

# Railways - Multibundle K209 cables

MBC LSZH K209B 4X12SM G652D SP1349 BK

**Aginode Ref:** 10218921

Multi Micro-bundles cable with corrugated steel armour - 48 fibres

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\* SP1349 cable has a central strength member (FRP : Fibre Reinforced Plastic), with 4 bundles around integrating 12 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 sheath.

## Fibre type

The MBC LSZH\* SP1349 cable is available with singlemode fibres.

## Technical performances

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.



## 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.

## Euroclass

B2<sup>ca</sup> S1a a1 d0

\* LSZH: Low Smoke Zero Halogen.

# MBC LSZH K209B 4x12SM G652D SP1349 BK

## Characteristics

### Construction characteristics

Colour	Black
Fiber optic type	SM (G.652D)
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	4
Approximate weight	188 kg/km
Number of optical fibres	48
Nominal outer diameter	12.6 mm

### Mechanical characteristics

Mechanical resistance to impacts	10 impacts of 1 N.m
Maximum permanent tensile load	2 kN
Crush resistance (IEC 60794-1-E3)	300 N/cm
Maximum installation tension	3000 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	-20...60 °C
Fire resistant	NF C 32-070 CR1

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.

Fire retardant	IEC 60332-3
Minimum static operating bending radius	250 mm
Flame retardant	IEC 60332-1
Smoke density	IEC 61034-2
U.V resistance	Good
Storage temperature, range	-20...60 °C
Laying operation bending radius	350 mm
Installation type	Indoor/Outdoor
Installation temperature, range	-20...60 °C
Water proof	Longitudinal & radial

## Declaration of Performance

MBC LSZH K209B 4x12SM G652D SP1349 BK pdf — 120.34 KB [Download](#) ⚡

## Selling & delivery Information

## Standard Marking

Aginode - FIBRE OPTIC CABLE - MBC LSZH SP1349 - XXxYY - FB - TN - metric

XX = Fibre Count YY = Fibre Type FB = Frameries, Belgium (manufacturing place) TN = Traceability Number