



Caledonian

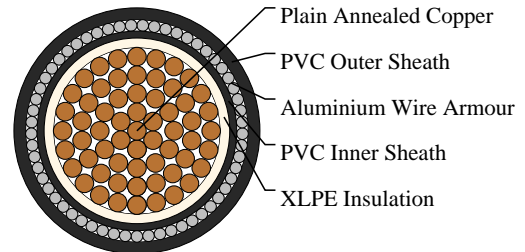
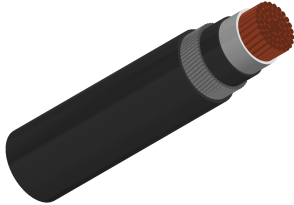
Airport Flame Retardant And Fire Resistant Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

600/1000V XLPE Insulated, PVC Sheathed, Armoured Power Cables (Single Core)

FGD300 1RVMV-R 1G500 (CU/XLPE/PVC/AWA/PVC 600/1000V Class 2)



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 BS 5467

FIRE PERFORMANCE

Flame Retardance (Single Vertical Wire Test)(Optional)	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)(Optional)	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

VOLTAGE RATING

600/1000V

CABLE CONSTRUCTION

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

Insulation: Extruded cross-linked XLPE compound.

Inner sheath : PVC Compound.

Armouring : Aluminium Wire.

Outer Sheath : Thermoplastic PVC compound.

COLOUR CODE

Insulation Colour: Natural

Sheath Colour: Black (other colors upon request)

PHYSICAL AND THERMAL PROPERTIES



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

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

Minimum Bending Radius: 8 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 Armour Wire Diameter	Diameter under Armour	Nom. Overall Diameter	Approx. Weight
	No. × mm ²	no./mm	mm	mm	mm	kg/km
FFGD300 1RVMV- R 1G500	1x500	61/3.2	2	36.2	44.6	5880

Current-Carrying Capacities (Amp)

Conductor Cross-sectional Area	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 1 1 2 cables, 1-phase a.c. or d.c. flat and touching	Ref. Method 1 1 3/4 cables, 3-phase a.c. flat and touching or trefoil	Ref. Method 1 2 3 cables trefoil, 3-phase a.c.	In single-way ducts 2 cables, 1-phase a.c. or d.c.	In single-way ducts 3/4 cables, 3-phase a.c.	Laid direct in ground 2 cables, 1-phase a.c. or d.c.	Laid direct in ground 3/4 cables, 3-phase a.c.
mm ²	A	A	A	A	A	A	A	A	A
500	962	791	1016	851	918	690	620	910	770

Voltage Drop (Per Amp Per Meter)

Nominal Cross sectional Area	2 cables d.c.	Ref. Methods 1, 11 2 cables, 1-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)	2 cables, 1-phase a.c. (In ducts)	2 cables, 1-phase a.c. (In ground)	3 or 4 cables, 3-phase a.c. touching (In ducts)	3 or 4 cables, 3-phase a.c. touching (In ground)
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
500	0.093	r:0.125 x:0.17 z:0.21	r:0.105 x:0.145 z:0.18	r:0.145 x:0.2 z:0.25	0.33	0.2	0.28	0.18



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Rated voltage



BS 5467



Flame Retardant
NF C32-070-2, IEC2
IEC60333-3-24/EN50266-2-1



Reduced Fire Propagation
NF C32-070-2, IEC1
IEC60333-3-24/EN50266-2-4