



Caledonian

FIREGUARD Flame Retardant Power & Control Cables

www.caledonian-cables.com

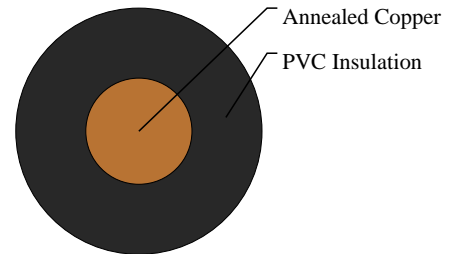
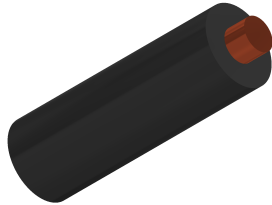
marketing@caledonian-cables.com

300/500V PVC Insulated, Non-sheathed Power Cables (Single Core 90°C)

FGD100 05V2-U 1C0.5 (CU/PVC 300/500V Class 1)

BS Code:2491XHR

HAR Code:H05V2-U



APPLICATIONS

This 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 BS EN 50525-2-31(formerly BS 6004:2000)

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)	EN 60332-1-2
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VOLTAGE RATING

300/500V

CABLE CONSTRUCTION

Conductor: Class 1 stranded copper conductor to BS EN 60228.

Insulation: PVC Type TI 3 according to BS EN 50363-3.

COLOUR CODE

Black, Blue, Brown, Grey, Orange, Pink, Red, Turquoise, Violet, White, Green and Yellow. Bi-colours of any combination of the above mono-colours are permitted.

PHYSICAL AND THERMAL PROPERTIES

Maximum temperature range during operation (PVC): 90°C

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

Minimum bending radius:

Up to 8mm²: 4 x overall diameter

8mm² to 12mm²: 5 x overall diameter

Above 12mm²: 6 x overall diameter

DIMENSION AND PARAMETERS



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No. of Cores × Cross-sectional Area	Conductor Class	Nominal Insulation Thickness	Overall Diameter (max.)	Approx. Weight
No. × mm ²		mm	mm	kg/km
1X0.5	1	0.6	2.3	8

Current-Carrying Capacities (Amp) according to HD516 Table 7 (a)

Conductor Cross-sectional Area	Single-phase a.c.	Three-phase a.c.
mm ²	A	A
0.5	3	3

Voltage Drop (Per Amp Per Meter) according to BS 7671:2008 table 4E1B

Conductor Cross-sectional Area	2 cables d.c.	Ref. Methods A, B 2 cables, 1-phase a.c.	Ref. Methods C, F, G 2 cables, 1-phase a.c. (Cables touching)	Ref. Methods C, F, G 2 cables, 1-phase a.c. (Cables spaced)	Ref. Methods A, B 3 or 4 cables, 3-phase a.c.	Ref. Methods C, F, G 3 or 4 cables, 3-phase a.c. (Cables touching, Trefoil)	Ref. Methods C, F, G 3 or 4 cables, 3-phase a.c. (Cables touching, Flat)	Ref. Methods C, F, G 3 or 4 cables, 3-phase a.c. (Cables spaced, Flat)
mm ²	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m
0.5	93	93	93	93	80	80	80	80



Rated voltage



BS EN 50525-2-31



Flame Retardancy
EN 60332-1-2