

CAT5e FTP solid+messenger Cable

P/N:EMT-FTP5EM-24AWG.1-PE-FCA

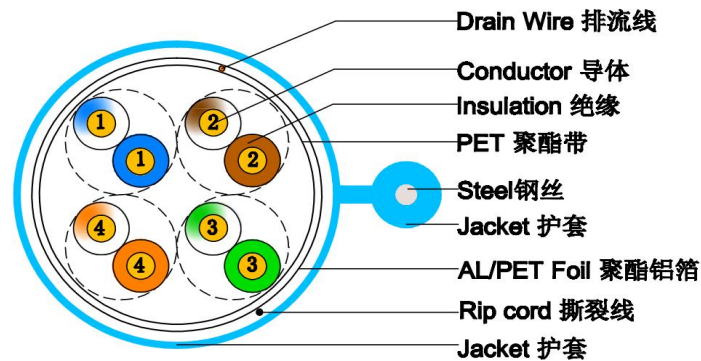
Version: A0

Date: 2025-4-7

Applications

This Cable meet ROHS requirement, Confidential information

Construction&Dimensions



- **Conductor**
Material: Solid bare copper
Diameter: $0.49 \pm 0.005 \text{ mm}$
- **Insulation**
Material: HDPE
Nominal thickness: 0.23 mm
Nominal diameter over insulation: $0.98 \pm 0.05 \text{ mm}$
- **Cable core**
4 number of Twisted pair stranded together to form the main core
Colour code pair 1 White / Blue、Blue
Colour code pair 2 White / Orange、Orange
Colour code pair 3 White / Green、Green
Colour code pair 4 White / Brown、Brown
- **Outer Shield:**
Material: Aluminum Foil-Polyester Tape
- **Outer Shield Drain Wire**
Material: CCS
Diameter: $0.50 \pm 0.01 \text{ mm}$
- **Load-bearing element**
Material: galvanized steel wires $\Phi 1.16 \pm 0.01 \text{ mm}$
- **Rip Cord:** under the sheath
- **Jacket:**
Material: PE
Diameter: $(6.2+2.4) \pm 0.5 \text{ mm}$
- **Marking:**
To Be Determined

Electrical characteristics

Item	Parameter	Unit
Conductor resistance	≤ 10.0	$\Omega / 100m$
Resistance unbalance within a pair	≤ 2.0	%
Resistance unbalance between pairs	≤ 4.0	%
Insulation resistance	≥ 5000	M Ω Km
Mutual capacitance	≤ 5.6	nF/100m
NVP	67	%

ITEM MHz	ATT	RL	NEXT	PS- NEXT	ACR-F	PS ACR-F
	dB/100m	dB	dB	dB	dB	dB
	Max.	Min.	Min.	Min.	Min.	Min.
1	3.0	19.0	60.0	57.0	58.6	55.6
4	3.9	19.0	54.8	51.8	46.6	43.6
8	5.5	19.0	50.0	47.0	40.6	37.6
10	6.2	19.0	48.5	45.5	38.6	35.6
16	7.9	19.0	45.2	42.2	34.5	31.5
20	8.9	19.0	43.7	40.7	32.6	29.6
25	10.0	18.0	42.1	39.1	30.7	27.7
31.25	11.2	17.1	40.5	37.5	28.7	25.7
62.5	16.2	14.1	35.7	32.7	22.7	19.7
100	21.0	12.0	32.3	29.3	18.6	15.6

NOTE: FLUKE TIA Cat5E Perm .Link Test

Mechanical characteristics

Item	Parameter	Unit
Minimum elongation at break of the sheath	≥ 350	%
Minimum Tensile strength of sheath	≥ 10.0	MPa

Storage and Operating Temperature range: -20°C to +70°C

Installation Temperature range: 0°C to +50°C

Packing information

Cable Length : 305 m $\pm$ 1.5 m

Reel/Spool Size (cm) : Disk diameter X total height X cylinder core: 31x31x13cm