PROFINET EtherNet/IP™

NEW

ETHERLINE® PN Cat.6$_A$ FLEX FC
Ethernet cable Category 6$_A$, Class E$_A$ for flexible use with FC inner sheath – verified up to 500 MHz

Info

- For PROFINET applications with 4 pairs
- CAT.6$_A$ qualified for 10Gbit/s
- Fast and easy cable preparation by FC inner sheath

Benefits

- Can be used in dry or damp rooms
- Screened against interference
- Can be used for Industrial Ethernet in harsh industrial environments
- 4pair: 100Mbit/s up to 10 Gbit/s for Industrial Ethernet

Application range

- For industrial secondary and tertiary cabling according to EN 50173-3 ISO/IEC 24702
- At 100 Mbit/s: max 90 m cable length
- Wiring of machines, tools, devices, appliances and control cabinets
- Suitable for EtherCAT and EtherNet/IP applications
- For flexible applications (7-wire stranded conductor)

Product features

- CAT.6$_A$ for flexible application, qualified for 10Gbit/s
- Meets the requirements according to CAT.6$_A$, ISO/IEC 11801 and EN 50173
- High-quality, double screening ensures high transmission reliability in areas with electromagnetic interference
- The oil-resistant PVC sheath enables usage in industrial environments

Product Make-up

- 7-wire tinned stranded copper conductor
- Core insulation: PE
- Inner sheath: halogen-free compound
- SF/UTP: braid of tinned copper wire and plastic laminated aluminum foil as overall screening, 2 cores stranded to pair, 4 pairs stranded to bundle with central cross
- PVC or FRNC jacket material
- Colour: green (based on RAL 6018)

Technical data

Peak operating voltage
(not for power applications) 125 V

Minimum bending radius
Flexing: 8 x outer diameter
Fixed installation: 4 x outer diameter

Z∞ Characteristic impedance
nom. 100 Ω acc. to IEC 61156-5

Temperature range
cable halogenfree compound
Fixed installation: -25°C to +80°C
cable with PVC jacket
Fixed installation: -40°C to +80°C

Article number	Article designation	Number of pairs and AWG per conductor	Outer diameter [mm]	Copper index (kg/km)
PVC jacket				
2170586	ETHERLINE® PN CAT.6$_A$ Y FLEX FC	4x2xAWG23/7	8.9	57
Halogen-free jacket				
2170587	ETHERLINE® PN CAT.6$_A$ FRNC FLEX FC	4x2xAWG23/7	8.9	57

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.

Accessories

- EPIC® DATA AX RJ45 Cat.6$_A$ refer to page 459
- EPIC® DATA 90 RJ45 Cat.6$_A$ refer to page 459
- EPIC® DATA AX RJ45 Cat.6$_A$ IP68 refer to page 460
- EPIC® DATA RJ45F Cat.6$_A$ refer to page 460
- EPIC® DATA M12X refer to page 462
- EPIC® DATA CCR FA refer to page 463
- DATA STRIP stripping tool refer to page 986
- Fibre Strip DC

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SKINTOP®

SILVYN®

FLEXIMARK®

ACCESSORIES

APPENDIX