



# Caledonian

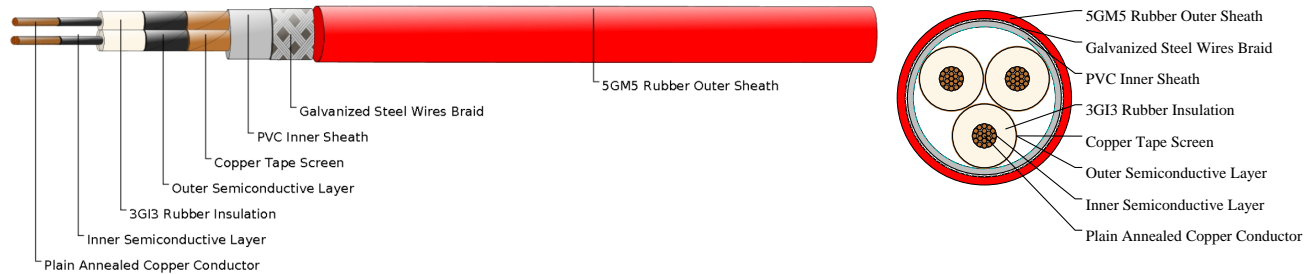
## Tunnel Cables

www.caledonian-cables.com

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### Tunnel Cable

3GSEYQY 3x70/16



### APPLICATIONS

These cables are used for the connection of mobile operating equipments. In mines and underground excavations with hazardous environments, in stationary operation, e.g. high-voltage transformers in mining and tunneling. It can be used also for powering main panels and switchboards in tunneling applications.

### STANDARDS

Construction: DIN VDE 0250-605 & IEC 60502-2

General Requirements: DIN VDE 0250-1

Guide Use: DIN VDE 0298-3

Electrical Tests: DIN VDE 0472-501, 503, 508

Non-Electrical Tests: DIN VDE 0472-401, 402, 602, 303, 615

Flame Retardant: VDE 0482-332-1-2, DIN EN 60332-1-2, IEC 60332-1

Under Fire Condition Tests: DIN VDE 0472-803, 804

### VOLTAGE RATING

18/30 KV

### CABLE CONSTRUCTION

Conductors: Circular Stranded Plain Annealed Copper Conductor (class 2 acc. to IEC 60228).

Insulation: 3GI3 type EPR Compound Insulation.

Electrical Field Control: Extruded inner and outer rubber semiconductive layer.

Screen: Copper tapes applied over each main core.

Lay Up: 3-Screened Cores will be laid up in concentrically.

Inner Sheath: PVC filler.

Monitoring Conductor: Semiconductive tape + overall concentric lay of copper wires and synthetic tape over wires.

Intermediate Sheath: Special Halogen free and flame retardant HFFR compound.

Armour: Galvanized Steel Wire Braid (CSWB) Min 90%.

Outer Sheath: 5GM5 Type elastomer compound. Red.

### COLOUR CODE

Core Identification: Natural coloring with black semiconductive layer



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## PHYSICAL AND THERMAL PROPERTIES

Rated Voltage:18/30 KV

AC Test Voltage:48 KV

Max.Permissible Operating Voltage AC:20.8/36 KV

Max.Permissible Operating Voltage DC:27/54 KV

Min Bending Radius:DIN VDE 0298-3

Current Carrying Capacities:DIN VDE 0298-4

Max. Short circuit Temperature:250°C

Max. conductor Temperature:90°C

Working Temperature:

Fixed:-25°C- +80°C

Mobile:+5°C- +80°C

Max.Tensile Load of Cable:15N/mm<sup>2</sup>

Max.Torsion:25°/m

## DIMENSION AND PARAMETERS

Nominal Cross-sectional Area	Overall Diameter (min.)	Overall Diameter (max.)	Approx. Weight	Max. DC Resistance at 20°C
mm <sup>2</sup>	mm	mm	kg/km	Ω/km
3x70/16	74.5	82.4	9760	0.268