



# Caledonian

FIREGUARD Flame Retardant Power & Control Cables

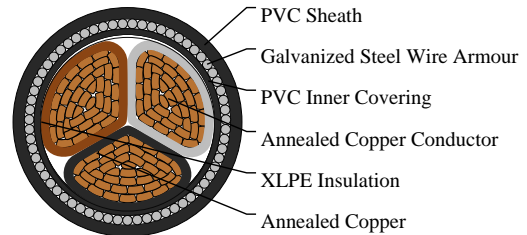
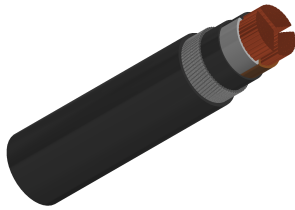
www.caledonian-cables.com

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

FGD400 1RVMV-R 3C120 (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
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### 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 × Cross-sectional Area	Conductor Class	Nominal Insulation Thickness	Nominal Thickness of Inner Covering	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
3x120S	2	1.2	1.2	2.2	2.0	40.4	5160

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

Conductor Cross-sectional Area	Ref. Method C One 1C cable, 1-phase a.c. or d.c.	Ref. Method C One 3C or 4C cable, 3-phase a.c.	Ref. Method D One 2C cable, 1-phase a.c. or d.c.	Ref. Method D One 3C or 4C cable, 3-phase a.c.	Ref. Method E One 2C cable, 1-phase a.c. or d.c.	Ref. Method E One 3C or 4C cable, 3-phase a.c.
mm <sup>2</sup>	A	A	A	A	A	A
120	392	335	271	223	410	353

### 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
120	0.39	r:0.4 x:0.145 z:0.42	r:0.34 x:0.13 z:0.37



Rated voltage



BS 5467



Flame Retardancy  
BS EN 60332-1-2