

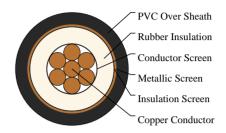
# Caledonian

Medium Voltage Cables www.caledonian-cables.com

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# RG7H1R 1C35





## **APPLICATIONS**

The single core cables are designed for distribution of electrical power with nominal voltage Uo/U ranging from 1.8/3KV to 18/30KV and frequency 50Hz. They are suitable for installation mostly in power supply stations, indoors and in cable ducts, outdoors, underground and in water as well as for installation on cable trays for industries, switchboards and power stations.

#### **STANDARDS**

IEC 60502 / CEI 20-13

## FIRE PERFORMANCE

Flame Retardant	DIN VDE 0482 part 265-2-1/EN 50265-2-1/EN			
	60332-1-2			

#### VOLTAGE RATING

3.6/6KV (Um=7.2KV)

#### CABLE CONSTRUCTION

Conductor: Plain annealed copper with IEC 60228 class 2.

Conductor Screen: The conductor screen consists of an extruded layer of non metallic, semi-conducting compound firmly bonded to the insulation to exclude all air voids.

Insulation: Rubber, type G7.

Insulaton Screen: The insulation screen consists of an extruded layer of non metallic, semiconducting compound extruded over the insulation. The extruded semi-conducting layer shall consist of bonded or cold strippable semi-conducting compound capable of removal for jointing or terminating. As an option, a semi-conducting tape may be applied over the extruded semi-conducting layer as a bedding for the metallic layer. The minimum thickness is 0.3 mm and the maximum resistivity is 500 Ohm-m at 90°C. The screen is tightly fitted to the insulation to exclude all air voids and can be easily hand stripped on site.

Outer Sheath: Red(RAL 3000), PVC, type RZ, other dimensions and colours available on request.

# PHYSICAL AND THERMAL PROPERTIES

Testing Voltage (rms):11KV Temperature Range: -15°C / +90°C



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Max Short Circuit Temperature: +250°C Min Installation Temperature: 0°C Min Bending Radius: 12 x OD Max. Tensile Stress: 60 N/mm<sup>2</sup>

#### **Electrical Properties**

Table 2a. Total Cross Section and Max. DC Resistance of Copper Wire Screen: Total Cross Section:16mm Max. DC Resistance at 20°C:1.075Ω Table 2a. Total Cross Section and Max. DC Resistance of Copper Tape Screen (0.1mm) : Total Cross Section:6.2mm Max. DC Resistance at 20°C:2.796Ω

# **TECHNICAL CHARACTERISTICS**

Nom. Cross- I Section Area	DC Resistand					Reactancl (Trefoil)		nductand (Trefoil)	nductand (Flat Spaced)	(Trefoil)	mpedance (Flat Spaced) CU
mm²	μΩ/m	μΩ/m	kA	pF/m	mA/m	μΩ/m	μΩ/m	nH/m	nH/m	μΩ/m	μΩ/m
35	524	668	5	251	0.35	122	178	327	524	679	695

# DIMENSION AND PARAMETERS

No. of Cores × Cross-sectional Area	AWG Size	Outer Diameter	Approx. Weight
No.×mm²		mm	kg/km
1x35	2	19.8±10%	630