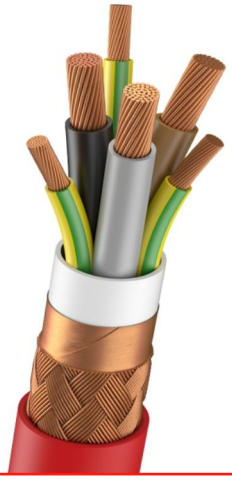
MPRXCX® FLEXISHIP® EMC 1.8/3 (3.6) kV



Cables for variable frequency drives

STANDARDS

Product IEC 60228

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

Test IEC 60332-1; IEC 60332-3-22; IEC 60754-1; IEC 60754-2; 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 1.8/3(3.6) kV cable to fulfil periodic peak voltage up to 3 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
2. **Insulation**
   XLPE (cross-linked polyethylene)
3. **Optional**
   Symmetrical return earth conductors
4. **Inner covering**
   Lapped or extruded
5. **Screen / Armouring**
   Copper / polyester tape
   Bare copper braid
6. **Outer sheath**
   Polyolefin SHF1
   Colour: red

Example of marking:
LYNXEO 279 MPRXCX FLEXISHIP EMC 1.8/3kV "n"x"s"mm2 90°C
IEC 60092-353 IEC 60332-3-22 Cat. A ww/yy + metric marking

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

CONTACT

Market information
industryprojects.business@lynxeogroup.com

Halogen free
IEC 60754-1

Rated Voltage Uo/U (Um)
1.8 / 3 (3.6) 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

Operating temp.
-30 ... 80 °C

MPRXCX® FLEXISHIP® EMC 1.8/3 (3.6) kV

CHARACTERISTICS

Construction characteristics	
Halogen free	IEC 60754-1
Electrical characteristics	
Rated Voltage Uo/U (Um)	1.8 / 3 (3.6) 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

MPRXCX® FLEXISHIP® EMC 1X.. OR 3X..

Reference	Nb. of cores	Cross section [mm²]	Min. outer diam. [mm]	Nom. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
	1	25	15.0	16.0	17.5	500
	1	35	16.5	17.3	19.0	620
	1	50	18.0	19.0	20.5	780
	1	70	20.0	20.7	22.5	1020
	1	95	22.0	23.2	25.0	1280
	1	120	23.5	24.5	26.5	1500
	1	150	26.0	27.0	29.0	1860
	1	185	27.5	28.8	31.0	2190
13129338	1	240	30.5	31.7	34.0	2730
10285737	3	50	31.5	33.9	36.3	2195
	3	70	38.5	40.6	42.5	3536
10225482	3	95	40.2	43.2	46.2	3750
10281408	3	120	43.9	47.2	50.5	4580
	3	150	51.0	52.9	56.5	6574

MPRXCX® FLEXISHIP® EMC 3X..+3G..

Reference	Nb. of cores	Cross section [mm²]	Nb aux. cond.	Earth cond. sect. [mm²]	Min. outer diam. [mm]	Nom. outer diam. [mm]	Max. outer diam. [mm]	Approx. weight [kg/km]
	3	50	3	10	34.5	36.0	38.5	2750
10280524	3	70	3	16	38.9	41.8	44.7	3255
	3	95	3	16	44.0	45.6	48.5	4678
10285439	3	120	3	25	47.0	49.2	52.0	5840
10280685	3	150	3	25	51.0	54.8	58.6	6186
10280680	3	185	3	35	54.5	58.6	62.7	7426