



**AL RAYAN**  
*SECURITY & SAFETY TRADING*

**PRODUCT DATA SHEET**



**SECURE**

**FIRE RESISTANT CABLE**



## SECURE FIRE RESISTANT CABLE



### Overview

Fire Resistant Cables are suitable for high buildings, entertainment venues and many high quality, and high demand security construction projects. They are used in fire protection systems for: fire elevators, fire pumps, fire alarms, smoke exhaust systems, emergency lighting, fire hazard areas, high temperature applications and special requirements on power supply lines for safe facilities etc

### Product Application:

Fire fighting Alarm Systems in hazardous area where the safety is highly required during fire condition, These cables are produced to be able to work between 30 & 180 minutes in fire situation.

- \* Conductor : solid pure copper, class 1
- \* Insulation : 200°C silicone
- \* Binding tape : compound mica
- \* Drain wire :  $\geq 0.5\text{mm}^2$  tinned copper
- \* Shielding : fire foil
- \* Sheath : 90°C LSZH polyolefin

### Product Property:

- \* Insulation at 250-300°C, oxygen index  $\geq 28\%$
- \* Sheath at 250-300°C, oxygen index  $\geq 28\%$
- \* Hydracid  $\geq 5\text{mg/g}$  PH value  $\geq 4.3$
- \* Transmittance  $\geq 80\%$
- \* Physical mechanical property: insulation tensile strength  $\geq 5.0\text{MPa}$  elongation at break  $\geq 200\%$ , sheath tensile strength  $\geq 10.0\text{MPa}$  elongation at break  $\geq 100\%$
- \* Min bend radius:  $10 \times D$ , at  $-15^\circ\text{C}$  Min bend dia  $\leq 12.5\text{mm}$
- \* Operating voltage: 300/500v
- \* Testing voltage: 2000v
- \* Operating temperature:  $-20^\circ\text{C} + 90^\circ\text{C}$



MODEL / NO : SECURE FR Multicore Cables



# SECURE FIRE RESISTANT CABLE



## Specifications

- \* BS LPCB approved
- \* Low smoke, no halogen, fire retardant, fire resistant, environmental
- \* Low smoke in fire, no halogen which decrease the damage to equipments and humans
- \* High retardance to fire, self- extinguishing
- \* Long operational life span, equal to structures life span
- \* Fire retardance compliant to BS6387-2013
  - fire test alone: 950°C, 180 mins
  - fire test with water: 650°C 15mins
  - fire test with impact: 950°C, 15 mins/30mins

Fire retardance compliant to BS EN50200-2015

PH30, PH120

- BS 7629 -1:2015 STANDARD 60
- BS 6387 :2013 CATEGORY CWZ
- EN 50200:2015 CLASS PH 120
- EN 50200:2006 Annex E (30MINS)
- BS 5839-1:2013 Clause 26.2d Standard



| Item structure | Conductor | Insulation | Diameter | Sheath | Diameter | Resistance of Conductor at 20°C: Ω/Km |
|----------------|-----------|------------|----------|--------|----------|---------------------------------------|
| 2 core 1.0mm   | 1/1.13mm  | silicone   | 2.2      | LSZH   | 6.6      | 18.1                                  |
| 2 core 1.5mm   | 1/1.38mm  | silicone   | 2.55     | LSZH   | 7.5      | 12.1                                  |
| 2 core 2.5mm   | 1/1.78mm  | silicone   | 3.2      | LSZH   | 8        | 7.41                                  |