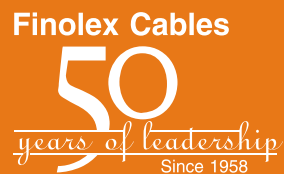


# Finolex

An IS / ISO 9001 Company



FLAMEGARD – Flame Retardant Low Smoke (FR-LSH) PVC Insulated Industrial Cables

# FLAMEGARD - Flame Retardant Low Smoke & Halogen Electrical Wires

For the first time in India, Finolex brings 'Flamegard' – Flame Retardant Low Smoke and Halogen (FR-LSH) electrical wires. Flamegard is manufactured by using electrolytic grade copper for conductor to ensure superior conductivity. Insulated with FR-LSH Grade PVC compound formulated and manufactured in-house. In case of fire, Flamegard wires has special flame retardant, low smoke emitting and toxic fumes suppressing properties, with improved fire performance for category C-2 as per IS 694 : 1990 with latest amendments.

During fire, ordinary PVC insulated wires give out thick black smoke and toxic fumes of hydrochloric acid gas. This impairs visibility and hampers rescue operations. Flamegard wires, on the contrary, not only emit very little smoke and toxic gases, but also retards the spread of fire. It is thus ideal for concealed and conduit wiring in multi-storied high rise buildings such as hotels, banks, hospitals, factories, commercial and residential complexes, etc. where the density of people is high.

Flamegard wires go through rigorous tests to ensure the highest standards of quality. It is also backed by the Tariff Advisory Committee and Fire Insurance Approval.

For unique identification these wires are provided with an orange stripe, on request.

These wires are manufactured in our state-of-the-art manufacturing plants at Pimpri (Pune), Urse (Near Pune), Verna (Goa) and Roorkee (Uttarakhand).

## FLAME RETARDANT v/s FR-LSH ELECTRICAL WIRES

Electrical safety is a function of five characteristics viz. smoke, hazardous gas generation, rate of heat release, flame spread and rate of burning. In case of fire in a closed space, trapped people are unable to find the exit due to emission of thick black smoke and loose consciousness due to the inhalation of toxic fumes before they can be evacuated to safety.

The advantages of low smoke and low acid gas generation are additional and critical features available with Finolex FR-LSH Flamegard wires in comparison with FR (Flame Retardant) wires which do not provide these properties.



IS:694



CM/L-7525273  
CM/L-0382242  
CM/L-7306463  
CM/L-8944096

## Flamegard- Single Core, Unsheathed Cables in Voltage grade 1100 v

Nominal area of Conductor	Number/ Nom. Dia. of Wire	Thickness of Insulation (Nom.)	Approx. Overall Diameter	Current carrying capacity#		Conductor Resistance (Max.) per Km. @20°C
				2 cables, single phase		
Sq. mm.	mm.	mm.	mm.	In conduit/ Trunking Amps.	Unenclosed - clipped directly to a surface or on a cable tray Amps.	Ohms.
1.0	14/.3*	0.7	2.6	11	12	18.10
1.5	22/.3*	0.7	2.9	13	16	12.10
2.5	36/.3*	0.8	3.6	18	22	7.41
4.0	56/.3**	0.8	4.0	24	29	4.95
6.0	84/.3**	0.8	4.7	31	37	3.30

Standard Base Colours: Black, Red, Blue, Yellow and Green (for earthing), provided with orange stripe on request.

Supplied in 180/270 metre lengths

# as per IS:396 (Part V) 1968

\*As per conductor Class 2 of IS : 8130/1984

\*\*As per conductor Class 5 of IS 8130/1984

## THE FLAMEGARD ADVANTAGE

TEST	FUNCTION	TEST METHOD SPECIFICATION	TYPICAL VALUES	
			FLAMEGARD WIRES	ORDINARY PVC INSULATED WIRES
Critical oxygen index	To determine percentage of oxygen required for supporting combustion of insulating material at room temperature	IS 10810 Part 58	More than 29%	23%
Temperature index	To determine at what temperature normal oxygen content of 21% in air will support combustion of insulating material	IS 10810 Part 64	More than 250°C	150°C
Acid gas generation	To ascertain the amount of Hydrochloric acid gas evolved from insulation of wire under fire	IS 10810 Part 59	Less than 20%	45-50%

Also meets requirements of Flammability test as per IS 694:1990

Sample card available on request



# Finolex

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**Finolex gets people together**

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