c UL us   **PROFI NET** INDUSTRIAL ETHERNET   **EtherNet/IP**
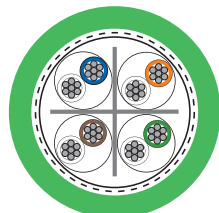
ETHERLINE® FD CAT.6$_A$

Ethernet cable Category 6$_A$, Class EA for highly flexible use with FC inner sheath – verified up to 500 MHz

2170485/2170484

Benefits
- For use in power chains and moving machinery parts in dry or damp rooms
- 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
- For highly flexible applications (e.g. power chains)
- Wiring of machines, tools, devices, appliances and control cabinets
- Suitable for EtherCAT and EtherNet/IP applications

Product features
- PUR version is halogen-free according to VDE 0472-815
- Oil-resistant acc. IEC 60811-2-1
- CAT.6A for drag chain, qualified for 10Gbit/s
- Meets the requirements according to CAT.6A, ISO/IEC 11801 and EN 50173
- Min. 2.5 million bending cycles in the power chain

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: Based on Polyolefin
- S/FTP: copper braid as overall screening and pair screening with aluminium compound foil
- Outer sheath: PUR/PVC
- Colour: green (based on RAL 6018)

Info
- CAT.6A for drag chain, qualified for 10Gbit/s
- For PROFINET applications with 4 pairs

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

Minimum bending radius
Fixed installation: 8 x outer diameter
Flexing: 15 x outer diameter

Characteristic impedance
nom. 100 Ω acc. to IEC 61156-6

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 to +70°C

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)
PVC sheath						
2170485	ETHERLINE® FD CAT.6$_A$	4x2xAWG24/7	1.3	8.9	44	88
PUR outer sheath, halogen-free						
2170484	ETHERLINE® FD P CAT.6$_A$	4x2xAWG24/7	1.3	8.9	44	90

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.
PROFINET® is a registered trademark of the PNO (PROFIBUS user organisation)
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® DATA RJ45 refer to page 447
- EPIC® DATA M12X refer to page 450
- EPIC® DATA CCR FA refer to page 451