



**Reference:** 10273549  
**Country Ref.:** 2PM694

## CONTACT

Markets and Products Information  
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## FIRE RESISTANT ETHERNET CABLES

Fostering innovation, Lynxéo designed FLAMEX® Ethernet FR that can reach data transmission performances for Category 5E or 6A as described in the ISO/CEI 11801, showing no loss of data train and no drop of the transmission parameters when burnt. This unique fire performance is achievable thanks to our technology for fire resistant cables known as INFIT™. On top of the fire performances, this technology makes easier and faster the preparation and the connection of the wires with rolling stock connectors compared to older taping technologies. FLAMEX® FR Ethernet cables are fire retardant, low smoke and halogen-free satisfying performance requirements from EN 45545-2.

## STANDARDS

**Product** EN 50464-1; EN 45545-2 (HL3)

**Test** EN 50200

## DESIGN

### 1. Conductor

Stranded tinned copper (metric or AWG sizes)

### 2. Insulation

Special halogen-free INFIT™ fire proof material  
 Quad or Pairs assemblies

### 3. Screen

Tinned copper braid  
 Separator tape

### 4. Outer sheath

Cross-linked material EM 104 or EM 101 acc. EN 50264-1  
 Oil, diesel, ozone and UV resistant  
 Colour: red

Example of marking: FLAMEX 239 - EDE 2PM653 - [4(2x0.25mm<sup>2</sup> 10Gigabit CAT 6A)] M S - EN 50200 - week and year of manufacture - batch number

## ADDITIONAL INFORMATION

- Fire resistant acc. to:
  - EN 50200 PH 30-60 tested under 110 V
  - EN 50200 PH 90 Ethernet frame loss and transmission parameter
- Bending radius:
  - Static use: 8 x outer cable diameter
  - For installation and occasional movements: 10 x outer cable diameter



Conductor flexibility  
-



Halogen free  
EN 60754-1 & EN 60684-2



Fire resistant  
EN 50200 PH90



Flame retardant  
EN 45545-2 (HL3)



Fire retardant  
-



Smoke density  
EN 45545-2 (HL3)



Gases toxicity  
-



Electro magnetic interference resistance  
Yes

**CHARACTERISTICS****Construction characteristics**

Conductor material	-
Type of cable	CAT 5E
Construction type	4x0,34 - AWG22
Lay Up	Quad
Conductor flexibility	-
Outer sheath	Cross-linked compound
Sheath colour	Red
Core identification	-
Screen	-
Halogen free	EN 60754-1 & EN 60684-2

**Dimensional characteristics**

Core diameter	2.2 mm
Minimum cable diameter	7.8 mm
Maximum cable diameter	8.4 mm
Approximate weight	90 kg/km

**Electrical characteristics**

Characteristic impedance	100 Ohm
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**Usage characteristics**

Fire resistant	EN 50200 PH90
Fire safety	EN 50200 PH 90 Ethernet protocol
Flame retardant	EN 45545-2 (HL3)
Fire retardant	-
Smoke density	EN 45545-2 (HL3)
Gases toxicity	-
Electro magnetic interference resistance	Yes
Chemical resistance	-