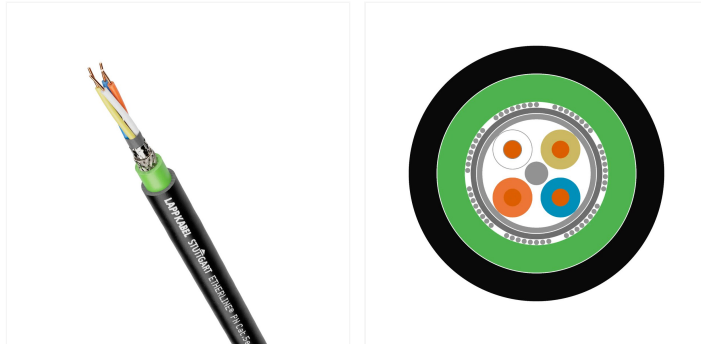


ETHERLINE® PN Cat.5e YY

Article No.: 2170933

Ethernet cable; Fixed Installation; ETHERNET/IP, PROFINET; PROFINET® application: Type C; Cat.5e; SF/UTP; PVC; 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.
- "FC" variants with Fast Connect cable design for easier assembly.
- 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 certification according to technical data enables the product to be used on the North American market.

Application

- For fixed installation in the PROFINET network (type A), due to solid conductor design.
- Also suitable for EtherCAT and EtherNET/IP applications.
- Can be used in dry and damp environments.
- The PVC outer jacket is resistant to acids and alkaline solutions and has limited oil resistance.
- Variant "YY" is 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	204.28 lb/10000 ft
valid Fieldbus or Ethernet System	ETHERNET/IP PROFINET
Industry segment	Assembly Machines Automotive Construction Machinery Food & Beverage Healthcare & Pharma Intralogistics & Material handling Machine Tools Process Industry Robotics

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	1 kV
Test voltage conductor/shielding	0.5 kV
Supports Power over Ethernet	IEEE 802.3af (PoE) IEEE 802.3at (PoE+)
Loop resistance at 20°C	118.2 Ω/km
Nominal characteristic impedance	100 Ω
Possible data transmission rates	100 Mbit/s
Nominal velocity of propagation	0.66 c

Product design

Conductor count/size	2x2x22/1AWG
Nominal cross section conductor (AWG)	22 AWG
Leading conductor cross-section	AWG
Wire count	1
Conductor material	Bare Copper
Conductor design	solid conductor
Including protective ground	No
Number of cores	4
Number of pairs	2
Stranding type	Star quad
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 armoring	No
With rodent protection	No
Nominal conductor diameter	0.059 in
Min. outer diameter	0.291 in
Nominal outer diameter	0.303 in
Max. outer diameter	0.315 in

Cable form	Round
Core insulation base material	Polyethylene
Conductor insulation basic material, short form	PE
Basic material of inner jacket	Polyvinylchloride
Basic material of inner jacket, short form	PVC
Basic material of outer jacket	Polyvinylchloride
Base material of outer sheath, shortname	PVC
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	Fixed Installation
PROFINET® application	Type C
Windable	No
Minimum bending radius, stationary	8 x outer diameter
Minimum bending radius in inch, fixed installation	2.52 in
Temperature, fixed installation	-25 °C to 80 °C max. conductor temperature
Installation temperature min.	-20 °C
Max. assembly temperature	60 °C
Flame-retardant	Yes
Flame retardance according to	CSA FT4
UV-resistant	Yes
UV-resistant according to	UL sunlight resistant
Halogenfree	No
Oil resistant	No
PWIS-free	Yes
PWIS-free according to	VDMA 24364-B2-L
Ethernet cable category	Cat.5e
Fast Connect (FC) cable	No

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)
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
Ecolab certified	No

ETHERLINE® PN Cat.5

Article No.	Name	Conductor count/size	Temperature, fixed installation	Flame retardance according to	Nominal outer diameter
2170879	ETHERLINE® TRAY ER PN Y FC 2x2x22	2x2x22/1AWG	-40 °C to 80 °C max. conductor temperature	CSA FT4	0.256 in
2170891	ETHERLINE® PN Cat.5e Y 2x2xAWG22	2x2x22/1AWG	-40 °C to 70 °C max. conductor temperature	UL VW-1,IEC 60332-1-2	0.248 in
2170893	ETHERLINE® Y FC Cat.5	2x2x22/1AWG	-40 °C to 80 °C max. conductor temperature	CSA FT4,IEC 60332-1-2	0.256 in
2170933	ETHERLINE® PN Cat.5e YY	2x2x22/1AWG	-25 °C to 80 °C max. conductor temperature	CSA FT4	0.303 in

V1.1