

ALTOCAB<sup>®</sup>

# **About us**



Karan Cable Industries, is a manufacturer and consolidated source of standard and customized electronic wires & cables, power cables and moulded cords. Electronic wires are used to carry data or low voltage signal, while Electrical wires are used to carry current at high voltage.

Through our experience of over 30 glorious years in this field, our brand, ALTOCAB Cables has served virtually every industry and market. Our focus on quality & customer satisfaction is second to none, and our team ensures all aspects of the product design are met or exceeded to deliver superior performance. Our certifications include CE, RoHS, ISI & ERDA which enable us to provide our customers with a wide range of certified products as per Indian & International standards.

Our clients consider us to be their strength & trusted supplier, as we provide superior quality products for a wide variety of applications that enhance & optimize their projects. Our belief is, "The cost is long forgotten, but the quality is remembered forever".

Our manufacturing process includes acquiring of Raw Material, Extrusion, Stranding, Shielding, Outer Jacketing, testing and Final Packaging & dispatch. These processes are ably managed by our staff who monitor each step, ensuring that all products are made as per the standard with least defects. Every cable produced is tested at our in-house lab by the QC team, to ensure that it meets industry specifications or customers' requirements.

Our tag line "The Quality Of Being Infinite", is well supported by following total quality management and having being certified ISO 9001:2015

Our core values of innovation, dedication, integrity & ownership are reflected both in our employees' work ethic and office space.

Our strength of adapting to customer needs & the ever-changing market sets us apart from others and is a major part of our success. We aim to get even better & achieve greater heights in delivering best quality products & superior customer service. As we enter the wire industry, our vision is to be an integrated supplier across the world for all kinds of wires, cables & cords.



ALTOCAB's House Wires are insulated with special PVC compound, specially formulated to provide added safety. Altocab wire are energy efficient as only Electrolytic Copper Conductors of 99.97% purity, having very low resistance are used thus ensuring low energy losses. We are manufacturing following three types of house wires.

Nominal Area of Conductor	Number/Nom. Dia. of Wires (Nom)	Thickness of Insulation	Overall Diameter Max.	Current Rating	Resistance (Max.) D.C. at 20°C
Sq. mm	No./ mm	No./mm	mm	Amps.	Ohms / Km
0.75	24/0.20*	0.6	2.50	7	26.00
1.0	14/0.30*	0.7	2.80	12	18.10
1.5	22/0.30*	0.7	2.8	16	12.10
2.5	36/0.30*	0.8	3.5	22	7.41
4.0	56/0.30*	0.8	4.2	28	4.95
6.0	84/0.30*	0.8	5.00	36	3.30

The size of the conductor is determined by its resistance. The construction of the conductor is as per market convention and should be treated as a guideline only, it may very within the limits of IS: 8130: 1994 with its related classes and tables.

Standard Colours: Red, Yellow, Blue, Black and Green (For Earthing).

Supplied in 90 / 180 meter coil in attractive cartons. Confirm to TS 694:2010.

#### 1 FR Wire

Altocab's House Wires are insulated with flame retardant (FR) PVC compound, specially formulated to provide added safety. This FR PVC Compound has a high oxygen and temperature index. These properties help in restricting the spread of fire even at very high ambient temperatures. This special compound also offers high insulation resistance and ideletric strength.

Additional FR Protected Wire Properties

Characterstics	Standard	Typical Values
Critical Oxygen Index	ASTM-D 2863	More than 29%
Temperature Index	ASTM-D 2863	More than 250°C





#### 2 FRLS

Allocab's FRLS Wires are insulated with FLAME RETARDANT LOW SMOKE PVC compound. Copper conductor, PVC insulated wires are extensively used in residential and commercial buildings. Altocab with its enhanced Fire Retardant properties of PVC adds special additives in the formulation of this wire. Altocab Wires have oxygen index of 30% which increases its efficiency in fire flighting. Altocab RRLS Wires have a less than 60% of smoke density rating property with standard of ASTM D 2863. Altocab Wires are energy efficient as only Electrolytic Copper of 99.99% purity having very low resistance are used thus ensuring low energy losses.

#### Additional FRLS Properties

Characterstics	Standard	Typical Values	
Oxygen Index	ASTM-D 2863	More than 29%	
Temperature Index	ASTM-D 2863	More than 250 C	
Smoke Density Rating	ASTM-D 2863	Less than 60%	



#### 3 HRFR

Allocab's HRFR (Heat Resistant Flame Retardant) cables are manufactured using a special PVC compound which is Flame Retardant. It is insulated and Sheathed and Completely safe for users as well as installers. Allocab Cables are Flame Retardant and have Capacity to bear 105 C temperature. Allocab wires are energy efficient as only Electrolytic Copper Conductors of 99.97% purity having very low resistance are used thus ensuring low energy losses









More than 99.95% are Copper Conducto



# **INDUSTRIAL CABLE**

#### **PVC INSULATED INDUSTRIAL SINGLE & MULTI CORE FLEXIBLE CABLES**

PVC compound Insulated Industrial Single Core and Multi Core Flexible Cables have a wide range of application in machine tools, appliances, control panels, machinery and industries of every nature. The conductors, drawn from 99.97% bright electrolytic grade copper with more than 100% conductivity, are annealed and bunched together. The conductors are insulated with a PVC compound with high insulation resistance and dielectric strength, formulated and manufactured in house.

In case of Multi Core Cables, the insulated cores are laid up to form the core assembly. The inner cores are coded for ease of identification as per National/ International coding practices. The sheathing is provided with a specially formulated PVC compound to facilitate not only ease in stripping but also to withstand mechanical abrasion while in use.

The Single Core and Multi Core sheathed Industrial Cables are manufactured as per IS 694:2010, in sizes from 0.5 sq. mm. to 300 sq. mm. in Single Core, and in sizes 0.5 sq. mm. to 2.5 sq. mm. up to 25 cores. These sizes carry the prestigious ISI mark. The rest of the sizes generally confirms to IS 694:2010. Cables as per BS 6004 and BS 6500 are also available for the export market.

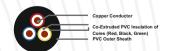




TABLE 1: PVC INSULATED SINGLE CORE UN-SHEATHED/SHEATHED FLEXIBLE CABLES AS PER IS 694:2010 VOLTAGE GRADE UPTO 1100 VOLTS HAVING CLASS 5 CONDUCTOR

	Conductor			Insu	lation		
Nominal Cross	as per IS 8130 Current		Single Core	Unsheathed	Single Core Sheathed		
Section Area of Conductor	Max. Resistance @ 20°C	Rating DC or AC	Nom. Thickness	Overall Diameter (Approx.)	Nom. Thickness	Overall Diameter (Approx.)	
Sq.mm	Ω/km	Amp	mm	mm	mm	mm	
0.5	39.00	4	0.6	2.00	0.9	4.00	
0.75	26.00	7	0.6	2.30	0.9	4.25	
1.0	19.50	12	0.6	2.45	0.9	4.85	
1.5	13.30	15	0.6	2.75	0.9	5.15	
2.5	7.98	20	0.7	3.50	1.0	5.90	
4	4.95	27	0.8	4.10	1.0	6.70	
6	3.30	35	0.8	4.75	1.1	7.35	
10	1.91	46	1.0	6.00	1.3	8.60	
16	1.21	62	1.0	7.10	1.4	9.90	
25	0.780	80	1.2	8.80	1.4	11.60	
35	0.554	102	1.2	10.10	1.6	13.30	
50	0.386	138	1.4	12.50	2.0	16.50	
70	0.272	214	1.4	13.90	2.2	18.30	
95	0.206	260	1.6	15.90	2.4	20.70	
120	0.161	305	1.6	17.80	2.5	22.80	
150	0.129	355	1.8	19.80		-	
185	0.106	415	2.0	22.00		-	
240	0.0801	500	2.2	26.00		-	

TABLE 2 : MULTI CORE PVC INSULATED & SHEATHED FLEXIBLE CIRCULAR CORDS
AS PER IS 694:2010 HAVING CLASS 5 CONDUCTOR AS PER IS 8130

No10	Unit	Nominal C	Cross Section	n Area of Cor	nductor in So	g. mm
No. of Cores	Unit	0.50	0.75	1.00	1.50	2.50
Max. Resistance at 20°C	Ω/km	39	26	19.5	13.3	7.98
Insulation						
Nom. Thickness	mm	0.60	0.60	0.60	0.60	0.70
Overall Diameter (Approx.)	mm	2.00	2.30	2.45	2.75	3.50
Two Core Sheathed						
Nom. Sheath Thickness	mm	0.90	0.90	0.90	0.90	1.00
Overall Diameter (Approx.)	mm	6.10	6.70	7.00	7.60	9.30
Three Core Sheathed						
Nom. Sheath Thickness	mm	0.90	0.90	0.90	0.90	1.00
Overall Diameter (Approx.)	mm	6.45	7.10	7.40	8.10	9.90
Four Core Sheathed						
Nom. Sheath Thickness	mm	0.90	0.90	0.90	1.00	1.00
Overall Diameter (Approx.)	mm	7.00	7.65	8.00	8.95	10.75
Five Core Sheathed						
Nom. Sheath Thickness	mm	0.90	0.90	1.00	1.00	1.00
Overall Diameter (Approx.)	mm	7.55	8.35	8.95	9.75	11.80

Note: The conductor construction will be such that all requirements of strand diameter and conductor resistance as per IS 694 and IS 8130 are met.



# TABLE 3: PVC INSULATED & SHEATHED ROUND MULTI CORE FLEXIBLE CABLES AS PER IS 694:2010 HAVING CLASS 5 CONDUCTOR AS PER IS 8130

No. of Cores	Unit	Nominal (	inal Cross Section Area of Conductor in Sq. mm			
No. of Cores	Unit	0.50	0.75	1.00	1.50	2.50
Max. Resistance at 20°C	Ω /km	39	26	19.5	13.3	7.98
Insulation		1	l .			
Nom. Thickness	mm	0.60	0.60	0.60	0.60	0.70
Overall Diameter (Approx.)	mm	2.00	2.30	2.45	2.75	3.50
Six Core Sheathed						
Nom. Sheath Thickness	mm	0.90	1.00	1.00	1.00	1.10
Overall Diameter (Approx.)	mm	8.00	9.10	9.55	10.45	12.90
Seven Core Sheathed		1	l .			
Nom. Sheath Thickness	mm	0.90	1.00	1.00	1.00	1.10
Overall Diameter (Approx.)	mm	8.00	9.10	9.55	10.45	12.90
Eight Core Sheathed						
Nom. Sheath Thickness	mm	1.00	1.00	1.00	1.10	1.20
Overall Diameter (Approx.)	mm	10.30	11.50	12.10	13.50	16.70
Nine Core Sheathed			l .			
Nom. Sheath Thickness	mm	1.00	1.10	1.10	1.10	1.30
Overall Diameter (Approx.)	mm	10.30	11.50	12.10	13.50	16.70
Ten Core Sheathed						
Nom. Sheath Thickness	mm	1.00	1.10	1.10	1.10	1.30
Overall Diameter (Approx.)	mm	10.65	12.10	12.70	13.95	17.45
Twelve Core Sheathed						
Nom. Thickness	mm	1.00	1.10	1.10	1.10	1.30
Overall Diameter (Approx.)	mm	10.65	12.10	12.70	13.95	17.45
Fourteen Core Sheathed						
Nom. Sheath Thickness	mm	1.10	1.10	1.10	1.20	1.30
Overall Diameter (Approx.)	mm	11.35	12.65	13.35	14.85	18.35
Sixteen Core Sheathed						
Nom. Sheath Thickness	mm	1.10	1.20	1.20	1.20	1.40
Overall Diameter (Approx.)	mm	12.50	14.20	14.95	16.45	20.60
Twenty One Core Sheathed						
Nom. Thickness	mm	1.20	1.30	1.40	1.40	1.50
Overall Diameter (Approx.)	mm	12.70	14.40	15.35	16.85	20.80
Twenty Four Core Sheathed						
Nom. Sheath Thickness	mm	1.20	1.30	1.40	1.40	1.50
Overall Diameter (Approx.)	mm	14.70	16.70	17.80	19.60	24.30

# TABLE 4 : PVC INSULATED & SHEATHED ROUND MULTI CORE FLEXIBLE CABLES AS PER IS 694:2010 HAVING CLASS 5 CONDUCTOR AS PER IS 8130

			Insulation					Shi	eath			
Nominal Cross			insi		Two		Three		Four		Five	Core
Section Area of Conductor	of Conductor @ 20°C	Rating DC or AC	Nom. Thickness	Overall Diameter (Approx.)								
Sq. mm	Ω/km	Amp	mm	mm								
4	4.95	22	0.8	4.10	1.0	10.5	1.0	11.4	1.0	12.4	1.1	13.8
6	3.30	31	0.8	4.75	1.1	12.0	1.2	13.1	1.2	14.4	-	
10	1.91	42	1.0	6.00	1.3	14.9	1.4	16.2	1.4	17.8		1
16	1.21	57	1.0	7.10	1.4	17.3	1.4	18.6	1.4	20.4	-	
25	0.780	72	1.2	8.80	1.4	20.7	1.5	22.5	1.6	25.0		-
35	0.554	91	1.2	10.10	1.6	23.7	1.6	22.5	1.7	28.3		-
50	0.386	120	1.4	12.50	2.0	29.3	2.0	31.4	2.0	34.7		



# **POWER CORDS / MOLDED CORDS**



# 1 2 Pin Class-II - 2.5 AMP Indian Plug

- > The Type C electrical plug (or Indian plug) is a two wire plug that has two round pins.
- ➤ It fits into any socket that accepts 5.03 5.105 mm round contacts on 16.30 mm centers.
- > They are being replaced by E, F, J, K or N sockets, Which work perfectly with type C plugs.
- Type C plug are generally limited for use in appliance that require 2.5 AMP or less.



## **TECHNICAL SPECIFICATION**

CABLE	DESCRIPTION	MODEL NO.	STANDARD	RATING
0.50 SQ MM X 2C (FLAT)	2 PIN INDIAN PLUG	TYPE C	As Per IS: 1293	2.5 A 250 V
0.75 SQ MM X 2C (FLAT)	2 PIN INDIAN PLUG	TYPE C	As Per IS: 1293	2.5 A 250 V

The available cable IS 694; 2010, IEC 60227



## 2 Pin Class-II 6/10 AMP Indian Plug

- > The Type C electrical plug is two wire plugs that have two round pins.
- It fits into any socket that accepts 5.03 5.105 mm round contacts on 16.30 mm centers.
- They are being replaced by E, F, J, K or N sockets which work perfectly with Type C plugs.



# **TECHNICAL SPECIFICATION**

CABLE	DESCRIPTION	MODEL NO.	STANDARD	RATING
0.50 SQ MM X 2C	2 PIN STRAIGHT PLUG	TYPE C	As Per IS: 1293	6 A 250 V
0.75 SQ MM X 2C	2 PIN STRAIGHT PLUG	TYPE C	As Per IS: 1293	6 A 250 V
1.00 SQ MM X 2C	2 PIN STRAIGHT PLUG	TYPE C	As Per IS: 1293	10 A 250 V
1.50 SQ MM X 2C	2 PIN STRAIGHT PLUG	TYPE C	As Per IS: 1293	10 A 250 V

The available cable IS 694; 2010, IEC 60227

## 3 Pin Class-I 6/10 AMP Indian Plug

- > The Type D electrical plug has three round pin in a triangular pattern.
- Type M plug are often used alongside Type D plugs for large appliance and as a result some socket work both Type D and Type M plugs.



#### TECHNICAL SPECIFICATION

CABLE	DESCRIPTION	MODEL NO.	STANDARD	RATING
0.50 SQ MM X 3C	3 PIN STRAIGHT PLUG	TYPE D	As Per IS: 1293	6-10 A 250 V
0.75 SQ MM X 3C	3 PIN STRAIGHT PLUG	TYPE D	As Per IS: 1293	6-10 A 250 V
1.00 SQ MM X 3C	3 PIN STRAIGHT PLUG	TYPE D	As Per IS: 1293	6-10 A 250 V
1.50 SQ MM X 3C	3 PIN STRAIGHT PLUG	TYPE D	As Per IS: 1293	6-10 A 250 V

The available cable IS 694; 2010, IEC 60227



#### 4 3 Pin Class-I 10/16 AMP Indian Plug

- The Type D electrical plug has three round pin in a triangular pattern.
- Type M plug are often used alongside Type D plugs for large appliance and as a result, some socket work both Type D and Type M plugs.



# **TECHNICAL SPECIFICATION**

1	CABLE	DESCRIPTION	MODEL NO.	STANDARD	RATING
1	0.50 SQ MM X 3C	3 PIN STRAIGHT PLUG	TYPE D	As Per IS : 1293	10-16 A 250 V
ĺ	0.75 SQ MM X 3C	3 PIN STRAIGHT PLUG	TYPE D	As Per IS: 1293	10-16 A 250 V
	1.00 SQ MM X 3C	3 PIN STRAIGHT PLUG	TYPE D	As Per IS: 1293	10-16 A 250 V
Ī	1.50 SQ MM X 3C	3 PIN STRAIGHT PLUG	TYPE D	As Per IS: 1293	10-16 A 250 V

The available cable IS 694: 2010, IEC 60227

## 5 3 Pin 13 AMP British Plug

The Type G electrical plug has three rectangular blades in a triangular pattern and has an incorporated fuse (usually a 3 amps fuse for smaller appliance such as a computer and a 13 amps one for heavy duty appliance such as HEATER, MIXER, AIR COOLER.ETC.).



# **TECHNICAL SPECIFICATION**

CABLE	DESCRIPTION	MODEL NO.	STANDARD	FUSE RATING
0.75 SQ MM X 3C	3 PIN BRITISH PLUG	TYPE G	As Per BS : 1363	5A/250 V
1.00 SQ MM X 3C	3 PIN BRITISH PLUG	TYPE G	As Per BS : 1363	10A/250 V
1.50 SQ MM X 3C	3 PIN BRITISH PLUG	TYPE G	As Per BS: 1363	13A/250 V

Note :The above specification cables used for IEC60227



# FLAT ELEVATOR CABLE

ALTOCAB Cables knows what counts: to meet international standards and the customer's specific needs. Using various test methods, we produce elevator cables for service under the toughest conditions. The unique cable design, the careful choice of high-grade raw materials, the absolutely precise workmanship with the latest production systems and the strict internal littly control guarantee ALTOCAB flat cable a long and trouble-free service life. We offer wide range of products designed especially for our customers, combined with advance research & technology, rapid product development capability and in depth sales and technical service. Our reliable elevator cable systems are known for smooth operation that adds significant comfort to the ride. We also offer halogen-free materials for special fire safety concepts. We demand the highest quality. Quality can only be achieved by the commitment of employees with a sense of responsibility. ALTOCAB product is therefore tested according to Strict quality standards before it leaves the factory.

#### CONSTRUCTION

#### Conductors :

Flexible bright annealed bare copper conductor Class 5, manufactured using 99.97% pure electrolytic grade copper, with more than 100% conductivity, as per IEC 60228

#### Insulation :

The best in it's class, ALTOCAB uses a high grade insulation PVC which passes tests as per EN 50214. It is blended with premium elastomers to give a leading edge to the product in terms of life and flexibility.

#### Core Identification :

White Core's with black numbering along with one Yellow/Green Earthing core.

#### Outer Sheath :

Specially formulated PVC with a blend of Elastomer, for continuous flexing operation, meeting the requirement of Type ST 3 as per IEC 60227-2, in black color



#### Mechanical Properties :

- Free Suspension Length: 45 Meters (Max.)
- Traveling Height: 80 Meters (Max.)
- » Running Speed: 4 Meters / Second (Max.)
- ➤ Acceleration : <0.8 Meters / Second.</p>
- > Operating Temp. :

Mobile Utilization -50C ~ +700C Fix Utilization -100C ~ +700C

- Bending Radius : Cable Thickness x 10 (Min.)
- ➤ Recommended Loop Dia :

Cable Thickness D < 5 mm; D x 70 (min.) Cable Thickness D < 5~9 mm; D x 65 (min.) Cable Thickness D > 9 mm; D x 60 (min.) According to table, Tolerance -50 mm, +100 mm

➤ IR Constant at 270C: 36.7 M 0 km



We are first to introduce Elevator Cable with: EN-50124 | RoHS | CE | Anti-Rodent

## **CATAGORIES OF FLAT ELEVATOR CABLES**

- 4 Core 24 Core Available in 0.50 sgmm & 0.75 sgmm
- CCTV Flat Cables, for Digital & Analog Camera's
- ROUND Ribbon Cables For COP / LOP purposes
- Serial Communication Composite Cables (SHILEDED UNSHIELDED
- > TWIN PAIR SCREENED FLAT CABLE
- ≫ 3 + 1 CCTV CABLE 2 + 2 CCTV CABLE
- CUSTOM MADE FLAT CABLES









# LAN CABLES

## CAT 5e UTP

Enhanced performance cable for transmission of high speed data, digital and analogue voice and video (RGB) signals on LANs. Supports Gigabit Ethernet (1000 baseT) standard. Operates at bandwidth of 100 MHz.

# Specification:

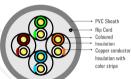
- Category: CAT 5e UTP Solid 4 Pair unshielded twisted pair (UTP) cable
- Conductor Material: Bare Copper 24 AWG(0.500 ±0.007mm)
- Material: PVC FR
- Insulation Material : HD-PE

## CAT 5e SFTP

Enhanced performance cable for transmission of high speed data, digital and analogue voice and video (RGB) signals on LANs. Supports Gigabit Ethernet (1000 baseT) standard. Operates at bandwidth of 100 MHz. Tinned Copper gives Protection against EMI and avoid signal loss with Higher Mechanical protection.

## **Specification:**

- Category: CAT 5e SFTP Solid 4 Pair Shielded twisted pair (SFTP) cable
- Conductor Material: Bare Copper 24 AWG(0.500 ±0.007mm)
- Material: PVC FR
- Shield: Aluminum / Polyester Foil Tinned copper Braiding
- Insulation Material : HD-PE





minum / Polyester Foil Coloured Insulation
Copper conductor
Tinned Copper Braiding PVC Sheath

Insulation with colour stripe



## CAT 6 UTP

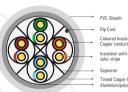
Enhanced performance cable for transmission of high speed data. digital and analogue voice and video (RGB) signals on LANs. Supports Gigabit Ethernet (1000 baseT) standard.

## Specification:

- Category: CAT 6 UTP Solid 4 Pair unshielded twisted pair (UTP) cable
- Conductor Material: Bare Copper 23 AWG
- Material : PVC FR
- Insulation Material : HD-PF

# CAT 6 SFTP

Enhanced performance cable for transmission of high speed data, digital and analogue voice and video (RGB) signals on LANs, Supports Gigabit Ethernet (1000 baseT) standard. Operates at bandwidth of 250 MHz. Tinned Copper gives Protection against EMI and avoid signal loss. Better Mechanical Properties of Cable



PVC Sheath

PVC Sheath Rin Cord

Coloured Insulation

Cooper conductor

Insulation with color stripe Seperator

Rin Cord Coloured Insulation Copper conductor

Seperator

Tinned Copper Braiding Aluminium/polyester Foil

# **Specification:**

- Category: CAT 6 SFTP Solid 4 Pair Shielded twisted pair (SFTP) cable
- Conductor Material: Bare Copper 23 AWG
- Material : PVC FR
- Shield: Aluminum / Polyester Foil Tinned copper Braiding
- Insulation Material : HD-PE



# **INSTRUMENTATION CABLE**

ALTOCAB Instrumentation cable offers total interface free data in measuring, process-control & security systems. Instrumentation process in any industry is a very important factor for controlling various parameters during process. Microcessor based control devices demand very low noise level & attenuation of signals in the cable. This calls for careful designing & manufacturing of cables with stringent quality control. ALTOCAB never compromise to use the high class of Mylar / Aluminum Tape / Polyester Tape & ATC Drain wire that ensure smooth communication of very Low level signal from transmitter to control room & also effectively cut the cross communication & noise.

#### CONSTRUCTION

#### Conductors :

Annealed bare / uniform coated with Tinned / Silver plated, High conductivity, and Electrolytic Grade Solid / Stranded / Flexible Conductor.

#### Insulation :

Conductor are insulated with General Purpose PE / HR / FRLS / LSZH / PVC compound / or any other dielectric material as per customers specification.

#### Colour of Dielectric :

Cores are identified with different type of color as per requirement as below

- 1) As per IS:1554[Pt-I]: 88, 694:90.
- 2) As per IEC, ITD or number Printing.
- 3) As per Customer Scheme.

#### Pair/ Triad / Ouad :

Two / Three / Four cores are uniformly twisted together to form a Pair / Triad / Quad with maximum lay length 80mm as per requirement of customer. The lay shall be so chosen as to minimize cross talk in the cable.

#### Individual Shelding:

If required, individual shielding may be of poly Aluminum (Thin Layer of Aluminum Foil bonded to Polyester Film) Tape with Annealed Tinned Copper Drain Wire. It prevents the shorting of adjacent shield and minimizes the cross talk and ground loops. A Tinned Copper drain Wire is installed to provide continuous contact with the shield and allow to connection to ground. Tinning the drain wire reduces galvanic corrosion between drain and shield.





#### • Laying of Pair / Triad / Quad :

Pair / Triad / Quad are laid up with suitable lay. The outer most layers are right hand lay and successive layers are laid up with opposite lay. Then, a Melinex Tape is provided to bind up laid up Pair / Triad / Quad.

#### • Overall Shielding:

If required, Overall Shielding may be of Annealed Tinned Copper Braiding / Poly Aluminum (Thin Layer of Aluminum Foil bonded to Polyester Film) Tape with Annealed Tinned Copper Drain Wire. Braiding ATC Shield has high tensile Strength and provides better coverage in flexing application. They are easier to terminate. This provides effective shielding, cross talk and noise are kept to an absolute minimum.

#### Inner Sheath :

The laid up Pair / Triad / Quad after shielding are provided with an inner sheath, which may be Extruded Inner Sheath.

#### Armouring :

It is applied over inner Sheath, It may consist of galvanized Round Steel wires or galvanized Flat Steel Strips.

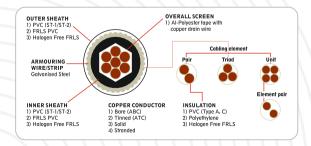
#### Outer Sheath:

It is applied over Armoring in case of Armoured Cable or over inner sheath in case of Unarmoured cable. The Color or Sheath is Black / Blue / Red / Grey. The Sheath material may be General Purpose / HR / FRLS / LSZH PVC compound as per requirement of specification.

#### Typical Application :

For Commercial of Instruments, Process Control System, Computers, Data Transmission etc.

## TYPICAL INSTRUMENTATION CABLE CONSTRUCTION





ALTOCAB carries a range of multi-conductor shielded and unshielded fire system service cable, as well as full range of multi-paired unshielded fire alarm cable. 'ALTOCAB' also carries shielded and unshielded heavy duty armored fire system cable.

Multi-conductor fire system cable products consist of many wire conductors within a high temperature electrical wire sheath. Temperature rated LIP to 105 degree C.

ALTOCAB Wire and Cable has been a staple provider of Fire Alarm-Security (FAS) cables for more than a decade, providing reliable interconnection within fire alarm security system, smoke and fire detectors, fire alarms and emergency communication system. Our standard Non-Shielded and Shielded Fire Alarms are the workhorses of the fire alarm cable industry. Need to pull a fire alarm cable without a conduit? Use one of our many Armoured Fire Alarm cables.

ALTOCAB solid / standard annealed plain electrolytic grade copper conductor as per IS:8130. Core insulated with extruded PVC conforming to IS:5831

Two such cores twisted together to form a pair and wrapped with aluminum backed Mylar tape with drain wire of ATC copper, PVC inner sheathed. GI wire / Strip armoured and finally sheathed with special PVC compound

#### **APPLICATIONS:**

Building Automation System Cables :

Available with us are used in multiplexes, malls and high rise buildings. For this a total complement of cables for control, connectivity, alarm, security, sound, water sprinklers to be used for, CCTV Cameras, Access control, P.A. Systems and Building management systems. Le Total IBMS solutions

#### Technical Data:

Conductor : Electrolytic Grade Copper Bare / Tinned, Solid / Standard / Flexible Conductors.

Range : 0.5/0.75/1.0/1./2.5 Sq. mm up to 48 Pair

Voltage Grade : 300/500/600/1100V

Primary Insulation: Heat Resistant PVC/ PE/ HR/ FR

Screening: Individual and / or Overall with AI-Mylar or Braided with Bare/ Tined Copper

Inner Sheath : FRPVC/ FRLSPVC / ZHFR/ LSZH

Armoured : GI Round Wire/ Flat Strip

Outer Sheath : FRPVC/ FRLSPVC / ZHFR/ LSZH



# SUBMERSIBLE FLAT CABLE

'ALTOCAB' 3 core flat cables have been specifically designed for submersible pump motors. The manufactured keeping tough and difficult conditions in mind which they to withstand. These cables confirms to ISI and mark IS: 694: 2010.

# 1 FLAT CABLE (PVC INSULATED)

#### Conductors :

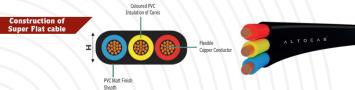
Conductors are drawn from 99.97% pure electrolytic grade copper and annealed and Bunched together to form a conductor.

#### • Insulation :

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

#### Sheathing:

3 Cores are parallel in position and sheathed with a special grade PVC compound which is impervious to oil, grease and abrasion resistance is very high.



#### APPLICATION:

Ideal for Irrigation Pumps, Drinking Water Supply Pumps, Offshore Drilling Rings, Sewage Treatment Plants, Sea Water Handling Equipments

# A L T O C A B

# **Certificates**











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