Caledonian Railway Cables www.caledonian-cables.co.uk

EUROBALISE BGA

Applications

The cables are used as balise cables for ERTMS (European Rail Traffic Management System) railway networks. The cables are armoured and can provide low reduction factor.

Standards

- CEI 20-11
- CEI 20-14
- CEI 20-29
- CEI 20-34
- CEI 46-4
- CEI 103-10

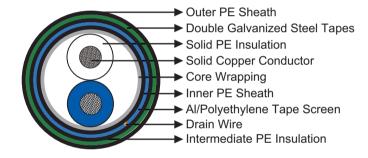
Sonstruction

- Conductors: Solid annealed copper, 1.6 mm nominal diameter.
- Insulation: Solid polyethylene.
- Stranding: Conductors will be stranded with dielectric fillers in order to get a circular core shape.
- Core Wrapping: Plastic tape (s) with overlapping.
- Inner Sheath: Low density polyethylene.
- Screen: Aluminium/polyethylene tape longitudinally applied and overlapped.
- Drain Wire: Tinned copper drain wire
- Intermediate Sheath: Low density polyethylene.
- Armour: Two galvanized steel tapes.
- Outer Sheath: Low density polyethylene.

Electrical Characteristics at 20°C

Nominal Conductor Diameter	mm	1.6
Maximum Conductor Resistance (DC)	Ω/km	21.5
Mutual Capacitance	nF/km	42.3+/-15%
Nominal Characteristic Impedance @8.9 KHz	Ω	130
Nominal Characteristic Impedance @560 KHz	Ω	110
Maximum Attenuation @560 KHz	dB/km	3.8
Insulation Resistance	MΩ.km	10000
Minimum Dielectric Strength core to screen (DC)	V	1000
Minimum Dielectric Strength core to core (DC)	V	3000
Reduction Factor @100V/km 50Hz		0.6









Mechanical and Thermal Properties

- Minimum Bending Radius: 8×OD (static); 16×OD (dynamic)
- Temperature Range: -30°C to +70°C (during operation); -20°C to +50°C (during installation)

Dimensions and Weight

Cable Code	Number of Pairs	Nominal Sheath Thickness mm		Nominal Overall Diameter	Nominal Weight		
		Inner	Inter.	Outer	mm	kg/km	
1.6mm Conductor, 3.4mm Insulated Wire							
RS/BGA-2Y2Y(L)2YB2Y-1P1.6	1	1.0	0.8	1.6	16	334	





UV Resistant









Water Resistant Mineral Oil

Resistant

Rated Voltage Laid In Ducts

Zero Halogen IEC 60754-1/NF C20-454 EN 50267-2-1

