



**Reference:** 10281622

## CONTACT

Market information  
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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 ... 80 °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	Yes

### Dimensional characteristics

Number of cores	4
Conductor cross-section	25 mm <sup>2</sup>
Minimum outer diameter	24.3 mm
Maximum outer diameter	27.9 mm
Approximate weight	1199 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	3.6 kA
Permissible current rating in open air	89 A
Max. DC resistance of the conductor at 20°C	0.727 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 ... 80 °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