



Caledonian

FIREGUARD Flame Retardant Power & Control Cables

www.caledonian-cables.com

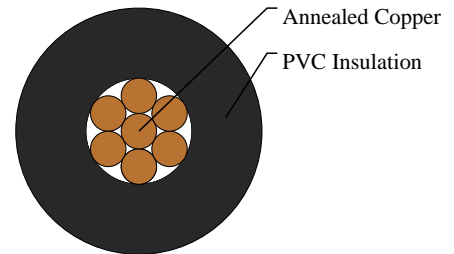
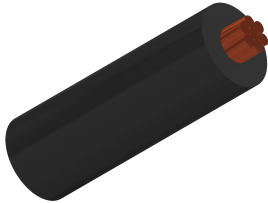
marketing@caledonian-cables.com

300/500V PVC Insulated, Non-sheathed Power Cables (Single Core 90°C)

FGD100 05V2-R 1C0.5 (CU/PVC 300/500V Class 2)

BS Code:2491XHR

HAR Code:H05V2-R



APPLICATIONS

This cables are mainly used in power stations, mass transit underground passenger systems,airports,petrochemical plants, hotels, hospitals, and high-rise buildings.

STANDARDS

Basic design to BS EN 50525-2-31(formerly BS 6004:2000)

FIRE PERFORMANCE

| | |
|--|--------------|
| Flame Retardance (Single Vertical Wire Test) | EN 60332-1-2 |
|--|--------------|

VOLTAGE RATING

300/500V

CABLE CONSTRUCTION

Conductor: Class 2 stranded copper conductor to BS EN 60228.

Insulation: PVC Type TI 3 according to BS EN 50363-3.

COLOUR CODE

Black, Blue, Brown, Grey, Orange, Pink, Red, Turquoise, Violet, White, Green and Yellow. Bi-colours of any combination of the above mono-colours are permitted.

PHYSICAL AND THERMAL PROPERTIES

Maximum temperature range during operation (PVC): 90°C

Maximum short circuit temperature (5 Seconds): 160°C

Minimum bending radius:

Up to 8mm²: 4 x overall diameter

8mm² to 12mm²: 5 x overall diameter

Above 12mm²: 6 x overall diameter

DIMENSION AND PARAMETERS



Caledonian

FIREGUARD Flame Retardant Power & Control Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

| No. of Cores × Cross-sectional Area | Conductor Class | Nominal Insulation Thickness | Overall Diameter (max.) | Approx. Weight |
|-------------------------------------|-----------------|------------------------------|-------------------------|----------------|
| No. × mm ² | | mm | mm | kg/km |
| 1X0.5 | 2 | 0.6 | 2.4 | 9 |

Current-Carrying Capacities (Amp) according to HD516 Table 7 (a)

| Conductor Cross-sectional Area | Single-phase a.c. | Three-phase a.c. |
|--------------------------------|-------------------|------------------|
| mm ² | A | A |
| 0.5 | 3 | 3 |

Voltage Drop (Per Amp Per Meter) according to BS 7671:2008 table 4E1B

| Conductor Cross-sectional Area | 2 cables d.c. | Ref. Methods A, B 2 cables, 1-phase a.c. | Ref. Methods C, F, G 2 cables, 1-phase a.c. (Cables touching) | Ref. Methods C, F, G 2 cables, 1-phase a.c. (Cables spaced) | Ref. Methods A, B 3 or 4 cables, 3-phase a.c. | Ref. Methods C, F, G 3 or 4 cables, 3-phase a.c. (Cables touching, Trefoil) | Ref. Methods C, F, G 3 or 4 cables, 3-phase a.c. (Cables touching, Flat) | Ref. Methods C, F, G 3 or 4 cables, 3-phase a.c. (Cables spaced, Flat) |
|--------------------------------|---------------|--|---|---|---|---|--|--|
| mm ² | mV/A/m | mV/A/m | mV/A/m | mV/A/m | mV/A/m | mV/A/m | mV/A/m | mV/A/m |
| 0.5 | 93 | 93 | 93 | 93 | 80 | 80 | 80 | 80 |



Rated voltage



BS EN 50525-2-31



Flame Retardancy
EN 60332-1-2