



# Caledonian

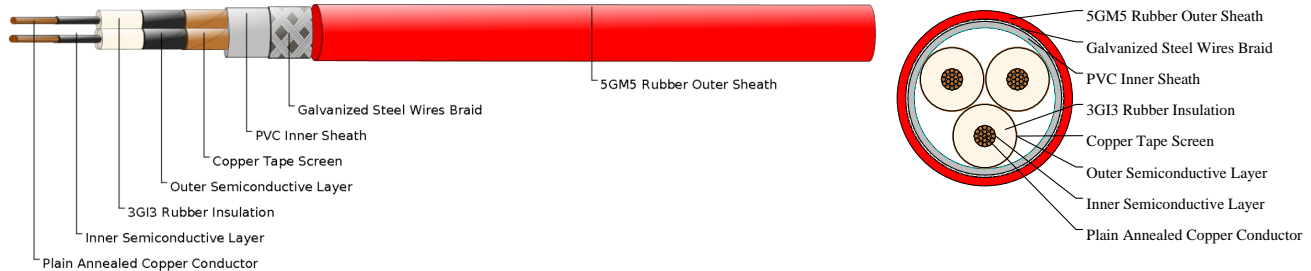
## Tunnel Cables

www.caledonian-cables.com

marketing@caledonian-cables.com

### Tunnel Cable

3GSEYQY 3x50/16



### 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: Semioconductive tape + overall concentric lay of copper wires and syntetic 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



# Caledonian

Tunnel Cables

[www.caledonian-cables.com](http://www.caledonian-cables.com)

[marketing@caledonian-cables.com](mailto:marketing@caledonian-cables.com)

## 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
3x50/16	70.8	78.3	8520	0.387