

# Technical Catalogue

**WIRES & CABLES**

# S U T U O B A

Founded in the year 1968, KUNDANCAB began its journey by manufacturing and marketing electrical wires. The company has over the period, witnessed exponential growth, driven by technical expertise, a diversified portfolio of high quality and innovative products, and the ability to respond on time to the changes in the market.

With over FIVE decades of experience in the Wire industry, FYBROS offers unrivaled engineering expertise, which has been directed towards developing specialised products for a variety of sectors. We deliver high quality products and ensure regulatory compliance at all levels of the product development cycle from sourcing of raw material to design and manufacturing to packaging and delivery.

We manufacture various types of unparalleled quality Wires & Cables. Our range of wires & cables caters specific needs of clients meeting international quality standards.

Our-state-of-the-art manufacturing facility in Bhiwadi, Rajasthan is well equipped to meet the demands of the local market for housing wires and low voltage electric Cables. We pride ourselves on our ability to identify and satisfy customer needs through development of innovative products and unique, cost effective Wire solutions for a wide range of industries. Our extensive project experience make FYBROS the supplier of choice for Wires projects in the residential and commercial sectors.

We are also committed to comply with all applicable environments, health & safety legislation and all requirements of interested parties. Our commitment to the nation is to produce the best in quality and to ensure awareness among employees, society, interested parties about environment protection, minimization of waste, wise use of energy, water and other natural resources.

# CONTENTS



**01**

**FR (GOLD) WIRES**

**02**

**FR-LSH (Platinum Plus) WIRES**

**03**

**UFFR (SILVER) WIRES**

**04**

**SINGLE & MULTICORE WIRES**

**05**

**3 CORE FLAT XLPE WIRES**

**06**

**3 CORE FLAT PVC WIRES**

**07**

**VIR WIRES**

**08**

**TV DISH ANTENNA CO-AXIAL WIRES**

**09**

**TELEPHONE & SWITCHBOARD WIRES**

**10**

**COMPUTER & LAN NETWORKING WIRES**

**11**

**CCTV WIRES**

# FR

Multistrand Single Core  
Unsheathed Flexible  
Industrial Wire

FYBROS introduces FR wires, multi-strand flexible FR PVC Insulated building wires with fire retardant properties. The conductor is insulated with a specially formulated Flame Retardant FR grade PVC Compound having high insulation resistance, oxygen, temperature index and dielectric strength which prevents the leakage of electric current. Suitable for use in surface mounted or embedded conduits or trunking. Also suitable for field protected installation in lighting fittings and inside appliances.

## FR PROPERTIES

TEST	TESTING METHOD	SPECIFIED VALUE
CRITICAL OXYGEN INDEX	IS : 10810 PART 58	OXYGEN INDEX MINIMUM 29%
TEMPERATURE INDEX	IS : 10810 PART 64	MIN. TEMP INDEX 250°C AT 21% OXYGEN

Also meet requirements of Flammability test as per IS:694:2010

## SINGLE CORE UNSHEATHED FLEXIBLE INDUSTRIAL CABLES IN VOLTAGE GRADE 1100 VOLTS

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°C	IS:694 CM/L-8637693
Sq. mm	mm	mm	mm	In conduit/ Trunking Amps	Unenclosed clipped directly to surface or on cable tray Amps	Ohms.
0.75	24/0.2**	0.6	2.3	7.0	7.5	26.0
1.0	14/0.3*	0.6	2.5	11.6	12.6	18.1
1.5	22/0.3*	0.6	2.9	14.7	16.8	12.1
2.5	36/0.3*	0.7	3.6	20.0	23.1	7.4
4.0	56/0.3**	0.8	4.0	26.0	29.0	5.0
6.0	84/0.3**	0.8	4.5	31.0	37.0	3.3

Supplied in 90 meters lengths in attractive cartoons  
Standard Colours : Red, Yellow, Blue, Black, Green for earthing

\*As per conductor Class 2 of IS:8130/2013. \*\*As per conductor Class 5 of IS:8130/2013  
Conform to IS 694/2010. ISI Licence number CM/L-8637693

## SINGLE CORE UNSHEATHED FLEXIBLE INDUSTRIAL CABLE IN VOLTAGE GRADE 1100 V.

10.0	80/0.4**	1.0	6.40	42	51	1.91
16.0	126/0.4	1.0	7.60	57	68	1.21
25.0	196/0.4	1.2	9.70	71	86	0.780
35.0	276/0.4	1.2	10.90	91	110	0.554
50.0	396/0.4	1.4	12.80	120	140	0.386

Supplied in 90 meters lengths in Woven Bag & Cloth Packing.  
Standard Colours : Red, Yellow, Blue, Black.  
Longer length & other colors are available on request

\*\*As per conductor Class 5 of IS:8130/2013  
# As per IS:3961 (Part V)-1968  
Sample Card available on request. (1.0 to 6.0 sq. mm)



MORE THAN  
100%  
CONDUCTIVITY

BUNCHING  
100%

FLAME  
RETARDANT



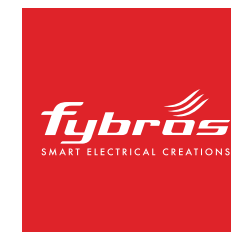


# FR-LSH

Flame Retardant Low Smoke and  
Halogen Multistrand Single Core  
Unsheathed Flexible  
Industrial Wire

FR-LSH has special flame retardant, low smoke emitting and toxic fumes suppressing properties. The oxygen index of a FYBROS Wires have 32% which increases its efficiency in fire fighting. In the case of fire, conventional PVC insulated wires give out thick black smoke and toxic fumes of hydrochloric acid gas. This impairs visibility and hampers rescue operations. Not only emits very little smoke and toxic gases, but also retards the spreading of fire.

The conductor manufacture of Pure Electrolytic Grade, bright annealed bare copper having very low resistance with more than 100% conductivity which makes it an excellent conductor of electricity, thus ensuring low energy losses.



## XTRA GARD FR-LSH PROPERTIES

TEST	TESTING METHOD	SPECIFIED VALUE FR-LSH
CRITICAL OXYGEN INDEX	IS : 10810 PART 58	OXYGEN INDEX MINIMUM 29%
TEMPERATURE INDEX	IS : 10810 PART 64	MIN. TEMP INDEX 250°C AT 21% OXYGEN
TEST FOR SMOKE DENSITY RATING	IS : 10810 PART 63	MINIMUM 40%
TEST FOR HALOGEN ACID GAS EVOLUTION	IS : 10810 PART 59	Hydrochloric acid gas released 20% max by weight

Also meet requirements of Flammability test as per IS:694:90

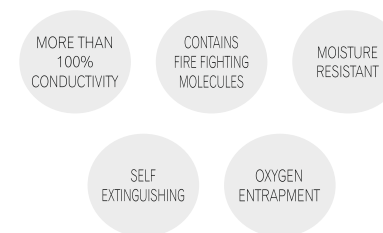
## SINGLE CORE UNSHEATHED FLEXIBLE INDUSTRIAL WIRE IN VOLTAGE GRADE 1100 VOLTS



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°C
				In conduit/ Trunking	Unenclosed clipped directly to surface or on cable tray	
Sq. mm	mm	mm	mm	Amps	Amps	Ohms.
0.75	11/0.3**	0.6	2.3	7.0	7.5	26.0
1.0	14/0.3*	0.6	2.5	11.6	12.6	18.1
1.5	22/0.3*	0.6	2.9	14.7	16.8	12.1
2.5	36/0.3*	0.7	3.6	20.0	23.1	7.4
4.0	56/0.3**	0.8	4.0	26.0	29.0	5.0
6.0	84/0.3**	0.8	4.5	31.0	37.0	3.3
10.0	80/0.4**	1.0	6.4	42	51	1.91
16.0	126/0.4**	1.0	7.6	57	68	1.21

Conform to IS-694/2010. ISI Licence number CM/L-8637693  
# As per IS:3961 (Part V)-1968

\* As per conductor Class 2 of IS:8130/2013  
\*\* As per conductor Class 5 of IS:8130/2013



# UFFR

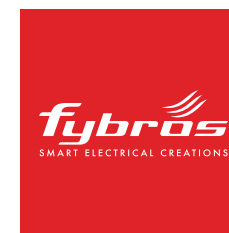
Ultra Flexible Flame Retardant (Multistrand)  
Single Core Unsheathed Flexible Industrial Wire

With an increase in the number of electrical & electronic equipments being used today. More equipments get plugged into system than what it is designed to handle. This overloading leads to reduction of cable life and ultimately short circuit. Normal PVC Wire are suitable for maximum operating temperature of 70°C.

STANDARDS	:	IS:694, BS:62131, IS:8130 & IS:5831.
CONDUCTOR	:	UFFR Wires are made of highly Pure Electrolytic Grade bright annealed bare copper with more than 100% conductivity which makes it an excellent conductor of electricity thus helps in saving energy.
INSULATION	:	The Wires, made with special formulated UFFR PVC compound, can withstand temperature 70°C compared to conventional Wires that bear to 70°C under continues usage. The new development makes possible the longer life for Wires and ability to withstand fluctuations and emergency loads. With the production of this new breed of house wiring
KEY APPLICATIONS	:	For the wiring of all types of control panel, building, factories, relay racks, surface mounted or embedded conduits trunking. Home Gard Wire is used by electrical contractors, electricians, municipalities and all major switch board manufacturers.
PACKING	:	FYBROS Multistrand Wires up to 6 Sq. mm are supplied in 90 metre Length in attractive carton. Longer length available on request.
COLORS	:	FYBROS Multistrand Wires are available in five colors Red, Yellow, Blue, Black & Green. Other colors can be supplied on request. Subject minimum order quantity.
MARKING	:	The Wires are printed with generic making FYBROS by KUNDANCAB UFFR.

## UFFR PROPERTIES

TEST	TESTING METHOD	SPECIFIED VALUE
CRITICAL OXYGEN INDEX	IS : 10810 PART 58	OXYGEN INDEX MINIMUM 29%
TEMPERATURE INDEX	IS : 10810 PART 64	MIN. TEMP INDEX 250°C AT 21% OXYGEN



SUPERIOR  
INSULATION  
RESISTANCE

HIGH  
DI-ELECTRIC  
STRENGTH

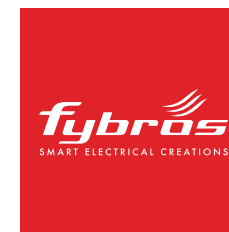
HIGHER  
CURRENT  
CARRYING  
CAPACITY



# SINGLE & MULTICORE

Round Flexible Industrial Wire

These Wires are mostly used for wiring in machines, control panels, electric power supply, modern electric appliances and equipment.



## SINGLE CORE/MULTICORE ROUND FLEXIBLE INDUSTRIAL Cables as per IS-694/2010 Voltage grade upto 1100 Volts.

IS-694



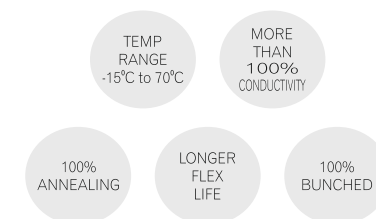
Conductor Area	No. & Size of each Strand	Thickness of PVC Insulation	Max DC Resist. at 20° C	Current Carrying Capacity	Thickness of PVC Outer Sheath (mm)			Approximate Overall Diameter (mm)		
					2 Core	3 Core	4 Core	2 Core	3 Core	4 Core
Sq.mm	Nos/Dia	mm	Ohm/Km	Amps						
0.5	16/0.2	0.6	39	4	0.9	0.9	0.9	6.15	6.40	7.05
0.75	24/0.2	0.6	26	7	0.9	0.9	0.9	6.55	6.85	7.50
1	32/0.2	0.6	19.5	12	0.9	0.9	0.9	6.90	7.20	7.90
1.5	*30/0.25	0.6	13.3	15	0.9	0.9	1.0	7.45	7.80	8.80
2.5	**50/0.25	0.7	7.98	20	1.0	1.0	1.0	8.95	9.35	10.35
4	56/0.3	0.8	4.95	23	1.0	1.0	1.0	10.35	10.85	12.05
6	84/0.3	0.8	3.30	35	1.1	1.1	1.2	11.65	12.20	13.80
10	140/0.3	1.0	1.91	36	1.2	1.2	1.3	14.55	15.30	17.25
16	101/0.45	1.0	1.21	62	1.3	1.3	1.4	16.80	17.70	19.95
25	157/0.45	1.2	0.78	80	1.4	1.5	1.6	21.90	23.25	26.20
35	220/0.45	1.2	0.554	102	1.5	1.6	1.7	24.60	26.10	29.45
50	314/0.45	1.4	0.386	138	1.6	1.7	1.8	29.00	30.75	34.70

\*This size can be supplied in 48/0.2 Construction.

The Number and diameter of conductor stands are for reference only.

The Conductor resistance as per IS : 8130 is the governing criteria.

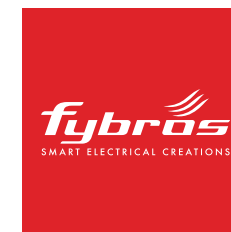
The above data is approximate and subject to manufacturing tolerance



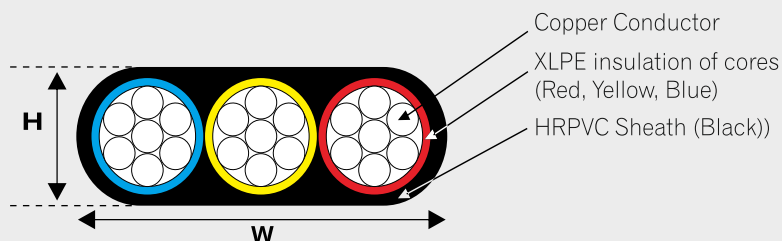
\*\*This size can be supplied in 80/0.2 Construction.

# 3-CORE FLAT **XLPE** INDUSTRIAL WIRES For Submersible Pump Motors

Submersible Wire is a specialized product to used for submersible pumps in deep well. The area of installation is physically restrictive environment is very hostile. The conductor is further insulated with thermoset type Cross Linked Polythene (XLPE) insulation with uniform thickness. The sheath with uniform thickness of Heat and Moisture Resistant type PVC (Grade ST2) compound formulated and manufactured in house, is extruded over these coloured cores in a flat formation. The colour of the sheath is black. The Wire undergo stringent quality checks during raw materials, in process and final testing as per the laid down specification and the quality norms. The cables are available progressive sequential marking, company name, size & voltage



- Higher current rating
- Higher overload capacity
- Higher short circuit rating
- Lighter in weight and smaller bending radius
- Lower Di-electric constant and power factor
- Better impact, abrasion, corrosion resistance

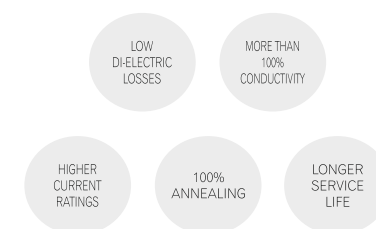


## 3 CORE FLAT WIRES WITH COPPER CONDUCTOR XLPE INSULATION AND HR PVC SHEATH

S. No.	PARAMETERS	Size (Sq. mm)						
		2.5	4.0	6.0	10.0	16.0	25.0	35.0
1.	Conductor construction (No/mm)	36/0.3	56/0.3	84/0.3	140/0.3	226/0.3	354/0.3	495/0.3
2.	Conductor Resistance at 20°C (ohms/km) Max	7.41	4.95	3.3	1.91	1.21	0.780.	0.554
3.	Insulation Thickness (mm) Nom	0.7	0.70	0.70	0.70	0.70	0.90	0.90
4.	Sheath Thickness (mm) Nom	1.0	1.0	1.1	1.2	1.3	1.5	1.6
5.	Overall Dimension Width (W)	12.7	14.9	16.9	20.3	23.8	29.6	33.6
	(mm) approx. Height (H)	6.0	6.6	7.4	9.1	10.4	12.9	14.4

The number of wires and its diameter in the conductor will be such as to satisfy requirement of the conductor resistance as per IS 8130:2013 Current Carrying Capacity (Amps)

S. No.	CABLE TYPE	Size (Sq. mm)						
		2.5	4.0	6.0	10.0	16.0	25.0	35.0
1.	PVC Insulation	18	26	31	42	57	71	91
2.	XLPE Insulation	30	37	46	66	85	113	139
Ambient Temperature (Deg. C)		25	30	35	40	45	50	
Factor		1.18	1.12	1.06	1.00	0.94	0.88	



# 3-CORE FLAT **PVC** INDUSTRIAL WIRES

For Submersible Pump Motors

These connecting Wires are used to connect underwater submersible pump set with the supply line, agriculture, irrigation, domestic installation, outdoor application and power supply. Submersible Wire is a specialised product to used for submersible pumps in deep well. The area of installation is physically restrictive environment is very hostile. Fybros designed and manufacture keeping in mind factors to achieve the highest possible degree of reliability.



3 Core Flat Industrial Cables For Submersible Pump Motors, 1100 Voltage Grade

CONDUCTOR		INSULATION	SHEATH OVERALL DIMENSIONS (Max)			CONDUCTOR RESISTANCE @20°C (Max) ohms/km.	CURRENT CARRYING CAPACITY @ 40°C (Amp.)
Area (Nom.) Sq. mm	No. /size of Wires mm	Thickness (Nom.) mm	Thickness (Nom.) mm	Width "W" mm	Thickness "T" mm		
1.5	22/0.3*	0.6	0.90	12.00	5.60	12.10	14
2.5	36/0.3*	0.7	1.00	13.00	6.20	7.41	18
4.0	56/0.3**	0.8	1.00	15.30	7.10	4.95	26
6.0	84/0.3	0.8	1.1	19.20	8.40	3.30	31
10.0	140/0.3	1.0	1.40	24.20	10.40	1.91	42
16.0	101/0.45	1.0	1.40	29.00	12.4	1.21	57
25.0	158/0.45	1.2	2.00	36.50	15.70	0.780	72
35.0	220/0.45	1.2	2.00	40.50	17.20	0.554	90

## Selection Guide for 3 Core Flat Cables

### HP vs Current : The full load current for submersible pump motors, 3 phase, 50 cycles, 415-425V

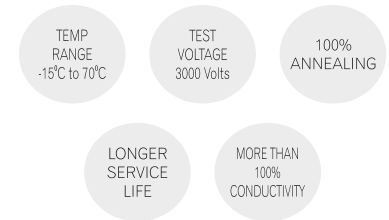
HP	5.0	7.5	10.0	12.5	15.0	17.5	20.0	25.0	30.0	35.0	40.0	45.0	50.0	55.0	60.0	65.0	70.0	75.0	80.0
Amp.	7.5	11.0	14.9	18.9	22.5	25.2	28.4	35.6	42.3	50.4	58.1	62.1	67.5	73.8	81.0	87.3	93.6	100.80	108.00

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

Ambient Temperature	30	35	40	45	50	Note : ■ Supplied in 500 (±5%) meter packing on Bags and Drums. Can also supplied in 100 mtr., 300 mtr. 1000 mtr. packing on request. ■ The strand diameter is nominal however, construction of conductor is design to satisfy the requirements of conductor resistance as per IS:8130:1984
Operating Factor	1.09	1.04	1.00	0.95	0.77	

\* As per conductor Class 2 of IS:8130:2013

\*\* As per conductor class 5 of IS:8130:2013

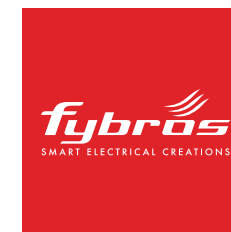


# VIR WIRES

## PVC INSULATED UNSHEATHED

Solid Stranded Copper Wire

FYBROS PVC Insulated Unsheathed Single Core Wires manufactured with plain annealed copper conductor solid & stranded insulated with electric grade PVC compound conforming (Industrial Wires) conforming to IS : 694:2010 Voltage Grade 1100 Volts, The CIR Wires & Wires are suitable for fixed wiring, House / Domestic wiring / Project & Industrial Plants. etc.



FYBROS Single Core Solid & Stranded Bright Annealed Copper Conductor PVC Insulated Unsheathed Wires Up to 1100 Volts Grade, as per IS-694/2010, with ISI mark

Nominal cross sectional area of conductor	No. of strand & Size of wire in	Nominal Thickness of Insulation in	Nominal Overall Dia (Max)	Max. Resistance of Conductor per Km@20°C	# Current rating 2 Cable Single Phase AC/DC
Sq. mm	mm	mm	mm	Ohms.	Amps
1.0	1/1.13	0.7	2.70	18.10	12
1.5	3/0.80	0.7	3.30	12.10	16
2.5	3/1.04	0.8	4.00	7.41	22
4.0	7/0.85	0.8	4.60	4.61	29
6.0	7/1.04	0.8	5.20	3.08	37
10.0	7/1.35	1.0	6.70	1.83	51
16.0	7/1.70	1.0	7.80	1.15	68
25.0	19/1.30	1.20	9.70	0.727	86
35.0	19/1.53	1.20	10.9	0.524	110
50.0	19/1.78	1.40	12.8	0.387	145
70.0	37/1.55	1.40	14.6	0.268	200
95.0	37/1.80	1.60	17.1	0.193	235
120.0	37/2.03	1.60	18.8	0.153	270

Supplied In 90 Meter Lengths In Carton, Woven Bag & Cloth Packing  
Standard Colors : Red, Yellow, Blue, Black & Green

# As per IS:3961 (Part V)-1968  
Conform to IS 694/2010. ISI Licence number CM/L-8637693  
Longer Length & other colors are available on request

MORE THAN  
100%  
CONDUCTIVITY

100%  
TWISTING

PURE  
ELECTROLYTIC  
COPPER

LONGER  
FLEXIBLE  
LIFE





# TV DISH ANTENNA CO-AXIAL WIRE

Gas Injected Physical Foam  
Jelly Flooded Industrial Wires

FYBROS Coaxial Wire (or "coax") is the most common Wire used for transmitting video signals. The name "coaxial" refers to the common axis of the two conductors. Coaxial Wire also offers high bandwidth per channel and low noise & cross talk which makes the medium of choice for delivering high-definition video to and within the home, short coaxial Wires are used to connect equipment, such as TVs, DVRs, VCRs or CATV

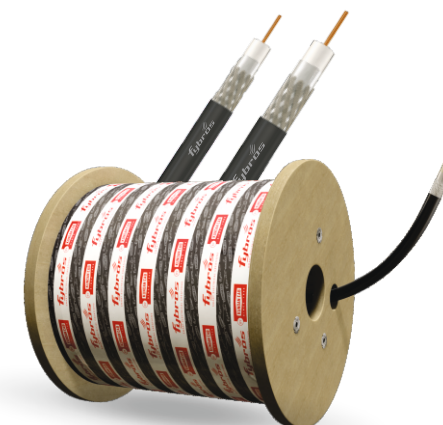
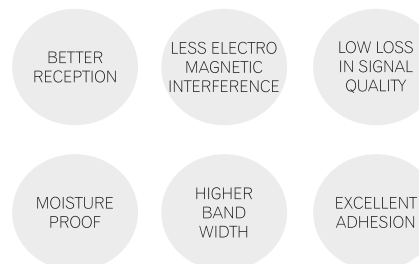
**fybros**  
SMART ELECTRICAL CREATIONS

## Specification / Construction

Components	RG-59 Stranded Shield		RG-6 Stranded Shield		RG-11 Stranded Shield	
	Inches	MM	Inches	MM	Inches	MM
Nominal Center Cond. Diameter	0.032	0.81	0.040	1.02	0.064	1.63
Nominal Diameter Over Dielectric	0.144	3.66	0.180	4.57	0.280	7.11
Nominal Diameter Over First Shield (Tape)	0.151	3.84	0.187	4.75	0.287	7.29
Nominal Diameter Over Jacket	0.240	6.20	0.272	7.00	0.395	10.00
Nominal Jacket Wall Thickness	0.032	0.81	0.030	0.76	0.042	1.07
Nominal Diameter of Steel Messenger	0.051 (Single)	1.30	0.051 (Single)	1.30	0.072 (Single)	1.83
	0.072 (Dual)	1.83	0.072 (Dual)	1.83	0.109 (Dual)	2.77
MECHANICAL CHARACTERISTICS						
Minimum Breaking	0.051		0.051		0.072	
Strength of Messenger	0.072		0.072		0.109	
ELECTRICAL CHARACTERISTICS						
Nominal Impedance	75 ohms		75 ohms		75 ohms	
Nominal Velocity of Propagation	85%		85%		85%	
Shielding Effectiveness	>100dB		>100dB		>100dB	

## Attenuation @ 20 deg. C

Frequency MHz.	RG-59 Maximum dB/100m	RG-6 Maximum dB/100m	RG-11 Maximum dB/100m
211	12.47	10.00	6.23
250	13.45	10.82	6.72
270	14.08	11.12	6.99
300	14.84	11.72	7.37
325	15.45	12.20	7.67
350	15.75	12.63	7.94
400	16.73	13.61	8.53
450	17.72	14.43	9.02
500	18.70	15.09	9.51
550	19.52	16.08	9.97
600	20.34	16.73	10.43
750	22.87	18.54	11.97
870	24.67	20.01	13.05
1000	26.64	21.49	14.27



# TELEPHONE & SWITCH BOARD WIRE

Tele-communications Wire

Made of pure electrolytic grade bright annealed bare copper as per IS:8130 in 0.4, 0.5, 0.6 & 0.7 mm. The insulated cores are twisted to form pairs and bunched to minimize cross talk. The cores are helically wrapped. Non hygroscopic and non wicking polyester tape or tape to form laid up Wires. The laid up Wires are further jacketed with grey colour and high oxygen index fire retardant PVC. Fybros Telephone and Switchboard Wires are recommended for switchboard and internal telephone wiring in multi-storeyed buildings, offices, factories, hotels, hospitals and residential complexes.



## ELECTRICAL PARAMETERS

Conductor resistance  
Mutual capacitance  
Insulation resistance in Air  
Capacitance unbalance Pair to Pair

0.4	0.5
Max. 143.0 ohm/km at 20°C	Max. 92.20 ohm/km at 20°C
Max. 50 nf/km	Max. 50 nf/km
Min. 10000N-Ohm/km	Min. 10000M-Ohm/km
Max. 250 pf/km	Max. 250 pf/km

## COLOUR COMBINATION

No. of Pairs	2 Pair	5 Pair
Pair No. 1	White - Blue	White - Blue
Pair No. 2	White - Orange	White - Orange
Pair No. 3		White - Green
Pair No. 4		White - Brown
Pair No. 5		White - Grey

## CONSTRUCTION

Conductor		Insulation		Rip Cord		Sheath	
Material	Nominal Diameter (mm)	Material	Nominal Thickness (mm)	Nominal Dia of Insulated Conductor (mm)	Material	Material	Nominal Thickness (mm)
Bright Annealed Pure Electrolytic Bare Solid Copper	0.50	PVC	0.20	0.92	Nylon	FR PVC with high oxygen and temp. index	1 Pair 0.50
							2-8 Pair 0.65
							10 Pair 0.75
Bright Annealed Pure Electrolytic Bare Solid Copper	0.40	PVC	0.20	0.82	Nylon	FR PVC with high oxygen and temp. index	1 Pair 0.50
							2-8 Pair 0.65
							10 Pair 0.75

HIGH SPEED TRANSMISSION

ZERO NOISE LEVEL

NO CROSS TALK

LOW ATTENUATION

NO VOICE LOSS

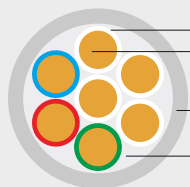




# COMPUTER & LAN

Networking Wire

LAN Wires - CAT 5E 100 MHZ. (unshielded Twisted Pair) CAT 5E UTP Wires are very effective network cabling systems used in modern computer networks. These Wires from the backbone of modern data transmission in Commercial areas, Industries, Buildings, Fybros provide a wide range of CAT, 5E Wire & Fibre Optic Wires that is manufactured using quality tested material, is a twisted pair Wire type designed for high signal integrity. Many such Wires are unshielded but some are shielded. Category 5 has been superseded by the Category 5e specification. This type of Wire is often used in structured cabling for computer networks such as Ethernet, and is also used to carry many other signals such as basic voice services. These products are known for high quality features like flexibility, compatibility and durability. This Wires from the backbone of modern data transmission in commercial areas.



Insulation  
Conductor  
Sheath  
Rip Cord

## Technical Data

Impedance	100+/-15 ohm
Mutual Capacitance, max nf/100m	5.6
DC Resistance, max Ohm / 100m at 20°C	9.38
DC Resistance Unbalance of a Pair, max	5%
Capacitance Unbalance - pair to Ground, max	330 pf/100 m
Velocity of Propagation at 100 MHZ, Min	62%
Propagation Delay Skey at 20°C, max	45 ns/100 m
Propagation Delay at 100 MHZ, 20°C, max	538 ns/100 m

## SPECIFICATION / CONSTRUCTION

Conductor	Insulation	No. of Pairs	Colour Combination	Rip Cord	Sheath. Colour	Nom. over all Diameter
24 AWG (0.5 mm) bare solid copper	HDPE FRPE	4 UTP (Unshielded Twisted Pair)	Pair 1. Blue-White/Blue 2. Orange - White/Orange 3. Green - White/Green 4. Brown - White/Brown	Nylon cord under sheath	FR PVC Grey colour (other colours available on request)	5.2 ± 0.2 mm

## SPECIFICATION / CONSTRUCTION

Frequency (MHz)	Attenuation Max (db/100m)	NEXT min. (db)	ACR Min. (db)	PC NEXT Min. (db)	PC ACR Min. (db)	ELFEXT Min (db/100 m)	PS ELFEXT Min (db/100 m)	RL Min. (db)
1	2.0	65.3	63.3	62.3	60.3	63.8	60.8	20.0
4	4.0	56.3	52.2	53.3	49.2	51.7	48.7	23.0
8	5.8	51.8	46.0	48.8	43.0	45.7	42.7	24.5
10	6.5	50.3	43.8	47.3	40.8	43.8	40.8	25.0
16	8.2	47.3	39.1	44.3	36.1	39.7	36.7	25.0
20	9.3	45.8	36.5	42.8	33.5	37.8	34.8	25.0
25	10.4	44.3	33.9	41.3	30.9	35.8	32.8	24.3
31.25	11.7	42.9	31.2	33.9	38.2	33.9	30.9	23.6
62.5	17.0	38.4	21.4	35.4	18.4	27.8	24.8	21.5
1000	22.0	35.3	13.3	32.3	10.3	23.8	20.8	20.1

**fybros**  
SMART ELECTRICAL CREATIONS

HIGH  
BIT  
RATES

USE IN  
STRUCTURAL  
CABLNE

CHOICES  
OF  
JACKETING

SNARI  
FREE  
PACK

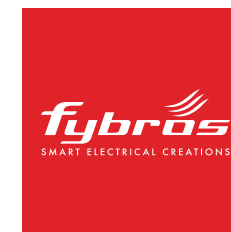
SUBSTITUTE  
FOR  
IMPORTED  
CABLES



# CCTV CABLES

## CLOSED CIRCUIT TELEVISION WIRE

FYBROS CCTV Wires : Surveillance is a primary function in safety and security for many environments such as schools, casinos, prisons and businesses. The selection of cameras and other electronic equipment is a primary concern, but the link between the electronics should be taken with extreme caution. FYBROS Wire provided CCTV coaxial Wires from short run appliances to the most critical long-distance applications. CCTV Wires provided by us is a composite structure of Video and audio wires intended to install the cameras with audio system from one point to equipments system. We use best quality raw materials to ensure efficient operation standards. Further, our CCTV Cables are safe and reliable transmission of voice, video & data. These CCTV Wires are available in various specifications and reasonable prices to suit client's.



CONSTRUCTION	MATERIAL	FYBROS	FYBROS
WIRE SIZE		CCTV WIRE 3+1	CCTV WIRE 4+1
POWER WIRE		3C X 0.15 SQ. MM	4C X 0.15 SQ. MM
<b>CONDUCTOR</b>	ATC	ATC	ATC
NO. OF STRANDS	NOS	14	14
STRAND DIA	MM	0.124	0.124
<b>INSULATION</b>	PVC	PVC	PVC
THICKNESS (NOMINAL)	MM	0.56	0.56
COLOR		R, BE, Y	R, BE, RR, Y
COAXIAL WIRE			
<b>CONDUCTOR</b>		ATC	ATC
CONDUCTOR DIA	MM/NOS	0.124/14	0.124/14
(NOMINAL)/NO. OF WIRE			
<b>INSULATION</b>	HDPE	FOAM	FOAM
THICKNESS	MM	1.34	1.34
<b>AL-FOIL</b>		AL-FOIL	AL-FOIL
THICKNESS	MM	0.052	0.052
(NOMINAL)			
WIDTH (NOMINAL) / OVERLAP	MM/%	15/100%	15/100%
<b>BRAIDING</b>	ATC	ATC	ATC
WIRE DIA (NOMINAL)	MM	0.12	0.12
BRAIDING COVERAGE	%	60	60
<b>OVERALL OUTER SHEATH</b>	PVC	PVC	PVC
COLOR	WHITE	WHITE	WHITE
THICKNESS	MM	0.70	0.70

DURABLE

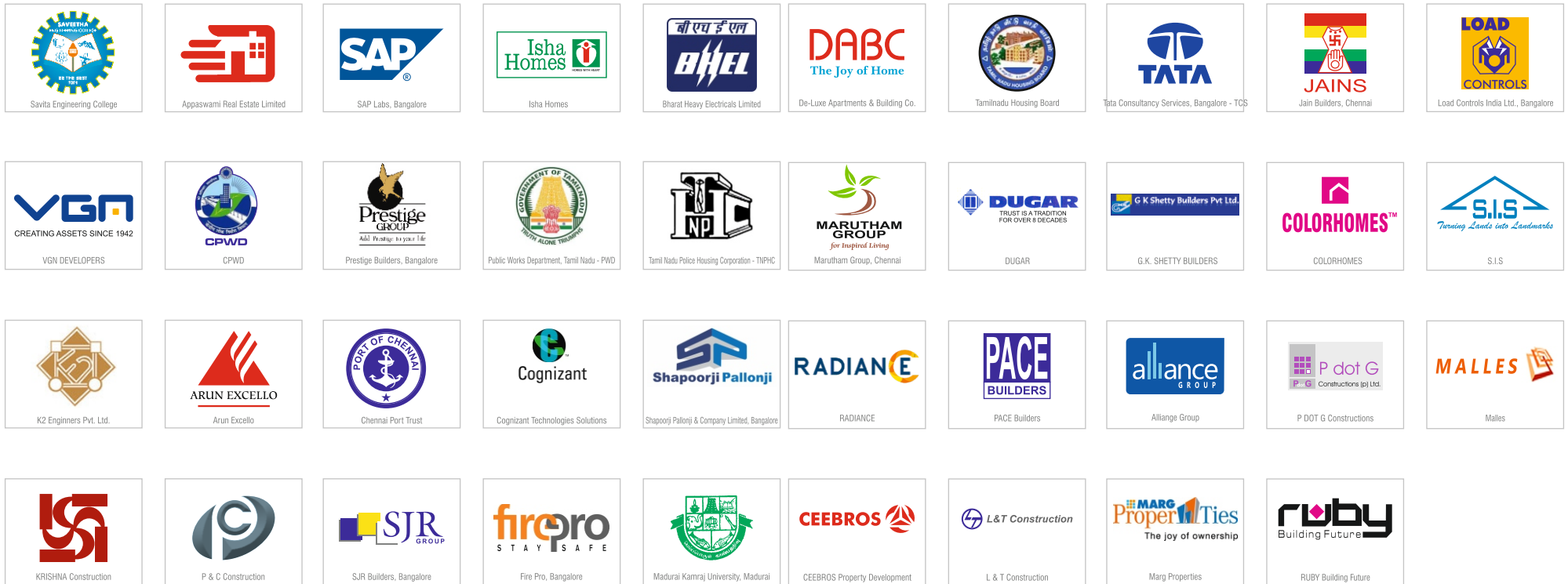
HIGHLY  
SHOCK  
PROOF

HIGH  
TENSILE  
STRENGTH

STURDY  
CONSTRUCTION



# Client List



Wires For Every Weather



WITNESS A 50 YEAR LEGACY  
OF ADVANCED ELECTRICALS & CABLES



# SAFETY BACKED WITH A STYLE STATEMENT

For more than 50 Years, our Electrical products provide safety, security, and serenity to homes and living spaces by manufacturing Smart Electrical Products like Wires & Cables, Switchgear, Switches & Accessories and Lighting Systems that not only fulfills the needs of modern technology and design but also takes innovation to a whole new extent.

## DELHI

166, Functional Industrial Estate,  
Patparganj, DELHI - 110092

## UTTAR PRADESH

Khasra No. 6 KH, Plot No: 03,  
Dehra MG Road, Opp: Coca Cola,  
Dhaulana, Hapur, UTTAR PRADESH - 245101.

92/190, 1st Floor, Bhaskar Complex,  
Adjacent Hotel S.P. International  
Gautam Buddha Marg,  
LUCKNOW - 226018

## NORTH



## RAJASTHAN

F18-A/2, Road No.2,  
Vishwakarma Industrial Area,  
JAIPUR - 302013



## SOUTH

## TAMILNADU

12/42, Taylors Road,  
Kilpauk, CHENNAI - 600010

## KERALA

Kudiyirickal Towers, First Floor,  
Palarivattom, Edappally Road,  
ERNAKULAM - 682025

## KARNATAKA

28, Off Mysore Road  
Suder Industrial Estate  
New Timber Yard Layout  
BANGALURU - 560026

## GOA

121, Nagarathpet Main Road,  
Near Kalamma Temple,  
BANGALURU - 560002

## WEST



## GUJARAT

410 Sub Plot Number 69/2/3  
Balaji Estate B/H Moni Hotel  
Narol - Naroda Highway Isanpur  
AHMEDABAD - 382443

First Floor, Shop No. 82-1,  
Paras Chambers, JEAN Compound,  
SURENDRANAGAR - 363002

## MAHARASHTRA

Gala No. 9 & 10, Blue Bell Imperial  
Manas Industrial Hub,  
Opp. Chinchpada, Valiv Road,  
Vasai East, PALGHAR - 401208





EAST

#### WEST BENGAL

Flat No. 2F, Crescent Tower,  
229 AJC Bose Road, KOLKATA - 700020

Plot No. 1369, Sankrail Industrial Park  
Dhulagarh, Dist Howrah  
KOLKATA - 711302

30, Sevok Road, Santdeep Building  
2nd Floor, SILIGURI - 734001

#### BIHAR

Shree Mahavira Logistics, Gopalpur Sampatchak,  
Patna Gaya Road, PATNA - 800008

Jindal House Building, P. K Sahi Lane, 5th Floor  
S. P Verma Road, PATNA-800001

#### JHARKHAND

Plot No. - 326, Mother Dairy Road,  
Tikratoli, Tundiul, RANCHI - 835303,

#### ASSAM

Dhiraj Tumung Compund,  
Dag No. 102, Pamohi - DPS Road  
GUWAHATI - 781035

House No - 06, Rangamancha Path,  
Rukmininagar, GUWAHATI - 781006

#### ODISHA

No.: C/3, Old Industrial Estate  
Jagatpur, CUTTACK - 754021



H.O.

Balar Marketing Pvt. Ltd.

J-48 & J-49, Sector-63, Noida,  
Gautam Buddha Nagar,  
UTTAR PRADESH - 201301

Balar Marketing Pvt. Ltd.

217, Functional Industrial Estate,  
Patparganj, DELHI - 110 092

Fybros Moddular Pvt. Ltd.

205, 2nd floor,  
Orbit Industrial Estate,  
Chincholi Bunder Road,  
Malad (W) MUMBAI- 400064

Balar Marketing Pvt. Ltd.

12/42, Taylors Road,  
Kilpauk, CHENNAI - 600010

Our Footprints  
Across India



#### **BALAR MARKETING PVT. LTD.**

Corporate Office: J-48 & J-49, Sec-63, Noida, Gautam Budh Nagar, UP - 201301

For queries contact to our customer care executive at above address

Customer Care Email: [customercare@fybros.com](mailto:customercare@fybros.com),

Website: [www.fybros.com](http://www.fybros.com)

Customer Care Toll Free: 1800-270-6334

WhatsApp Virtual Assistant: 7070706737 (say "Hi" For Quick Connect)



SCAN this QR-code from  
your smart phone to  
visit our website

#### **Call**

1800-270-6334  
(Customer Support)

#### **My Fybro's App**



**7070706737**  
(Say "Hi" for quick connect)

The intellectual property of Balar Marketing Pvt. Ltd. is safeguarded by copyright. Reproduction or printing of any portion of this catalogue is strictly prohibited without the explicit consent of Balar Marketing Pvt. Ltd. Our patents, trademarks, and designs are legally protected. Any infringement is subject to prosecution. Imitation of graphics is considered a punishable offense. The brand identity, concept, and design are exclusive to Balar Marketing Pvt. Ltd.

#### **Terms & Conditions:**

Warranty is applied to Fybro's products according to Fybro's warranty policy. Continuous design and product development are routine practices at Fybro, so data in this catalogue may change without prior notice. Customers are advised to check current data before purchasing any product.

Images/colours used in the catalogue are strictly for representational purposes only. Actual product/colour may vary due to product improvements, innovations and printing limitations.



