

XG Category 6A F/UTP Cabling System Products

Performance for Next Generation Application

2012 Edition



SECTION FACTS

Exceeds ANSI/TIA
568-C.2 Category 6A

Meets IEEE 802.3an 10GBASE-T
and ISO/IEC 11801 Class
EA on 100m channels

Superior noise immunity for superior
performance and headroom

Better heat dissipation for
power over Ethernet

Faster, more familiar installation

Consistent, precise terminations

Fastest termination time
in the industry

Enhanced cable management
and density

Automatic bonding and
grounding design

Please call customer service
at 1-800-553-0938 for quotes
on custom assemblies

TE Connectivity offers one of the
broadest assortments of connectors
in the world and is continually
introducing new products. If
you don't see what you need in
this catalog, please contact TE
Connectivity Product Information
Center at 1-800-522-6752

XG Category 6A

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XG Category 6A F/UTP Cabling System

Chapter Summary

At TE Connectivity, we've known for years that shielded cabling offers superior noise immunity at higher frequencies where applications like 10 gigabit Ethernet reside, without hampering performance. That's why shielded technology is the only copper technology with proposals for supporting next-generation applications beyond 10 gig.

Through advancements in connector technology and system design, the AMP NETCONNECT XG Category 6A shielded solution now offers easier 10-gig installation without the restrictions of unshielded cabling. For starters, our XG Category 6A solution allows you to mix cabling with other types of copper media and neatly arrange cabling bundles without worrying about performance. Plus, there's no need for time-consuming Alien Crosstalk testing. And you get the easiest terminating shielded jack on the market, which means your 10-gig networks can be up and running faster than ever.

Backed by our 25-year performance warranty*, the AMP NETCONNECT XG shielded cabling solution features modular jacks, patch panels and shielded cable and assemblies that offer superior performance and cost advantages over unshielded solutions. Our fully-compliant XG solution offers fast, easy deployment with bonding and grounding that occurs naturally through normal installation practices.

With superior noise immunity to eliminate Alien Crosstalk and RFI/EMI, the AMP NETCONNECT XG Category 6A shielded system offers performance above 500 MHz, with plenty of margin needed for advanced 10 gigabit transmission and future applications.

* Some conditions may apply. AMP NETCONNECT Home Net-Works Systems qualify for a 25 year component warranty only. For more information, please visit www.ampnetconnect.com or call 1-800-553-0938. Outside the U.S., please contact your local AMP NETCONNECT product sales office.

XG Category 6A F/UTP Cabling System

Twisted Pair Cable Information

CABLE PACKAGING REFERENCE

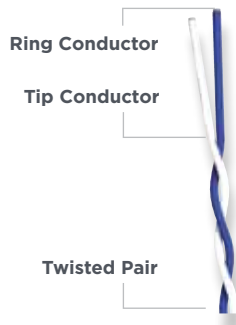


WR = Wooden Reels

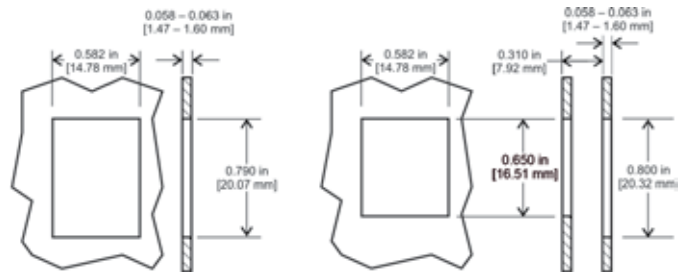
Note: Unless otherwise specified, all lengths are 1000 feet (305 meters). Other lengths and colors available. Call for details. Package types are listed in each chart.

4-PAIR CONDUCTOR COLOR CODE

| Pair | | Jacket Color |
|------|------|--------------|
| 1 | Tip | White |
| | Ring | Blue |
| 2 | Tip | White |
| | Ring | Orange |
| 3 | Tip | White |
| | Ring | Green |
| 4 | Tip | White |
| | Ring | Brown |



Suggested Modular Jack Cutouts and Technical Reference



Single Panel Cutout

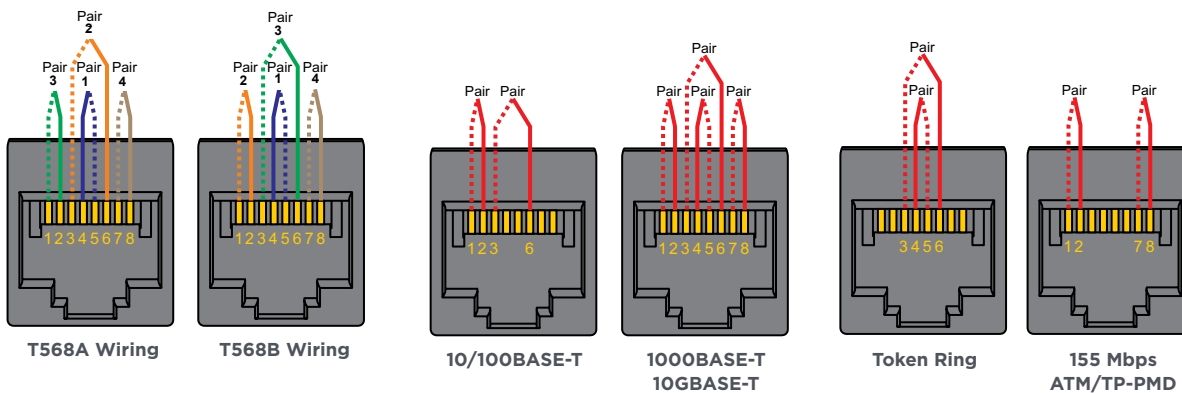
Flush Mount Panel Application Cutout

- Modular Jack Mating Cycles:** 750
- 110 Contacts Terminations:** 200
- Modular Jack Pull Force:** 20 lbs (89 N)
- Voltage:** 150 VAC max.
- Operating Temperature:** -40° – 70° C (-40° – 158° F)
- Approvals:** UL Listed
File Number: E81956

TWISTED PAIR CABLE TEMPERATURES

| Category | Condition | Riser/Plenum |
|----------|--------------|---------------------------|
| Cat 6A | Storage | -4 - 176° F (-20 - 80° C) |
| | Operating | -4 - 140° F (-20 - 60° C) |
| | Installation | 41 - 122° F (5 - 50° C) |

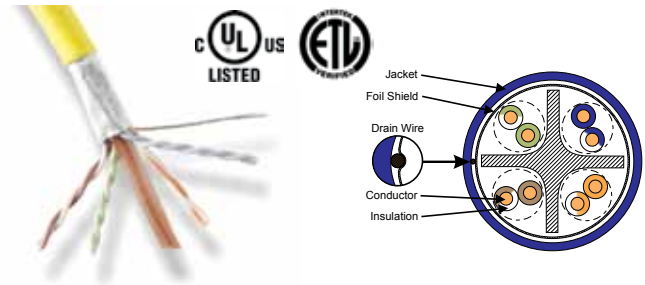
APPLICATION WIRING DIAGRAMS FOR MODULAR JACKS



XG Category 6A F/UTP Cabling System

XG620 Series, Category 6A F/UTP (ScTP) Cable

- Meets or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class E_A up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- Independently tested by Intertek ETL SEMKO third party testing services
- Meets or exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet
- 24 AWG (CMR) and 23 AWG (CMP) solid conductors
- Lead-free (no heavy metals)



ORDERING INFORMATION

| UL/NEC Ratings | Pair Count | Package | Weight lbs/mft | Vp (%nom) | Dimensions | | | Part Numbers | | |
|----------------|------------|---------|----------------|-----------|------------|-------------|-------------|--------------|-------------|--|
| | | | | | Outside | White | Gray | Blue | Yellow | |
| CMR | 4 | WR | 42 | 69 | 0.265" | 4-1499389-1 | 4-1499389-3 | 4-1499389-5 | 4-1499389-7 | |
| CMP | 4 | WR | 42 | 72 | 0.265" | 4-1499416-1 | 4-1499416-3 | 4-1499416-5 | 4-1499416-7 | |

XG Category 6A AMP-TWIST Shielded Modular Jacks

- Meets or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class EA up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- Termination time: about 90 seconds (using AMP NETCONNECT SL Series Termination Tool, without Lacing Fixture - 1725150-3, see Chapter 22)
- Meets or exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet
- Easy installation
- Integrated strain relief and shield clamp
- Integrated dust cover option
- Re-usable
- Universal wiring label permits wiring to T568A or T568B
- 8-Position RJ45 Modular Jacks for 1, 2, 3, and 4-Pair applications
- RoHS compliant
- For unloaded patch panels see Chapter 15



Figure A



Figure B

ORDERING INFORMATION

| Description | Condition | Riser/Plenum | Figure | Part Number |
|-------------|-------------|-----------------------|--------|-------------|
| Rear Entry | T568A/T568B | without Dust Cover | A | 1711342-2 |
| | | with Clear Dust Cover | | 1711160-2 |
| Side Entry | T568A/T568B | without Dust Cover | B | 1711343-2 |
| | | with Clear Dust Cover | | 1711295-2 |

XG Category 6A F/UTP Cabling System

Colored Dust Covers for XG Cat 6A AMP-TWIST Modular Jacks With Integrated Dust Covers

- For use with AMP-TWIST modular jacks 1711160-2 and 1711295-2 only
- Replaces existing clear dust cover on 1711160-2 and 1711295-2 (jack is not included with colored dust cover)
- 9 color choices
- Provides easier port identification
- Interchangeable
- No special tooling required
- Packaged 50/bag
- Application Spec: 114-93016
- RoHS compliant



| Product Description | Colors | Part Number |
|---|--------------|-------------|
| Colored Dust Covers for XG Cat 6A AMP-TWIST Modular Jacks | Light Almond | 1-1711691-1 |
| | Black | 1-1711691-2 |
| | White | 1-1711691-3 |
| | Violet | 1-1711691-4 |
| | Orange | 1-1711691-5 |
| | Blue | 1-1711691-6 |
| | Red | 1-1711691-7 |
| | Yellow | 1-1711691-8 |
| | Green | 1-1711691-9 |

SL Series Modular Dust Covers for Jacks Without Integrated Dust Covers

- Protect contacts from dust, build-up and contaminants which can affect performance
- Work with any RJ45 jack
- Made of flexible plastic for snug fit and contact protection
- Tab makes installation and removal a snap
- EU RoHS/ELV compliant



ORDERING INFORMATION

| Product Description | Color | Part Number |
|------------------------|-------|-------------|
| RJ45 Dust Cover | Black | 2111285-2 |

XG Category 6A F/UTP Cabling System

XG Category 6A F/UTP Slim Line Patch Cable Assemblies

- Meets or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class EA up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- Meets or exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet
- Non-plenum (CM rated)
- 4-Pair stranded F/UTP conductors
- Universal wiring (T568A/T568B)
- Lead-Free (no heavy metals)
- Jacket colors shown in the table are approximate



| Length | Black | Gray | Blue | Green | Red | White | Yellow | Orange | Violet |
|----------------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|-------------|
| 2' (0.61 m) | 1933880-2 | 1933881-2 | 1933882-2 | 1933883-2 | 1933884-2 | 1933885-2 | 1933886-2 | 1933887-2 | 1933888-2 |
| 3' (0.91 m) | 1933880-3 | 1933881-3 | 1933882-3 | 1933883-3 | 1933884-3 | 1933885-3 | 1933886-3 | 1933887-3 | 1933888-3 |
| 4' (1.22 m) | 1933880-4 | 1933881-4 | 1933882-4 | 1933883-4 | 1933884-4 | 1933885-4 | 1933886-4 | 1933887-4 | 1933888-4 |
| 5' (1.52 m) | 1933880-5 | 1933881-5 | 1933882-5 | 1933883-5 | 1933884-5 | 1933885-5 | 1933886-5 | 1933887-5 | 1933888-5 |
| 6' (1.83 m) | 1933880-6 | 1933881-6 | 1933882-6 | 1933883-6 | 1933884-6 | 1933885-6 | 1933886-6 | 1933887-6 | 1933888-6 |
| 7' (2.13 m) | 1933880-7 | 1933881-7 | 1933882-7 | 1933883-7 | 1933884-7 | 1933885-7 | 1933886-7 | 1933887-7 | 1933888-7 |
| 8' (2.44 m) | 1933880-8 | 1933881-8 | 1933882-8 | 1933883-8 | 1933884-8 | 1933885-8 | 1933886-8 | 1933887-8 | 1933888-8 |
| 9' (2.74 m) | 1933880-9 | 1933881-9 | 1933882-9 | 1933883-9 | 1933884-9 | 1933885-9 | 1933886-9 | 1933887-9 | 1933888-9 |
| 10' (3.05 m) | 1-1933880-0 | 1-1933881-0 | 1-1933882-0 | 1-1933883-0 | 1-1933884-0 | 1-1933885-0 | 1-1933886-0 | 1-1933887-0 | 1-1933888-0 |
| 12' (3.66 m) | 1-1933880-2 | 1-1933881-2 | 1-1933882-2 | 1-1933883-2 | 1-1933884-2 | 1-1933885-2 | 1-1933886-2 | 1-1933887-2 | 1-1933888-2 |
| 14' (4.27 m) | 1-1933880-4 | 1-1933881-4 | 1-1933882-4 | 1-1933883-4 | 1-1933884-4 | 1-1933885-4 | 1-1933886-4 | 1-1933887-4 | 1-1933888-4 |
| 15' (4.57 m) | 1-1933880-5 | 1-1933881-5 | 1-1933882-5 | 1-1933883-5 | 1-1933884-5 | 1-1933885-5 | 1-1933886-5 | 1-1933887-5 | 1-1933888-5 |
| 16' (4.88 m) | 1-1933880-6 | 1-1933881-6 | 1-1933882-6 | 1-1933883-6 | 1-1933884-6 | 1-1933885-6 | 1-1933886-6 | 1-1933887-6 | 1-1933888-6 |
| 20' (6.10 m) | 2-1933880-0 | 2-1933881-0 | 2-1933882-0 | 2-1933883-0 | 2-1933884-0 | 2-1933885-0 | 2-1933886-0 | 2-1933887-0 | 2-1933888-0 |
| 24' (7.32 m) | 2-1933880-4 | 2-1933881-4 | 2-1933882-4 | 2-1933883-4 | 2-1933884-4 | 2-1933885-4 | 2-1933886-4 | 2-1933887-4 | 2-1933888-4 |
| 26' (7.92 m) | 2-1933880-6 | 2-1933881-6 | 2-1933882-6 | 2-1933883-6 | 2-1933884-6 | 2-1933885-6 | 2-1933886-6 | 2-1933887-6 | 2-1933888-6 |
| 30' (9.14 m) | 3-1933880-0 | 3-1933881-0 | 3-1933882-0 | 3-1933883-0 | 3-1933884-0 | 3-1933885-0 | 3-1933886-0 | 3-1933887-0 | 3-1933888-0 |
| 40' (12.19 m) | 4-1933880-0 | 4-1933881-0 | 4-1933882-0 | 4-1933883-0 | 4-1933884-0 | 4-1933885-0 | 4-1933886-0 | 4-1933887-0 | 4-1933888-0 |

XG Category 6A F/UTP Cabling System

XG Category 6A AMP-TWIST Shielded Patch Panels

- Meets or exceeds the channel specifications of ANSI/TIA-568-C.2 Category 6A and Amendment 1 to ISO/IEC 11801:2002 Class EA up to 500 MHz when used as a component in a properly installed AMP NETCONNECT XG F/UTP channel
- Meets or exceeds all requirements for IEEE 802.3an 10 Gigabit Ethernet
- Shielded installation made simple with jacks
- Ports may be individually replaced
- Packaged unloaded with jacks bagged separately for termination with SL Series jack termination tool, see Chapter 22
- Available in straight and angled versions
- Labels and label covers included
- Accommodates icons (sold separately)
- Integrated bonding bar makes bonding simple and requires no extra steps
- For multimedia (no included connectivity) patch panels, see Chapter 15



Figure A



Figure B



Figure C



Figure D

| Footprint | Port Count | Height | Width | Figure | Part Number |
|-----------|------------|------------|-------|--------|-------------|
| Standard | 24 | 1U (1.75") | 19.0" | A | 1933319-2 |
| | 48 | 2U (3.50") | 19.0" | B | 1933320-2 |
| Angled | 24 | 1U (1.75") | 19.0" | C | 1933321-2 |
| | 48 | 2U (3.50") | 19.0" | D | 1933322-2 |

CATALOG

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