

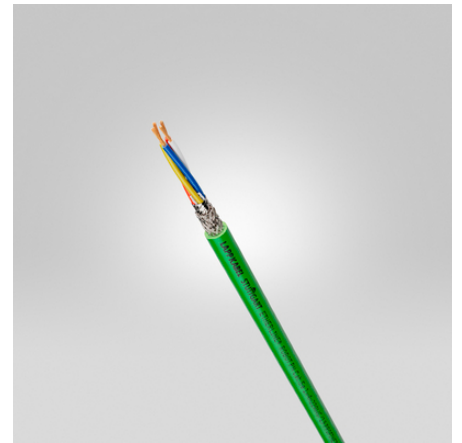
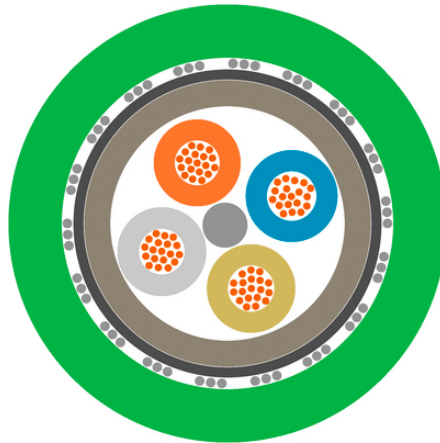
ETHERLINE® ROBOT PN

Robot applications

Industrial Ethernet cable Cat.5e for highly flexible robot applications acc. to PROFINET Type R

Info

Industrial Ethernet cable
PROFINET Type R



Supplementary automation components from Lapp



Mechanical and plant engineering



Suitable for outdoor use



Good chemical resistance



Flame-retardant



Halogen-free



Mechanical resistance



Power chain



Robust

Last Update (01.12.2025)

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Product Management www.lappkabel.de

You can find the current technical data in the corresponding data sheet.

PN 0456 / 02_03.16

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Interference signals



Torsion-resistant



UV-resistant

Benefits

Can be used for Industrial Ethernet in harsh industrial environments

EMC-optimised design

Screened against interference

2pair: 10/100 Mbit/s for Industrial Ethernet

Variant 'FC' with Fast-Connect construction with inner jacket enables effortless stripping and assembly of the cable

Application range

Especially for highly flexible, continuously moving use with torsional stress in industrial robots and handling devices in the PROFINET network (Type R)

suitable for EtherCAT and EtherNet/IP applications

Can be used in dry, humid and oily environments.

PUR outer sheath withstands high mechanical loads

The PUR outer sheath is insensitive to mineral oil-based lubricants and is chemically resistant in many cases.

Product features

Flexibility for use inside power chain/cable carrier

TORSION: for torsional stress, e.g. robot application; $\pm 180^\circ$ per 1 m

PUR outer sheath is resistant to most oils and hydraulic fluids

Norm references / Approvals

AWM certification for USA and Canada

Flame-retardant according to IEC 60332-1-2, UL FT-2 flame test

Halogen-free according to VDE 0472-815

Product Make-up

Stranded tinned copper, 19-wired

Core insulation: PE

Colour-coded in accordance with PROFINET for Cat.5e applications

Star quad

SF/UTP: braid of tinned copper wire and plastic laminated aluminum foil as overall screening

Outer sheath made of PUR

Technical Data

Classification ETIM 5:

ETIM 5.0 Class-ID: EC000830

ETIM 5.0 Class-Description: Data cable

Classification ETIM 6:

ETIM 6.0 Class-ID: EC000830

ETIM 6.0 Class-Description: Data cable

Peak operating voltage:

(not for power applications) 125 V

Minimum bending radius:

Fixed installation: 8 x outer diameter

Flexible use: 12 x outer diameter

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Test voltage:	Core/core: 2000 V Core/screen: 2000 V
Characteristic impedance:	nom. 100 Ω acc. to IEC 61156-6
Temperature range:	Fixed installation: -40 °C to +80 °C Flexible use: -20 °C to +60 °C

Note

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request.

Please find our standard lengths at: www.lappkabel.de/en/cable-standardlengths

Packaging size: coil $\leq$ 30 kg or $\leq$ 250 m, otherwise drum

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Detailed data sheets are available upon request. Please specify the type/dimensions of the required cable.

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

Prices are net prices without VAT and surcharges. Sale to business customers only.

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Article number	Article designation	Number of pairs and AWG per conductor	Core diameter in mm	Outer diameter mm	Copper index (kg/km)	Weight (kg/km)
2170941	ETHERLINE® ROBOT PN FC Cat.5e	1 x 4 x 22/19AWG	1.55	6.8	35.6	66.4