

# Stewart Connector

## Category 6 Modular Plugs 39 Series

Future-proof your premises wiring applications with the modular plug that achieves true CAT 6 performance.

### True CAT 6 Performance Today.

Stewart's new Category 6 Modular Plugs meet/exceed the requirements of Gigabit Ethernet and proposed EIA/TIA Cat 6 applications. Technical innovations, including a patented multi-level contact configuration, metallic enhancement bars that isolate crosstalk, and porosity-tested, gold plated, electropolished IDC contacts ensure the highest levels of performance for all of your cutting edge applications.

### Terminate with Ease and Speed.

An enhanced wire management system, featuring Stewart's strain relief stabilization technology and a longer, easier-to-handle management bar, makes installation a breeze while improving reliability and performance. A patented staggered straddle mount reliable termination with stranded and solid conductors.

### Ensure Compatibility.

Stewart Cat 6 Plugs are the same size as traditional plugs, making them perfect for stacked and side-by-side applications. They're also fully compatible with current Cat 3, 4, 5, and 5e applications, and they're designed to accommodate typical 24 gauge solid or stranded cable. Plus, you can terminate Stewart Cat 6 Plugs with traditional RJ-45 crimp tools, saving you money.



## Stewart Category 6 Modular Plugs

For true CAT 6 performance, look no further than Stewart's new CAT 6 Modular Plugs. As a result of Stewart's participation in the TIA TR 42.7.1 subcommittee, we've been able to design a plug that meets/exceeds the proposed EIA/TIA specifications for CAT 6 performance. Others may claim true Cat 6 performance – only Stewart achieves it.

## Innovative Technologies Put to Work

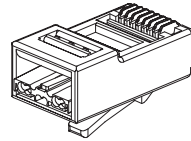
The Stewart CAT 6 Plug achieves superb high-end performance thanks to a number of technological innovations. A patented multi-level contact configuration that increases the distance between critical pairs enables our CAT 6 Plugs to achieve superior performance and meet proposed CAT 6 values for De-Embedded NEXT. Metallic enhancement bars provide higher degrees of crosstalk isolation and enhance return loss performance.

## Unsurpassed Reliability

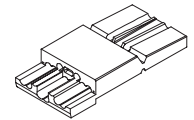
All Stewart CAT 6 Plugs reflect the attention to detail that makes Stewart Connector your number one choice for reliability and performance. Reliability and durability during mating are ensured by Stewart's patented porosity-tested, gold plated, electropolished IDC contacts.

The data and information provided by Stewart Connector Systems, Inc. ("SCS"), contained herein relating to product performance or design models ("the content"), is believed accurate but is neither warranted to be error-free nor fit for a particular use. Although representative of product manufactured or intended by SCS, the content may not reflect performance actually achieved by such product in a specific application. Recipient assumes sole responsibility for determining whether any product is fit for a specific use. In obtaining this content, recipient agrees to limit use of such data and information to its express purpose, and agrees not to disclose content to any third party without prior written consent from SCS.

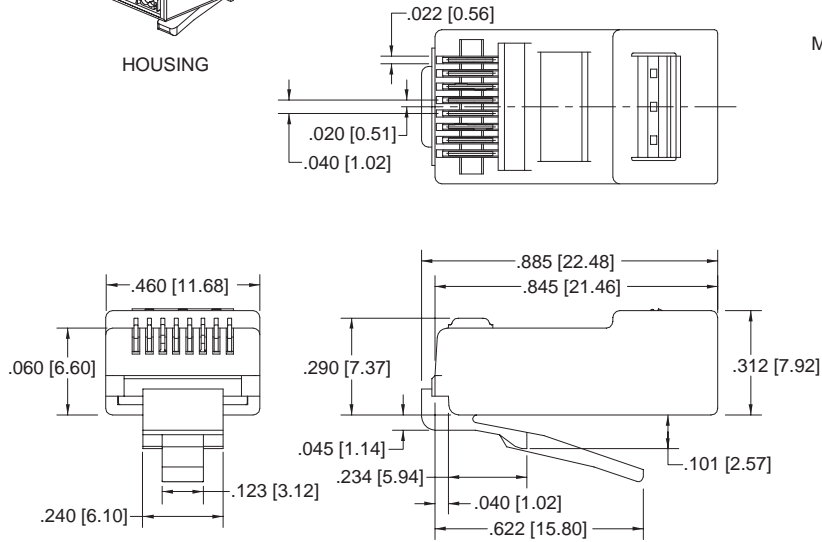
For detailed test data, contact Stewart Connector.



HOUSING

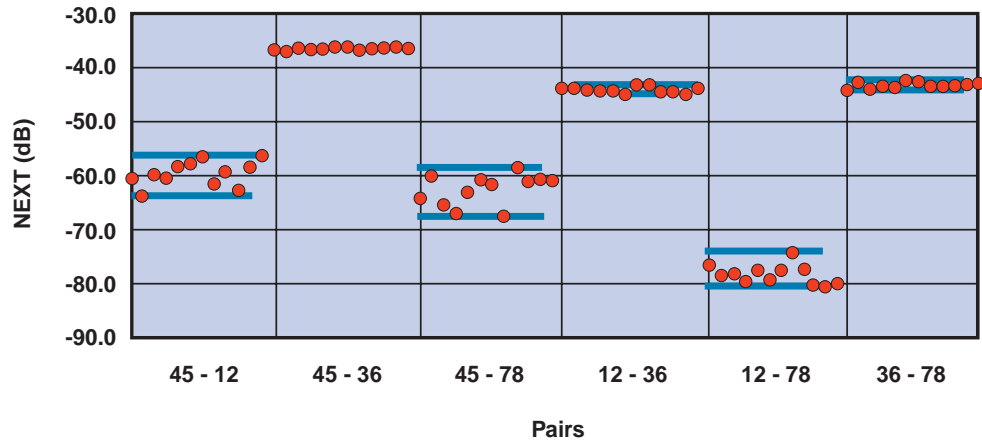


MANAGEMENT BAR

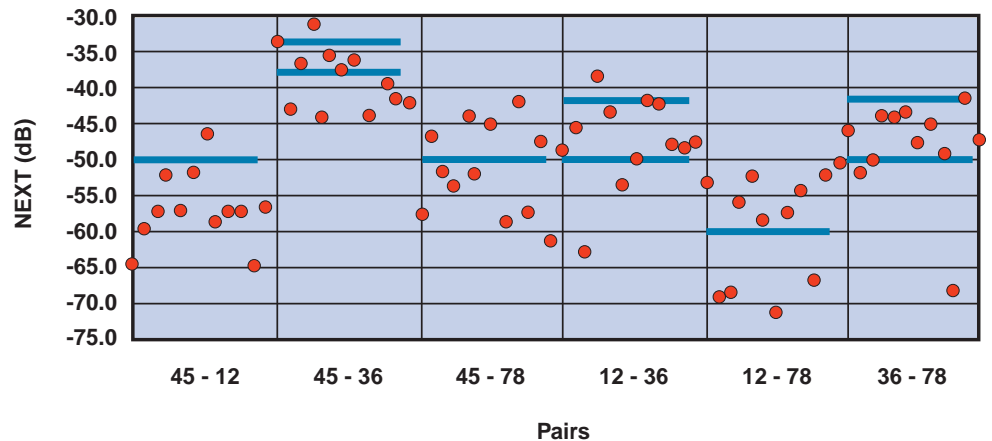


All dimensions are in inches with metric values in brackets.

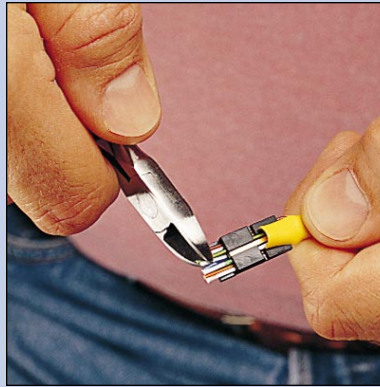
## STEWART CAT 6 DE-EMBEDDED PLUG NEXT @ 100 MHz



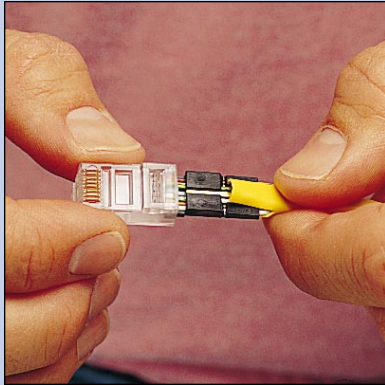
## TYPICAL CAT 5 PLUG DE-EMBEDDED NEXT @ 100 MHz



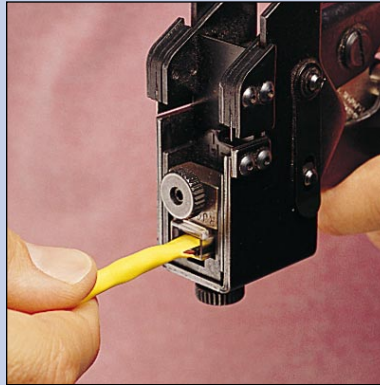
## Termination and Assembly That Couldn't Be Easier!



① Insert conductors into loadbar. Trim all conductors flush with loadbar edge.



② Insert loadbar into housing.



③ Terminate.



*Our Category 6 Plugs feature Stewart's patented multi-level contact configuration that increases the distance between critical pairs, boosting performance.*



*Stewart's enhanced wire management bar features a longer, easier-to-handle design that makes assembly and termination a snap.*

### Effortless Assembly and Termination

Stewart innovation doesn't stop with performance. We've significantly improved assembly and termination. A Stewart-patented staggered straddle mount contact design ensures reliable termination of both solid and stranded conductors. An enhanced wire management system, featuring a longer and easier-to-handle management bar, makes installation a snap and boosts performance. The strain relief stabilization system\* maintains conductor twists prior to termination for added performance. And there's no need to purchase new tools – plugs are terminated with traditional RJ-45 tools.

### Compatibility is Key

Stewart CAT 6 Plugs were built from the ground up to provide superior performance and reliability while maintaining compatibility with the widest array of products and parts. They're the same size as traditional RJ-45 plugs, and are perfect for both stacked and side-by-side applications. They also accommodate typical 24 gauge stranded and solid cable and insulated conductor sizes up to .042 inches, and are compatible with industry-standard plug boots. And of course, they're fully interoperable with all CAT 3, 4, 5, and 5e applications.

### Exceptional Value

Because we design and manufacture every plug for reliability, you get a worry-free product that easily satisfies your specific applications. Increased reliability equals lower warranty costs and higher customer satisfaction. True CAT 6 performance enables your customers to install now, while future-proofing their applications.

\* patents pending

## Materials

Plug Housing: UL 94V-0-rated polycarbonate  
Contacts: Phosphor bronze  
Contact Plating: 50 microinches [1.27 mm]  
selective gold plate

## Electrical Characteristics

Current Rating: 1.5 A (maximum) @ 25° C  
Voltage Rating: 150 VAC (maximum)  
Low-Level  
Contact Resistance: 15 mΩ maximum allowable  
change (using Stewart Connector  
jack)

Dielectric  
Withstanding Voltage: 1000 Vrms, 1 min. (60 Hz)  
Insulation Resistance: 500 MΩ (minimum)

## Mechanical Characteristics

Plug Tolerances  
and Dimensions: Compliant with FCC  
requirements

## Environmental Characteristics

Operating Temperature: -40° to 85° C

## Approvals/Certifications

UL Component recognition pending  
CSA Certification pending  
FCC Compliant  
Stewart Connector Systems, Inc. is ISO 9001 certified

## Ordering Information

39100 Category 6 Plug, Unshielded  
39200 Category 6 Plug, Shielded\*

\* Consult factory for availability

## Tool Information

Tools are available for field and high volume factory  
installations. Call Stewart Connector for tooling options.

[www.stewartconnector.com](http://www.stewartconnector.com)

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## Insilco Technologies Group

[www.insilcotechologies.com](http://www.insilcotechologies.com)

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