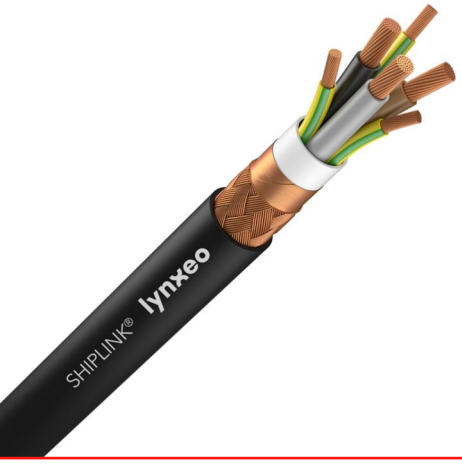
# MPRXCX® FLEXISHIP® EMC 0.6/1(1.2) kV

**MPRXCX® FLEXISHIP® EMC 0.6/1kV 3x10+3G1.5**




**Reference:** 10284864

## CONTACT

Market information
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## CABLES FOR VARIABLE FREQUENCY DRIVES

## STANDARDS

**Product** IEC 60228

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

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

## APPLICATION

Motor supply cable for frequency converters controlled low voltage AC drives on ships, called VFD applications. MPRXCX® FLEXISHIP® EMC cables are designed with a special coverage, copper-polyester tape and braid, which provide a 100% EMC protection. Insulation with low dielectric constant is used to reduce reflected wave voltage peak magnitude.

Symmetrical insulated ground wires, placed in corner, can reduce reflected wave and return common mode noisy currents back to the drive. Enhanced insulation is implemented for 0.6/1 (1.2) kV cable to fulfil periodic peak voltage up to 2xU=2 kV due to harmonics.

These cables are used on board of ships in all locations for fixed installations.

## Design

1. **Conductor:**
   Flexible bare copper class 5
   Stranded bare copper class 2 for cross-section < 4 mm²
2. **Insulation:**
   XLPE (cross linked polyethylene)
3. **Optional**
   Return earth conductor
4. **Assempling:**
   Polyester tape
5. **Screen / Armouring:**
   Copper / polyester tape
   Bare copper braid
6. **Outer sheath:**
   Polyolefin SHF1
   Colour: black

Example of marking:
LYNXEO 279 MPRXCX FLEXISHIP EMC Nbr of cores & cross-section 0.6/1 kV 90C IEC 60092-353 IEC 60332-22 Cat. A SS YYYY *CE* Manufacturing n° + metric marking

Core Identification
3 cores: black-grey-brown
Earth: green/yellow split in 3 conductors


Conductor flexibility
**Flexible class 5**

Halogen free
**IEC 60754-1**


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


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


Flame retardant
**IEC 60332-1**


Smoke density
**IEC 61034**


Gases corrosivity
**IEC 60754-2**


Electro magnetic interference resistance
**Yes**

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## CHARACTERISTICS

| | |
|---|---|
| **Construction characteristics** | |
| Conductor material | Bare copper |
| Conductor flexibility | Flexible class 5 |
| Insulation | XLPE (Cross-linked Polyethylene) |
| Screen | Copper tape |
| Armour type | Bare copper braid |
| Outer sheath | Polyolefin |
| Sheath colour | Black |
| With Green/Yellow core | Yes |
| Construction type | - |
| Halogen free | IEC 60754-1 |
| **Dimensional characteristics** | |
| Number of cores | 3 |
| Conductor cross-section | 10 mm² |
| Nominal outer diameter | - mm |
| Minimum outer diameter | 16.9 mm |
| Maximum outer diameter | 19.5 mm |
| Approximate weight | 618 kg/km |
| Earth conductor cross section | 1.5 mm² |
| Number of auxiliary conductors | 3 |
| **Electrical characteristics** | |
| Permissible current rating in open air | - A |
| Rated Voltage Uo/U (Um) | 0.6/ 1 (1.2) kV |
| **Usage characteristics** | |
| Fire retardant | EN IEC 60332-3-22 (cat A) |
| Flame retardant | IEC 60332-1 |
| Smoke density | IEC 61034 |
| Gases corrosivity | IEC 60754-2 |
| Electro magnetic interference resistance | Yes |
| Operating temperature, range | -30 ... 80 °C |
| Max. conductor temperature in service | 90 °C |

Conductor flexibility
**Flexible class 5**


Halogen free
**IEC 60754-1**

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

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

Flame retardant
**IEC 60332-1**

Smoke density
**IEC 61034**

Gases corrosivity
**IEC 60754-2**

Electro magnetic interference resistance
**Yes**

## OTHER CHARACTERISTICS

**Test Voltage**
AC between cores..... 5 kV AC

**Minimum bending radius for fixed installations**..... 5 x outer diameter