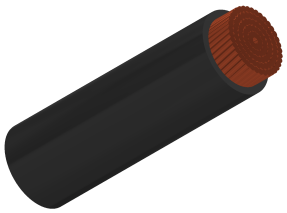
Caledonian

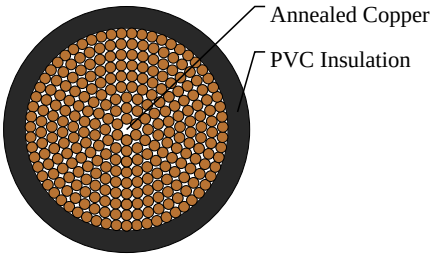
FIREGUARD Flame Retardant Power & Control Cables

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

600/1000V PVC Insulated, Non-sheathed Flexible Cables (Single Core)

FGD100 1V-K 1C120 (CU/PVC 600/1000V Class 5)
BS Code: TYPE BK/TYPE CK(CU/PVC)





APPLICATIONS

The cables are intended for use in the wiring of switch, control, metering, relay and instrument panels of power switchgear, and for such purposes as internal connections in rectifier equipment and its motor starters and controllers.

STANDARDS

Basic design to BS 6231: 2006

APPROVALS

TUV Certification (Z1 18 01 98200 016)

FIRE PERFORMANCE

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

VOLTAGE RATING

600/1000V

CABLE CONSTRUCTION

Conductor: Annealed copper conductor, class 5 according to BS EN 60228.
Insulation: PVC Type TI 1 according to BS EN 50363-3 for cable type BK, and type TI 3 according to BS EN 50363-3 for cable type CK

COLOUR CODE

Black, Blue, Brown, Red, White, Grey, Violet, Pink, Green and Yellow. Other colours can be offered upon request.

PHYSICAL AND THERMAL PROPERTIES

Maximum temperature range during operation (PVC): 70°C (TYPE BK): 90°C (TYPE CK)
Maximum short circuit temperature (5 Seconds): 160°C
Minimum bending radius: 6 x overall diameter

Electrical Properties

Caledonian

FIREGUARD Flame Retardant Power & Control Cables

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

Conductor Operating Temperature: 70°C

Ambient Temperature: 30°C

DIMENSION AND PARAMETERS

No. of Cores × Cross-sectional Area	Conductor Class	Nominal Insulation Thickness	Overall Diameter (max.)	Approx. Weight
No.×mm²		mm	mm	kg/km
1x120	5	1.6	21.2	1175

Current-Carrying Capacities (Amp) according to BS 7671:2008 table 4D1A

Conductor Cross-sectional Area	Ref. Method A 2cables, 1-phase a.c. or d.c.	Ref. Method A 3/4 cables, 3-phase a.c.	Ref. Method B 2 cables, 1-phase a.c. or d.c	Ref. Method B 3/4 cables, 3-phase a.c.	Ref. Method C 2 cables, 1-phase a.c. or d.c. flat and touching	Ref. Method C 3/4 cables, 3-phase a.c. flat and touching or trefoil	Ref. Method F 2 cables, 1-phase a.c. or d.c. flat	Ref. Method F 3 cables, 3-phase a.c. flat	Ref. Method F 3 cables, 3-phase a.c. trefoil	Ref. Method F Spaced by on cable diameter 3/4 cables, 3-phase a.c. Horizontal	Ref. Method F Spaced by on cable diameter 3/4 cables, 3-phase a.c. Vertical
mm²	A	A	A	A	A	A	A	A	A	A	A
120	210	188	269	239	330	303	352	321	308	396	362

Voltage Drop (Per Amp Per Meter) according to BS 7671:2008 table 4D1B

Conductor Cross-sectional Area	2 cables d.c.	Ref. Methods A,B 2 cables, 1-phase a.c.	Ref. Methods C,F 2 cables, 1-phase a.c. (Cables touching)	Ref. Methods C,F 2 cables, 1-phase a.c. (Cables spaced)	Ref. Methods A,B 3 or 4 cables, 3-phase a.c.	Ref. Methods C,F 3 or 4 cables, 3-phase a.c. (Cables touching,Trefoil)	Ref. Methods C,F 3 or 4 cables, 3-phase a.c. (Cables touching,Flat)	Ref. Methods C,F 3 or 4 cables, 3-phase a.c. (Cables spaced,Flat)
mm²	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m
120	0.36	r:0.39 x:0.27 z:0.47	r:0.37 x:0.175 z:0.41	r:0.37 x:0.26 z:0.45	r:0.33 x:0.23 z:0.41	r:0.32 x:0.15 z:0.36	r:0.32 x:0.23 z:0.4	r:0.32 x:0.3 z:0.44

Rated voltage

BS 6231

Flame Retardancy BS/EN/IEC 60332-1-2