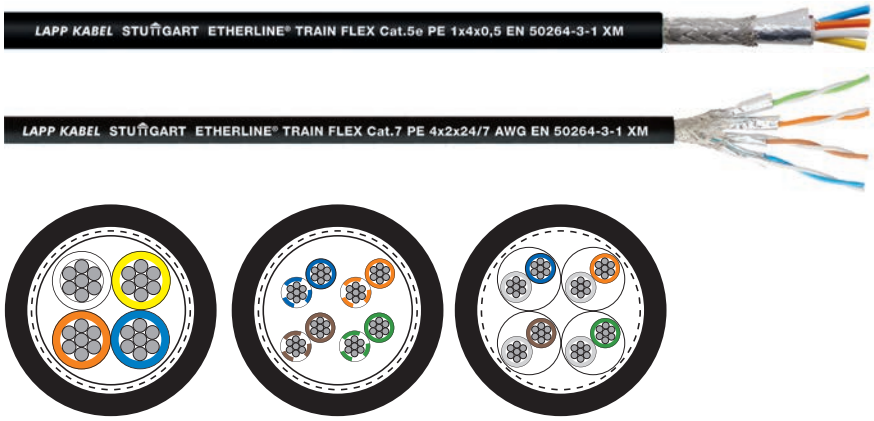
ETHERLINE® TRAIN

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



Info

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

Benefits

- Good chemical resistance
- Resistant to mechanical influences in harsh environmental conditions
- Extended temperature range
- Reduced flame spreading increase the protection against damage to persons and property in the event of a fire

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 fl ame 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.6_A/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
Occasional flexing: -35°C up to +90°C

Article number	Article designation	Number of pairs and AWG per conductor	Core diameter in mm	Outer diameter [mm]	Copper index (kg/km)
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_A					
2170908	ETHERLINE TRAIN FLEX Cat. 6A 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

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.
Please find our standard lengths at: 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.
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