



Caledonian

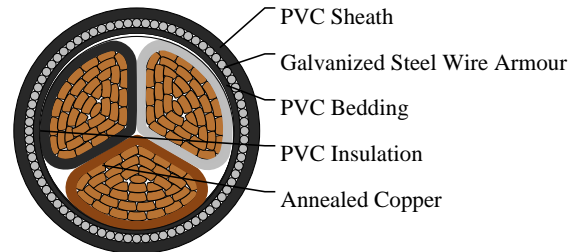
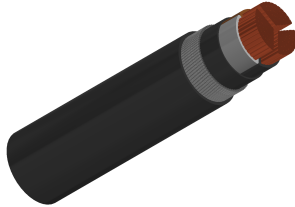
FIREGUARD Flame Retardant Power & Control Cables

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600/1000V PVC Insulated, PVC Sheathed, Armoured Power Cables to BS 6346 (3 Cores)

FGD400 1VVMV-R 3C300 (CU/PVC/PVC/SWA/PVC 600/1000V Class 2)



APPLICATIONS

The cables are intended for use in fixed installations in industrial areas, buildings and similar applications.

STANDARDS

Basic design to BS 6346

FIRE PERFORMANCE

| | |
|--|-----------------|
| Flame Retardance (Single Vertical Wire Test) | BS EN 50265-2-1 |
|--|-----------------|

VOLTAGE RATING

600/1000V

CABLE CONSTRUCTION

Conductor: Annealed copper wire, shaped stranded according to BS 6360 class 2.

Insulation: PVC TI 1 according to BS 7655-3.1.

Bedding: Extruded PVC or taped bedding comprising two or more layers of PVC tape or other synthetic tape (for cables having a nominal conductor area of 16mm² and above).

Armouring: Galvanized steel wire.

Outer Sheath: PVC TM 1 according to BS 7655-4.1.

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: Brown, grey, black

Sheath Colour: Black (other colours upon request)

PHYSICAL AND THERMAL PROPERTIES

Maximum temperature range during operation (PVC): 70°C

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



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Minimum bending radius:

Circular copper conductors: 6 x Overall Diameter

Shaped copper conductors: 8 x Overall Diameter

Electrical Properties

Conductor Operating Temperature: 70°C

Ambient Temperature: 30°C

DIMENSION AND PARAMETERS

| No. of Cores × Cross-sectional Area | Conductor Class | Nominal Insulation Thickness | Nominal Bedding Thickness | Nominal Sheath Thickness | Nominal Steel Wire Armour Diameter | Approx. Overall Diameter (Extruded Bedding) | Approx. Overall Diameter (Taped Bedding) | Approx. Weight |
|-------------------------------------|-----------------|------------------------------|---------------------------|--------------------------|------------------------------------|---|--|----------------|
| No. × mm ² | | mm | mm | mm | mm | mm | mm | kg/km |
| 3x300S | 2 | 2.4 | 1.6 | 2.8 | 2.5 | 63.2 | 61.6 | 10006 |

Current-Carrying Capacities (Amp) according to BS 7671: 2008 table 4D4A

| 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 ² | A | A | A | A | A | A |
| 300 | 547 | 469 | 379 | 316 | 592 | 510 |

Voltage Drop (Per Amp Per Meter) according to BS 7671: 2008 table 4D4B

| Conductor Cross-sectional Area | 2C cable, d.c. | 2C cable, 1-phase a.c. | 3C or 4C cable, 3-phase a.c. |
|--------------------------------|----------------|------------------------|------------------------------|
| mm ² | mV/A/m | mV/A/m | mV/A/m |
| 300 | 0.145 | r:0.155 x:0.145 z:0.21 | r:0.135 x:0.13 z:0.185 |



Rated voltage



BS 6346



Flame Retardancy
BS EN 50265-2-1