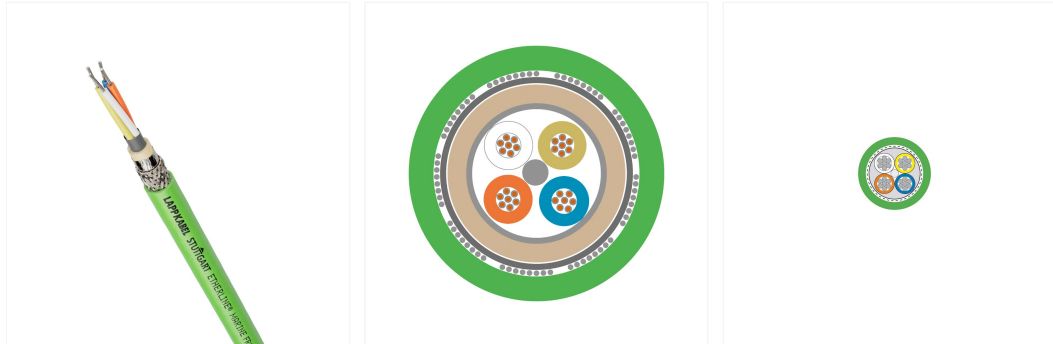


ETHERLINE® MARINE FRNC FC CAT.5 2x2xAWG22
Article No.: 2170889

Ethernet cable; Flexible; ETHERNET/IP, PROFINET, Ethernet; PROFINET® application: Type B; Cat.5e; SF/UTP; Halogenfree; green



Details

Benefits

- Fast information exchange through Ethernet technology.
- Cat. 5 performance up to 100 Mbit/s.
- For transmission of analog and digital signals in the frequency range up to 100 MHz.
- Power-over-Ethernet-capable cable for simultaneous power and data supply of smaller network components with low energy requirements (e.g. IP cameras, wireless access points).
- Cable specially developed for maritime use with international DNV approval.
- Flame-resistant, halogen free product that does not produce corrosive acids or hazardous gases in the event of a fire.
- The "Fast Connect" design, including inner jacket and cross separator, significantly reduces the cable assembly time, by eliminating the time-consuming removal of the pair shielding. It also provides undiminished shielding of the conductor pairs.
- High resistance to electromagnetic interference thanks to star quad design as well as double shielding made of aluminum-laminated foil and high degree of copper shielding braiding (SF/UTP).
- UL/CSA certification according to technical data enables the product to be used on the North American market.

Application

- For flexible use in the PROFINET network (type B).
- Also suitable for EtherCAT and EtherNET/IP applications.
- For fixed installation and occasional flexing.
- Listed as a Power Limited Tray Cable (PLTC) according to UL, for open installation on cable trays.
- Can be used in dry, damp or wet environments.
- Suitable for outdoor use, subject to the temperature range.

Notes

Unless specified otherwise, the product values shown are rated values at room temperature. You can receive additional values, such as tolerances, upon request if they are available and have been released for publication.

Photographs and graphics are not to scale and do not represent detailed images of the respective products.

The absence of PWIS raw materials does not protect against the potential risk of contamination with substances that interfere with the paint wetting during subsequent handling of the product(s) during transport, storage or further processing after delivery.

If applicable, the prices are solid metal prices without additional charges and VAT. Sales only to business customers.

PROFINET® is a registered trademark of PNO (PROFIBUS user organization).

Remarks

Technical Data

General information

Brand	ETHERLINE®
Product type	Ethernet cable
Copper index	215 lb/10000 ft
valid Fieldbus or Ethernet System	ETHERNET/IP PROFINET Ethernet

Electrical parameters

Nominal voltage	48 V AC rms according to IEC
Rated voltage conductor to conductor	50 V AC rms according to IEC

Maximum operating voltage (not for power transmission)	125 V
Test voltage conductor/conductor	0.7 kV
Test voltage conductor/shielding	0.7 kV
Supports Power over Ethernet	IEEE 802.3af (PoE) IEEE 802.3at (PoE+)
Loop resistance at 20°C	120 Ω/km
Nominal characteristic impedance	100 Ω
Possible data transmission rates	100 Mbit/s
Nominal velocity of propagation	0.67 c

Product design

Conductor count/size	2x2x22/7AWG
Nominal cross section conductor (AWG)	22 AWG
Leading conductor cross-section	AWG
Wire count	7
Conductor design	7-wire
Including protective ground	No
Number of cores	4
Number of pairs	2
Stranding type	Star quad
Wrapping above stranding	Halogen-free plastic film
Shielded	Yes
Type of overall shielding	Aluminum-laminated plastic foil Tin-plated copper braiding
Abbreviation shielding	SF/UTP
Optical degree of coverage of the stranded shielding, overall shield	85 %
With rodent protection	No
Nominal conductor diameter	0.059 in
Min. outer diameter	0.24 in
Nominal outer diameter	0.256 in
Max. outer diameter	0.272 in
Cable form	Round

Core insulation base material	Polypropylene
Conductor insulation basic material, short form	PP
Basic material of inner jacket	Halogen-free compound
Basic material of outer jacket	Halogen-free compound
Outer jacket color	green
Colour outer sheath RAL code	RAL 6018
Core identification	Colors
Conductor color code	PROFINET Color code star quad

Product features

Application area	Flexible
PROFINET® application	Type B
For permanent bending	No
Windable	No
Minimum bending radius, stationary	3 x outer diameter
Minimum bending radius in inch, fixed installation	0.815 in
Minimum bending radius, occasionally moved	7.5 x outer diameter
Minimum bending radius in mm, occasionally moved	2.039 in
Temperature, fixed installation	-25 °C to 70 °C max. conductor temperature
Temperature, occasionally moved	0 °C to 50 °C max. conductor temperature
Installation temperature min.	0 °C
Max. assembly temperature	50 °C
Flame-retardant	Yes
Flame retardance according to	IEC 60332-1-2 IEC 60332-3-22
Corrosiveness of combustion gases according to	IEC 60754-2
UV-resistant	Yes
UV-resistant according to	UL sunlight resistant
Halogenfree	Yes

Halogen-free according to	IEC 60754-1
Oil resistant	No
PWIS-free	Yes
PWIS-free according to	VDMA 24364-B2-L
Ethernet cable category	Cat.5e
Fast Connect (FC) cable	Yes

Certifications and standards

CE marking	Yes
EAC certified	Yes
EAC certification number	EAЭC N RU Д-DE.АЮ64.В.00130/20
UL recognized	No
UL listed	Yes
UL certification	UL CMG according to UL 444 (e-file number: E236660) UL PLTC according to UL 13
cUR recognized	No
cUL listed	Yes
cUL certification	cUL CMG (75°C) according to CSA C22.2 No. 214 (e-file number: E236660)
CSA certified	No
VDE certified	No
TÜV certified	No
DNV-certified	Yes
Ecolab certified	No

ETHERLINE® MARINE FRNC FC Cat.5e

Article No.	Name	Conductor count/size	Nominal outer diameter	Copper index
2170889	ETHERLINE® MARINE FRNC FC CAT.5 2x2xAWG22	2x2x22/7AWG	0.256 in	215 lb/10000 ft

V1.1