



**B2<sub>ca</sub>**

**Nexans Ref.:** 10532905  
**EAN 13:** 5413404303106

### FIRE PERFORMANCE CLASS



B2ca-s1,d1,a1



### CONTACT

Product Management  
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YMz1K B2ca is a halogen free low smoke power cable according to fire classification B2ca-s1,d1,a1 for connection in low voltage installation up to 0.6/1 kV in construction works with a very high fire hazard level. YMz1K B2ca FLEX provided with conductors with increased bendability (FLEX)

### STANDARDS

**Product** HD 604 S1 part 5/sect. C; IEC 60228

### APPLICATIONS

**Nexans YMz1K B2ca** is a halogen free low smoke power cable for general use in construction works subject to performance requirements on reaction to fire. **YMz1K B2ca** is suitable for application in low voltage installations up to 0.6/1 kV, according to NEN 1010. It meets the requirements according to fire classification B2ca-s1,d1,a1 for buildings and civil engineering works with a very high fire hazard level (NEN 8012). Available from 35 mm2: **YMz1K B2ca FLEX**, provided with conductors with increased bendability.

### MAIN BENEFITS

- **Easy Strippable** - Cables (1.5 - 6 mm2) are easy to strip
- **PEP EcoPassport** - EPD environmental passport available
- **UV Resistant** - Our cables passed the 720 hour test according to the test standard EN 50289-4-17 Method A

### DESIGN

1. Conductor  
Sections till 10 mm2: Bare copper, solid, class 1  
Sections from 10 mm2: Bare copper, stranded, class 2
2. Insulation: XLPE  
Inner covering: Halogen free compound
3. Outer sheath: Halogen free compound  
Colour: grey  
UV resistance: Yes

### Core identification

- 1 core: neutral
- 2 cores: brown-light blue
- 3G cores: green/yellow-brown-light blue
- 3x cores: black-grey-brown
- 4 cores: green/yellow - brown-black-grey
- 5 cores: green/yellow - light blue - brown - black - grey



Conductor flexibility  
Solid class 1



Halogen free  
IEC 60754



Rated Voltage Uo/U  
(Um)  
0,6/1 kV



Mechanical  
resistance to  
impacts  
Good



Bending factor  
when laying  
10 (xD)



Minimum  
installation  
temperature  
0 °C



Operating temp.  
-20 ... 80 °C



Max. conductor  
temp. in service  
90 °C

### CHARACTERISTICS

#### Construction characteristics

Conductor flexibility	Solid class 1
Conductor material	Bare copper
Insulation	XLPE (Cross-linked Polyethylene)
Core identification	Brown, black, grey, green / yellow
Protection	-
Outer sheath	Halogen free compound
Sheath colour	Grey
Halogen free	IEC 60754
Conductor shape	Round solid

#### Dimensional characteristics

Number of cores	4
Conductor cross-section	2.5 mm <sup>2</sup>
Nominal outer diameter	12.5 mm
Approximate weight	300 kg/km
Average insulation thickness	0.7 mm
Nominal outer sheath thickness	1.8 mm

#### Electrical characteristics

Permissible current rating in open air	32 A
Loop resistance, max. at 20°C	7.41 Ohm/km
Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> )	0,6/1 kV

#### Mechanical characteristics

Mechanical resistance to impacts	Good
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#### Usage characteristics

Bending factor when laying	10 (xD)
One single bending at each end minimum	8 (xD)
Field of application	Standard
Minimum installation temperature	0 °C
Operating temperature, range	-20 ... 80 °C
Max. conductor temperature in service	90 °C
U.V resistance	EN 50289-4-17 method A, for 720h

### SELLING AND DELIVERY INFORMATION

#### Marking

ALSECURE YMz1K B2ca n (x or G) s mm<sup>2</sup>  
 NEXANS BENELUX  
 KEMA KEUR  
 Meter Marking

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