



**Reference:** 10171163

## CONTACT

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## FIRE RESISTANT POWER CABLES

### STANDARDS

**Product** IEC 60228

**Installation** IEC 60092-350; IEC 60092-353; IEC 60092-360

**Test** a; IEC 60331-1 or 2; IEC 60332-1; IEC 60332-3-22; IEC 60754-1; IEC 61034

### APPLICATION

MPRX®331 0.6/1 kV fire resistant power and control cables maintain circuit integrity in case of fire by meeting performances requirements from the IEC 60331 series for 180 minutes. They are used for detection and warning systems not subject to mechanical risks.

The highly flexible MPRX®331 FLEXISHIP® range is recommended for installations and connections in narrow spaces where an optimal bending radius is required. Designed with halogen-free fire retardant materials, they provide optimum safety for people and maximal asset protection against all risks of fire.

### Design

#### 1. Conductor

Stranded bare copper, class 2 or class 5 for FLEXISHIP®

#### 2. Insulation

Mica tape + XLPE (cross-linked polyethylene)

#### 3. Outer sheath

(Filler if necessary)  
 Polyolefin SHF1  
 Colour: orange

Example of marking:

LYNXEO 279 MPRX 331 or MPRX 331 FLEXISHIP 0.6/1 kV "n" x (orG) "s" 90°C IEC 60092-353 IEC 60332-3-22 Cat. A IEC 60331-1/21 "ww/yy" \* CE\* + metric marking

Core Identification

- 1 x: black
- 2 x: brown-blue
- 3 x: brown-black-grey
- 3G: brown-blue-green/yellow
- 4 x: brown-black-grey-blue
- 4G: brown-black-grey-green/yellow
- > 5 cores: n x: white with printed numbers / nG: white with printed numbers + green/yellow core



Halogen free  
 IEC 60754-1



Conductor flexibility  
 Stranded class 5



Rated Voltage Uo/U  
 (Um)  
 0.6/1 (1.2) kV



Fire resistant  
 IEC 60331-1 or -2



Fire retardant  
 EN IEC 60332-3-22  
 (cat A)



Smoke density  
 IEC 61034



Gases corrosivity  
 IEC 60754-2



Operating temp.  
 -30 ... 82 °C

## CHARACTERISTICS

### Construction characteristics

|                                   |                     |
|-----------------------------------|---------------------|
| Conductor material                | Bare copper         |
| Halogen free                      | IEC 60754-1         |
| Sheath colour                     | Orange              |
| Insulation                        | XLPE + Mica tape    |
| Material of filler / inner sheath | Filler if necessary |
| Outer sheath                      | Polyolefin          |
| Conductor flexibility             | Stranded class 5    |
| With Green/Yellow core            | No                  |

### Dimensional characteristics

|                         |                   |
|-------------------------|-------------------|
| Number of cores         | 4                 |
| Conductor cross-section | 6 mm <sup>2</sup> |
| Minimum outer diameter  | 14.8 mm           |
| Maximum outer diameter  | 17.0 mm           |
| Approximate weight      | 359 kg/km         |
| Nominal outer diameter  | - mm              |

### Electrical characteristics

|   |                 |
|---|-----------------|
| Rated Voltage U <sub>0</sub> /U (U <sub>m</sub> ) | 0.6/ 1 (1.2) kV |
| Permissible short circuit current                 | 0.9 kA          |
| Permissible current rating in open air            | 36 A            |
| Max. DC resistance of the conductor at 20°C       | 3.3 Ohm/km      |

### Usage characteristics

|                                       |                           |
|---------------------------------------|---------------------------|
| Fire resistant                        | IEC 60331-1 or -2         |
| Fire retardant                        | EN IEC 60332-3-22 (cat A) |
| Smoke density                         | IEC 61034                 |
| Gases corrosivity                     | IEC 60754-2               |
| Operating temperature, range          | -30 ... 82 °C             |
| Max. conductor temperature in service | 90 °C                     |

## OTHER CHARACTERISTICS

### Test Voltage

AC between cores..... 3.5 kV AC

### Minimum bending radius for fixed installations

- MPRX® 331..... 6 x outer diameter
- MPRX® 331 FLEXISHIP®..... 5 x outer diameter