



# Caledonian

FIREGUARD Flame Retardant Power & Control Cables

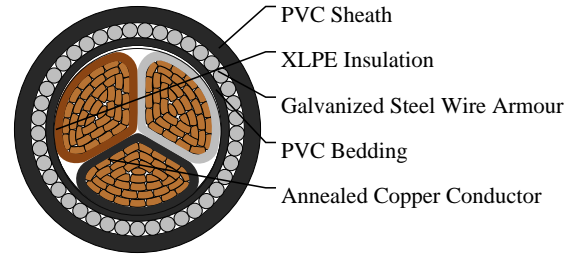
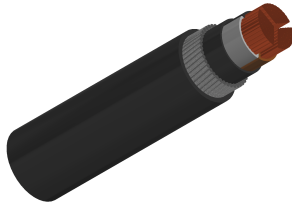
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## 600/1000V XLPE Insulated, PVC Sheathed, Armoured Power Cables to BS 5467 (3 Cores)

FGD400 1RVMV-R 3C25 (CU/XLPE/PVC/SWA/PVC 600/1000V Class 2)

BS Code: 6943X



### 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



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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 Area | Conductor Class | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Sheath Thickness | Nominal Steel Wire Armour Diameter | Approx. Overall Diameter | Approx. Weight |
|--|-----------------|------------------------------|---------------------------|--------------------------|------------------------------------|--------------------------|----------------|
| No. × mm <sup>2</sup>                  |                 | mm                           | mm                        | mm                       | mm                                 | mm                       | kg/km          |
| 3x25S                                  | 2               | 0.9                          | 1                         | 1.7                      | 1.6                                | 23.6                     | 1710           |

### 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   |
| 25                             | 146   | 124   | 116   | 96  | 152   | 131   |

### 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                       |
| 25                             | 1.85           | r:1.85 x:0.16 z:1.9    | r:1.6 x:0.14 z:1.65          |



Rated voltage



BS 5467



Flame Retardancy  
BS/EN/IEC 60332-1-2