

# Railways - Multibundle K209 cables

MBC LSZH K209B 2X6SM G652D SP1344 BK

**Aginode Ref:** 10145800

Multi Micro-bundles cable with corrugated steel armour - 12 fibres SM G652D

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

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.

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

The cable is compliant with the standard NFPA - IEEE1202&UL1685.

## **Euroclass**

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

\* LSZH: Low Smoke Zero Halogen.

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## 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          | 2         |
| Approximate weight       | 176 kg/km |
| Number of optical fibres | 12        |
| Nominal outer diameter   | 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              |

### 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 retardant               | IEC 60332-3           |

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

## Declaration of Performance

MBC LSZH K209B 2x6SM G652D SP1344 BK pdf — 119.99 KB [Download](#) ⚡

## Selling & delivery Information

## Standard Marking

Aginode - FIBRE OPTIC CABLE - MBC LSZH SP1344 - XXxYY - FB - TN - metric

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