3	1.8	17.0	220	- NA -	- NA -	- NA -	- NA -	1.40	1.24	18.0	640	57	67	1000
10	Stranded	0.7	0.3	1.8	18.0	230	- NA -	- NA -	- NA -	- NA -	1.40	1.24	19.0	680	57	67	1000
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	1000
25	Stranded	0.9	0.3	2.0	20.2	460	- do -	1.40	20.5	770	1.60	1.40	23.0	990	94	96	1000
35	Stranded	0.9	0.3	2.0	21.5	575	- do -	1.40	23.0	900	1.60	1.40	25.0	1150	113	117	1000
50	Stranded	1.0	0.3	2.0	24.5	700	- do -	1.40	25.5	1100	1.60	1.56	27.5	1400	133	142	1000
70	Stranded	1.1	0.3	2.0	29.0	990	- do -	1.56	30.0	1425	2.00	1.56	32.0	1950	164	179	1000
95	Stranded	1.1	0.4	2.2	32.5	1250	- do -	1.56	33.5	1735	2.00	1.56	37.5	2300	196	221	500
120	Stranded	1.2	0.4	2.2	34.5	1525	- do -	1.56	35.5	2050	2.00	1.72	39.5	2700	223	257	500
150	Stranded	1.4	0.4	2.4	38.5	1900	- do -	1.72	40.5	2350	2.00	1.88	43.5	3200	249	292	500
185	Stranded	1.6	0.5	2.6	43.5	2380	- do -	1.88	44.5	2850	2.50	2.04	48.5	4200	282	337	500
240	Stranded	1.7	0.5	2.8	48.5	3000	- do -	2.04	49.0	3550	2.50	2.20	53.0	5100	326	399	500
300	Stranded	1.8	0.6	3.0	51.5	3750	- do -	2.20	53.0	4500	2.50	2.36	57.5	5900	367	455	500
400	Stranded	2.0	0.6	3.4	59.5	4760	- do -	2.52	58.5	5700	3.15	2.68	65.0	7900	418	530	500
500	Stranded	2.2	0.6	3.6	66.0	6000	- do -	2.68	67.0	6900	3.15	2.84	73.0	9550	470	612	250
630	Stranded	2.4	0.7	3.8	72.0	7550	- do -	2.84	73.0	8700	4.00	3.00	78.0	12500	529	707	250

650/1100 VOLTS | Weight & Dimension

The above data is approximate and Subject to manufacturing tolerance

* Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.

TABLE-6 “MEGACAB” THREE CORE COPPER CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART-1/1988

Nominal Size of Conductor	Form of conductor Circular	Nominal thickness of XLPE Insulation for U/A	Minimum thickness of PVC Inner sheath	Unarmoured Cable			Formed Wire / Strip Armoured Cable				Round wire Armoured Cable				Current rating		* Normal Delivery Length
				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 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/mm	mm	mm	mm	mm	Amps.	Amps.	Amps.
4	Solid	0.7	0.3	1.8	14.0	210	- NA -	- NA -	- NA -	- NA -	1.40	1.24	15.0	530	43	36	1000
4	Stranded	0.7	0.3	1.8	15.5	235	- NA -	- NA -	- NA -	- NA -	1.40	1.24	16.0	580	43	36	1000
6	Solid	0.7	0.3	1.8	15.5	280	- NA -	- NA -	- NA -	- NA -	1.40	1.24	16.0	640	54	47	1000
6	Stranded	0.7	0.3	1.8	16.0	300	- NA -	- NA -	- NA -	- NA -	1.40	1.24	17.0	680	54	47	1000
10	Stranded	0.7	0.3	1.8	18.0	415	- NA -	- NA -	- NA -	- NA -	1.40	1.24	19.0	865	72	62	1000
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	1000
25	Stranded	0.9	0.3	2.0	20.2	920	- do -	1.40	20.5	1235	1.60	1.40	23.0	1450	119	108	1000
35	Stranded	0.9	0.3	2.0	21.5	1225	- do -	1.40	23.0	1550	1.60	1.40	25.0	1800	144	132	1000
50	Stranded	1.0	0.3	2.0	24.5	1620	- do -	1.40	25.5	2020	1.60	1.56	27.5	2320	174	162	1000
70	Stranded	1.1	0.3	2.0	29.0	2290	- do -	1.56	30.0	2720	2.00	1.56	32.0	3250	210	198	500
95	Stranded	1.1	0.4	2.2	32.5	3010	- do -	1.56	33.5	3500	2.00	1.56	37.5	4060	252	240	500
120	Stranded	1.2	0.4	2.2	34.5	3750	- do -	1.56	35.5	4320	2.00	1.72	39.5	4920	288	276	500
150	Stranded	1.4	0.4	2.4	38.5	4760	- do -	1.72	40.5	5280	2.00	1.88	43.5	5980	324	318	500
185	Stranded	1.6	0.5	2.6	43.5	5810	- do -	1.88	44.5	6385	2.50	2.04	48.5	7630	360	366	500
240	Stranded	1.7	0.5	2.8	48.5	7450	- do -	2.04	49.0	8150	2.50	2.20	53.0	9550	414	426	500
300	Stranded	1.8	0.6	3.0	51.5	9310	- do -	2.20	53.0	10060	2.50	2.36	57.5	11460	462	480	500
400	Stranded	2.0	0.6	3.4	59.5	12200	- do -	2.52	58.5	13125	3.15	2.68	65.0	15320	510	546	250

The above data is approximate and Subject to manufacturing tolerance
* Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.

650/1100 VOLTS | Weight & Dimension



TABLE-7 “MEGACAB” THREE AND HALF CORE ALUMINIUM CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART-1/1988

Nominal Size of Conductor	Form of conductor Circular	Nominal thickness of XLPE Insulation for U/A		Minimum thickness of PVC Inner sheath	Unarmoured Cable			Formed Wire / Strip Armoured Cable			Round wire Armoured Cable				Current rating		* Normal Delivery Length	
		Nominal Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable		Approx weight of Cable	Nominal Dimensn - sion of Aluminium flat strip	Minimum Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable	Nominal Dimensn - sion 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	mm	Kgs/Km	mm	mm	mm	Kgs/mm	mm	mm	mm	mm	kgs/km	Amps.	Amps.
25/16	Stranded	0.9	0.7	0.3	2.0	22.0	525	4 X 0.8	1.40	23.0	850	1.60	1.40	25.5	1050	94	96	1000
35/16	Stranded	0.9	0.7	0.3	2.0	24.0	625	- do -	1.40	25.5	980	1.60	1.40	26.5	1200	113	117	1000
50/25	Stranded	1.0	0.9	0.3	2.0	27.5	800	- do -	1.40	30.0	1240	1.60	1.56	29.5	1500	133	142	1000
70/35	Stranded	1.1	0.9	0.4	2.2	31.0	1100	- do -	1.56	30.5	1600	2.00	1.56	34.0	2050	194	179	500
95/50	Stranded	1.1	1.0	0.4	2.2	35.0	1400	- do -	1.56	33.5	1900	2.00	1.56	38.0	2450	196	221	500
120/70	Stranded	1.2	1.1	0.4	2.2	37.5	1650	- do -	1.72	35.5	2300	2.00	1.72	41.0	2800	223	257	500
150/70	Stranded	1.4	1.1	0.5	2.4	41.0	2000	- do -	1.72	40.5	2650	2.00	1.88	45.0	3350	249	292	500
185/95	Stranded	1.6	1.1	0.5	2.6	46.5	2550	- do -	1.88	44.5	3250	2.50	2.04	50.5	4500	282	337	500
240/120	Stranded	1.7	1.2	0.6	2.8	52.5	3200	- do -	2.04	53.5	4100	2.50	2.20	56.0	5450	326	399	500
300/150	Stranded	1.8	1.4	0.6	3.0	56.0	4000	- do -	2.20	57.0	4950	2.50	2.36	61.0	6400	367	455	500
400/185	Stranded	2.0	1.6	0.7	3.4	64.0	5250	- do -	2.52	65.0	6150	3.15	2.68	70.0	8300	418	530	500
500/240	Stranded	2.2	1.7	0.7	3.6	72.5	6500	- do -	2.68	73.5	7600	3.15	2.84	77.0	10000	470	612	250

The above data is approximate and Subject to manufacturing tolerance

* Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.

650/1100 VOLTS | Weight & Dimension

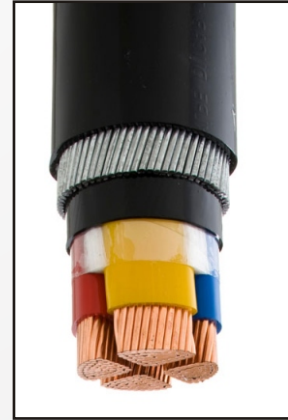


TABLE-8 “MEGACAB” THREE AND HALF CORE COPPPER CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART -1/1988

Nominal Size of Conductor	Form of conductor	Nominal thickness of XLPE Insulation for U/A	Minimum thickness of PVC Inner sheath	Unarmoured Cable			Formed Wire / Strip Armoured Cable				Round wire Armoured Cable				Current rating		* Normal Delivery Length
				Nominal Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable	Nominal Dimesn - sion of Aluminium flat strip	Minimum Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Approx weight of Cable	Nominal Dimesn - sion 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	Kgs/mm	mm	mm	mm	mm	kgs/km	Amps.	Amps.
25/16	Stranded	0.9	0.7	0.3	22.0	1080	4 X 0.8	1.40	23.0	1410	1.60	1.40	24.0	1610	119	108	1000
35/16	Stranded	0.9	0.7	0.3	24.0	1370	- do -	1.40	25.5	1725	1.60	1.40	26.0	1950	144	132	1000
50/25	Stranded	1.0	0.9	0.3	27.5	1875	- do -	1.40	28.0	2325	1.60	1.56	29.0	2580	174	162	1000
70/35	Stranded	1.1	0.9	0.4	31.0	2620	- do -	1.56	32.0	3110	2.00	1.56	34.0	3560	210	198	500
95/50	Stranded	1.1	1.0	0.4	35.0	3490	- do -	1.56	36.0	3930	2.00	1.56	37.5	4525	252	240	500
120/70	Stranded	1.2	1.1	0.4	37.5	4315	- do -	1.72	40.0	4960	2.00	1.72	41.0	5460	288	276	500
150/70	Stranded	1.4	1.1	0.5	41.0	5220	- do -	1.72	44.0	5870	2.00	1.88	45.0	6570	324	318	500
185/95	Stranded	1.6	1.1	0.5	46.5	6575	- do -	1.88	50.0	7275	2.50	2.04	50.0	8520	360	366	500
240/120	Stranded	1.7	1.2	0.6	52.5	8400	- do -	2.04	55.0	9300	2.50	2.20	56.0	10650	414	426	500
300/150	Stranded	1.8	1.4	0.6	56.0	10500	- do -	2.20	58.0	11500	2.50	2.36	61.0	12400	462	480	500
400/185	Stranded	2.0	1.6	0.7	65.0	13820	- do -	2.52	66.0	14720	3.15	2.68	70.0	16875	510	546	250

650/1100 VOLTS | Weight & Dimension



The above data is approximate and Subject to manufacturing tolerance
 * Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.



TABLE-9 “MEGACAB” FOUR CORE ALUMINIUM CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART-1/1988

Nominal Size of Conductor	Form of conductor Circular	Nominal thickness of XLPE Insulation for U/A	Minimum thickness of PVC of Inner sheath	Unarmoured Cable			Formed Wire / Strip Armoured Cable				Round wire Armoured Cable				Current rating		* Normal Delivery Length	
				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	Kgs/mm	mm	mm	mm	mm	kgs/km	Amps.	Amps.	
4	Solid	0.7	0.3	1.8	15.0	160	- NA -	- NA -	- NA -	- NA -	- NA -	1.40	1.24	16.5	510	34	31	1000
4	Stranded	0.7	0.3	1.8	16.0	180	- NA -	- NA -	- NA -	- NA -	- NA -	1.40	1.24	17.5	560	34	31	1000
6	Solid	0.7	0.3	1.8	16.5	200	- NA -	- NA -	- NA -	- NA -	- NA -	1.40	1.24	17.5	580	43	50	1000
6	Stranded	0.7	0.3	1.8	17.5	215	- NA -	- NA -	- NA -	- NA -	- NA -	1.40	1.24	18.5	625	43	50	1000
10	Solid	0.7	0.3	1.8	18.0	250	- NA -	- NA -	- NA -	- NA -	- NA -	1.40	1.40	19.0	700	57	67	1000
10	Stranded	0.7	0.3	1.8	18.5	260	- NA -	- NA -	- NA -	- NA -	- NA -	1.40	1.40	20.5	765	57	67	1000
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	1000	
25	Stranded	0.9	0.3	2.0	21.0	550	- do -	1.40	23.0	940	1.60	1.40	25.0	1150	94	96	1000	
35	Stranded	0.9	0.3	2.0	23.5	680	- do -	1.40	25.0	1050	1.60	1.40	26.5	1325	113	117	1000	
50	Stranded	1.0	0.3	2.0	26.0	875	- do -	1.56	28.0	1280	1.60	1.56	29.5	1640	133	142	1000	
70	Stranded	1.1	0.4	2.2	30.5	1200	- do -	1.56	32.0	1700	2.00	1.56	34.0	2175	164	179	1000	
95	Stranded	1.1	0.4	2.2	33.5	1530	- do -	1.56	35.0	2100	2.00	1.72	38.0	2775	196	221	500	
120	Stranded	1.2	0.5	2.4	37.5	1850	- do -	1.72	39.0	2600	2.00	1.88	42.0	3250	223	257	500	
150	Stranded	1.4	0.5	2.6	42.0	2280	- do -	1.88	43.5	3000	2.50	2.04	47.0	4175	249	292	500	
185	Stranded	1.6	0.6	2.8	46.5	2800	- do -	2.04	48.0	3650	2.50	2.20	52.0	5000	282	337	500	
240	Stranded	1.7	0.6	3.0	52.5	3700	- do -	2.20	54.0	4700	2.50	2.36	57.5	6050	326	399	500	
300	Stranded	1.8	0.6	3.2	58.0	4600	- do -	2.52	59.5	5600	3.15	2.52	64.5	7850	367	455	500	
400	Stranded	2.0	0.7	3.6	65.5	6000	- do -	2.68	66.5	7000	3.15	2.84	71.5	9500	418	530	500	

The above data is approximate and Subject to manufacturing tolerance

650/1100 VOLTS | Weight & Dimension

* Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.

TABLE-10 “MEGACAB” FOUR CORE COPPER CONDUCTOR, XLPE INSULATED

UNARMoured & ARMoured CABLE CONFORMING TO IS 7098 PART-1/1988

Nominal Size of Conductor	Form of conductor	Nominal thickness of XLPE Insulation for U/A	Minimum thickness of PVC Inner sheath	Unarmoured Cable			Formed Wire / Strip Armoured Cable			Round wire Armoured Cable				Current rating		* Normal Delivery Length
				Nominal Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Kgs/Km	Nominal Dimension of Aluminium flat strip	Minimum Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	Kgs/mm	Nominal Dimension of Aluminium Round wire	Minimum Thickness of PVC Outer Sheath	Approx Overall Diameter of Cable	In Ground	In Air	
Sq. mm.	-	mm	mm	mm	mm	Kgs/Km	mm	mm	mm	mm	mm	mm	mm	Amps.	Amps.	Amps.
4	Solid	0.7	0.3	1.8	15.0	260	- NA -	- NA -	- NA -	- NA -	1.40	1.24	16.5	43	36	1000
4	Stranded	0.7	0.3	1.8	16.0	280	- NA -	- NA -	- NA -	- NA -	1.40	1.24	17.5	43	36	1000
6	Solid	0.7	0.3	1.8	16.5	350	- NA -	- NA -	- NA -	- NA -	1.40	1.24	17.5	54	47	1000
6	Stranded	0.7	0.3	1.8	17.5	365	- NA -	- NA -	- NA -	- NA -	1.40	1.24	18.5	54	47	1000
10	Stranded	0.7	0.3	1.8	18.5	510	- NA -	- NA -	- NA -	- NA -	1.40	1.40	20.5	72	62	1000
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	92	79	1000
25	Stranded	0.9	0.3	2.0	21.0	1170	- do -	1.40	23.0	1520	1.60	1.40	25.0	119	108	1000
35	Stranded	0.9	0.3	2.0	23.5	1550	- do -	1.40	25.0	1915	1.60	1.40	26.5	144	132	1000
50	Stranded	1.0	0.3	2.0	26.0	2110	- do -	1.56	28.0	2510	1.60	1.56	29.5	174	162	1000
70	Stranded	1.1	0.4	2.2	30.5	2925	- do -	1.56	32.0	3430	2.00	1.56	34.0	210	198	1000
95	Stranded	1.1	0.5	2.2	33.5	3880	- do -	1.56	35.0	4450	2.00	1.72	38.0	252	240	1000
120	Stranded	1.2	0.5	2.4	37.5	4825	- do -	1.72	39.0	5575	2.00	1.88	42.0	288	276	500
150	Stranded	1.4	0.6	2.6	42.0	6000	- do -	1.88	43.5	6710	2.50	2.04	47.0	324	318	500
185	Stranded	1.6	0.6	2.8	46.5	7380	- do -	2.04	48.0	8225	2.50	2.20	52.0	360	366	500
240	Stranded	1.7	0.6	3.0	52.5	8950	- do -	2.20	54.0	10340	2.50	2.36	57.5	414	426	500
300	Stranded	1.8	0.7	3.2	58.0	12025	- do -	2.36	59.5	13025	3.15	2.52	64.5	462	480	250

650/1100 VOLTS | Weight & Dimension

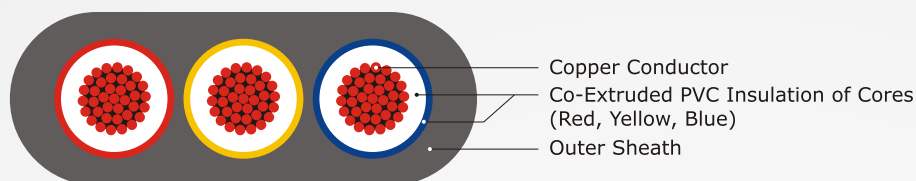
The above data is approximate and Subject to manufacturing tolerance

* Delivery Length tolerance +/- 5 %. Length more than normal as per customer request.



Flat Cable & House Wire

3 Core Flat Cables as per IS 694:2010 with ISI mark



"Megacab" 3 Core Flat Cables have been specifically designed for submersible pump motors. It is manufactured keeping in mind tough and difficult conditions in which they have to operate.

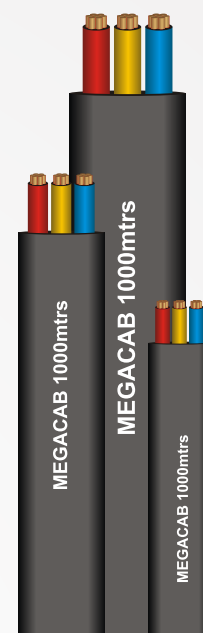
Conductors : The conductors are drawn from bright electrolytic grade copper annealed and bunched together & have 99.97 % Purity.

Insulation : Bunched conductors are insulated with specially formulated PVC Compound having high insulation resistance values.

Sheathing : 3 Core are in parallel position and sheathed with a special grade of PVC Compound which is impervious to water, grease, oil etc.

3 CORE FLAT CABLES FOR SUBMERSIBLE PUMP MOTORS

CONDUCTOR		PVC INSULAION		PVC SHEATH				Max. D/C Resistance @ 20°C Ohm. / km.
Nominal c/s Area Of Conductor In Sq. mm.	Counductor Construction No. /mm.	Nominal Insulation Thickness in mm.	Approx. Core Dia. In mm.	Nominal Thickness In mm.	Overall Dimensions		Current Rating At. 40°C In Amps.	
					Height mm.	Width mm.		
1.00	14/0.30	0.7	2.7	0.9	5.20	10.30	11	18.10
1.50	22/0.30	0.7	3.2	0.9	5.60	12.00	14	12.10
2.50	36/0.30	0.8	3.6	1.0	6.40	14.00	18	7.41
4.00	56/0.30	0.8	4.2	1.1	7.40	15.80	26	4.61
6.00	84/0.30	0.9	5.3	1.2	7.90	18.60	31	3.08
10.00	140/0.30	1.0	6.7	1.4	9.90	23.70	42	1.83
16.00	226/0.30	1.0	8.2	1.4	11.4	28.00	57	1.15



House Wire

Conductor Area	Insulation Thickness mm.	Number Nominal Dia of strands	Approx overall diameter	DC Conductor Resistance ohm/km at 20 C (Max)
0.5	0.6	16/0.2	2.3	39.00
0.75	0.6	24/0.2	2.5	26.00
1	0.6	14/0.3	2.7	18.1
1.5	0.7	22/0.3	3.1	12.1
2.5	0.8	36/0.3	3.7	7.41
4	0.8	56/0.3	4.1	4.95
6	0.8	84/0.3	4.8	3.3



Colours : Red Yellow, Blue, Black, Green, Grey

Packing: 90 mtrs coils packed in protective cartons. Also available coils as per customer need.



Control Cable

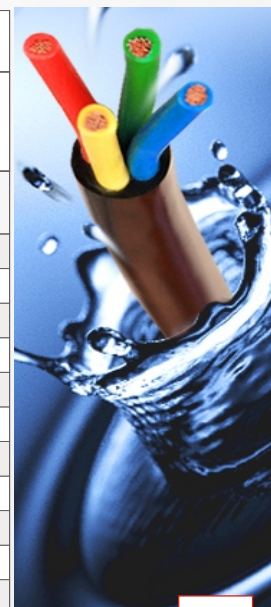
With firm commitment to quality, we are manufacturing, supplying and exporting flexible control cables. These cables are widely used to carry control signal of low power strength and are subjected to severe working temperature conditions such as boilers, exposed to oil, chemical and heaters.



Cable Code (YY/YWY/YFY)		Unarmoured (YY)				Armoured with Flat Strips / Round Wires (YFY/YWY)								Approx Net wt of Cable (kg/km)			
No. of Cores	Min. thick of inner sheath	Nom thick of Outer sheath		Approx overall Diameter		Diameter of Round wire		Diameter of Flat strip		Min thick of Outer sheath		Approx overall Diameter		Unarmoured (YY)		Wt of cable armoured Approx	
(Nos.)	(mm)	(mm)		(mm)		(mm)		(mm)		(mm)		(mm)		(kg/km)		(kg/km)	
Sq. Mm >	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5	1.5 2.5
2	0.30 0.30	1.8 1.8	1.8 1.8	11.5 12.5	12.5 13	1.40 1.40	1.40 1.40	- -	- -	1.24 1.24	1.24 1.24	13.0 13.5	15.0 15.5	170 195	215 250	385 420	455 500
3	0.30 0.30	1.8 1.8	1.8 1.8	12 12.5	13 14	1.40 1.40	1.40 1.40	- -	- -	1.24 1.24	1.24 1.24	13.5 14.0	15.5 16.0	195 225	250 290	420 460	500 575
4	0.30 0.30	1.8 1.8	1.8 1.8	12.5 13.5	14 15	1.40 1.40	1.40 1.40	- -	- -	1.24 1.24	1.24 1.24	14.0 15.0	16.0 16.5	225 240	290 320	460 500	575 620
5	0.30 0.30	1.8 1.8	1.8 1.8	13.5 14.5	15 16	1.40 1.40	1.40 1.40	- -	- -	1.24 1.24	1.24 1.24	15.0 16.0	16.5 17.5	240 280	320 375	500 565	620 705
6	0.30 0.30	1.8 1.8	1.8 1.8	14.5 15	16 16.5	1.40 1.40	1.40 1.40	- -	- -	1.24 1.24	1.24 1.24	16.0 18.0	17.5 18.0	280 300	375 400	565 580	705 720
7	0.30 0.30	1.8 1.8	1.8 1.8	15 16	17 17	1.40 1.40	1.40 1.40	- -	- -	1.24 1.24	1.24 1.24	18.0 17.0	18.0 19.5	300 330	400 450	580 630	720 840
8	0.30 0.30	1.8 1.8	1.8 1.8	16 16	17 19	1.40 1.40	1.40 1.40	- -	- -	1.24 1.24	1.24 1.40	17.0 -	19.5 19.5	330 -	450 505	630 -	840 800
9	- 0.30	- 1.8	- 1.8	- 19	- 19	- 1.40	- 1.40	- -	- -	- 1.40	- 1.40	- -	19.5 -	- 505	- 505	- 800	- 800
10	0.30 0.30	1.8 1.8	1.8 1.8	17 17.5	20 21	1.40 -	1.40 -	4 X 0.8 -	4 X 0.8 -	1.40 1.40	1.40 1.40	18.5 19.0	20.0 21.0	365 395	510 585	695 765	825 900
12	0.30 0.30	1.8 1.8	1.8 1.8	17.5 18	21 21.5	- -	- -	4 X 0.8 -	4 X 0.8 -	1.40 1.40	1.40 1.40	19.0 18.0	21.0 21.5	395 445	585 660	765 665	900 1010
14	0.30 0.30	1.8 1.8	1.8 1.8	18 18.5	21.5 22.5	- -	- -	4 X 0.8 -	4 X 0.8 -	1.40 1.40	1.40 1.40	18.0 19.0	21.5 23.0	445 495	660 750	665 750	1010 1075
16	0.30 0.30	2.0 2.0	2.0 2.0	18.5 19.5	22.5 24	- -	- -	4 X 0.8 -	4 X 0.8 -	1.40 1.40	1.40 1.40	19.0 20.0	23.0 24.0	495 520	750 850	750 825	1075 1220
19	0.30 0.30	2.0 2.0	2.0 2.0	19.5 21	24 27.5	- -	- -	4 X 0.8 -	4 X 0.8 -	1.40 1.40	1.40 1.40	20.0 21.0	24.0 27.5	520 590	850 1060	825 905	1220 1480
24	0.30 0.30	2.0 2.0	2.0 2.0	21 24	27.5 28	- -	- -	4 X 0.8 -	4 X 0.8 -	1.40 1.40	1.40 1.40	21.0 24.0	27.5 28.0	590 740	1060 1160	905 1005	1480 1610
27	0.30 0.30	2.0 2.0	2.0 2.0	24 24.5	28 29	- -	- -	4 X 0.8 -	4 X 0.8 -	1.40 1.40	1.40 1.56	24.0 24.5	28.0 29.0	740 800	1160 1260	1005 1195	1610 1740
30	0.30 0.30	2.0 2.0	2.0 2.0	24.5 25	29 31.5	- -	- -	4 X 0.8 -	4 X 0.8 -	1.40 1.40	1.56 1.56	24.5 25.0	29.0 32.0	800 870	1260 1560	1195 1260	1740 2030
37	0.30 0.40	2.0 2.0	2.0 2.0	25 25	31.5 31.5	- -	- -	4 X 0.8 -	4 X 0.8 -	1.40 1.40	1.56 1.56	25.0 25.0	32.0 32.0	870 870	1560 1560	1260 1260	2030 2030

Ind. Flexible cable

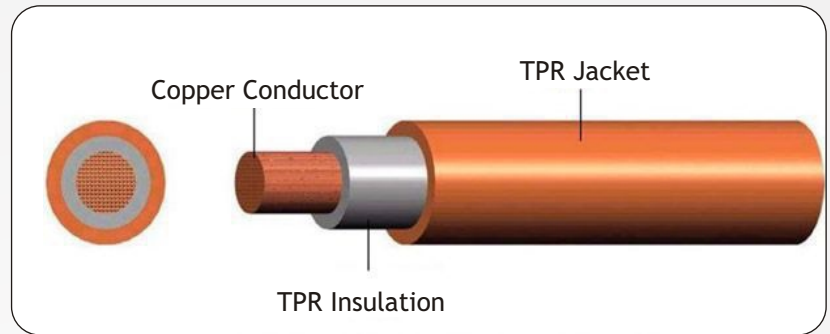
CONDUCTOR		PVC INSULATION		PVC SHEATH					
Nominal Area	Nos & Dia of wire	Nominal Thickness	Nominal Core Dia	Nominal Thickness			Overall Dia		
Sq. mm.	Nos/mm	mm	mm	2 core	3 core	4 core	2 core	3core	4 core
1.50	30/0.25	0.60	2.90	0.90	0.90	1.00	7.60	8.10	9.00
2.50	50/0.25	0.70	3.50	1.00	1.00	1.00	9.00	9.60	10.50
4.00	56/0.30	0.80	4.30	1.00	1.00	1.00	10.60	11.30	12.40
6.00	84/0.30	0.80	5.10	1.15	1.15	1.40	12.60	13.40	15.20
10.00	140/0.30	1.00	6.60	1.40	1.40	1.40	18.80	17.00	22.20
16.00	126/0.40	1.00	8.00	1.40	1.40	1.40	18.80	20.10	22.20
25.00	196/0.40	1.20	10.00	2.00	2.00	2.00	24.00	25.60	28.20
35.00	276/0.4	1.20	11.10	2.00	2.00	2.00	26.30	28.00	31.00
50.00	396/0.4	1.40	13.40	2.00	2.00	2.00	30.90	33.00	36.20
70.00	360/0.5	1.40	15.10	2.00	2.00	2.40	34.20	37.00	41.00
95.00	485/0.5	1.60	17.90	2.00	2.20	2.40	40.20	43.50	47.80



Welding cables

FEATURES

- Outstanding toughness & durability
- High resistance to cuts, tears and abrasion
- Resistance to oil, solvents and chemicals
- Excellent ozone and weather resistance



Application

Welding : Designed for secondary (high current) connection to automatic or hand held metal are welding electrode. It is suitable use under rugged condition on assembly lines and conveyer system, in machine tool and automatically operated line and spot welding machine.

Power: Earthing/return leads, power feeds to electrolytic plating process, busbar connection, transformers, generators, aircraft servicing equipments etc.

Construction

- **Conductor:** High conductivity, bare annealed copper flexible conductor
- **Sheath:** Double sheathed with specially developed thermoplastic elastomer (TPR/TPE), outer layer is orange.

Current Rating

The maximum current ratings of flexible cables for different duty cycles are based on an ambient air temperature of 25 C and maximum conductor temperature of 90 C. The percentage duty cycles for various process and application are as follows :

1. Automobile welding : Up to 100%
2. Semi automatic welding : 30% to 85%
3. Manual Welding : 0% to 60%
4. Very intermitted or occassional welding : Up to 20%

Voltage Drop : When total cable lengths in excess of 15 mtrs are involved, it may be necessary to use cables of larger cross section to ensure that the voltage drop is not excessive and welding currents are maintained at adequate level

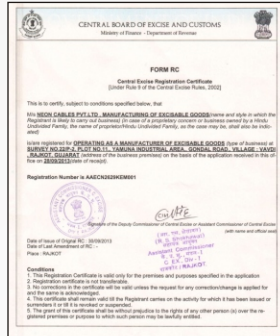
Cross Sectional area	Max c Conductor Resistance at 20° C	Nominal thickness of sheath	Minimum overall diameter	Maximum overall diameter	Current Ratings					
					Welding Application			Duty Cycle		Non Welding Application
					100%	85%	60%	30%	20%	
Sq. mm.	ohmkm	mm	mm	mm	amp	amp	amp	amp	amp	amp
10	1.91	2.0	7.8	10.0	105	115	135	190	235	110
16	1.21	2.0	9.0	11.5	135	145	175	245	302	138
25	0.78	2.0	10.0	13.0	180	195	230	330	402	187
35	0.554	2.0	11.5	14.5	225	245	290	410	503	233
50	0.386	2.2	13.0	17.0	285	310	370	520	637	295
70	0.272	2.4	15.0	19.0	355	385	460	650	794	372
95	0.206	2.6	17.5	21.5	430	470	560	790	961	449
120	0.161	2.8	19.5	24.0	500	540	650	910	1118	523
150	0.129	3.0	21.5	26.0	580	620	740	1040	1476	608
185	0.106	3.2	23.0	29.0	660	715	850	1200	1297	690
240	0.0801	3.4	27.0	32.0	710	770	916	1296	1587	744
300	0.0641	3.6	30.0	35.0	800	850	1035	1450	1790	840
400	0.0486	3.8	33.0	39.0	925	1000	1195	1690	2070	970



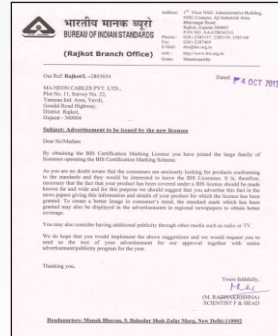
Our Certificates & Approvals



CE CERTIFICATE



EXCISE CERTIFICATE



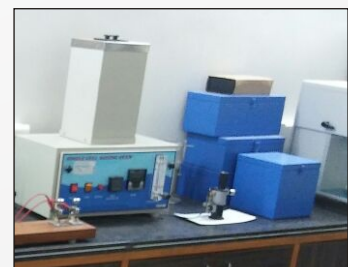
ISI CERTIFICATE



ISO CERTIFICATE



Our testing Lab





NEON CABLES PVT. LTD.

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