

Caledonian

Tunnel Cables

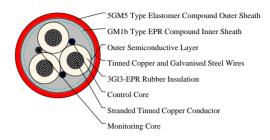
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Tunnel Cable

NTSKCGEWöU 3x50+3×(1.5 ST KON+16/3 KON)





APPLICATIONS

For the connection of mobile electrical equipment in mines and tunnels. Suitable also for coal cutting machines, particularly for extreme bending loads inside of steel or plastic track chains.

STANDARDS

Construction: DIN VDE 0250-813

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

Oil Resistant: HD/EN/IEC 60811-2-1., DIN VDE 0473-811-2-1

VOLTAGE RATING

1.8/3 KV

CABLE CONSTRUCTION

Power Cores:

Conductors: Tinned copper conductor DIN VDE 0295 class 5.

Insulation: Based on 3GI3-EPR rubber and semi rubber compound.

CONTROL CORES+MONITORING PE CORE(S):

Conductors: Tinned copper conductor DIN VDE 0295 class 5.

Insulation: 3GI3 type EPR compound and semi conductive rubber compound.

Cradle Separator: A shaped section of elastomeric material. -semi conductive, with control wire in the center. designed to support the core assembly. fill the center interstice and provide a specified separation between individual power cores.

Electrical Field Control:Inner and Outer semiconductive layer of semiconductive rubber.

Lay Up:Three main conductors laid-up with three(control cores & PE conductors) in interstice over a cradle separator.

Inner Sheath: GM1b Type EPR compound.



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Screen / Armour:Flexible- pliable armour in helix of tinned copper and galvanised steel wires.

Outer Sheath: 5GM5 Type elastomer compound. Red.

COLOUR CODE

Core Identification:

Power cores: naturally colored Control cores: blue colored

PHYSICAL AND THERMAL PROPERTIES

Rated Voltage:1.8/3 KV AC Test Voltage:6 KV

Max.Permissible Operating Voltage AC:2.1/3.6 KV Max.Permissible Operating Voltage DC:2.7/5.4 KV

Min Bending Radius:DIN VDE 0298-3

Current Carrying Capacities: DIN VDE 0298-4

Working Temperature: Fixed:-40°C- +80°C Mobile:-25°C- +80°C

DIMENSION AND PARAMETERS

Nominal Cross- sectional Area	Overall Diameter (min.)	Overall Diameter (max.)	Approx. Weight	Conductor Resistance at 20 °C
mm²	mm	mm	kg/km	Ω/km
3x50+3×(1.5 ST KON+16/3 KON)	50.4	53.5	4730	0.393