

## Ethernet cables

Industrial Ethernet cables Cat.7 • Industrial Ethernet Cat.6 - Various applications



### info

- Industrial Ethernet cable
- For PROFINET applications with 4 pairs
- CAT.6<sub>A</sub> qualified for 10Gbit/s

### Technical data

ETIM 5.0 Class-ID: EC000830  
ETIM 5.0 Class-Description: Data cable

**Peak operating voltage**  
(not for power applications) 125 V

**Minimum bending radius**  
Fixed installation: 10 x outer diameter

**Characteristic impedance**  
100 ohm at 1 - 100 MHz

**Temperature range**  
cable with PUR jacket  
Fixed installation: VDE -30°C to +80°C;  
UL/CSA -30°C to +80°C  
flexing: VDE -5°C to +50°C;  
UL/CSA -5°C to +80°C  
cable halogenfree compound  
Fixed installation: -25°C to +80°C  
cable with PVC jacket  
Fixed installation: -40°C to +80°C



## ETHERLINE® Cat.6<sub>A</sub>

Fixed installation

LAPP KABEL STUTTGART ETHERLINE® Cat.6<sub>A</sub> Y



### 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
- Wiring of machines, tools, devices, appliances and control cabinets
- Max. cable length for 100 Mbit/s is 100 m  
max. cable length for 10 Gbit/s is 100 m
- Suitable for EtherCAT and EtherNet/IP applications

### Product features

- PUR outer sheath is highly resistant to mineral oils and abrasion
- Robust, halogen-free outer sheath
- The oil-resistant PVC sheath enables usage in industrial environments
- High-quality, double screening ensures high transmission reliability in areas with electromagnetic interference

### Product Make-up

- Solid bare copper wire AWG22
- Core insulation made of polyethylene (PE)
- S/FTP: copper braid as overall screening and pair screening with aluminium compound foil
- Colour: green (based on RAL 6018)

Article number	Article designation	Number of pairs and AWG per conductor	Max. outer diameter (mm)	Copper index (kg/km)	Weight (kg/km)
<b>Halogen-free jacket</b>					
2170466	ETHERLINE® Cat.6 <sub>A</sub> H	4 x 2 x AWG22/1	9.0	53	99
<b>PUR outer sheath, halogen-free</b>					
2170465	ETHERLINE® CAT.6 <sub>A</sub> P	4 x 2 x AWG22/1	9.0	53	91
<b>PVC outer sheath</b>					
2170464	ETHERLINE® Cat.6 <sub>A</sub> Y	4 x 2 x AWG22/1	9.0	53	98

## EPIC® DATA PN 90 RJ45 FASTConnect



### Info

- For PROFINET applications
- Installation without tools
- 4 different angled cable outlets possible



### Technical data

ETIM 5.0 Class-ID: EC001121  
ETIM 5.0 Class-Description: Modular connector

**Protection rating**  
IP 20

**Ambient temperature (operation)**  
-40°C to +85°C

### Product

- For PROFINET applications
- Cable outlet in 4 different 90° angles possible
- Housing: zinc die-casting, grey
- Suitable for stranded cores with AWG27/7 -22/7 and for solid conductors with AWG24/1- 22/1
- Suitable for use in industrial applications
- Colour-coded in accordance with PROFINET for Cat.5 applications

### Norm references / Approvals

- Field assembly Industrial Ethernet connector, RJ45 according to IEC 60603-7-51
- UL-listed (E-File E353543)

Article number	Article designation	Min. outer diameter (mm)	Max. outer diameter (mm)	Min. Core diameter in mm	Max. Core diameter in mm	AWG solid	AWG 7-wire
<b>EPIC® DATA PN 90 RJ45</b>							
21700638	ED-IE-90-6 <sub>A</sub> -PN-20-FC	5.5	10	1	1.6	24 - 22	27 - 22