



**Caledonian**

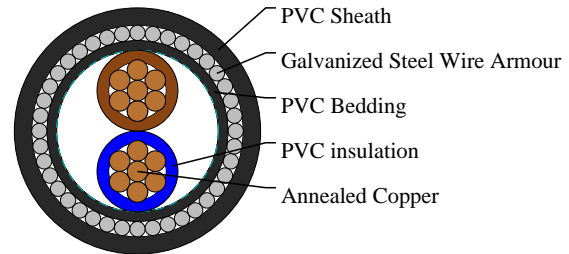
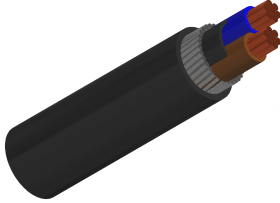
**FIREGUARD Flame Retardant Power & Control Cables**

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marketing@caledonian-cables.com

### **600/1000V PVC Insulated, PVC Sheathed, Armoured Power Cables to IEC 60502(2Cores)**

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



### **APPLICATIONS**

The 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 IEC60502

### **APPROVALS**

TUV Certification (B 098200 0031 Rev.00)

### **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, stranded according to IEC 60228 class 2.

Insulation: PVC/A according to IEC 60502-1.

Inner Covering: Extruded PVC or polymeric compound.

Armouring: Galvanized steel wire

Outer Sheath: Extruded PVC Type ST1/ST2 according to IEC 60502-1.

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, blue

Sheath Colour: Black (other colours upon request)

### **PHYSICAL AND THERMAL PROPERTIES**



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

Maximum short circuit temperature (5 Seconds): 160°C( $\leq 300 \text{ mm}^2$ ); 140°C( $> 300 \text{ mm}^2$ )

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 Thickness of Inner Covering	Nominal Sheath Thickness	Nominal Steel Wire Armour Diameter	Overall Diameter (max.)	Approx. Weight
No. x mm <sup>2</sup>		mm	mm	mm	mm	mm	kg/km
2x25	2	1.0	1.2	1.8	1.6	24.8	1513



Rated voltage



Flame Retardancy  
IEC 60332-1-2



IEC60502-1