



# Caledonian

Airport Flame Retardant And Fire Resistant Cables

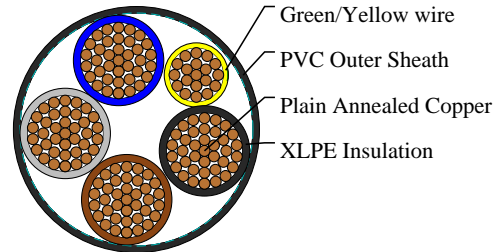
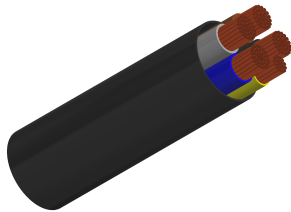
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## 600/1000V XLPE Insulated, PVC Sheathed, Power Cables (4+1 Cores)

FGD400 1RV-R 4G185/95 (CU/XLPE/PVC 600/1000V Class 2)

Outdoor Cabling



### 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 IEC 60502-1

### FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)	EN 60332-1-2; IEC 60332-1-2; BS EN 60332-1-2; VDE 0482-332-1 ; NBN C 30-004 (cat. F1); NF C32-070-2.1(C2); CEI 20-35/1-2; EN 50265-2-1*; DIN VDE 0482-265-2-1*
Reduced Fire Propagation (Vertically-mounted bundled wires& cable test)	EN 60332-3-24 (cat. C); IEC 60332-3-24; BS EN 60332-3-24; VDE 0482-332-3; NBN C 30-004 (cat. F2); NF C32-070-2.2(C1); CEI 20-22/3-4; EN 50266-2-4*; DIN VDE 0482-266-2-4
Halogen Free	IEC 60754-1; EN 50267-2-1; DIN VDE 0482-267-2-1; CEI 20-37/2-1 ; BS 6425-1*
No Corrosive Gas Emission	IEC 60754-2; EN 50267-2-2; DIN VDE 0482-267-2-2; CEI 20-37/2-2 ; BS 6425-2*
Minimum Smoke Emission	IEC 61034-1&2; EN 61034 -1&2; DIN VDE 0482-1034-1&2; CEI 20-37/3-1&2; EN 50268-1&2*; BS 7622-1&2*
No Toxic Gases	NES 02-713; NF C 20-454

### VOLTAGE RATING

600/1000V

### CABLE CONSTRUCTION

Conductor: Plain annealed copper wire, stranded according to IEC 60228 class 2.

Insulation: Extruded cross-linked XLPE compound.



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Outer Sheath: Thermoplastic PVC compound.

## COLOUR CODE

Insulation Colour: as per BS7671.

4+1 Cores: Yellow/Green, Brown, Gray, Black, Blue

Sheath Colour: Black (other colors upon request)

## PHYSICAL AND THERMAL PROPERTIES

Temperature Range During Operation: -40°C ~ 70°C

Temperature Range during Installation : -5°C ~ 50°C

Minimum Bending Radius : 6 x OD

## Electrical Properties

Dielectric Test:3500 V r.m.s. x 5' ( core / core )

Insulation Resistance:500 MΩ x km ( at 20°C )

Short circuit Temperature :250°C ( up to 5 secs )

Conductor Operating Temperature : 90°C

Ambient Temperature : 30°C

## DIMENSION AND PARAMETERS

Caledonian Cable Code	No. of Cores × Cross-sectional Area	No./Nominal Diameter of Strands	Nominal Insulation Thickness	Nom. Overall Diameter	Approx. Weight
	No. × mm <sup>2</sup>	no./mm	mm	mm	kg/km
FGD400 1RV-R 4G185/95	4x185/95	37/2.52	1.6	53.9	8700

## Current-Carrying Capacities (Amp)

Conductor Cross-sectional Area	Ref. Method 4 2cables, 1-phase a.c. or d.c.	Ref. Method 4 3/4 cables, 3-phase a.c.	Ref. Method 3 2cables, 1-phase a.c. or d.c.	Ref. Method 3 3/4 cables, 3-phase a.c.	Ref. Method 1 2 cables, 1-phase a.c. or d.c. flat and touching	Ref. Method 1 3/4 cables, 3-phase a.c. flat and touching or trefoil	Ref. Method 11 2 cables, 1-phase a.c. or d.c. flat and touching	Ref. Method 11 3/4 cables, 3-phase a.c. flat and touching or trefoil	Ref. Method 12 2 cables, 1-phase a.c. or d.c. or 3 cables 3-phase Horizontal	Ref. Method 12 2 cables, 1-phase a.c. or d.c. or 3 cables 3-phase Vertical	Ref. Method 12 3 cables trefoil, 3-phase a.c.
mm <sup>2</sup>	A	A	A	A	A	A	A	A	A	A	A
185	341	306	426	370	545	500	579	530	651	600	511

## Voltage Drop (Per Amp Per Meter)

Nominal Cross sectional Area	2 cables d.c.	Ref. Methods 3,4 2 cables, 1-phase a.c.	Ref. Methods 1,11 2 cables, 1-phase a.c.	Ref. Methods 3,4 3 or 4 cables, 3-phase a.c.	Ref. Methods 1,11,12 3 or 4 cables, 3-phase a.c. (in trefoil)	Ref. Methods 1,11 3 or 4 cables, 3-phase a.c. (Flat and touching)
mm <sup>2</sup>	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m	mV/A/m



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185	0.25	r:0.27 x:0.26 z:0.37	r:0.26 x:0.165 z:0.3	r:0.23 x:0.23 z:0.32	r:0.22 x:0.14 z:0.26	r:0.22 x:0.165 z:0.28
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Rated voltage



Flame Retardant  
NF C32-070-2.1(C2)  
IEC60332-1-2:ENS0265-2-1



IEC60502-1



Reduced Fire Propagation  
NF C32-070-2.2(C1)  
IEC60332-3-24:ENS0266-2-4