

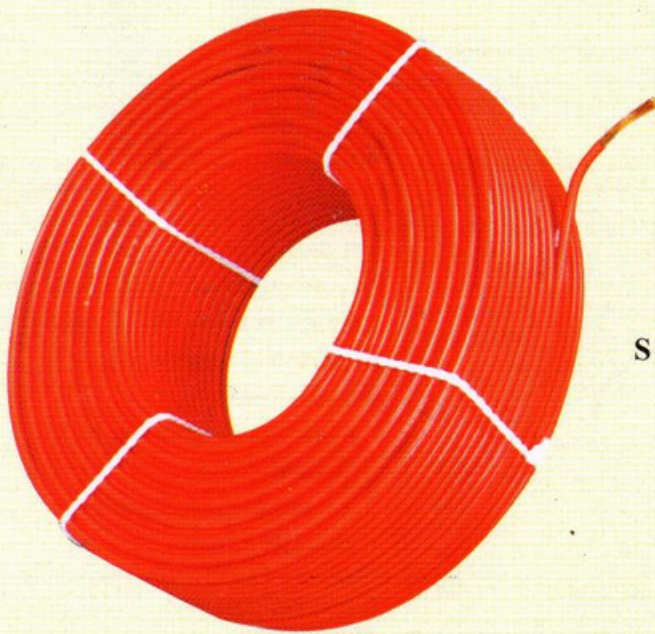
IS:694



®

monikab

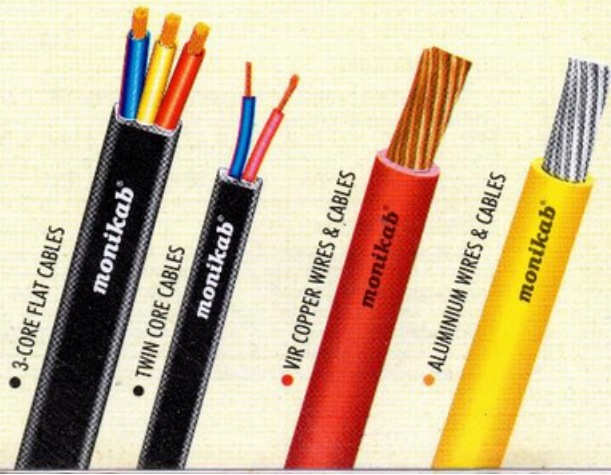
P.V.C. INSULATED CABLES



SATISFACTION *DIRECT*



An ISO 9001:2000 Certified Co.



CATALOGUE

monikab 3 core flat cables are manufactured by using pure electrolytic grade bright copper. These conductor are drawn annealed & bunched properly to ensure durability, and then insulated with superior grade of P.V.C. Compound. Three cores are laid up in a flat parallel position to ensure equal covering ratio on these three cores.

The outer covering or sheathing is made with special grade of P.V.C. compound that resist abrasion, acidic, fluids, oil, grease and water. The consistency in working trouble free for pumps in any type of weather conditions are taken into proper consideration in the manufacturing process of **monikab** 3 core flat cables for submersible pumps.

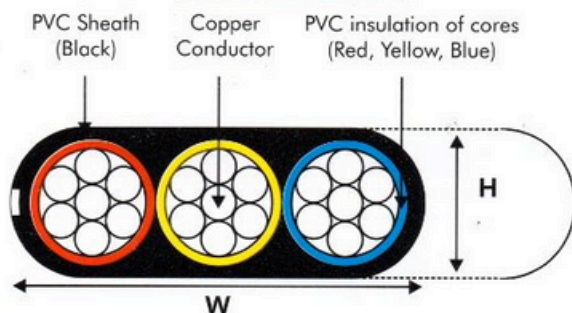
The high standard of quality is maintained through strict quality practices. All the appropriate measures from procuring raw material through manufacturing process and up to finished product has been taken into consideration.

A team of qualified and experienced technician who are well versed with modern techniques are engaged in manufacturing of this product.

monikab cables meet the international standards because of superior quality, ultra modern fully automatic machinery and supported by well-equipped laboratory and experienced staff.



Technical Data



3 Core Flat Cables as per IS:694:1990 with ISI mark

Conductor		Insulation		Sheath Overall Dimensions			Conductor Resistance @20C (max.) ohms / km.	Current Carrying Capacity @ 40°C (Amp.)
Area (Nom.) Sq. mm.	No. /size of Wires mm	Thickness (Nom) mm.	Core Dia. (Nom) mm.	Thickness (Nom) mm.	Width 'W' mm	Thickness 'T' mm		
1.5	22/0.3	0.8	3.25	1.15	12.5	5.8	12.10	14
2.5	36/0.3	0.9	3.90	1.15	14.4	6.3	7.41	18
4.0	56/0.3	1.0	4.65	1.15	17.2	7.4	4.95	26

Note :

The strand diameter is nominal however, construction of conductor is design to satisfy the requirements of conductor resistance as per IS:8130:1984.

* As per conductor class 2 of IS:8130:1984

** As per conductor class 5 of IS:8130:1984

3 Core Flat Cables generally conforming to IS:694:1990

Conductor		Insulation		Sheath Overall Dimensions			Conductor Resistance @20C (max.) ohms / km.	Current Carrying Capacity @ 40°C (Amp.)
Area (Nom.) Sq. mm.	No. /size of Wires mm	Thickness (Nom) mm.	Core Dia. (Nom) mm.	Thickness (Nom) mm.	Width 'W' mm	Thickness 'T' mm		
6.0	84/0.3	1.0	5.20	1.15	18.7	7.9	3.30	31
10.0	140/0.3	1.0	6.60	1.40	23.7	9.9	1.91	42
16.0	226/0.3	1.0	8.20	1.40	28.0	11.4	1.21	57

Selection Guide For 3 Core Flat Cables

1) HP Vs Current

The full load current for submersible pump motors, 3 phase, 50 cycles, 415 ~ 425 V.

Hp	5.0	7.5	10.0	12.5	15.0	17.5	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0
Amp	7.5	11.0	14.9	18.9	22.5	25.2	28.4	35.6	42.3	50.4	58.1	62.1	67.5	73.8	81.0	87.3	93.6	100.80	108.0

2) Derating Factors

Multiply the current carrying capacity of the cable by factors given below for various ambient temperatures.

Ambient Temperature C	30	35	40	45	50
Operating Factor	1.09	1.04	1.00	0.95	0.77

monikab wires & cables having quality control code no 8642484 granted by the commissioner of industries, Delhi Adm. With 25 years of experience has earned evitable reputation as a quality product in P.V.C. insulated wires & cables industry **monikab** P.V.C. insulated wires & cables are as per 694:1990 and manufactured in an ultra modern plant under strict quality measures. These wires and cables are suitable for electrification of building, machine, tools, telecommunication, control panel, agriculture, fixed and flexible wiring in any type of industries.



Conductor & Insulation : The most acceptable metal for conductor are copper and aluminium. Generally copper conductor is used, due to high conductivity. Copper Conductor is drawn from electrolytic grade copper to ensure compliance with international standards. The most economical construction for conductor is solid conductor. As area of conductor increases solid conductor becomes stiffer and hence difficult to handle. In this connection, stranded construction is adopted i.e. made of strands, arranged in spiral layers in 1+6+12+18+24+.... Formations.

In case of flexible cables, number of fine copper strands is bunched in one direction on bunching machine in circular construction to give concentric shape. In case of bigger size flexible conductor number of such bunched conductors are a strand in rope construction to form the conductor. The construction of conductor is as per IS:694:1990, as they must comply with IS:8130:1984 which is specification for conductor for Electric cable from B.I.S.

As per international practice, which is also adopted by ISI, its resistance decides the size of conductor only. The construction of the conductor mentioned in the table only for guidance and is as per market convention, it may vary within prescribed limits of IS:9130:1984.

The insulation is made with a special grade of P.V.C. compound, it has all the thermal and chemical properties which help in serving under tough situation. It also helps in going through all the tests according to IS specification. The insulations is as per type of IS:5831:1984 and is suitable for 70 degree continues conductor temperature operation.



monikab Single Core unsheathed flexible cable in voltage grade up to and including 1100 Volts.



Item Code No.	Nominal Cross Sectional Area of Conductor	Number/ Nom. Dia of wire	Nominal Thickness of Insulation	Overall Diameter (Approx.)	Current Carrying Capacity 2 Cables. Single Phase		Max. Resistance of Conductor per Km@20 ^o c
					In Conduit/ Trunking	Unenclosed Clipped directly to a surface or on a cable tray	
	sq. mm	mm	mm	mm	Amps.	Amps.	ohms
MK-1	0.75	24/0.2	0.6	2.5	7	8	26.0
MK-2	1.0	14/0.3	0.7	3.0	11	12	18.10
MK-3	1.5	22/0.3	0.7	3.3	13	16	12.10
MK-4	2.5	36/0.3	0.8	4.0	18	22	7.41
MK-5	4.0	56/0.3	0.8	4.8	24	29	4.95
PI-6	6	84/0.3	0.8	5.8	31	37	3.30
PI-7	10	140/0.3	1.0	7.2	42	51	1.91
PI-8	16	101/0.45	1.0	8.4	57	68	1.21
PI-9	25	168/0.45	1.2	10.4	71	86	0.780
PI-10	35	220/0.45	1.2	11.5	91	110	0.554
PI-11	50	325/0.45	1.4	13.4	120	140	0.386

Length & Cables Packing : Supplied in 90 Meters in attractive cartons.
Standard Colours : Red, Yellow, Blue, Black & Green (for earthing)

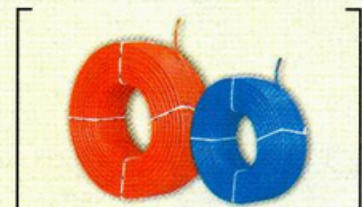
* As per IS 3961 (Part-V)-1968
 Confirm to IS:694/1990. ISI Licence Number CML-8642484

PI-12	2.0	28/0.3	0.7	3.4	16	20	12.10
PI-13	3.0	44/0.3	0.8	4.0	20	24	7.41
PI-14	4.5	65/0.3	0.8	4.8	28	33	7.41

Supplied In 90 meter lengths in polythene & Cloth packing. Conform to IS:694/1990. ISI Licence Number CML-8642484

Standard Colours : Red  Yellow  Blue  Black  GREEN 
 [For Earthing]

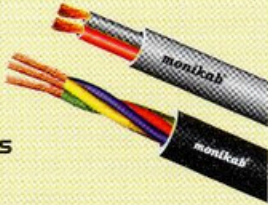
This information is based on our present state of knowledge and is intended to provide general notes on our products and their uses. Company will not be responsible for any loss or damage due to overloading of cable by more than recommended Voltage or current given in this catalogue.



Aluminium Twin Solid



Round Flexible Wires



Flexible Wires



VIR Copper Wires & Cables



Aluminium Wires & Cables



Aluminium Twin Wires



Aluminium Single Core Solid



OUR PRODUCT RANGE :

1. P.V.C. insulated Solid/Multi Stranded Copper Conductor Single Core unsheathed cable confirming to IS:694:1990.
2. P.V.C. insulated Solid & Multi core Aluminium Cables as per IS:694:1990.
3. Three core flat cables for Submersible pumps.
4. Single & Multi core flexible cables confirming to IS:694:1990.
5. Two core Three core & Four core round cables confirming to IS:694:1990.
6. Twin core flat Copper / Aluminium cables.
7. FRLS (FLAME RETARDANT LOW SMOKE) PVC / FRHF (FLAME RETARDANT HALOGEN FREE) Compound Insulated Solid/Stranded, Copper / Aluminium Conductor Single core unsheathed cables as per IS:694:1990.

monica[®]
WINDING WIRES

IS:694

CML-8642484

monikab
P.V.C. INSULATED CABLES



"Together we Progress"

All information given here is in good faith. The company shall not be liable for any damages arising out of incorrect use