

IS 17048:2018 halogen Free Flame Retardant (HFFR) Cables for Working Voltages up to and including 1100 V - Specification

A cable essentially means a conductor covered with an insulator. Cables are used to transmit electrical power from, say, a generating station to a city for distribution to a network of residential areas and commercial establishments. A cable typically makes use of aluminium or copper for power transmission. Insulation is used to cover the metal; common material in use in the Indian context being polyvinyl chloride (PVC) and cross linked polyethylene (XLPE). With large scale use of cables in everyday life and renewed focus on everything being environment friendly, there exists a need to have cables that are not only safe and reliable, but also eco-friendly. This need is fulfilled by use of halogen free flame retardant (HFFR) cables.

HFFR cables use halogen free insulation, are more effective at preventing fires, have better heat resistance and have better overall durability. Indian Standard S 17048:2018 has been brought out for handling voltages up to and including 1100 volts. The standard ensures:

1. Safety: Reduced risk of electrical fires.
2. Environmental sustainability: No harmful chemicals.
3. Reliability: Cables perform well in various conditions.

By following this standard, manufacturers, installers, and users can trust that cables meet strict safety and performance requirements.