

# Railways - Multibundle K209 cables

MBC LSZH K209B 4X50/125 OM3 SP1344 BK

**Aginode Ref:** tdb

Multi Micro-bundles cable with corrugated steel armour - 4 fibres 50x125 OM3

Multi Micro-bundles cable with corrugated steel armour:

SP1344 - up to 36 fibres modulo 6

SP1400 - up to 48 fibres modulo 6

SP1349 - up to 72 fibres modulo 12

SP1757 - up to 96 fibres modulo 12

SP1758 - up to 144 fibres modulo 12

SP1921 - up to 288 fibres modulo 12

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  $\mu$ bundles is made easy with the internal ripcord.

This cable can be operated under a large temperature range.

## Design

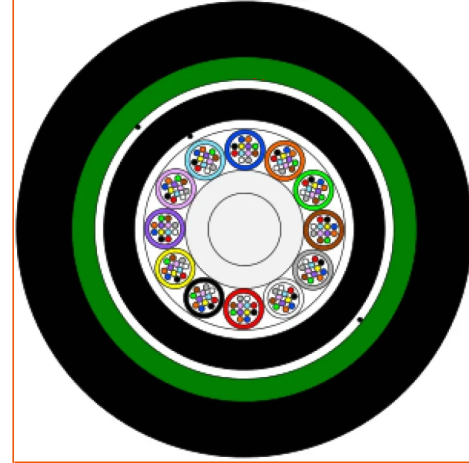
The MBC LSZH\* cable has a central strength member (FRP : Fibre Reinforced Plastic), with bundles (maximum 6 fibres per bundle) around. The design is reinforced by a first layer of watertight glass, a LSZH\* inner sheath, a second layer of watertight glass yarns, a corrugated steel armour and a LSZH\*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

## Fibre type

The MBC LSZH\* cable is available with singlemode and multimode fibres.

## Technical performances

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.



## STANDARDS

EN 50399 B2

IEC 60331-2

IEC 60332-1

IEC 60332-3

IEC 60754-1

IEC 60794

IEC 61034

NF C32-070/C1

The multibundle cable performances are specified in the following tables.

## Additional details

This cable is provided as a standard with a black sheath, other sheath colours are also available. Long exposure to UV with these other colours could generate colour fading.

The sheathing material is compliant with ISO 4892-2 regarding the UV exposure.

The cable is compliant with NFPA - IEEE1202 &UL1685.

## Euroclass

B2ca S1a a1 d0

\* LSZH: Low Smoke Zero Halogen.

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## Characteristics

### Construction characteristics

Colour	Black
Fiber optic type	OM3 50/125
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	1
Approximate weight	176 kg/km
Number of optical fibres	4
Nominal outer diameter (mm)	11.1 mm

### Mechanical characteristics

Mechanical resistance to impacts	10 impacts of 1 N.m
Maximum permanent tensile load	1.4 kN
Crush resistance (IEC 60794-1-E3)	300 N/cm
Maximum installation tension	2000 N

### Usage characteristics

Rodent protection	Corrugated steel tape
Operating temperature, range	-20...60 °C
Fire retardant	IEC 60332-3
Minimum static operating bending radius	220 mm
Flame retardant	IEC 60332-1
Smoke density	IEC 61034-2
U.V resistance	Good
Storage temperature, range	-20...70 °C

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Laying operation bending radius	275 mm
Installation type	Indoor/Outdoor
Installation temperature, range	-20...60 °C
Water proof	Longitudinal & radial

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