Cat5e F/UTP Patch Cord — Snagless RJ45

26 AWG Stranded Bare Copper | 100 MHz | F/UTP Shielded | CM Rated PVC Jacket



1. GENERAL DESCRIPTION

Cat5e F/UTP patch cord is a factory-terminated, shielded Ethernet cable assembly with a snagless RJ45 plug on each end. It is built from flexible 26 AWG stranded bare copper conductors in four twisted pairs with an overall foil screen and drain wire, and a CM-rated PVC jacket. Designed for connecting network devices, patch panels and switches in structured cabling, it supports Gigabit Ethernet (1000BASE-T) and PoE, with every cord tested for continuity and wiring.

2. KEY FEATURES

- Shielded F/UTP construction for improved EMI / RFI immunity
- Shielded RJ45 plugs with nickel-plated metal housing and gold-plated contacts for low contact resistance
- Snagless moulded boot protects the latch and strain-relieves the cable
- 26 AWG stranded conductors for flexibility and easy routing in racks
- CM-rated PVC jacket for in-wall and general building use
- Supports 10/100/1000BASE-T and PoE / PoE+ (IEEE 802.3af / at)

3. APPLICATIONS

- Connecting switches, routers, servers and workstations to patch panels or wall outlets
- Data centres, server rooms, offices and telecom closets
- IP cameras, access points, VoIP phones and other PoE devices

4. APPLICABLE STANDARDS

- ANSI/TIA-568.2-D — Category 5e patch cord and channel requirements
- ISO/IEC 11801 and IEC 61156-6 — Class D cabling and cord requirements
- IEC 60603-7 — 8-position modular connector (RJ45)
- UL 444 / NEC Article 800 — Type CM communications cable [confirm listing]
- FCC 47 CFR Part 68 — Modular plug requirements

5. CONSTRUCTION

Connector	RJ45 (8P8C) shielded plug, both ends
Plug Housing	Nickel-plated metal shell

Contacts	Gold-plated phosphor bronze — [50 µin / 1.27 µm]
Boot	Snagless moulded PVC boot — colour: [Grey / Blue / Red / Black / Yellow / Green / White]
Conductor	26 AWG stranded bare copper, 7/0.16 mm
Insulation	Solid HDPE (high-density polyethylene)
Pairs	4 twisted pairs
Screening	Overall Al/PET foil (F/UTP) with drain wire — coverage [100 %]
Outer Jacket	CM-rated PVC — colour: [Grey / Blue / Red / Black / Yellow / Green / White]
Wiring	Straight-through, T568B at both ends (1:1)
Marking	CAT5e F/UTP 26AWG CM [length]

Wiring (T568B, straight-through)

Pin	Colour	Pair
1	White / Orange	2
2	Orange	2
3	White / Green	3
4	Blue	1
5	White / Blue	1
6	Green	3
7	White / Brown	4
8	Brown	4

6. MECHANICAL & ENVIRONMENTAL

Cable Outer Diameter (approx.)	[5.5 ± 0.3 mm]
Min. Bending Radius	8 × cable diameter
Plug Mating Cycles (min.)	[750] cycles
Plug Retention Force	[≥ 50 N]
Operating Temperature	[-20 °C to +60 °C]
Flame Rating	CM — [UL 1685 vertical tray]
Standard Lengths	0.5 m, 1 m, 2 m, 3 m, 5 m, 10 m [or custom]

7. ELECTRICAL CHARACTERISTICS

Characteristic Impedance	100 Ω ± 15 Ω
Max. DC Resistance (per conductor)	[≤ 14 Ω/100 m]
Max. DC Resistance Unbalance	5 %
Contact Resistance	[≤ 20 mΩ]
Insulation Resistance	[≥ 500 MΩ]
Dielectric Withstand (1 min)	[1000 V AC]
Current Rating per Contact	[1.5 A]

Max. Operating Voltage	[72 V]

8. TRANSMISSION PERFORMANCE

Channel Insertion Loss (100 MHz)	≤ 24.0 dB
Channel NEXT / PS NEXT (100 MHz)	≥ 30.1 dB / ≥ 27.1 dB
Channel ACR-F / PS ACR-F (100 MHz)	≥ 17.4 dB / ≥ 14.4 dB
Channel Return Loss (100 MHz)	≥ 10.0 dB

9. INSTALLATION & HANDLING GUIDELINES

- Do not pull or hang equipment by the cable; do not exceed the min. bending radius (8 × OD).
- Release the latch before unplugging — do not force the plug out of the jack.
- Use with shielded Cat5e (or higher) jacks and patch panels so the screen stays continuous and grounded.
- Keep total patch cord length within 10 m per channel and avoid tight bundling or crushing.