

## ETHERLINE® TRAIN

Ethernet cables according to EN 50264-3-1 Type XM for high requirements in railway applications

ETHERLINE® TRAIN

### Info

Meets EN 50264-3-2 type XM and EN 45545-2  
Cat.5e Performance up to 100 / 1000 MBit/s  
Cat.6A & Cat.7 qualified for 10 GBit/s



Rail



Good chemical resistance



Flame-retardant



Halogen-free



Oil-resistant



Interference signals



UV-resistant

### Benefits

Good chemical resistance

Resistant to mechanical influences in harsh environmental conditions

Extended temperature range

Reduced flame spreading increases the protection against damage to persons and property in the event of a fire

Last Update (16.02.2020)

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Product Management [www.lappkabel.de](http://www.lappkabel.de)

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

PN 0456 / 02\_03.16

## ETHERLINE® TRAIN

### Application range

For use in railway vehicles and buses, for fixed installations and applications where limited movement may occur  
Suitable for connecting to of e.g. camera systems, enter-/ infotainment for passengers, ticketing systems  
Also applicable within oily environments and areas with increased ambient temperature

### Product features

Fire behaviour according to EN/IEC:

- Halogen-free acc. to EN 60754-1
- No corrosive gases acc. to EN 60754-2
- No fluorine acc. to EN 60684-2
- No toxic gases acc. to EN 50305
- Low smoke density acc. to EN 61034-2
- Flame-retardant acc. to EN 60332-1-2
- No flame propagation acc. to EN 60332-3-25

Fire behaviour according to NF:

- Toxicity of gases acc. to NF X 70-100
- Low smoke density acc. to NF X 10-702
- No flame propagation acc. to NF C 32-070,  
Cat. C1 and C2

Chemical properties:

- Oil resistant acc. to EN 50264-1
- Fuel resistant acc. to EN 50264-1
- Acid resistant acc. to EN 50264-1
- Alkali resistant acc. to EN 50264-1
- Ozone resistant acc. to EN 50264-3-2

### Norm references / Approvals

electrical requirements acc. to IEC 61156-6

EN 50264-1

EN 45545-2 HL1, HL2, HL3

### Product Make-up

7-wire tinned stranded copper conductor

Core insulation: Based on Polyolefin

Cat.5e: SF/UTP - copper braid and foil screening as overall screening

Cat.6A/Cat.7: S/FTP - copper braid as overall screening and pair screening with aluminium compound foil

Outer sheath: electron beam cross-linked polymer-compound EM 104

Outer sheath colour: Black

### Technical Data

Peak operating voltage:	(not for power applications) 125 V
Minimum bending radius:	Flexing: 10 x outer diameter Fixed installation: 8 x outer diameter
Test voltage:	Core/core: 1000 V Core/screen: 1000 V
Characteristic impedance:	nom. 100 Ω acc. to IEC 61156-6
Temperature range:	Fixed installation: -45°C to +90°C Flexing: -35°C up to +90°C

### Note

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## ETHERLINE® TRAIN

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](http://www.lappkabel.de/en/cable-standardlengths)

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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.

Article number	Article designation	Number of pairs and AWG per conductor	Core diameter in mm	Outer diameter mm	J_1NVGW
Cat.5e, 2-pair version					
2170906	ETHERLINE TRAIN FLEX Cat.5e 1x4x22/7 PE	1x4xAWG22/7	1.5	6.5	30
2170910	ETHERLINE TRAIN FLEX Cat.5e 1x4x0,5 PE	1x4x0,5/7	2	7.6	41
Cat.5e, 4-pair version					
2170907	ETHERLINE TRAIN Cat.5e 4x2x24/7 PE	4x2xAWG24/7	1.2	7.7	38
Cat.6 <sub>A</sub>					
2170908	ETHERLINE TRAIN FLEX Cat.6 <sub>A</sub> 4x2x24/7 PE	4x2xAWG24/7	1.4	8.4	38
Cat.7					
2170909	ETHERLINE TRAIN FLEX Cat.7 4x2x24/7 PE	4x2xAWG24/7	1.4	8.4	43

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