Data communication systems for ETHERNET technology

PROFINET, Cat.6_A • Type C - Cables for continuous flexing applications



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ETHERLINE[®] TORSION Cat.6_A Highly flexible application

🚹 Info

- Industrial Ethernet Cable, 4-pair, suitable for torsion stress
- CAT.6_A qualified for 10Gbit/s
- For PROFINET applications

LAPP KABEL STUTTGART ETHERLINE® TORSION P Cat.6, 4x2xAWG24/7



- Many applications with Industrial Ethernet, e.g. PROFINET, i.e. fixed installation, flexible use as well as TORSION.
- 4pair: 100Mbit/s up to 10 Gbit/s for Industrial Ethernet
- Premium screening against electromagnetic interference
- Can be used for Industrial Ethernet in harsh industrial environments

Application range

- Suitable for torsional applications which are typical for the loop in wind turbine generators (WTG)
- Can be used for Industrial Ethernet in harsh industrial environments
- Max. cable lenght for 100 Mbit/s is 85 m
- Suitable for EtherCAT and EtherNet/IP applications

Product features

- PUR version is halogen-free according to IEC 60754
- Oil-resistant acc. IEC 60811-2-1
- Cable suitable for high torsion stress. Tested with more than 1 million bending cycles and a right/left movement of 180° per metre.
- Meets the requirements according to CAT.6_A, ISO/IEC 11801 and EN 50173

Norm references / Approvals

- Electrical requirements acc. to IEC 61156-6
- PUR cable is UL/CSA-certified (CMX)
- PUR versions: UL AWM Style 21576
- PVC cable is UL/CSA-certified (CM)
- Flame retardant acc. to IEC 60332-1-2

Product Make-up

- 7-wire tinned stranded copper conductor
- Core insulation made of polyethylene (PE)
- S/FTP: copper braid as overall screening and pair screening with aluminium
- compound foil
- Outer sheath: PUR, halogen-free/PVC
- Colour: green (based on RAL 6018)



Classification ETIM 5/6
ETIM 5.0/6.0 Class-ID: EC000830
ETIM 5.0/6.0 Class-Description: Data
cable

	Minimum bending radius Flexing: 15 x outer diameter
$\langle N \rangle$	Flexing: 15 x outer diameter

Fixed installation: 8 x cable diameter **Characteristic impedance** 100 Ω



100 Ω Temperature range

Cable with PUR jacket Fixed installation: -40°C to +80°C Flexing: -30°C to +70°C Cable with PVC jacket Fixed installation: -40°C to +80°C Flexing: -10°C bis +70°C

Article number	Article designation	Number of pairs and AWG per conductor	Core diameter in mm	Outer diameter [mm]	Copper index (kg/km)
VC jacket				1	(8//
2170482	ETHERLINE® TORSION Y CAT6	4 x 2 x AWG24/7	1.3	8.9	44

Unless specified otherwise, the shown product values are nominal values. Detailed values (e.g. tolerances) are available upon request. Copper price basis: EUR 150/100 kg. Refer to catalogue appendix T17 for the definition and calculation of copper-related surcharges.

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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.

UL certifications can be found in the data sheet.

Accessories

- + EPIC $^{\otimes}$ DATA AX RJ45 Cat.6, refer to page 459
- EPIC® DATA 90 RJ45 Cat.6 refer to page 459
- EPIC[®] DATA AX RJ45 Cat.6^A_A IP68 refer to page 460
- EPIC[®] DATA M12X refer to page 462
- EPIC[®] DATA CCR FA refer to page 463

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ACCESSORIES