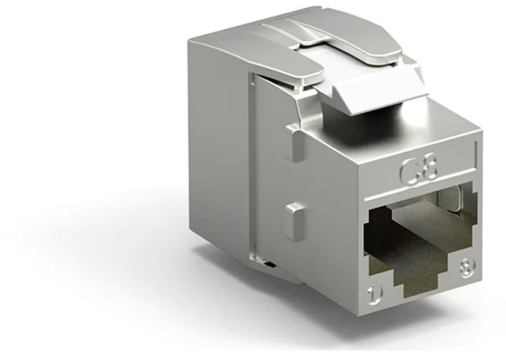
Cat8 RJ45 Shielded Toolless Keystone Jack

8P8C RJ45 | Shielded | Cat8 / 2000 MHz | Toolless Termination



1. GENERAL DESCRIPTION

Cat8 shielded toolless keystone jack is an 8P8C RJ45 connector for terminating shielded twisted-pair data cable (S/FTP, F/FTP) in structured cabling systems. The toolless design lets installers terminate the cable without a punch-down tool, and the universal labelling supports both T568A and T568B wiring. The full metal shield gives 360° coverage when bonded to the cable screen, and gold-plated contacts give reliable performance up to 2000 MHz, supporting 25GBASE-T and 40GBASE-T Ethernet over channels up to 30 m. The jack snaps into standard keystone wall plates, faceplates and patch panels.

2. KEY FEATURES

- Toolless termination — no punch-down tool required
- Cat8 performance up to 2000 MHz — supports 25GBASE-T / 40GBASE-T
- Universal T568A / T568B colour labelling
- Full metal shield with 360° coverage for cable screen termination
- Die-cast metal housing; fits standard keystone plates and patch panels

3. APPLICATIONS

- Structured cabling outlets in offices, buildings and data centres
- 25GBASE-T and 40GBASE-T links for data-centre servers, switches and storage
- Wall plates and keystone-compatible patch panels
- Shielded cabling systems in electrically noisy environments

4. APPLICABLE STANDARDS

- ANSI/TIA-568.2-D — Category 8 connecting hardware
- ISO/IEC 11801-1 — Class I / II generic cabling (Category 8.1 / 8.2) [confirm]
- IEC 60603-7-81 — 8-pin shielded connectors, 2000 MHz [confirm]
- UL 94 V-0 — Flammability of plastic parts
- RoHS — Restriction of hazardous substances [confirm]

5. PRODUCT CONSTRUCTION

Connector Type	8P8C RJ45 jack (keystone format), shielded
Termination	Toolless (punch-free) LSA / IDC [confirm]
Compatible Wire	[22–24 AWG] — shielded Cat8 cable (S/FTP, F/FTP)
Wiring	T568A / T568B (universal label)

Shielding	Full metal shield, 360° [bond to cable screen]
Contacts	[Phosphor bronze, gold plated — confirm]
IDC Contacts	[Zinc-plated phosphor bronze — confirm]
Housing	[Zinc alloy die-cast, nickel plated; ABS pin holder UL 94 V-0]
Orientation	[90° / 180° — confirm]
Colour / Packing	[White / Black / other] — [1 pc per bag]

Wire colour code (see jack label for T568A / T568B pin order)

Pair	Conductor 1 (Tip)	Conductor 2 (Ring)
1	White / Blue	Blue
2	White / Orange	Orange
3	White / Green	Green
4	White / Brown	Brown

6. MECHANICAL & ENVIRONMENTAL

Plug–Jack Mating Cycles	≥ 750 cycles
IDC Termination Life	≥ 200 cycles
Cable Re-termination	[20 times]
Operating Temperature	[-20 °C to +70 °C]
Installation Temperature	[0 °C to +50 °C]
Flame Retardancy	UL 94 V-0 (plastic parts)

7. ELECTRICAL CHARACTERISTICS (AT 20 °C)

Frequency Range	1–2000 MHz
Max. Contact Resistance	[≤ 20 mΩ]
Max. DC Resistance	[≤ 0.1 Ω]
Min. Insulation Resistance	[≥ 500 MΩ @ 500 VDC]
Max. Current	[1.5 A]
Voltage Rating	[72 VDC max.]
Pin-Pair Assignment	T568A / T568B (universal)
Compatible Wire Gauge	22–24 AWG

8. INSTALLATION & HANDLING GUIDELINES

- Use shielded cable of 22–24 AWG only [outer diameter within the jack opening — confirm].
- Arrange the wires per the T568A / T568B label on the jack and insert each wire into its slot.
- Keep separation from power cables according to local wiring standards (EN 50174-2 / TIA-569).
- Untwist pairs by no more than 13 mm (0.5 in) at termination points.
- Use shielded Cat8-rated cable, patch panels and patch cords (channel max. 30 m for 25GBASE-T / 40GBASE-T), and bond the cable screen to the jack shield.
- Test every installed link with a certified cable tester (Category 8 channel).