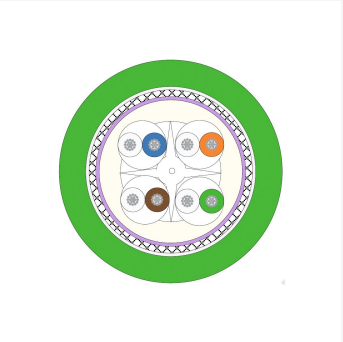
ETHERLINE® FD P CAT.6 4X2XAWG26

Article No.: 2170488

Ethernet cable; Cable chain, Flexible; EtherCAT, ETHERNET/IP; Cat.6; SF/UTP; PUR; Halogen-free; green





Details

Benefits

- Fast information exchange through Ethernet technology.
- Cat. 6 performance up to 1 Gbit/s.
- Highly flexible cable design with a cross separator to protect the core pairs for maximum mechanical stress.
- Durable, resistant product thanks to the outer sheath PUR material that is resistant to abrasions, notches and cuts.
- Ideal protection against electromagnetic interference thanks to double shielding made of aluminium-laminated foil and copper stranded shielding with high degree of coverage (SF/UTP).
- Successfully tested for over 4 million bending cycles in cable chains.
- UL certification according to technical data enables the product to be used on the North American market.

Application

- The cable design allows flexible, continuously moving use in moving machine parts and in cable chains.
- Also suitable for EtherCAT and EtherNet/IP applications.
- Can be used in dry and damp conditions, and especially in harsh and oily environments.

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- The PUR outer sheath withstands high mechanical loads.
- The PUR outer sheath is resistant to mineral oil-based lubricants and highly resistant to chemicals.

Notes

Unless specified otherwise, the product values shown are rated values at room temperature. You can receive further 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 surcharges and VAT. Sales only to business customers.

Remarks

Technical Data

General information

Brand	ETHERLINE®
Product type	Ethernet cable
Weight	63 kg/km
Copper index	34 kg/km
valid fieldbus or Ethernet system	EtherCAT ETHERNET/IP
Industry segment	Food & Beverage Healthcare & Pharma Intralogistics Machine tools Packaging Processing Industries
customs code	85444995

Electrical parameters

Nominal voltage	48 V AC rms according to IEC

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Rated voltage core to core	50 V AC rms according to IEC 300 V AC rms according to UL
Maximum operating voltage (not for power transmission)	125 V
Test voltage core/core	1.7 kV
Test voltage core/screening	1.7 kV
Supports Power over Ethernet	IEEE 802.3af (PoE) IEEE 802.3at (PoE+) IEEE 802.3bt (4PPoE)
Loop resistance at 20°C	280 Ω/km
Nominal surge impedance	100 Ω
Possible data transmission rates	1000 Mbit/s
Signal propagation speed (nom.)	0.68 c

Product design

Conductor number/size	4x2x26/19AWG
Nominal conductor cross-section (metric)	0.15 mm²
Nominal conductor cross-section (AWG)	26 AWG
Leading conductor cross-section	AWG
Number of wires	19
Conductor material	Tin-plated copper
Conductor design	19-wire
Including protective earth	No
Number of cores	8
Number of pairs	4
Stranding type	Twisted-pair
Additional stranding element	Cross separator
Shielded	Yes
Type of overall screening	Aluminium-laminated plastic foil Tin-plated copper braiding
Shielding, short form	SF/UTP
Optical degree of coverage of the stranded screening, overall screen	85 %
Nominal core diameter	0.98 mm
Min. outer diameter	7.5 mm

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Nominal outer diameter	7.8 mm
Max. outer diameter	8.1 mm
Cable shape	Round
Core insulation basic material	Polyolefin
Core insulation basic material, short form	PO
Basic material of inner sheath	Halogen-free compound
Basic material of outer sheath	Polyurethane
Basic material of outer sheath, short form	PUR
Outer sheath colour	green
Cable sheath RAL colour	RAL 6018
Core identification	Colours

Product features

Application area	Cable chain Flexible
For permanent bending	Yes
For torsional load	No
Reelable	No
Minimum bending radius, stationary	4 x outer diameter
Minimum bending radius in mm, fixed installation	32.4 mm
Minimum bending radius, dynamic continuously flexing	8 x outer diameter
Minimum bending radius in mm, dynamic continuously flexing	64.8 mm
Temperature, fixed installation	-40 °C to 80 °C max. conductor temperature
Temperature, fixed installation max	80 °C
Temperature, fixed installation min	-40 °C
max. conductor temperature, occasionally moved	-30 °C to 70 °C max. conductor temperature
Temperature, occasionally moved max	70 °C
Temperature, occasionally moved min	-30 °C
Installation temperature min.	-30 °C
Max. assembly temperature	70 °C

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Flame-retardant	Yes
Flame retardance according to	UL VW-1 IEC 60332-1-2
UV-resistant	Yes
UV-resistant according to	EN ISO 4892-2, method A (colour change permitted)
Halogen-free	Yes
Halogen-free according to	VDE 0472-815
Oil-resistant	Yes
Oil resistance according to	EN 50363-10-2
PWIS-free	Yes
PWIS-free according to	VDMA 24364-B2-L
Ethernet cable category	Cat.6
Fast Connect (FC) cable	Yes

Certifications and standards

CE marking	Yes
EAC-certified	Yes
EAC certification number	ЕАЭС N RU Д-DE.АЮ64.B.00130/20
UL recognized	No
UL listed	Yes
UL certification	UL CMX according to UL 444 (e-file number: E236660)
cUR recognised	No
cUL listed	Yes
cUL certification	cUL CMX (75°C) according to CSA C22.2 No. 214 (e-file number: E236660)
CSA certified	No
VDE certified	No
Flame retardance tested according to UN /ECE-R118	Yes

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ETHERLINE® Cat.6 FD

Article No.	Name	Conductor number/size	Nominal outer diameter	Copper index	Weight
2170488	ETHERLINE® FD P CAT.6 4X2XAWG26	4x2x26/19AWG	7.8 mm	34 kg/km	63 kg/km

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