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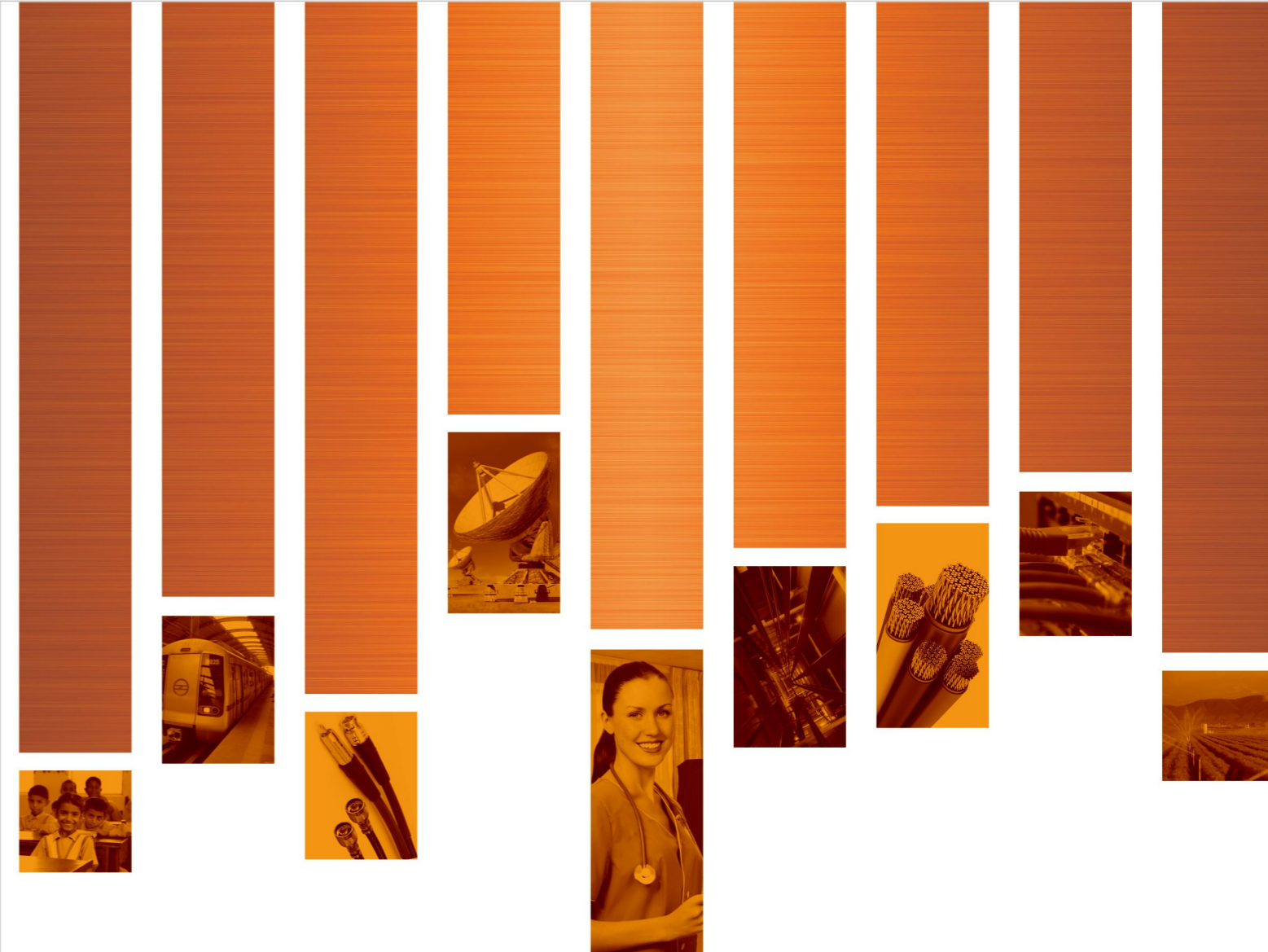
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catalogue



Corporate Information

TAMRA, a fully owned subsidiary of the Singhee Group, is one of India's fastest growing companies engaged in manufacturing and trading of diversified non-ferrous metal products.

With its state of the art manufacturing facility located at Pathredi, Bhiwadi (Rajasthan, India) TAMRA has an overall production capacity of 18000MT per annum. The range of product includes Oxygen Free Copper Rod, Copper Wire, Bunched Conductor, Tinned Copper Wire, Copper Bussbar, Copper Strips, Insulated Copper Conductors and recently introduced Wires & Cables.

The Company through its worldwide suppliers and a pan India marketing network trades in various non-ferrous metals i.e. Copper Wire Rod, Copper Scrap, Zinc Ingots, Tin Ingots, among others. The Company is driven by its prudent and experienced management and employees ensuring continuous creation of economic value for the Company and its various stakeholders.

Vision

To continuously evolve by challenging past achievements and setting new benchmarks as a producer of high quality products and a world class service provider.

Mission

To create value and delight its customers through continuous development of innovative products.

To go that extra mile by taking actions that builds strong partnerships and develops customer loyalty. To foster an atmosphere of knowledge sharing and collaborative working.

To contribute towards the enhancement of health, safety and environmental protection.

CERTIFICATION





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High Insulation Resistance

Tamra wires have an allowable current-leakage limit that is 50 times lower than the prescribed international safety norms.

International safety standards specifies that current leakage limit in hand held equipment is considered to be safe if the value is not more than 0.75 mA. Tamra Cables, with special technology, incorporate insulation of high quality which ensure that current leakage level is as low as 0.01 mA, which is much below the prescribed limit.

Safety from electrical shocks-Electric shock occurs when a body-part comes in contact with a bare conductor of poor insulated wire. Higher insulation resistance protects against electric shock.

RoHS complaint

Release of certain harmful substances such as lead, mercury, cadmium and chromium, etc. in the plastic/ equipment are dangerous to the environment and health. European Union has adopted a directive on the restriction of the use of certain hazardous substances in electrical and electronic equipment commonly referred to as Restriction of Hazardous Substances directive or RoHS.

This ensures that release of hazardous substances are eliminated to provide safety for human health and to give us green environment.

An initiative for eco friendly environment by Tamra.

Anti-Termite And Anti-Rodent

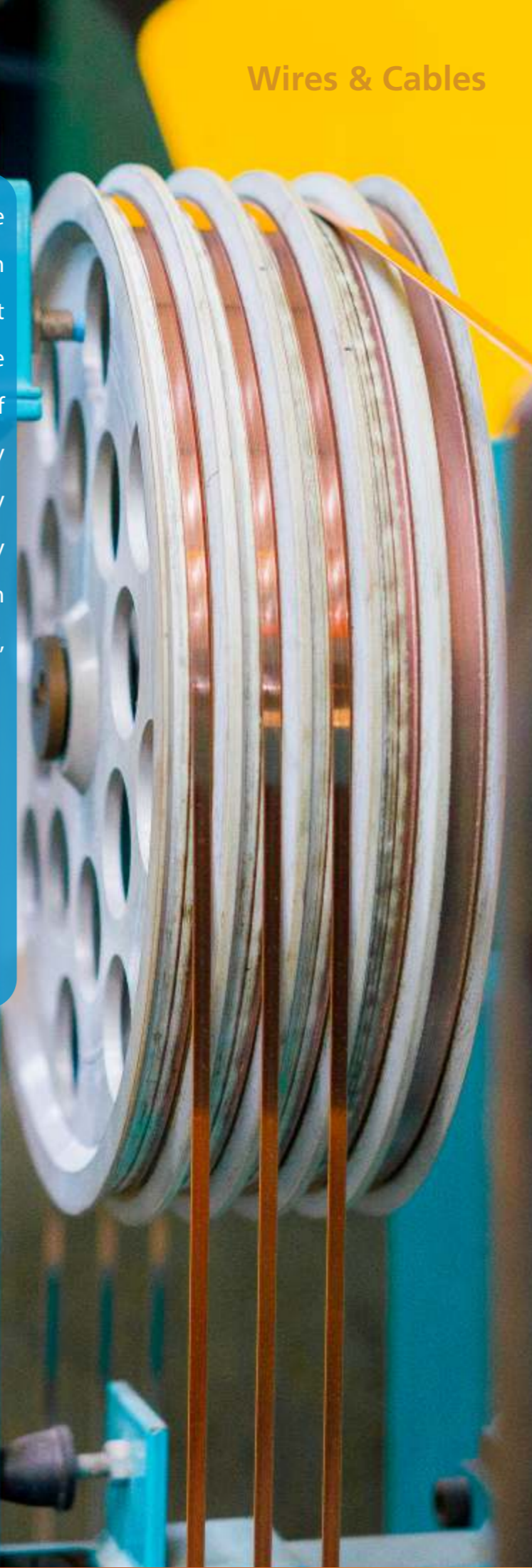
Termites and rodents cause extensive damage to paper, wood, plastic etc. In case of electrical installation, damaged caused by above pests may lead to short circuit which can become a cause for a major disaster, loss of property and human life. Tamra cables with special technology provide insulation with termite and rodent repulsion properties.



Tamra flexible cables with insulation and Flame Retardant (FR) properties ensure optimum electrical and mechanical performance at higher temperatures. Irrespective of the industry, flexible cables are an essential part of any commercial establishment because they offer high levels of safety, reliability and energy efficiency. Reducing the leakage current, they also safeguard us and the environment from harmful substances such as lead, mercury, cadmium and chromium.

Construction

- Conductor** - Bare annealed copper as per IS : 8130 / BS : 6360/IEC : 60228
- Insulation** - Primary - Natural PVC with FR Property
Secondary - Skin Colour with FR Properly coated PVC
- Standard** - IS:694
- Sizes** - 0.5 sq.mm to 400 sq.mm



Single Core Electric Wire with Flexible Copper Conductor Ref : IS: 694

Tamra 1100V Grade Multi Strand Flexible Annealed Bare Copper Conductor, FR PVC Insulated and Unsheathed Single Core Flexible Cables

Conforming to IS : 694

Nominal Cross Sectional Area of the Conductor (Sq. mm)	Nos./Nominal Dia. of Strand (Nos./mm)	Nominal Thickness of Insulation (mm)	Approx. Overall Dia (mm)	Conductor Resistance at 20° C Max. (Ohm/km)	Current Rating (Amps.)	
					2 Wires, In Conduit/ Trunking	1 Phase # Clipped Directly to Surface or on Cable Tray
0.75	24/.2	0.6	2.3	26.0	8	9
1.0	32/0.2	0.6	2.6	19.50	13	14
1.5	30/0.25	0.7	2.9	13.30	17	20
2.5	50/0.25	0.8	3.6	7.98	24	27
4.0	56/.3	0.8	4.0	4.95	30	33
6.0	84/.3	0.8	4.6	3.30	38	42

Note

Std. Colours - Red, Yellow, Blue, Black & Green

Normal packing length - 90 mtrs. in project packing - 180/200 mtrs.

TAMRA 1100V Grade Multi Strand Flexible Annealed Bare Copper Conductor, PVC Insulated and Unsheathed Single Core

Conductor Area Sq. mm.	No. & Size of Each Strand mm.	Max. DC Resistance at 20°C Ohm/Km.	Insulation Thickness Nominal mm.	Cable Dia App. mm.	#Current Carrying Capacity Amp.	Conductor Area Sq. mm.	No. & Size of Each Strand mm.	Max. DC Resistance at 20°C Ohm/Km.	Insulation Thickness Nominal mm.	Cable Dia App. mm.	#Current Carrying Capacity Amp.
0.50	16/0.20	39.00	0.60	2.10	5	35.00	276/0.40	0.554	1.20	9.9	110
0.75	24/0.20	26.00	0.60	2.30	8	50.00	396/0.40	0.386	1.40	11.8	145
1.00	32/0.20	19.50	0.60	2.60	13	70.00	556/0.40	0.272	1.40	13.5	215
1.50	30/0.25	13.30	0.70	2.90	17	95.00	756/0.40	0.206	1.60	15.5	260
2.50	50/0.25	7.98	0.80	3.60	24	120.00	954/0.40	0.161	1.60	17.1	305
4.00	56/0.30	4.95	0.80	4.00	30	150.00	1192/0.40	0.129	1.80	19.2	355
6.00	84/0.30	3.30	0.80	4.60	38	185.00	1472/0.40	0.106	2.00	21.3	415
10.00	140/0.30	1.91	1.00	6.10	52	240.00	1910/0.40	0.0801	2.20	24.2	500
16.00	126/0.40	1.21	1.00	7.10	70	300.00	2380/0.40	0.0641	2.40	26.7	585
25.00	196/0.40	0.78	1.20	8.70	88	400.00	3182/0.40	0.0486	2.60	30.7	640

Standard Packing

100 mtrs Coils, Colours available Red, Yellow, Blue, Black, Grey & Green.



Multi-Core Flexible Cables Conforming to IS : 694

Tamra 1100V Grade Multi Strand Flexible Annealed Copper Conductor, PVC Insulated, PVC Sheathed Multi-Core Flexible Cables Conforming to IS : 694

Conductor Area Sq. mm.	No. & Size of Each Strand mm.	Max. DC Resistance at 20°C Ohm/km	Insulation Thickness Nominal mm.	Sheath Thickness Nominal				Overall Diameter Maximum				#Current Rating Amp.
				2 Core mm.	3 Core mm.	4 Core mm.	5 Core mm.	2 Core mm.	3 Core mm.	4 Core mm.	5 Core mm.	
0.50	16/0.2	39.0	0.6	0.9	0.9	0.9	0.9	6.2	6.6	7.0	7.5	5
0.75	24/0.2	26.0	0.6	0.9	0.9	0.9	0.9	6.6	6.90	7.4	8.0	8
1.00	32/0.2	19.5	0.6	0.9	0.9	0.9	1.0	7.1	7.3	8.0	8.9	13
1.50	30/0.25	13.3	0.6	0.9	0.9	1.0	1.0	7.5	8.0	9.0	9.7	17
2.50	50/0.25	7.98	0.7	1.0	1.0	1.0	1.0	9.0	9.4	10.4	11.3	24
4.00	56/0.3	4.95	0.8	1.0	1.0	1.0	1.1	10.0	10.6	11.8	13.0	30
6	84/0.30	3.30	0.80	1.1	1.2	1.2		11.2	12.3	13.6		38
10	140/0.30	1.91	1.00	1.3	1.4	1.4		14.8	16.0	17.6		52
16	126/0.40	1.21	1.00	1.4	1.4	1.4		17.0	18.2	20.0		70
25	196/0.40	0.78	1.20	1.4	1.5	1.6		20.3	21.9	24.5		88
35	276/0.40	0.554	1.20	1.6	1.6	1.7		23.1	24.8	27.5		110
50	396/0.40	0.386	1.40	2.0	2.0	2.0		27.8	29.7	32.8		145
70	556/0.40	0.272	1.40	2.2	2.2	2.2		32.0	34.2	37.8		215
95	756/0.40	0.206	1.60	2.4	2.4	2.4		35.8	38.3	42.2		260
120	954/0.40	0.161	1.60	2.5	2.5	2.5		39.6	42.4	46.9		305



FR-LSH Cables

Increasing human habitation has brought a lot of people and families living closer to each other within a single housing or commercial complex and therefore the need for cables to be safe and efficient is paramount. Tamra FR- LSH cables are made from specially formulated PVC polymers that restrict the toxic gases and smoke and are therefore safe, reliable, fire resistant, lead resistant lead free and a non toxic alternative.

Construction

- Conductor** - Bare annealed copper as per IS 8130/BS : 6360/ IEC : 60228
- Insulation** - Unicolour FR-LSH PVC with a longitudinal colour stripe
- Standard** - IS:694
- Sizes** - 1 sq.mm to 50 sq.mm

Salient Features

- Excellent fire retardant properties.
- Self Extinguishing.
- During Fire : very less toxic fumes emitted.
- Quite lesser amount of non-corrosive smoke emitted.

Some comparative technical features are given in the details below.

Feature	Standard Range Flame Retardent FR	Special Range	
		Flame Retardent Low Smoke & Halogen FR-LSH	LSZH/HFFR/ZHFR
Insulation material	Spl. PVC	Spl. PVC	Spl. Polymer
Insulation property	Good	Good	Very Good
Temperature rating	70°C	70°C	70°C
Thermal Stability	Good	Good	Very Good
Flame Retadancy	Very Good	Very Good	Excellent
Safety During Burning	Good	Good	Excellent
Requirment of Critical Oxygen Index As Per ASTMD-2863 to Catch Fire (%)	>30	>30	>35
Temperature Index	>250°C	>250°C	>280°C
Light Transmission (visibility) During Cables As Per ASTMD-2843 to Catch Fire (%)	NA -	>40 Good	>80 Excellent
Release of alogen Gas During Burning (%)	NA -	>20% Good	>0.5% Excellent
Abrasion Resistance During Installation	Good	Good	Good



Special Test on TAMRA FR-LSH WIRES

Test	Function	Specification	Specified Values & Test	Obsd. Values
Critical Oxygen Index	To determine percentage of oxygen required for supporting combustion at room temperature of insulating material.	ASTM-D-2863	Oxygen Index: minimum 29% Test sample 7 to 15 cm long by 6.5 + 0.5 mm wide & over 3 + 0.5 mm thick in a minimum concentration of oxygen and nitrogen mixture will just support candle like burning at room temperature.	More than 32
Temp. Index	To determine at what temp. normal oxygen content of 21% in air will support combustion of insulating material.	ASTM-D-2863	Temperature Index : minimum 250° C The aforesaid procedure at various temperatures & then extrapolating to 250° C.	Around 285° C
Smoke Density	To determine the visibility (light transmission) under fire of insulating material.	ASTM-D-2843	Light Transmission : minimum 40% The test sample is exposed to flame to a 40 psi pressure for 4 minutes. The light absorption data and plotted on a graph as smoke density (%) versus time.	Around 45%
Acid Gas Generation	To ascertain the amount of hydrochloric acid gas evolved from PVC insulation of wire under fire conditions.	IEC 754 - I	Hydrochloric acid gas released : 20% max. 0.5-1 gram of the material from the wire insulation/sheath is burnt in a ceramic tube inside a tubular furnace at 800° C. The volume of corrosive gases (HCL) present in the combustion products are analyzed chemically.	Around 15%
Flammability test on group of cables	To determine flame propagation of wires in installed condition.	IEEE-383	In total 20 minutes of burning 8 ft. wire length samples with flame temp of app 1500° F. The burning of Cables should not go to the top.	Satisfactory
Flammability test	1) To determine ignition resistance & flame propagation under specified conditions.	Swedish standard No. SS-424-17	From test sample of 850mm length. The un-burnt portion shall be more than 300 mm from the top.	Satisfactory
	2) To determine ignition resistance & flame propagation under specified conditions.	IEC 332-1	In the calculated time duration of burning the Cables wire sample of 600 mm 25 mm length the length of un-burnt portion to be min 50 mm from the top.	Satisfactory
	3) To determine ignition resistance and flame propagation, especially from bunch of wire under specified conditions.	IEC 332-2	From test sample of 3.5 mtrs. length effected portion during burning, shall not reach 2.5 mtrs. above from the bottom edge of the burner.	Satisfactory

HR / ZHFR Wires / HFFR

Our Heat Resistant Cables can withstand upto 85 C / 105 C (as per requirement) operating conductor temperature. Tamra HR Cables have 30% more current carrying capacity in comparison to FR Cables.

Tamra Zero Halogen Fire Retardant Cables are recommended specially in a situation where high degree of safety of personnel and equipment are used for application like Hotels, Theaters, Hospitals, High-rise buildings, Commercial complexes, Centrally A.C. offices, Residential properties etc.

Owing to its special insulation characteristics the wires continue to provide uninterrupted power supply even during fire- keeping alive fire alarm circuits, exit lights, Lifts & other emergency Circuits. Tamra ZHFR Cables are made to International standards and carry a guarantee that far exceeds the minimum requirements

Construction

- Conductor** - Bare Annealed Copper as per IS : 8130 / BS : 6360 / IEC : 60228
- Insulation** - HR grade /ZHFR compound
- Sizes** - 1.0 sq.mm to 50 sq.mm



Single Core, ZHFR Insulated Cables In Voltage Grage 1100V.

Nominal area of Conductor (Sq.mm)	Number/Nom. Dia. of wire (Nos./mm)	Nominal Thickness of Insulation (mm)	Approx. Overall Diameter (mm)	Max dc Resistance @ 20°C (Ohms/Km.)	Current Rating (Amps.)
1.0	32/0.2	0.6	2.6	19.50	13
1.5	30/0.25	0.7	2.9	13.30	17
2.5	50/0.25	0.8	3.6	7.98	24
4.0	56/3	0.8	4.0	4.95	30
6.0	84/3	0.8	4.6	3.30	38



Submersible Cables

Owing to the special safety parameters for the submersible cables, Tamra flexible cables offer you a safe, reliable, fire retardant, fire resistant, lead free, non toxic cable that is eco friendly. Tamra being the largest manufacturer of cables for multiple applications has pioneered cable technology with innovations and high technology manufacturing.

Construction

- Conductor** - Stranded bare annealed electrolytic grade copper
- Insulation** - Specially formulated PVC (Type A & Type C HR)
- Outer Sheath** - Specially formulated PVC (ST-1 & ST-2)
- Sizes** - 1 to 50.0 Sq mm three core flat and shape. (round submersible cable as per customer specific requirement)
- Standard** - IS 694

Applications

PVC insulated multistrand annealed bare copper conductor, three core flat PVC sheathed cable are used for giving electrical connection to the submersible pump motors.

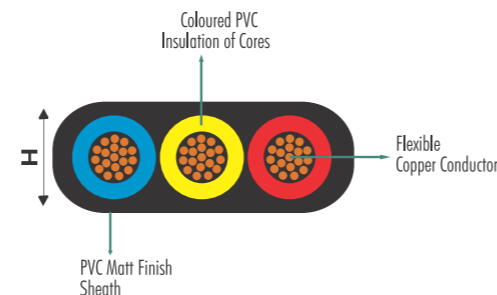
TAMRA Cable 3-Core Flat Cables for Submersible Pump Motors (Technical Date)

Area (Nom.) Sq.	Number/size of Wire	Insulation Thickness (Nom.)	Sheath Thickness (Nom.)	Height 'H' (Maximum)	Width 'W' (Maximum)	Resistance at 20°C (Maximum)	Current carrying capacity at 40°
mm.	No./mm	mm.	mm.	mm.	mm.	Ohm/Km	Amps
1.0	32/0.2	0.6	0.9	4.5	9.9	19.50	13
1.5	30/0.25	0.6	0.9	4.8	10.8	13.30	17
2.5	50/0.25	0.7	1.0	5.7	12.9	7.98	24
4.0	56/0.3	0.8	1.0	6.2	14.5	4.95	30
6.0	84/0.3	0.8	1.1	7.2	16.4	3.30	38
10.0	140/0.30	1.0	1.4	9.2	21.5	1.91	52
16.0	126/0.4	1.0	1.4	10.3	24.7	1.21	70
25.0	196/0.4	1.2	2.0	13.1	30.9	0.780	88
35.0	276/0.4	1.2	2.0	14.3	34.6	0.554	110
50.0	396/0.4	1.4	2.2	15.5	40.5	0.386	145

***Conductor** : Class 5 of IS : 8130/84

Salient Features

- Bright annealed electrolytic grade copper having 100% purity and maximum conductivity to ensure minimum power losses. Cores are insulated on modern & precision machines using specially formulated PVC compound having very high thermal properties.
- Indigenous PVC compound provides better ageing properties, higher operating temperature & enhance insulation characteristics.
- Outersheath for Submersible Cables is designed to fit closely, maintain flexibility, resist water absorption, abrasions, oil, grease and other environmental effects.



Telephone Cables

To cater the growing need of telecommunication, Tamra presents Tamra Telephone Cables as a fulfilment of our commitment to quality and performance. Tamra Telephone cables are among the best in industry and meet various national and international standard requirements.

Construction

- Conductor** - Bare/tinned annealed copper
- Insulation** - PVC/ PE
- Shielding** - Individual /Overall Shielded with aluminium tape (Polyester backed) or Bare/Tinned copper wire braiding
- Outersheath** - PVC
- Sizes** - 0.4/0.5/0.6/0.7/0.8/0.9 mm dia conductors available in 1 pair to 50 pair
- Standard** - TEC Specification G/WIR 06/02



Application

For telecom data transmission in telephones, Intercoms, EPBAX, FAX, Close circuit security system, Residential / Industrial telephone line.

Salient Features

- Specially formulated hard grade PVC, is used for insulation. This PVC not only gives long life and better stability to cable but also has high electric properties to minimize losses and disturbances.
- Distinct Colour Coding System as per TEC.
- Pairs having staggered lay especially the adjacent one to minimize the cross talk.
- Precise and controlled sizing and process is done for conductor and insulated cores with all automatically controlled machines to attain the perfect and optimum value of capacitance, attenuation and impedance.
- Shielding is provided as optional feature, to avoid external as well as inter pair interferences, when the cables are used for specific needs.

No. of Pair	0.45 mm Dia. over Insulation (mm)	Conductor Approx. Overall Dia (mm)	0.50 mm Dia. over Insulation (mm)	Conductor Approx. Overall Dia (mm)	0.60 mm Dia. over Insulation (mm)	Conductor Approx. Overall Dia (mm)	0.70 mm Dia. over Insulation (mm)	Conductor Approx. Overall Dia (mm)
1	0.80	2.60	0.90	2.80	1.00	3.00	1.20	3.70
2	0.80	4.00	0.90	4.40	1.00	4.70	1.20	5.60
3	0.80	4.20	0.90	4.60	1.00	5.00	1.20	5.90
4	0.80	4.60	0.90	5.00	1.00	5.40	1.20	6.40
5	0.80	5.00	0.90	5.40	1.00	5.90	1.20	7.00
6	0.80	5.40	0.90	5.90	1.00	6.40	1.20	7.60
8	0.80	5.70	0.90	6.30	1.00	6.80	1.20	8.10
10	0.80	6.70	0.90	7.40	1.00	8.00	1.20	9.30
20	0.80	8.60	0.90	9.50	1.00	10.30	1.20	12.00
40	0.80	11.80	0.90	13.00	1.00	14.10	1.20	17.00
50	0.80	13.20	0.90	14.60	1.00	16.00	1.20	18.70

Networking Data Cables

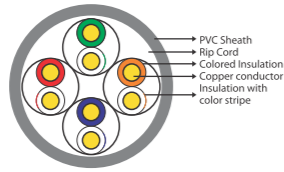
Enhanced performance cables for transmission of high speed data, digital and analogue voice and video (RGB) signals of LAN's. Supports Gigabit Ethernet standards (1000 base T). Operates at bandwidth up to 100 MHz for CAT-5e and 250 MHz for CAT-6e. The cable meets the requirements of EIA/TIA 568 B.2 and ISO-11801

Construction

- Conductor** - Solid/stranded, Annealed Bare Electrolytic Grade Copper conductors.
- Insulation** - High Density Polyethylene
- Pair** - Two Cores are twisted to form a pair. The lay of the pairs are chosen to minimize the Cross talk, and Structural return loss (SRL). The four pairs are further laid up. A separator between pairs is inserted in CAT-6e cable to minimize crosstalk between pairs at high frequencies.
- Colour coding of Pairs** - Pair 1 - WHITE - BLUE / BLUE Pair 2 - WHITE - ORANGE / ORANGE
Pair 3 - WHITE - GREEN / GREEN Pair 4 - WHITE - BROWN / BROWN
- Sheath** - FR / FRLS / ZHFR PVC Printing : At every meter with sequential marking
- Rip Cord** - PP / Polyester
- Shielding** - FTP : Aluminium mylar and polyester tape with ATC drain wire in contact with aluminium tape.
STP : Aluminium mylar tape with copper / alloy braiding upto 96%+ coverage.

Application

- Horizontal Distribution & Backbone Cabling
- 100 Base TX / 1000 Base TX / 100 Base VG Anylan
- 155 ATM / 622 ATM
- IEEE 802.3 / IEEE 802.5
- 16 Mbps Token Ring
- Gigabit Ethernet



Electrical & Transmission Characteristics

- DC Resistance (OHMS/100 meters at 20°C) - 9.13 for a single copper conductor
- DC Resistance Unbalanced (percent), max. - 5
- Pair-to-Ground Capacitance Unbalanced - 330 (pF/100 meters), Max
- Impedance (ohms) 100MHz - 100±15%

Application

- Gigabit Ethernet
- ATM 622 or higher
- Broadband video (77 channels, 550MHz)



Electrical & Transmission Characteristics

- DC Resistance Unbalanced - 5(percent), max.
- Pair-to-Ground Capacitance - 330 Unbalanced (pF/100 meters), Max
- Impedance (ohms) - 100±15%

Packing : 100 mtr coils / 305 mtr tangle free cartons.

CAT-5e

Frequency (MHz)	Worst Pair Near-End Cross talk (db), min	Attenuation (db/100 Meters at 20°C), Max	Structural Return Loss (db) Min.
0.772	64	1.8	-
1	62	2	23
4	53	4.1	23
8	49	5.8	23
10	47	6.5	23
16	44	8.2	23
20	42	9.3	23
25	41	10.4	22
31.25	39	11.7	21
62.5	35	17	18
100	32	22	16

CAT-6

Frequency (MHZ)	ATT (db/100m) max.	Ps. Next (db) min.	PS. ACR (db@100m) min.	PS. Elfext (db@100m) min.	R.L. (db@ 100m) min.
1	2	72.3	70.3	64.8	20
4	3.8	63.3	59.5	52.7	23
8	5.4	58.8	53.4	46.7	24.5
10	6	57.3	51.3	44.8	25
16	7.6	54.3	46.7	40.7	25
20	8.5	52.8	44.3	38.7	25
25	9.6	51.3	41.7	36.8	24.3
31.25	10.7	49.9	39.2	34.9	23.6
62.5	15.5	45.1	29.9	28.8	21.5
100	19.9	42.3	22.4	24.8	20.1
155	25.3	39.5	14.2	20.9	18.8
200	29.2	37.8	8.6	18.7	18
250	33	36.3	3.3	16.8	17.3

Co-axial Cables

Used extensively in cable TV and computer networking operations, the Tamra Co axial cables are known for their highest quality standard. The multiple features of the Tamra Co Axial cables include reliable, safe, fire retardant, fire resistant, lead & halogen free and non toxic. We have always raised the bar with our technological innovations and are one of the largest cable producers in India. We develop all our cables at an eco friendly facility.

Construction

- Conductor** - Solid bare annealed electrolytic grade copper
- Insulation** - PE foam and solid
- Braiding/Taping** - Alluminium Alloy Wirebraiding / Myler Taping
- Outer Sheath** - Specially formulated FR PVC
- Sizes** - RG 6, RG 11, RG 59 (CV & CSS)



Application

For signals transmission for satellite TV telecom, microwave signals and Close Circuit TV. Coaxial cable is used as transmission line for Radio frequency signals. Its applications includes feedlines connecting Radio transmitters & receivers with their Antennas, Computer Network Connections.

Salient Features

- Double screening over the dielectric i.e polyester baked aluminum tape with 100% coverage is done and an additional layer of shielding in the form of fine tinned copper braid ensures the low loss in cables and ensure better and high quality of reception and transmission of signals.
- Specially formulated PVC for Outersheath with added resistance to sunlight makes it suitable for outdoor installations.

Cable Type	RG 59 (Foam)	RG 6 (Foam)	RG 11 (Foam)
Conductor Diameter	0.80	1.02	1.62
Dia over dielectric	3.55	4.57	7.1
Overall Diameter	6.0	7.0	10.0
Impedence	75	75	75
Capacitance	53	53	53
Velocity of propogation	85	85	85

Attenuation at Different Frequencies

Attenuation at 20° C (Db/100 yards) MHZ	RG 59 (Foam)	RG 6 (Foam)	RG 11 (Foam)
100	6	5	3.5
200	11	9	6
300	15	12	8
500	20	16	11
800	27	21	15

Above parameter may vary under different using conditions.

Notes

DC Solar Cables

DC Solar Cables for ON-GRID/OFF-GRID Application-Specification.

General Description

Flexible Single core cable with flexible electroplated tinned copper conductor insulated with special cross linked halogen free Elastomer, low smoke zero halogen sheathed, UV and Ozone resistant. The cable is able to satisfy the latest requirement for PV systems as per TUV Spec No. 2 pfg-1169/08.2007.

Application

Flexible Cables suitable for:

Mobile & fixed installations

Connection between photovoltaic panels to junction box/inverter

Construction

Conductor:

Electrolytic annealed electroplated tinned copper conductor, class-5 IEC 60228/IS 8130

Insulation

halogen free fire retardant thermosetting Elastomer (cross linked) type IE3 to IS 6380 and EI 3 to EN 50363-1, according to table 4 of TUV spec. 2pfg-1169/08.2007

Outer Sheath:

alogen free fire retardant thermosetting Elastomer (cross linked) outer sheath type SE4 to IS: 6380 and EM 50363-1, according to table 4 of TUV spec. No. 2 pfg-1169/08.2007. Standard Colours are Red or Black. Both Profibus DP and Profibus PA work on RS 485.

Size (in sq. mm.)	No. of Cond./Size of each wire (in Nos./mm.)	Cond. Dia (mm.)	XL-LSOH insulation thickness nominal (mm)	XL-LSOH sheath thickness nominal (mm)	Overall Diameter Nominal (mm)
4.00	56/0.3	2.6	0.70	0.80	5.50±0.20
6.00	84/0.3	3.2	0.80	0.90	6.50±0.20
10.00	80/0.4	4.3	0.80	0.90	7.45±0.20
16.00	126/0.4	5.4	0.80	0.90	8.45±0.20

1×10^{14} Ohm cm @ 20°C

1×10^{11} Ohm cm @ 90°C

(Specific volume resistance to IEC: 50395-8.2)