



# ZHFR CABLES

## Insulation

MESCAB ZHFR Wires are eco-friendly superior quality wires that are insulated with specially formulated Zero Halogen Fire Retardant Compound. These properties aid in restricting the spread of fire even at a very high temperature. Additionally these wires have good electrical properties, high thermal stress resistance, low smoke formation and long term reliability. Zero Halogen insulation provides better flame retardant properties than FR and FR-LSH. Zero Halogen requires  $> 300^{\circ}\text{C}$  temperature to catch fire (with 1% oxygen). The insulation does not melt or drip in case of fire. The smoke emission is transparent, non-toxic and minimal. The victims trapped in the fire do not suffer suffocation and evacuation is convenient.

## Conductor

The conductors are drawn from 99.97% pure bright electrolytic grade annealed copper and bunched together which gives flexibility, high purity and conductivity ensuring higher current rating. Thus helps in saving energy.

Zero Halogen Flame Retardant (ZHFR) PVC Insulated (Unsheathed) single core multi strand cable with electrolytic grade annealed copper conductor suitable up to 1100 Volts grade generally conforming to IS : 694

Nominal Area of Conductor Sq.mm	Number/ Nom. dia* of Wire mm	Nominal Thickness of Insulation mm	Approx. Overall Diameter mm	Current Carrying Capacity 2 Cables, Single Phase @		Max DC Conductor Resistance At 20°C Ohms/km
				In Conduit Amps	Unenclosed Amps	
0.75	24/0.2	0.6	2.5	07	08	26.00
1.0	14/0.3	0.7	2.8	11	12	18.10
1.5	22/0.3	0.7	3.1	13	16	12.10
2.5	36/0.3	0.8	3.8	18	22	7.41
4.0	56/0.3	0.8	4.4	24	29	4.95
6.0	84/0.3	0.8	5.0	31	37	3.30
10.0	80/0.4	1.0	6.5	–	46	1.91
16.0	126/0.4	1.0	7.4	–	62	1.21

Additional Zero Halogen Flame Retardant (ZHFR) Properties		
Test	Specification	Specified Values
Critical Oxygen Index	ASTM-D 2863	Minimum 29%
Temperature Index	ASTM-D 2863	Minimum 250°C
Acid Gas Generation	IEC 60754-1	< 0.5%
Smoke Density Rating	ASTM-D 2843	Maximum 20%

Colours : Available in Red, Yellow, Blue, Black, Grey & Green.

Marking : The cables are printed with brand name, size in sq.mm. & voltage grade.