

# Railways - Multibundle K209 cables

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.

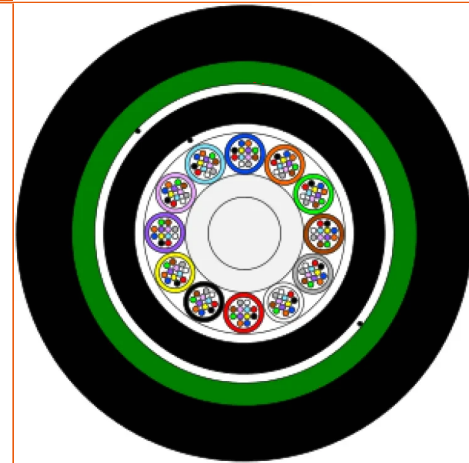
## Design

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



## 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

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 (G657.A2)
Armour type	Corrugated steel
Outer sheath	LSZH
Halogen free	IEC 60754-1
Metal free	No
Strength member	Central FRP
Construction type	Multibundle
Additional strength member	Glass yarn

### Dimensional characteristics

Number of tubes	6
Number of optical fibres	72

### Mechanical characteristics

Mechanical resistance to impacts	10 impacts of 1 N.m
Crush resistance (IEC 60794-1-E3)	300 N/cm

### Usage characteristics

Rodent protection	Corrugated steel tape
Operating temperature, range	-20...60 °C
Fire resistant	NF C 32-070 CR1
Fire retardant	IEC 60332-3
Flame retardant	IEC 60332-1
Smoke density	IEC 61034-2
U.V resistance	Good
Installation type	Indoor/Outdoor
Installation temperature, range	-20...60 °C
Water proof	Longitudinal & radial

## Selling & delivery Information

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.

# Standard Marking

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

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

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## Product list

Aginode ref.	Country ref.	Name	Number of optical fibres	Crush resistance (IEC 60794-1-E3)	Mechanical resistance to impacts
☎ 14500598	-	MBC LSZH K209B 6x12SM G657A2 SP1349 BK	72	300 (N/cm)	10 impacts of 1 N.m
☎	-	MBC K209B LSZH 24x6SM SP1921 BK	144	200 (N/cm)	3 impacts of 5 N.m
☎ 10548533	-	MBC LSZH K209B 6xSM G652D SP1344 BK	6	300 (N/cm)	10 impacts of 1 N.m
☎ 10145800	-	MBC LSZH K209B 2x6SM G652D SP1344 BK	12	300 (N/cm)	10 impacts of 1 N.m
☎	-	MBC LSZH 1x6 50/125 OM3 SP1344 GR (K209/SYT)	6	300 (N/cm)	10 impacts of 1 N.m
☎ 10507006	-	MBC LSZH K209B 6x50/125 OM3 SP1344 BK	6	300 (N/cm)	10 impacts of 1 N.m
☎ tdb	-	MBC LSZH K209B 4x50/125 OM3 SP1344 BK	4	300 (N/cm)	10 impacts of 1 N.m
☎ 10562651	-	MBC K209B LSZH 24x12SM G657A1 SP1921 BK	288	200 (N/cm)	3 impacts of 5 N.m
☎ 10513197	-	MBC LSZH K209B 6x12SM G652D SP1349 BK	72	300 (N/cm)	10 impacts of 1 N.m
☎ 10508928	-	MBC LSZH K209B 4x6SM + 4x6MM SP1400 BK	48	300 (N/cm)	10 impacts of 1 N.m
☎ 10508458	-	MBC K209c LSZH 8x12SM G652D SP1757 BK	96	300 (N/cm)	10 impacts of 1 N.m
☎ 10509235	-	MBC K209 LSZH 12x12SM G652D SP1758 BK	144	300 (N/cm)	10 impacts of 1 N.m
☎ 10504788	-	MBC LSZH K209B 6x6SM G652D SP1344 BK	36	300 (N/cm)	10 impacts of 1 N.m
☎ 10545733	-	MBC LSZH K209B 2x6 50/125 OM3 SP1344 BK	12	300 (N/cm)	10 impacts of 1 N.m
☎ 10218921	-	MBC LSZH K209B 4x12SM G652D SP1349 BK	48	300 (N/cm)	10 impacts of 1 N.m
☎ 14500004	-	MBC K209B LSZH 24x12SM G657A2 SP1921 GY	288	200 (N/cm)	3 impacts of 5 N.m

☎ = Make to order, 📦 = In Stock

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