Cat6 Keystone RJ45 Shielded Inline Coupler Insert

Female-to-Female Feed-Through | Shielded 360° Metal Housing | Cat6 250 MHz | Snap-In Keystone



1. GENERAL DESCRIPTION

Cat6 shielded keystone inline coupler insert is an RJ45 (8P8C) female-to-female feed-through adapter in a standard keystone-style insert. It lets two RJ45 plugs or patch cords be joined, or provides a pass-through port on a patch panel or wall plate, without any punch-down or termination. The full metal shield bonds to the cable screens through the plugs and to the panel, keeping the shield continuous for Gigabit Ethernet and EMI-sensitive installations, while the snap-in keystone body fits standard keystone openings.

2. KEY FEATURES

- Shielded 360° metal housing (nickel-plated zinc alloy) with shield contact to the plug and the panel
- Cat6 performance up to 250 MHz — supports 1000BASE-T and PoE / PoE+, and short-reach 10GBASE-T
- Feed-through design: no tools or termination needed, just plug in cords from both sides
- Standard keystone snap-in body fits most keystone panels, faceplates and surface boxes
- Gold-plated phosphor bronze contacts for stable low-resistance connections
- Flame-retardant housing insert, UL 94 V-0, with [colour options]

3. APPLICATIONS

- Extending or joining shielded patch cords and trunk cables without re-termination
- Pass-through ports in shielded patch panels, wall plates and surface mount boxes
- Data centers, EMI-prone industrial plants, hospitals and broadcast rooms using shielded cabling

4. APPLICABLE STANDARDS

- ANSI/TIA-568.2-D — Category 6 connecting hardware
- ISO/IEC 11801 — Class E generic cabling
- IEC 60603-7-41 — 8-position shielded connector, Category 6 (RJ45) [confirm]
- UL 94 V-0 — Flammability of plastic parts; RoHS [Compliant — Directive 2011/65/EU]

5. CONSTRUCTION & MATERIALS

Type	RJ45 (8P8C) female-to-female inline coupler, shielded, keystone body
Shield	Nickel-plated zinc alloy metal housing with panel contact tabs
Insert	Polycarbonate, UL 94 V-0

Contacts	Phosphor bronze, gold-plated — [50 µin / 1.27 µm]
Mounting	Snap-in keystone, fits [14.5 × 19.5 mm] openings
Colour	[Black / Grey / White / Blue]

6. ELECTRICAL CHARACTERISTICS

Contact Resistance	[≤ 20 mΩ]
Shield Contact Resistance	[≤ 50 mΩ]
Insulation Resistance	[≥ 500 MΩ]
Dielectric Withstand (1 min)	[1000 V AC]
Current Rating per Contact	[1.5 A]
Max. Operating Voltage	[72 V]

7. TRANSMISSION PERFORMANCE

Frequency (MHz)	Insertion Loss — max (dB)	NEXT — min (dB)
100	0.2	54.0
250	0.32	46.0

8. INSTALLATION GUIDELINES

- Push the coupler into the keystone opening from the front or rear until the latches click; make sure the metal shell touches the panel for grounding.
- Plug a shielded Cat6 plug or patch cord into each side until the latch clicks.
- Use a metal (grounded) patch panel or wall plate so the shield stays continuous end to end.
- Avoid chaining multiple couplers in one channel, and test the installed link to Category 6.