

# Caledonian

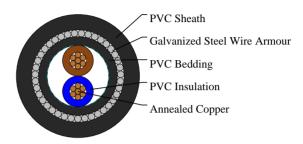
## FIREGUARD Flame Retardant Power & Control Cables

www.caledonian-cables.com marketing@caledonian-cables.com

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

FGD400 1VVMV-R 2C2.5(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

#### FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)

IEC 60332-1-2

#### **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

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

Maximum short circuit temperature (5 Seconds): 160°C(<=300 mm²); 140°C(>300 mm²)



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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 Thickness of Inner Covering	Nominal Sheath Thickness	Nominal Steel Wire Armour Diameter	Nom. Overall Diameter	Approx. Weight
No.×mm²		mm	mm	mm	mm	mm	kg/km
2x2.5	2	0.8	1.0	1.8	0.8	14	380

## 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.
mm²	Α	А	А	A	Α	А
2.5	28	25	29	24	31	26

# 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.	
mm²	mV/A/m	mV/A/m	mV/A/m	
2.5	18	18	15	





