Flame retardant cable

The flame retardant cable is mainly featured in low liability of fire or that second combustion is only limited to a certain range, meets the IEC60332 combustion testing requirements, and is applicable to the places with flame retardant requirement.

Product Category

1. Ordinary flame retardant cable: In the event of fire, the cable may produce a large amount of corrosive gases and smoke after combustion, and can be used in general occasions with low flame retardant requirement. Its flammability has A, B, C, D four categories, and its cable models are added with ZRA- (or ZA-), ZRB- (or ZB-), ZRC- (or ZC-), and ZRD- (or ZD-) before ordinary cable models, respectively.

2. Low-halogen flame-retardant cable: in addition to maintaining the general characteristics and electrical properties of the flame-retardant cable, it also has the following characteristics:
   a. low halogen acid gas emissions;
   b. low corrosivity;
   c. less smoke generated.
   Its cable model is added with DDZ- (or DL-) before ordinary XLPE insulated cables model.

3. Low smoke zero halogen (LSZH) flame retardant cable: featured in:
   a. no halogen acid gas release;
   b. small fuming amount;
   c. less corrosive gas generated;
   d. good flame retardant property.
   and has certain mechanical and physical and electrical properties to meet the operating requirements for the cable. It is widely used in nuclear power plants, subway stations, telephone switching and computer control centers, high-rise buildings, hotels, radio and television stations, important military facilities, oil platforms, etc. Its cable models include WDZ-YJY, WDZ-YJY23, WDZ-YJY33, WDZ-YJY43, WDZ-YJE, WDZ-YJE23, WDZ-YJE33, WDZ-YJE43 or WL-YJE, WL-YJL23, WL-YJL33, and WL-YJL43, and can be matched with the flame retardant levels A, B, C, D, such as WDZA-.

4. Oxygen-barrier cable (also known as highly-flame retardant cable): a layer of non-melting, non-flammable, halogen-free, smoke-free fire-resistant plastic material is filled or wrapped between the cable insulated core and the cable sheath, i.e. insulating organic is used to isolate the cable from the outside oxygen gas, so that the cable is non-combustible or flame-retardent. Its cable model is added with GZR- before the ordinary cable model.

Main features

1. Ordinary flame retardant cable
   For Class A and Class B fire tests, the fire time is 40 minutes, and for Class C and Class D fire tests, the fire time is 20 minutes, and the charring height does not exceed 2.5 m.

2. Low-halogen low-smoke flame retardant cable
   Halogen acid gas emission <100 mg/g, smoke density (transmittance) > 30%, from the group burning test, it meets the requirements of Class C flame retardancy.

3. Low smoke zero halogen (LSZH) flame retardant cable:
   Halogen acid gas all-emission 0 mg/g, pH value ≥ 4.3, conductivity ≤ 10 us/mm, toxicity index ≤ 5.
   From the group burning test, it at least meets the requirements of Class C flame retardancy, smoke density (transmittance) ≥ 60%.

4. Oxygen barrier cable (highly-flame retardant cable)
   From the group burning test, it meets and exceeds the requirements of Class A flame retardancy, and the smoke density (transmittance) is equal to or close to national standard GB/T17651-2008 and international standard IEC61034 low smoke standard.
   It is especially suitable for 6 KV-35 KV medium-voltage cable flame retardancy, has not only flame retardancy up to Class A, but also has certain refractory characteristics (i.e. can still keep 2.4 Uo insulation standard after burning for 20 min).

Notes: Users can select category and class of flame retardant cable according to laying places.