Railways - Multibundle K209 cables

MBC K209B LSZH 24X6SM SP1921 BK



Multi Micro-bundles cable with corrugated steel armour

This multi micro-bundles cable is designed for indoor/outdoor installation in railways infrastructure.

The corrugated steel armour provides a high rodent protection. This cable has an outstanding fire behaviour.

Access to µbundles is made easy with the internal ripcord.

This cable can be operated under a large temperature range.

Design

The MBC LSZH SP1921 cable has a central strength member (FRP : Fibre Reinforced Plastic), with 24 bundles around integrating 6 fibres each. The design is reinforced by a first layer of watertight glass, a LSZH* inner sheath, a second layer of watertight glass yarns, a corrugated steel armour and a LSZH* outer steath.

Technical performances

The multibundle cable performances are specified in the following tables.

Euroclass

$B2^{ca}$ S1a a1 d0

* LSZH: Low Smoke Zero Halogen.

STANDARDS

EN 50399 B2
IEC 60331-2
IEC 60332-1
IEC 60332-3
IEC 60754-1
IEC 60794
IEC 61034
NF C32-070/C1

All drawings, designs, specifications, plans and particulars of weights, size and dimensions contained in the technical or commercial documentation of Aginode is indicative only and shall not be binding on Aginode or be treated as constituting a representation on the part of Aginode.

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Characteristics

Construction characteristics	
Colour	Black
Fiber optic type	SM
Armour type	Corrugated steel
Outer sheath	LSZH
Halogen free	IEC 60754-1
Material used for longitudinal water tightness	Swellable yarn
Metal free	No
Strength member	Central FRP
Construction type	Multibundle
Additional strength member	Glass yarn
Dimensional characteristics	
Number of tubes	24
Approximate weight	330 kg/km
Number of optical fibres	144
Nominal outer diameter (mm)	16.7 mm
Mechanical characteristics	
Mechanical resistance to impacts	3 impacts of 5 N.m
Maximum permanent tensile load	3.4 kN
Crush resistance (IEC 60794-1-E3)	200 N/cm
Maximum installation tension	5700 N
Transmission characteristics	
Attenuation, max. 1310 nm (cabled)	0.36 dB/1000m
Attenuation, max. 1550 nm (cabled)	0.23 dB/1000m
Usage characteristics	
Rodent protection	Corrugated steel tape
Operating temperature, range	-30...60 °C
Fire retardant	IEC 60332-3
Minimum static operating bending radius	330 mm
Flame retardant	IEC 60332-1

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Smoke density	IEC 61034-2
U.V resistance	Good
Storage temperature, range	-30...70 °C
Laying operation bending radius	420 mm
Installation type	Indoor/Outdoor
Installation temperature, range	-5...60 °C
Water proof	Longitudinal & radial

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