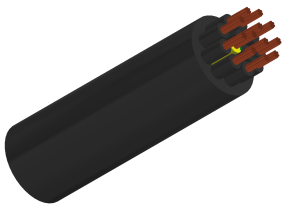
Caledonian

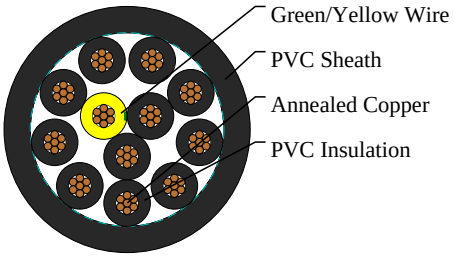
FIREGUARD Flame Retardant Power & Control Cables

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

600/1000V PVCInsulated, PVC Sheathed,Unarmoured Power Cables (12 Cores)

FGD400 1VV-R 12C1.5 (CU/PVC/PVC 600/1000V Class 2)
VDE Code: NYY





APPLICATIONS

The cables are mainly use in fixed installations in industrial areas, buildings and similar applications but not for burial in the ground, either directly or in ducts.

STANDARDS

Basic design to IEC 60502-1

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)	IEC 60332-1

VOLTAGE RATING

600/1000V

CABLE CONSTRUCTION

Conductor: Annealed copper wire, stranded according to BS EN 60228 class 2.
Insulation: PVC/A according to IEC 60502-1.
Inner Covering Option: Extruded PVC or polymeric compound.
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:
Multicores: Black, green-and-yellow
Note: Depending on their intended use, the cables might be subject to the core colour requirements specified in BS 7671 or other standards, or in statutory requirements.
Sheath Colour: Black, other colours can be offered upon request

PHYSICAL AND THERMAL PROPERTIES

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Maximum temperature range during operation (PVC): 70°C
Maximum short circuit temperature (5 Seconds):
Conductor cross-section <=300 mm2:160°C
Conductor cross-section >300 mm2:140°C
Minimum bending radius: 12 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 Sheath Thickness	Nom. Overall Diameter	Approx. Weight
No.×mm²		mm	mm	mm	kg/km
12x1.5	2	0.8	1.8	16.1	424

Current-Carrying Capacities (Amp) according to BS 7671:2008 table 4D2A

Conductor Cross-sectional Area	Ref. Method A One 2C cable, 1-phase a.c. or d.c.	Ref. Method A One 3C or 4C cable, 3-phase a.c.	Ref. Method B One 2C cable, 1-phase a.c. or d.c.	Ref. Method B One 3C or 4C cable, 3-phase a.c.	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 G One 2C cable, 1-phase a.c. or d.c.	Ref. Method G One 3C or 4C cable, 3-phase a.c
mm²	A	A	A	A	A	A	A	A
1.5	14	13	16.5	15	19.5	17.5	22	18.5

Voltage Drop (Per Amp Per Meter) according to BS 7671:2008 table 4D2B

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
1.5	29	29	25

Rated voltage


Flame Retardancy
IEC 60332-1

IEC60502-1