



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 $< 4 \text{ mm}^2$
2. Insulation:
XLPE (cross linked polyethylene)
3. Optional
Return earth conductor
4. Assembling:
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



导线柔软度
柔软等级5



无卤
IEC 60754-1



额定电压 U_0/U
0.6/ 1 (1.2) kV



阻燃
EN IEC 60332-3-22
(cat A)



阻燃 - 火焰
IEC 60332-1



烟密度
IEC 61034



气体腐蚀性
低 IEC 60754-2



抗电磁干扰
是

CHARACTERISTICS

结构特性

导体材料	裸铜线
导线柔软度	柔软等级5
绝缘	XLPE (Cross-linked Polyethylene)
屏蔽	铜带
铠装类型	裸铜编织
外护套	聚烯烃
护套颜色	黑
有绿/黄芯线	是
结构类型	-
无卤	IEC 60754-1

尺寸特性

芯线数	3
导线截面	10 mm ²
标称外径	- mm
外径最小值	16.9 mm
Maximum outer diameter	19.5 mm
近似重量	618 kg/km
Earth conductor cross section	1.5 mm ²
Number of auxiliary conductors	3

电气特性

露天允许通过的额定电流	- A
额定电压U ₀ /U	0.6/ 1 (1.2) kV

使用特性

阻燃	EN IEC 60332-3-22 (cat A)
阻燃 - 火焰	IEC 60332-1
烟密度	IEC 61034
气体腐蚀性	低 IEC 60754-2
抗电磁干扰	是
操作温度范围	-30 ... 80 °C
芯线最高静止温度	90 °C

导线柔软度
柔软等级5无卤
IEC 60754-1额定电压U₀/U
0.6/ 1 (1.2) kV阻燃
EN IEC 60332-3-22
(cat A)阻燃 - 火焰
IEC 60332-1烟密度
IEC 61034气体腐蚀性
低 IEC 60754-2抗电磁干扰
是

OTHER CHARACTERISTICS

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

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