



Caledonian

Airport Flame Retardant And Fire Resistant Cables

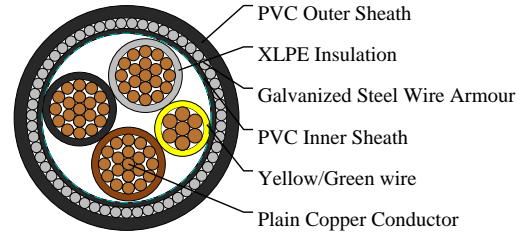
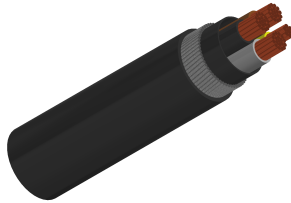
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600/1000V XLPE Insulated, PVC Sheathed, Armoured Power Cables (3+1 Cores)

FGD400 1RVMV-R 3G50/35 (CU/XLPE/PVC/SWA/PVC 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 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: Galvanized Steel Wire.

Outer Sheath: PVC Compound.

COLOUR CODE

Insulation Colour as per BS7671

Insulation Colour: Yellow/Green, Brown, Gray, Black

Sheath Colour: Black (other colors upon request)



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PHYSICAL AND THERMAL PROPERTIES

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 Insulation Thickness | Nominal Armour Wire Diameter | Diameter under Armour | Nom. Overall Diameter | Approx. Weight |
|-------------------------------|-------------------------------------|---------------------------------|------------------------------|------------------------------|-----------------------|-----------------------|----------------|
| | No. × mm ² | no./mm | mm | mm | mm | mm | kg/km |
| FGD400 1RVMV- R 3G50/35 | 3x50/35 | 19/1.78 | 1 | 1.6 | 30 | 33.6 | 3175 |

Current-Carrying Capacities (Amp)

| 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 D One 2C cable, 1-phase a.c. or d.c. | Ref. Method D One 3C or 4C cable, 3-phase a.c. | Ref. Method E One 2C cable, 1-phase a.c. or d.c. | Ref. Method E One 3C or 4C cable, 3-phase a.c. |
|--------------------------------|--|--|--|--|--|--|--|--|
| mm ² | A | A | A | A | A | A | A | A |
| 50 | 219 | 187 | 228 | 197 | 210 | 175 | 255 | 215 |

Voltage Drop (Per Amp Per Meter)

| Nominal Cross sectional Area | 2C cable, d.c. | Ref. Methods A,B 2 cables, 1-phase a.c. | Ref. Methods A,B 3 or 4 cables, 3-phase a.c. | 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 |
| 50 | 0.98 | r:0.99 x:0.155 z:1 | r:0.86 x:0.135 z:0.87 | 1 | 1 | 0.87 | 0.87 |



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Rated voltage



BS 5467



Flame Retardant
NF C32-070-2, IEC2
IEC60333-3-24/EN50266-2-4



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