



# Caledonian

## FIREGUARD Flame Retardant Power & Control Cables

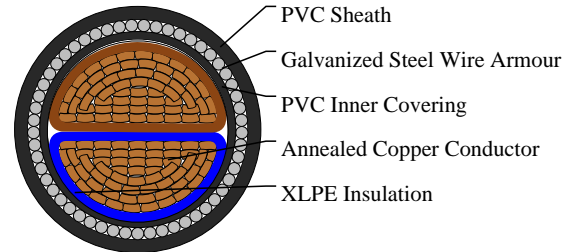
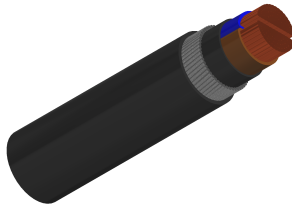
www.caledonian-cables.com

marketing@caledonian-cables.com

### 600/1000V XLPE Insulated, PVC Sheathed, Armoured Power Cables to BS 5467 (2 Cores)

FGD400 1RVMV-R 2C95 (CU/XLPE/PVC/SWA/PVC 600/1000V Class 2)

BS Code: 6942X



### APPLICATIONS

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

### STANDARDS

Basic design to BS 5467

### APPROVALS

TUV Certification (Z1 17 01 98200 003)

### FIRE PERFORMANCE

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

### VOLTAGE RATING

600/1000V

### CABLE CONSTRUCTION

Conductor: Annealed copper wire, shaped stranded according to BS EN 60228 class 2.

Insulation: Extruded XLPE GP 8 according to BS 7655-1.3.

Bedding: PVC.

Armouring: Galvanized steel wire

Outer Sheath: PVC Type 9 according to BS 7655-4.2.

Outer Sheath Option: UV resistance, hydrocarbon resistance, oil resistance, anti rodent and anti termite properties can be offered as option. Compliance to fire performance standard (IEC 60332-1, IEC 60332-3, UL 1581, UL 1666 etc) depends on the oxygen index of the PVC compound and the overall cable design. LSPVC can also be provided upon request.

### COLOUR CODE

Insulation Colour:

Two-core: Brown, blue



# Caledonian

## FIREGUARD Flame Retardant Power & Control Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

Three-core: Brown, black, grey

Four-core: Blue, brown, black, grey

Five-core: Green-and-yellow, blue, brown, black, grey

Sheath Colour: Black, other colours can be offered upon request.

### PHYSICAL AND THERMAL PROPERTIES

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

Maximum short circuit temperature (5 Seconds): 250°C

Minimum bending radius:

Circular copper conductors: 6 x Overall Diameter

Shaped copper conductors: 8 x Overall Diameter

### Electrical Properties

Conductor Operating Temperature: 90°C

Ambient Temperature: 30°C

### DIMENSION AND PARAMETERS

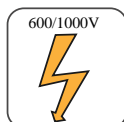
| No. of Cores<br>× Cross-sectional<br>Area | Conductor<br>Class | Nominal<br>Insulation<br>Thickness | Nominal<br>Thickness<br>of Inner<br>Covering | Nominal<br>Sheath<br>Thickness | Nominal<br>Steel Wire<br>Armour<br>Diameter | Approx.<br>Overall<br>Diameter | Approx.<br>Weight |
|---|--------------------|------------------------------------|--|--------------------------------|---|--------------------------------|-------------------|
| No.×mm <sup>2</sup>                       |                    | mm                                 | mm   | mm                             | mm  | mm                             | kg/km             |
| 2x95S                                     | 2                  | 1.1                                | 1.2  | 2                              | 2.0   | 33.1                           | 3150              |

### Current-Carrying Capacities (Amp) according to BS7671:2008 table 4E4A

| Conductor Cross-sectional Area | Ref. Method C<br>One 1C cable, 1-phase a.c. or d.c. | Ref. Method C<br>One 3C or 4C cable, 3-phase a.c. | Ref. Method D<br>One 2C cable, 1-phase a.c. or d.c. | Ref. Method D<br>One 3C or 4C cable, 3-phase a.c. | Ref. Method E<br>One 2C cable, 1-phase a.c. or d.c. | Ref. Method E<br>One 3C or 4C cable, 3-phase a.c. |
|--------------------------------|---|---|---|---|---|---|
| mm <sup>2</sup>                | A   | A   | A   | A   | A   | A   |
| 95                             | 338   | 289   | 239   | 197   | 354   | 304   |

### Voltage Drop (Per Amp Per Meter) according to BS7671:2008 table 4E4B

| Conductor Cross-sectional Area | 2C cable, d.c. | 2C cable, 1-phase a.c. | 3C or 4C cable, 3-phase a.c. |
|--------------------------------|----------------|------------------------|------------------------------|
| mm <sup>2</sup>                | mV/A/m         | mV/A/m                 | mV/A/m                       |
| 95                             | 0.49           | r:0.5 x:0.15 z:0.52    | r:0.43 x:0.13 z:0.45         |



Rated voltage



BS 5467



Flame Retardancy  
BS EN 60332-1-2