



**Product:** [BA43806FR](#) 

Industrial Ethernet CAT7 4PR Strand AWG24/7 S/FTP Fire Resistant

## Product Description

Industrial Ethernet CAT7, S/FTP, 4P24AWG/7, Tinned Strand copper Conductors, Foam Polyolefin Insulation, Individual Shielded Pair + Braid shield, LZSH Jkt, Fire Resistant, EN 50200, EN 50289-4-16 & IEC60331-23

## Technical Specifications

### Product Overview

Suitable Applications: This Category 7 Cable is a cable standard for Gigabit Ethernet, capable to continue transmitting data even when being directly attacked by fire.

### Construction Details

#### Conductor

Size	Stranding	Material	No. of Pairs
24 AWG	Stranded	TC - Tinned Copper	4

#### Insulation

Material	Nom. Insulation Diameter	Color Code
PE - Polyethylene (Foam)	1.23 mm (0.0484 in)	1. Blue & White , 2. Orange & White , 3. Green & White, 4. Brown & White , Wrap Tape 1: Mica Tape, Wrap Tape 2: PET Tape

#### Inner Shield

Element	Shield Type	Material
Individual Shielded Pair	Tape	Bi-Laminate (Alum+Poly)

#### Outer Shield

Shield Type	Material	Coverage
Braid	Tinned Copper (TC)	80%

#### Outer Jacket

Material
LSZH - Low Smoke Zero Halogen (Flame Retardant)

Outer Jacket1 Table Notes: Outer Jacket Color: Grey (or per customer's request)

Overall Cable Diameter (Nominal): 8.5 +/-0.3 mm

### Electrical Characteristics

#### Electricals

Max. Conductor DCR	Nom. Characteristic Impedance
95@20°C Ohm/km	100 Ohm

#### Delay

Max. Delay Skew
30 $\mu$ s

#### High Frequency

Frequency [MHz]	Max. Insertion Loss (Attenuation)	Min. NEXT [dB]	Min. PSNEXT [dB]	Min. ACRF (ELFEXT) [dB]	Min. PSACRF (PSELFEXT) [dB]	Min. RL (Return Loss) [dB]
1	4.0 dB/60m	65.0	62.0	65.0	62.0	19.0

16	8.1 dB/60m	65.0	62.0	57.5	54.5	18.0
100	20.8 dB/60m	62.9	59.9	44.4	41.4	12.0
250	33.8 dB/60m	56.9	53.9	37.8	34.8	8.0
500	49.3 dB/60m	52.4	49.4	32.6	29.6	8.0
600	54.6 dB/60m	51.2	48.2	31.3	28.3	8.0

## Mechanical Characteristics

### Temperature

#### UL Temperature

-40°C to + 80°C

## Standards and Compliance

Environmental Suitability:	UV Resistance, Oil Resistance
Flammability / Reaction to Fire:	IEC 60332-1-2, IEC 60331-23, IEC 60332-3-25, EN 50200 PH120
Data Category:	Category 7
ISO/IEC Compliance:	IEC 11801
Other Standard Compliance(s):	EN 45545-2 (Class R14 HL 3)

## Product Notes

Notes:	Mechanical Characteristics: 1. IRM 902 Mineral oil resistance at 100 for 72h: Tensile Strength (Mpa): $\pm 30\%$ of original, Elongation (%): $\pm 40\%$ of original, 2. IRM 903 Fuel resistance at 70 for 168h: Tensile Strength (Mpa): $\pm 30\%$ of original Elongation (%): $\pm 40\%$ of original, 3. N-Sodium hydroxide solution alkali resistance at 23 for 168h: Tensile Strength (Mpa): $\pm 30\%$ of original, Elongation (%): 100%, Ozone resistance at (0.025~0.03)%/25/24h: No crack. 4. Max application length: 60m
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## History

Update and Revision: Revision Number: 0.1 Revision Date: 05-11-2026

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