

AMP-TWIST 6_AS SL modular jack

1711592-1, 1711716-1



Description:

AMP NETCONNECT Category 6_A Shielded AMP-TWIST 6_AS SL modular jack combines quick & easy termination with superior performance. The jack meets and exceeds Category 6_A component specifications of ISO/IEC 11801 edition 2.1 Amendment 2 (April 2009) and ANSI/TIA/EIA-568-B.2-10 (April 2008) up to 500 MHz. Tyco Electronics' engineers have achieved a technology leap pushing the limits of RJ45 connectors to a much wider frequency band up to 600 MHz, beyond the ISO/IEC standard performance specification.

This AMP NETCONNECT XG_A Category 6_A Shielded AMP-TWIST modular jacks meet or exceed Class E_A and Cat6A channel and link specifications as in above mentioned standards, when used as a component in a properly installed AMP NETCONNECT link. AMP NETCONNECT XG_A Category 6_A Systems comply with all of the performance requirements for current and proposed applications such as Gigabit Ethernet (1000BASE-Tx), 10/100BASE-Tx, token ring, 155 Mbps ATM, 100 Mbps TP-PMD, ISDN, analog and digital video, analog and digital voice (VoIP), and exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet on all parameters.

AMP NETCONNECT AMP-TWIST 6_AS SL modular jacks are shielded, have a slim profile and are compatible with SL Series and standard faceplates. Universal wiring labels permit termination to either T568A or T568B wiring patterns. These modular jacks are available with or without dust covers standard in black color. Colored dust covers (1-1711691-x) are separately available allowing identification of specific ports or applications. The AMP TWIST 6_AS SL Category 6_A shielded modular jacks include an integrated lacing fixture for use with the SL Series termination tool (1725150). A spacer to adjust the tool to the dimensions of the AMP-TWIST 6_AS is delivered with the jacks. The modular jacks contain integrated cutting blades used during termination to allow all four pairs of a four pair cable to be terminated at once. This Automatic Wire Cutting (AWC technology) ensures fast, reliable and reproducible termination. Category 6_A Shielded AMP-TWIST modular jacks are available with a metallic shell protecting the data transmission against Electro Magnetic Interference. The construction consequently protects effectively against Alien Crosstalk by design.

Specification (text in **[brackets]** requires a choice):

Modular jacks shall be unkeyed, 4-pair, RJ-45, with an integrated shield and shall fit in a 20.07x14.78 mm cut out. Modular jacks shall terminate using the AMP NETCONNECT SL Series modular jack termination tool part number 1725150-3 (or 1725150-1 after removing the tool's lacing fixture), and be color-coded for both T568A and T568B wiring. Each modular jack shall be wired to **[T568A or T568B]** and shall accommodate cable with a maximum O.D. of 9.00 mm. The insulation displacement contacts shall be capable of terminating [24-22 AWG solid or 24 AWG stranded] conductors with a maximum insulation diameter of 1.60 mm. The insulation displacement contacts shall be paired, with additional space between pairs to improve crosstalk performance. Modular jacks shall utilize a secondary PCB, separate from the signal path, for crosstalk compensation. Each modular jack shall meet the ISO/IEC 11801. Ed. 2.1 Amd. 2 and TIA/EIA-568-B.2-10, Category 6_A performance standards.

[Each jack shall incorporate an integral, hinged dust cover.] Modular jacks shall be AMP NETCONNECT part number **[1711592-1-2, or 1711716-1]**.

Applicable standards:

ISO/IEC 11801 ed. 2.1 Amd 2:2008

ANSI/TIA/EIA-568-B.2-10:2008

DIN IEC 60068

ISO / IEC 60603-7-1 First Edition. 2002

IEC 60603-7-51. Ed. 1.0

EIA-364

CENELEC EN 50289-1-14

IEEE 802.3an

Information Technology -

Generic Cabling for Customer Premises

Transmission Performance Specifications for 4-Pair 100 Ohm Augmented Category 6 Cabling

Basic environmental testing procedures

Detailed Specification for 8-way, shielded free and fixed connectors with common mating features

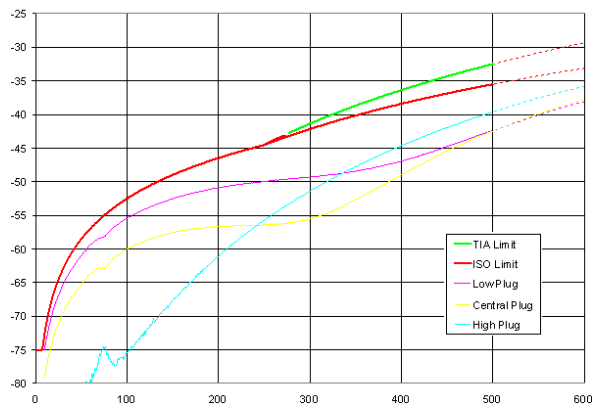
Detailed specification for 8-way, shielded free and fixed connectors, for data transmissions with frequencies up to 500 MHz

Electrical Connector/Socket test Procedures Including Environmental Classifications

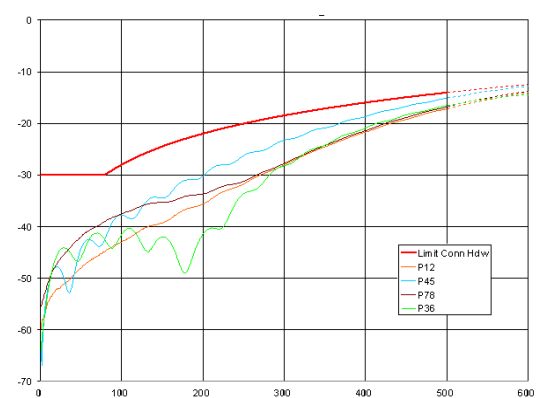
Coupling attenuation or screening attenuation of connecting hardware.

Physical Layer for 10 Gb/s (10GBASE-T) operation over balanced twistedpair structured cabling systems

Typical NEXT Loss values (dB) 36&45



Typical Return Loss values (dB)



Technical Details:

Materials

Modular Jack & Lacing Fixture Housing
IDC Connecting Block
Contacts

- Zinc Alloy
- Polycarbonate, 94V-0 rated
- Beryllium copper, plated with 1.27 μm [50 μin] thick gold in localized area and 3.81 μm [150 μin] minimum thick nickel underplate and 3.8 μin minimum thick tin in solder area over 1.27 μm min. thick nickel underplate

Cutting Blade and Shield Point Contact
Insulation Displacement Contacts

- Stainless Steel
- Phosphorous bronze, plated with 3.81 μm [150 μin] minimum thick matte tin over 1.27 μm [50 μin] minimum thick nickel underplate

Integral Dust Cover

- Polycarbonate

Electrical Characteristics

Voltage

- 150VAC max

Current

- Signal application only (0.75A)

Operating Temperature

- -40° to 70°C (-40° to 158°F)

Environmental Conditions

Thermal shock resistance

- According IEC 60068-2-14

Humidity-temperature cycling resistance

- According IEC 60068-2-38

Stress relaxation resistance

- According IEC 60068-2-2, Test method Ba

Flowing mixed gas corrosion resistance

- According IEC 60068-2-60 Test Method C

Mechanical Characteristics

Modular Jack

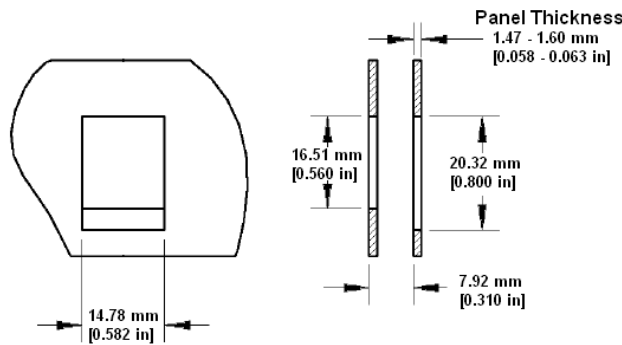
Plug insertion/withdrawal force

Insulation Displacement Contacts

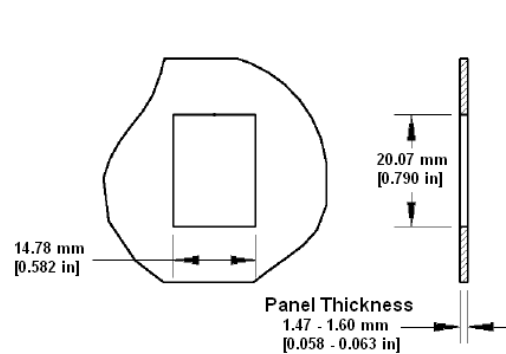
Cable Outside Diameter

- 750 mating cycles
- 30 N maximum
- Accept solid 24-22 AWG or stranded 24 AWG conductors with a maximum insulation diameter of 1.60 mm
- Accepts cables with a maximum O.D. of 9.00 mm

Flush Mount Panel Cutout



Single Panel Cutout



Part Numbers:

Description	Part Number
Jack with dust cover	1711592-1
Jack without dust cover	1711716-1
Colored dust covers (per bag of 50 pieces)	1-1711691-X

-X	Color
-6	blue
-7	red
-8	yellow
-9	green

Specification subject to change without notice.

Revised 06/2009

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