

Cat.7 STP Toolless Keystone Jack 180°

Part Number:

PL-KE7STL



FEATURES

- Category 7 / Class F shielded toolless keystone, 180° cable entry, intended for 1 to 600 MHz shielded channel applications.
- S/FTP compatible when conductor construction, insulation diameter, cable diameter, pair-screen handling and overall-shield termination follow the approved production drawing and installation instruction.
- Supports T568A and T568B wiring with a color-coded termination cap and slim-profile installation.
- Toolless termination provides strain relief, bend-radius control and secure cable retention.
- Accepts 23&24 AWG copper conductors ; CCA and CCS conductors are not accepted.
- Zinc-alloy external shielding enclosure with flame-retardant polycarbonate internal insert.
- RJ45 mating contacts: 15 microinch gold standard; 30 or 50 microinch optional. IDC contacts use lead-free tin over nickel.
- Minimum 750 plug insertion/removal cycles; permitted retermination cycles and conductor-reuse limitations shall follow the released qualification report.
- Category 7 component and Class F channel claims require a released IEC 60603-7-7 component report and a compatible qualified mated interface through 600 MHz.

APPLICATIONS

- 10BASE-T, 100BASE-TX and 1000BASE-T Ethernet
- 2.5GBASE-T and 5GBASE-T Ethernet
- 10GBASE-T Ethernet over a compliant complete Class F channel and qualified mated interface
- Voice and IP telephony
- IEEE 802.3 remote-powering applications subject to released connector and complete-channel verification

REFERENCE STANDARDS

- ISO/IEC 11801-1:2017 (including Amd 1:2025 and its Cor 1:2025) - Category 7 / Class F cabling
- EN 50173-1:2018 - Category 7 / Class F generic cabling
- IEC 60603-7-7:2010 - Shielded 8-way Category 7 connectors up to 600 MHz
- IEEE 802.3-2022 - Ethernet and remote-powering application compatibility
- IEC 60512-99-002:2022 + Amd 1:2025 - PoE unmating endurance under electrical load

GOLD PLATING CONFIGURATION

STANDARD	OPTION	OPTION
15 microinch 0.38 micrometre	30 microinch 0.76 micrometre	50 microinch 1.27 micrometre

CHARACTERISTICS

Property	Specification
Category / bandwidth	Category 7 connecting hardware; Class F channel use; 1-600 MHz; claim subject to a released IEC 60603-7-7 component report
Shielding enclosure	Zinc alloy; alloy grade, finish and screen-bonding method shall follow the approved drawing
Internal insert	Flame-retardant polycarbonate (PC); UL 94 V-0 is a material rating, not a product listing
PCB	FR-4, 1.2 mm nominal thickness
RJ45 mating contacts	Phosphor bronze, 0.35 mm nominal thickness, nickel underplate; 15 microinch (0.38 micrometre) gold standard
Optional gold plating	RJ45 mating-contact area: 30 microinch (0.76 micrometre) or 50 microinch (1.27 micrometre)
IDC contacts	Phosphor bronze, 0.50 mm nominal thickness, nickel underplate and lead-free tin finish
Cable compatibility	23&24 AWG copper conductors ; CCA/CCS excluded; conductor construction, insulation diameter and cable diameter shall follow the approved drawing
Wiring scheme	T568A and T568B color coding
Durability	RJ45: minimum 750 mating cycles; IDC retermination limit and post-cycle electrical criteria shall follow the released qualification report
Storage temperature	-40°C to +70°C
Operating temperature	-10°C to +60°C
Voltage / current rating	Declared rating: 125 VAC RMS, 1.5 A maximum; released report shall identify the contact loading and test conditions
Contact resistance	20 milliohms maximum; released test result required
Insulation resistance	100 megohms minimum at 500 VDC; released test result required
Dielectric strength	750 VAC RMS, 60 Hz for 1 minute; released test result required
Shield continuity	Verify continuity from the cable overall shield through the jack enclosure to the qualified mated connector and patch panel using the approved bonding method
Environmental	Lead-free IDC plating; RoHS conformity requires released production-BOM material declarations

CATEGORY 7 / CLASS F RELEASE CONTROLS

Control	Required verification
Connector classification	Confirm the released mated connector combination to IEC 60603-7-7 through 600 MHz; identify instrument, adapters, samples, limits and worst-case PASS margins.
Transmission verification	Verify insertion loss, return loss, NEXT, FEXT/ACR-F, TCL/TCTL and applicable power-sum parameters over 1-600 MHz for the released component and link configuration.
Interface compatibility	Document the qualified plug/jack mating interface; channel classification shall not exceed the lowest-performing connector, cable or patching component in the installed channel.
Cable / link records	Record specified limits and worst-case measured results for DC loop resistance and unbalance, mutual capacitance, propagation delay and delay skew for the selected 24 AWG S/FTP cable and installed link.
Shield continuity	Verify 360° continuity from the cable overall shield through the jack enclosure to the qualified mated connector and patch panel; document pair-foil handling and the approved grounding/bonding path.
Electrical integrity	Confirm the declared voltage/current rating, contact resistance, insulation resistance and dielectric strength using identified test methods and loading conditions.
Remote powering	Where PoE is claimed, verify resistance unbalance, current-carrying capacity, temperature rise and unmating under electrical load for the released connector and complete channel.
Ordering traceability	Ordering codes, drawings and reports shall distinguish the standard 15 microinch contact finish from the optional 30 and 50 microinch versions.

Classification note: Category 7 / Class F is an ISO/IEC and EN cabling designation.

INSTALLATION AND SHIELDING REQUIREMENTS

- Maintain pair twist as close as practical to the IDC termination and avoid conductor untwist beyond the approved termination instruction.
- Follow the released instruction for pair-foil preparation and separation; maintain 360° continuity of the cable overall shield through the jack enclosure.
- Apply the termination cap and strain relief without exceeding the approved cable bend radius or compressing the pair geometry.
- Use only the qualified shielded mated connector, patch panel and bonding hardware; verify continuity after installation.
- Terminate only approved 24 AWG copper conductors in this product configuration; CCA/CCS are excluded.

COMPLIANCE NOTES

- Gold thickness applies to the RJ45 mating-contact area only; the IDC uses a separate lead-free tin finish over nickel.
- The 24 AWG conductor construction, insulation diameter, cable diameter, shield termination, dimensions, tolerances and faceplate compatibility shall be stated in the approved production drawing.
- UL 94 V-0 identifies the flammability rating of the plastic material; it does not by itself represent a UL product listing.
- UL/ETL certification or listing shall be claimed only when a valid certificate or listing covers the exact PL-KE7STL production configuration.
- RoHS conformity shall be supported by released material declarations for the production bill of materials.
- Category 7 / Class F compliance applies only to the released PL-KE7STL construction represented by the approved drawings and matching test reports.

PERFORMANCE DOCUMENTATION: Detailed electrical performance test reports and compliance documentation for the released product configuration are available upon request.

Packing 1pc / PE bag

BOX	50 PCS
Carton	500 PCS