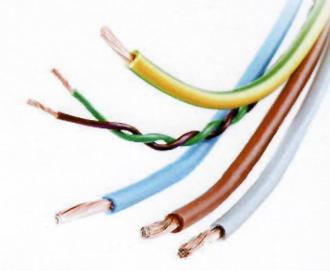
INTRODUCTION OF WIRES & CABLES

A cable is a thick wire, or a group of wires inside a Insulation covering which is used to carry electricity or electronic signals A copper cable consists of two or more copper wires running side by side and bonded, twisted or braided together to form a single assembly. Electrical cables may be made more flexible by stranding the wires. WAA Cables offers immense expertise in R & D, Design & Manufacturing

of high quality Cables & Wires of LT Range.



PRODUCTS RANGE



Solar Cables



LT Power & Control Cables



Flexible Cables



Welding Cables



Submersible Cables



Shielded / Braided Instrumentation Cables



Fire Survival Cables



Auto Cables



Heavy Duty Industrial Cables



Housing Wires

INSULATION VARIATIONS

Flame Retardant (FR) Wire

These wires are made of special insulation material with higher oxygen and temperature indices. This insulation retards flame propagation. Flame retardant properties enable the cable to withstand overloads. The insulation is resistant to boiling water, steam and vapours. This prevents ageing and cracking in kitchens, bathrooms, damp walls and chemical industries.

Zero Halogen Flame Retardant (ZHFR) wire

The zero halogen fire-retardant (ZHFR) wire and cable is available for applications where people are present in confined areas. When combined with other fire prevention and suppression practices, fire-retardant, LSZH cables can help minimize fire-related deaths and property damage. The PVC insulation done in case of ZHFR wires are free from halogen, thus preventing emission of corrosive gases under conditions of fire.

ADDITIONAL FR PROPERTIES

	Specifications	Specified Values	
Critical Oxygen Index	ASTM-D 2863	<u>≥</u> 29%	
Temperature Index	ASTM-D 2863 & BICC Handbook Chaper No.6	<u>></u> 250° C	

Also meets requirements of Flammability Test as per IEC 60332-1

HOUSING WIRES

WAACAB house wires are made of annealed bare copper of electrolytic grade, as per IS: 8130 -1984. The wires are twin coated for superior insulation. These wires are suited for all domestic and commercial wiring applications. The insulation processes for wires carried out on high speed extrusion lines, with online spark testers & outer diameter controllers ensures uniform insulation throughout and moderates for any insulation faults in wires in the course of production.

The Different kind of insulation we offer are

- Lead free flame retardant (LFFR)
- Zero halogen flame retardant (ZHFR)
- Heat resistant flame retardant (HRFR)

PVC Insulated Single core Fixed wiring and Single core cables for 1100V Grade, conforming to IS:694-1990

Nominal area of Conductor (sq.mm)	Number/Nom. Dia. (mm) of Strands	Thickness of Insulation (Nom.)	Overall Diameter, Nom. (mm)	Current Carrying Capacity#	Max Conductor Resistance (Ω/km) @ 20°C
0.75**	24/0.20	0.6	2.4	7	26.0
1.00*	14/0.30	0.7	3.0	12	18.1
1.50*	22/0.30	0.7	3.2	16	12.1
2.50*	36/0.30	0.8	4.0	22	7.41
4.00*	56/0.30	0.8	4.5	29	4.61
6.00**	84/0.30	0.8	5.6	31	3.30
10.00**	140/0.30	1.0	6.4	42	1.91

[#] As per IS:3961 (Part V) - 1968

Available colors:











As per Conductor Class 2 of IS:8130-1984

^{**} As per Conductor Class 5 of IS:8130-1984

SOLAR CABLES

Solar DC Cables as per Standard EN 50618

Size	Conductor	Cable Overall Diameter	XLPO Insulation Thickness	XLPO Sheath Thickness	Current Rating (A)		
Sq.mm	No./Dia of Strand (mm) (Nom.)	Nominal in mm	Nominal in mm	Nominal in mm	At 60°C in Air	Single Cable on Surface	2 Cables Adjacent on Surfaces
4	56/0.3	4.7	0.5	0.5	55	52	44
6	84/0.3	5.5	0.5	0.5	70	67	57

RATING FACTOR

Ambient Temp °C	<60	70	80	90	100	110
Rating Factor	1	0.91	0.82	0.71	0.58	0.41

SUBMERSIBLE CABLES

For PVC Insulated 3 Core Round & Flat (submersible) Cables (1100 Volts), Conforming to IS: 694/2010

Nominal Area of	Number/Dia of	Current	PVC Insulation		Conductor Resistance at	
Conductor Sq. mm**	Wire / mm of Strands**	Rating AMPS	Nominal Thickness mm	Nominal Core Dia. mm	20°C (Max) ohms/km	
1.5	30/0.25	14	0.80	3.25	12.10	
2.5	50/0.25	19	0.90	3.80	7.41	
<u> </u>	56/0.30	26	1	4.50	4.95	
6	84/0.30	31	1	5.25	3.30	

^{**} As per Conductor Class 5 of IS : 8130 -1984