Category 5e Products

AMP **NETCONNECT**™

Tyco Electronics

Our commitment. Your advantage.

25 Year System Performance Coverage*

We are confident that your AMP NETCONNECT cabling system will keep performing to current TIA/EIA industry standards. If the registered system ever fails to meet those standards within 25 years of the date of installation, we'll provide the reasonable parts and labor to replace or repair the AMP NETCONNECT product.

25 Year Component Coverage*

Tyco Electronics also offers a 25 Year Component Warranty to protect individual AMP NETCONNECT cabling system components. If a component fails within 25 years of the date of installation, we'll provide the reasonable parts to replace or repair the registered AMP NETCONNECT product.

It's Standard Equipment

This coverage is automatically part of the package when*:

- AMP NETCONNECT products are specified end-to-end
- A Tyco Electronics authorized NETCONNECT Design & Installation (ND&I) contractor registers the network project with Tyco Electronics
- That ND&I performs the actual installation in accordance with Tyco Electronics requirements

Who's Covered

Unlike most systems suppliers, Tyco Electronics provides warranty coverage directly to the end user. Many suppliers provide coverage to the installers, who then provide coverage to the customer. But with Tyco Electronics warranties, there are no middlemen. The warranties are between you and Tyco Electronics.

For more information, please visit: http://www.tycoelectronics.com/aboutus/pdf/tc.pdf

Or call: 1-800-553-0938

Outside the U.S., please contact your local AMP NETCONNECT product sales office.

People & Products to Answer the Cabling Challenge.

Cabling a retail store, casino or office building can be complex. Yet the solution for productive connectivity and cable management can be as simple as talking to the right people - The AMP NETCONNECT business unit of Tyco Electronics.

The reason is what we bring to the building infrastructure challenges you face. In-depth technical knowledge and expertise from decades of experience. Innovative technologies from ongoing R&D. And quality products for every power, data, voice and video networking need. One of the broadest lines in the industry, in fact.

Additionally, it's what we do to answer the challenge: develop and deliver integrated, made-to-order solutions that optimize network performance, increase productivity and produce more immediate return-on-investment.

And it's not just providing technology. It's making sure solutions are efficiently and effectively installed: working with distributors and customers so products are delivered when and where you need them. And maintaining a global network of certified installation contractors.

It all means, simply, that AMP NETCONNECT cabling systems provide the answers you're looking for: the whole solution for any cabling challenge. From the ground up.

*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.

Tyco Electronics

03

Tyco Electronics

03 **Cable Packaging Reference**

WR = Wooden Reels   RB = Reel-in-a-Box   PB = Pull Box

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.
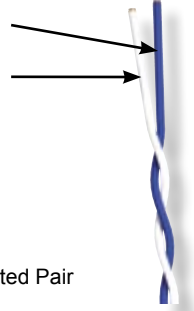
Twisted Pair Cable Temperatures

Category	Condition	Riser/Plenum
5e	Storage	-4 – 140°F (-20 – 60°C)
	Operating	-4 – 140°F (-20 – 60°C)
	Installation	40 – 140°F (4 – 60°C)

4-Pair Conductor Color Code

Ring Conductor

Tip Conductor

Twisted Pair

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

25-Pair Conductor Color Code

Color Group	Pair		Conductor Jacket Color	Stripe Color
White (1)	1	Tip	White	Blue
		Ring	Blue	White
	2	Tip	White	Orange
		Ring	Orange	White
	3	Tip	White	Green
		Ring	Green	White
	4	Tip	White	Brown
		Ring	Brown	White
	5	Tip	White	Slate
		Ring	Slate	White
Red (2)	6	Tip	Red	Blue
		Ring	Blue	Red
	7	Tip	Red	Orange
		Ring	Orange	Red
	8	Tip	Red	Green
		Ring	Green	Red
	9	Tip	Red	Brown
		Ring	Brown	Red
	10	Tip	Red	Slate
		Ring	Slate	Red
Black (3)	11	Tip	Black	Blue
		Ring	Blue	Black
	12	Tip	Black	Orange
		Ring	Orange	Black
	13	Tip	Black	Green
		Ring	Green	Black
	14	Tip	Black	Brown
		Ring	Brown	Black
	15	Tip	Black	Slate
		Ring	Slate	Black
Yellow (4)	16	Tip	Yellow	Blue
		Ring	Blue	Yellow
	17	Tip	Yellow	Orange
		Ring	Orange	Yellow
	18	Tip	Yellow	Green
		Ring	Green	Yellow
	19	Tip	Yellow	Brown
		Ring	Brown	Yellow
	20	Tip	Yellow	Slate
		Ring	Slate	Yellow
Violet (5)	21	Tip	Violet	Blue
		Ring	Blue	Violet
	22	Tip	Violet	Orange
		Ring	Orange	Violet
	23	Tip	Violet	Green
		Ring	Green	Violet
	24	Tip	Violet	Brown
		Ring	Brown	Violet
	25	Tip	Violet	Slate
		Ring	Slate	Violet

Tyco Electronics

Category 5e Products

Suggested Modular Jack Cutouts

SL Series and 110Connect

Suggested Single Panel
Cutout

Suggested Flush Mount Panel
Application Cutout

Keystone

Suggested Single Panel
Cutout

Suggested Flush Mount Panel
Application Cutout

AMP NETCONNECT Modular Jack Technical Reference

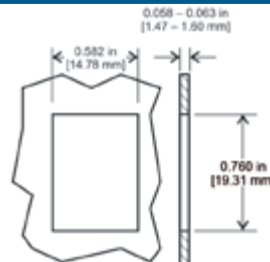| Modular Jack Mating Cycles	110 Contacts Terminations	Modular Jack Pull Force	Voltage	Operating Temperature	Approvals
750	200	20 lbs (89 N)	150 VAC max.	-40° — 70°C (-40° — 158°F)	UL Listed File Number: E81956

Application Wiring Diagrams for Modular Jacks

T568A Wiring

T568B Wiring

10/100BASE-T

1000BASE-T
10GBASE-T

Token Ring

155 Mbps
ATM/TP-PMD

Die Set/Tool to Modular Plug Cross-Reference

Modular Plug Kits	Individual Modular Plug Die Sets for Hand Tool 2-231652-0	
	1-231666-4	1-853400-0
1479583	X	X
1479584	X	X
1479585	X	X
1479586	X	X
558530	X	X
569278	X	X
569550	X	X
569552	X	X

Tyco Electronics

Category 5e Products

510 Series, Category 5e UTP Cable

- ◉ Independently verified by Intertek ETL SEMKO testing services
- ◉ Meets or exceeds ANSI/TIA-568-C.2 Enhanced Category 5 and ISO 11801: 2002 Class D specifications
- ◉ UL & cUL Listed (CMR/CMP)
- ◉ 24 AWG, solid conductors
- ◉ Lead-free (no heavy metals)
- ◉ 4-Pair Cables:
  - ◉ Performance characterized to 200 MHz
  - ◉ 2 dB NEXT performance above Category 5e
  - ◉ Meets or exceeds all requirements for Gigabit Ethernet

UL/NEC Ratings	Pair Count	Package	Part Number				Weight lbs/kft	Vp (%nom)	Dimensions (in)	
			White	Gray	Blue	Yellow			Dielectric	Outside
CMR	4	RB	219538-2	219538-4	219538-6	219538-8	24	70	0.037	0.20
		WR	219538-1	219538-3	219538-5	219538-7				
		PB	6-219538-2	6-219538-4	6-219538-6	6-219538-8				
	25	WR	1499418-1	1499418-2	1499418-3	1499418-4	134	69	0.032	0.50
CMP	4	RB	219513-2	219513-4	219513-6	219513-8	22	74	0.035	0.19
		WR	219513-1	219513-3	219513-5	219513-7				
		PB	6-219513-2	6-219513-4	6-219513-6	6-219513-8				
	25	WR	1499419-1	1499419-2	1499419-3	1499419-4	142	72	0 .037	0.46

520 Series, Category 5e F/UTP Cable

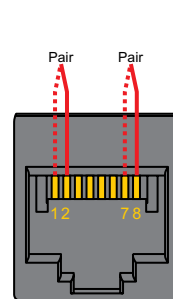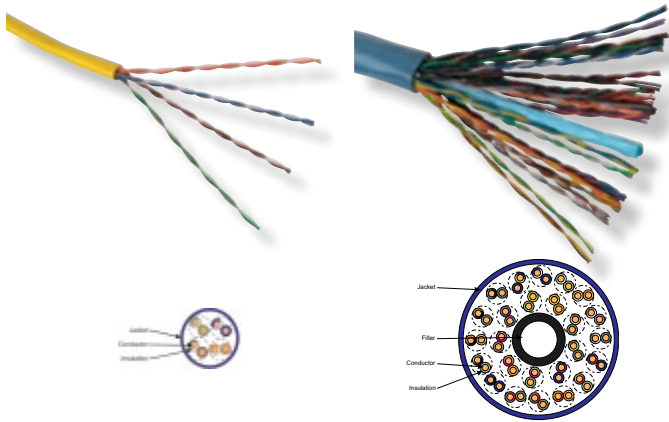- ◉ Meets or exceeds ANSI/TIA-568-C.2 Enhanced Category 5 and ISO 11801: 2002 Class D specifications
- ◉ Independently verified by Intertek ETL SEMKO testing services
- ◉ UL & cUL Listed (CMR/CMP)
- ◉ Exceeds all requirements for Gigabit Ethernet
- ◉ 24 AWG, solid conductors
- ◉ Lead-free (no heavy metals)

UL/NEC Ratings	Pair Count	Package	Part Number				Weight lbs/kft	Vp (%nom)	Dimensions (in)	
			White	Gray	Blue	Violet			Dielectric	Outside
CMR	4	WR	1499171-1	1499171-3	1499171-5	1-1499171-7	31	72	0.041	0.240
CMP	4	WR	1499172-1	1499172-3	1499172-5	—	29	72	0.042	0.219

520 Series, Category 5e UTP Cable

- ◉ Performance characterized to 350 MHz
- ◉ 5 dB NEXT performance above Category 5E
- ◉ Meets or exceeds ANSI/TIA-568-C.2 Enhanced Category 5 and ISO Class D 11801:2002 specifications
- ◉ Independently verified by Intertek ETL SEMKO testing services
- ◉ UL & cUL listed (CMR/CMP)
- ◉ Gigabit Ethernet zero bit error rate independently certified by Intertek ETL SEMKO testing services
- ◉ Lead-free (no heavy metals)
- ◉ 24 AWG, solid conductors

UL/NEC Ratings	Pair Count	Package	Part Number				Weight lb/kft	Vp (%nom)	Dimension (in)	
			White	Gray	Blue	Yellow			Dielectric	Outside
CMR	4	RB	57826-2	57826-4	57826-6	57826-8	24	70	0.037	0.20
		WR	57826-1	57826-3	57826-5	57826-7				
		PB	6-57826-2	6-57826-4	6-57826-6	6-57826-8				
CMP	4	RB	57825-2	57825-4	57825-6	57825-8	22	74	0.035	0.19
		WR	57825-1	57825-3	57825-5	57825-7				
		PB	6-57825-2	6-57825-4	6-57825-6	6-57825-8				

Tyco Electronics

SL Series Category 5e Modular Jacks

- Thin profile improves outlet density
- Modular Jacks available with integral dust covers
- 180° or 90° cable dress for easy termination
- Universal wiring label permits wiring to T568A or T568B
- Meets or exceeds all TIA and ISO component performance requirements
- Bend-limiting strain relief included with unshielded jacks
- UL Listed: E81956
- 8-Position RJ45 Modular Jacks for 1, 2, 3 and 4-Pair applications
- Can be terminated with either SL Series Modular Jack Termination Tool (1725150-1) or standard 110 punch-down tools, see Chapter 22
- RoHS compliant
- The bulk option is 25 jacks per bag, 4 bags per carton

Shielding	Cable Entry	Jack Color	Without Dust Cover	With Dust Cover	Without Dust Cover Bulk Packaged
Unshielded	90° (Side) or 180° (Rear)	Almond	1375191-1	1375190-1	2-1375191-1
		Black	1375191-2	1375190-2	2-1375191-2
		White	1375191-3	1375190-3	2-1375191-3
		Gray	1375191-4	1375190-4	2-1375191-4
		Orange	1375191-5	1375190-5	2-1375191-5
		Blue	1375191-6	1375190-6	2-1375191-6
		Red	1375191-7	1375190-7	2-1375191-7
		Yellow	1375191-8	1375190-8	2-1375191-8
		Green	1375191-9	1375190-9	2-1375191-9
		Violet	1-1375191-0	1-1375190-0	3-1375191-0
		Electrical Ivory	1-1375191-1	1-1375190-1	3-1375191-1
		Alpine White	1-1375191-3	1-1375190-3	3-1375191-3
Shielded	180° (Rear)	Black	1375189-1*	–	–
	90° (Side)	Black	1479717-1*	–	–

*Note: Shielded jacks are not available in colors, or with dust covers and do not accept strain reliefs. Colors are approximate and for reference only.

SL Series Modular Jack Accessories

A

B

C

- Provide strain relief for terminated cables in the Work Area
- Strain reliefs are for use with unshielded SL Series Modular Jacks only
- Dust cover protect contacts from dust, build-up and contaminants which can affect performance
- RJ45 Dust Covers:
  - 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

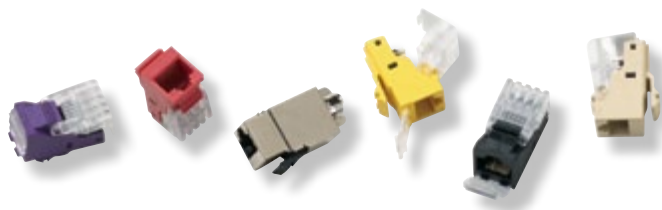| Description	Used with	Color	Figure	Part Number
Bend-Limiting Strain Relief	Category 5E	Blue	A	1375200-2
Strain Relief	Category 6, 5E, 3	Clear	B	1375157-1
RJ45 Dust Cover	8-Position Modular Jacks	Black	C	2111285-2

SL Series Modular Couplers

- Compact couplers for two modular plugs
- Snaps into 0.585 in x 0.790 in cut-outs
- Wired one-to-one

Description	Shielding	Figure	Part Number
Category 5e SL Coupler	Unshielded	A	2111121-1
	Shielded		2111122-1

Category 5e Products
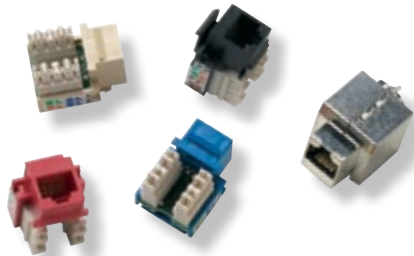
SL Series Toolless Category 5e Modular Jacks

- ◉ Thin profile improves outlet density
- ◉ Terminate with common pliers
- ◉ Hinged stuffer cap simplifies assembly
- ◉ Jacks available with integral dust covers
- ◉ Universal wiring label permits wiring to T568A or T568B

- ◉ Meets or exceeds all TIA and ISO component performance requirements
- ◉ UL Listed: E81956
- ◉ 8-Position RJ45 Modular Jacks for 1, 2, 3 and 4-Pair applications
- ◉ RoHS compliant

Shielding	Cable Entry	Jack Color	Without Dust Cover	With Dust Cover
Unshielded	90° (Side) or 180° (Rear)	Almond	1116604-1	1339189-1
		Black	1116604-2	1339189-2
		White	1116604-3	1339189-3
		Gray	1116604-4	1339189-4
		Orange	1116604-5	1339189-5
		Blue	1116604-6	1339189-6
		Red	1116604-7	1339189-7
		Yellow	1116604-8	1339189-8
		Green	1116604-9	1339189-9
		Violet	1-1116604-0	1-1339189-0
		Electrical Ivory	1-1116604-1	1-1339189-1
Shielded	180° (Rear)	Black	1339015-1*	–

*Note: Shielded jacks are not available in colors, or with dust covers and do not accept strain reliefs. Colors are approximate and for reference only.

110Connect Category 5e Modular Jacks

- ◉ Category 5E Modular Jacks meet or exceed TIA and ISO requirements
- ◉ Universal wiring label permits termination to either T568A or T568B
- ◉ UL Listed: E81956

- ◉ Can be terminated with standard 110 punch-down tools, see Chapter 22
- ◉ RoHS compliant
- ◉ The bulk option is 25 jacks per bag, 4 bags per carton

Shielding	Jack Color	Standard Packaging	Bulk Packaging
Unshielded	Almond	406372-1	2-406372-1
	Black	406372-2	2-406372-2
	White	406372-3	2-406372-3
	Gray	406372-4	2-406372-4
	Orange	406372-5	2-406372-5
	Blue	406372-6	2-406372-6
	Red	406372-7	2-406372-7
	Yellow	406372-8	2-406372-8
	Green	406372-9	2-406372-9
	Violet	1-406372-0	3-406372-0
	Electrical Ivory	1-406372-1	3-406372-1
	Alpine White	1-406372-3	3-406372-3
Shielded	Black	1116515-1*	–

*Note: Shielded jacks are not available in colors, or with dust covers and do not accept strain reliefs. Colors are approximate and for reference only.

110Connect Stuffer Caps

- ◉ Available as an alternative termination method
- ◉ Provide additional strain relief
- ◉ Each stuffer cap accommodates 2 pairs

- ◉ For 110Connect Modular Jacks only
- ◉ Available in bags of 50

Description	Part Number
110Connect Stuffer Caps	569332-1

1-800-553-0938
http://www.ampnetconnect.com
AMP, AMP NETCONNECT, NETCONNECT, TE LOGO AND TYCO ELECTRONICS ARE TRADEMARKS.
OTHER PRODUCTS, LOGOS AND COMPANY NAMES MENTIONED HEREIN MAY BE TRADEMARKS OF THEIR RESPECTIVE OWNERS.

Tyco Electronics

Category 5e Products

Category 5e Modular Plugs

- Meets TIA and ISO requirements for component performance
- Modular plug tooling in Chapter 22
- Each kit includes:
  - Plug housing
  - Load bar
- Load bar helps maintain pair twist
- RoHS compliant
- Molded with UL94V-0 Plastic
- UL Listed: E81956
- Modular Plug to Die Set cross reference on page 3

Description	AWG	Insulation O.D. in (mm)	Cable Jacket O.D. in (mm)	Conductor	Quantity per Box 500	100	25
Unshielded	24	≤ 0.039 (0.99)	0.190 (4.83) – 0.220 (5.59)	Stranded	5-558530-2	5-558530-3	5-558530-4
	28 – 24	0.035 (0.89) – 0.039 (0.99)	0.190 (4.83) – 0.200 (5.08)	Solid	5-569278-2	5-569278-3	5-569278-4
Shielded	26 – 24	0.035 (0.89) – 0.039 (0.99)	0.190 (4.83) – 0.200 (5.08)	Stranded	5-569552-2	5-569552-3	5-569552-4
				Solid	5-569550-2	5-569550-3	5-569550-4

Modular Plug Boots

- For use with Category 3, 5 and 5e
- 8-position modular plugs
- Accept cables with a maximum diameter of 0.210 in (5.33 mm)

Description	Color	Part Number
Modular Plug Boots	Black	569875-1
	Almond	569875-2
	Red	569875-3
	Green	569875-4
	Blue	569875-5
	Yellow	569875-6
	Orange	569875-7
	White	569875-8
	Violet	569875-9
	Gray	1-569875-0

NOTE: Colors are approximate and for reference only.

External Strain Reliefs For Modular Plugs

- Metal strain relief that positively engages plug housing
- PRO-CRIMPER Tool and Die Set in Chapter 22
- For use with 8-position Category 3, 5 and 5e Modular Plugs only
- RoHS compliant

Description	Part Number
Not for use with Modular Plug Boots	558527-1
For use with Modular Plug Boots	558527-3

Field Terminable 110Connect XC Patch Plugs

- 24 AWG stranded conductors
- Verified for Category 5e performance
- Available in various pair combinations
- Factory-terminated cable assemblies in on page 9

Description	Part Number
1-Pair	569477-1
2-Pair	569478-1
4-Pair	569480-1

Tyco Electronics

Category 5e Products

Category 5e Patch Cable Assemblies

Booted, Unshielded

Bootless, Unshielded

- ⊙ Meets or exceeds Category 5e performance standards
- ⊙ Unshielded cable assemblies contain 4-Pair stranded 24 AWG conductors
- ⊙ Shiwelded cable assemblies contain 4-Pair stranded 26 AWG conductors

- ⊙ Non-Plenum (CM rated)
- ⊙ Booted cable assemblies include color-matched snagless boots
- ⊙ Universal wiring (T568A/T568B)
- ⊙ Lead-Free (no heavy metals)
- ⊙ Jacket colors are available as listed

Length	Shielding	Boot	Black	Gray	Blue	Green	Red	White	Yellow	Orange	Violet
2 ft [0.61 m]	Unshielded	Booted	406483-2	219241-2	219242-2	219243-2	219244-2	219245-2	219246-2	219184-2	1499094-2
		Bootless	1499110-2	1499111-2	1499112-2	1499113-2	1499114-2	1499115-2	1499116-2	1499117-2	1499118-2
	Shielded	Booted	–	1499479-2	–	–	–	–	–	–	–
3 ft [0.91 m]	Unshielded	Booted	406483-3	219241-3	219242-3	219243-3	219244-3	219245-3	219246-3	219184-3	1499094-3
		Bootless	1499110-3	1499111-3	1499112-3	1499113-3	1499114-3	1499115-3	1499116-3	1499117-3	1499118-3
	Shielded	Booted	–	1499479-3	–	–	–	–	–	–	–
4 ft [1.22 m]	Unshielded	Booted	406483-4	219241-4	219242-4	219243-4	219244-4	219245-4	219246-4	219184-4	1499094-4
		Bootless	1499110-4	1499111-4	1499112-4	1499113-4	1499114-4	1499115-4	1499116-4	1499117-4	1499118-4
	Shielded	Booted	–	1499479-4	–	–	–	–	–	–	–
5 ft [1.52 m]	Unshielded	Booted	406483-5	219241-5	219242-5	219243-5	219244-5	219245-5	219246-5	219184-5	1499094-5
		Bootless	1499110-5	1499111-5	1499112-5	1499113-5	1499114-5	1499115-5	1499116-5	1499117-5	1499118-5
	Shielded	Booted	–	1499479-5	–	–	–	–	–	–	–
6 ft [1.83 m]	Unshielded	Booted	406483-6	219241-6	219242-6	219243-6	219244-6	219245-6	219246-6	219184-6	1499094-6
		Bootless	1499110-6	1499111-6	1499112-6	1499113-6	1499114-6	1499115-6	1499116-6	1499117-6	1499118-6
	Shielded	Booted	–	1499479-6	–	–	–	–	–	–	–
7 ft [2.13 m]	Unshielded	Booted	406483-7	219241-7	219242-7	219243-7	219244-7	219245-7	219246-7	219184-7	1499094-7
		Bootless	1499110-7	1499111-7	1499112-7	1499113-7	1499114-7	1499115-7	1499116-7	1499117-7	1499118-7
	Shielded	Booted	–	1499479-7	–	–	–	–	–	–	–
8 ft [2.44 m]	Unshielded	Booted	406483-8	219241-8	219242-8	219243-8	219244-8	219245-8	219246-8	219184-8	1499094-8
		Bootless	1499110-8	1499111-8	1499112-8	1499113-8	1499114-8	1499115-8	1499116-8	1499117-8	1499118-8
	Shielded	Booted	–	1499479-8	–	–	–	–	–	–	–
9 ft [2.74 m]	Unshielded	Booted	406483-9	219241-9	219242-9	219243-9	219244-9	219245-9	219246-9	219184-9	1499094-9
		Bootless	1499110-9	1499111-9	1499112-9	1499113-9	1499114-9	1499115-9	1499116-9	1499117-9	1499118-9
	Shielded	Booted	–	1499479-9	–	–	–	–	–	–	–
10 ft [3.05 m]	Unshielded	Booted	1-406483-0	1-219241-0	1-219242-0	1-219243-0	1-219244-0	1-219245-0	1-219246-0	1-219184-0	1-1499094-0
		Bootless	1-1499110-0	1-1499111-0	1-1499112-0	1-1499113-0	1-1499114-0	1-1499115-0	1-1499116-0	1-1499117-0	1-1499118-0
	Shielded	Booted	–	1-1499479-0	–	–	–	–	–	–	–
12 ft [3.66 m]	Unshielded	Booted	1-406483-2	1-219241-2	1-219242-2	1-219243-2	1-219244-2	1-219245-2	1-219246-2	1-219184-2	1-1499094-2
		Bootless	1-1499110-2	1-1499111-2	1-1499112-2	1-1499113-2	1-1499114-2	1-1499115-2	1-1499116-2	1-1499117-2	1-1499118-2
	Shielded	Booted	–	1-1499479-2	–	–	–	–	–	–	–
14 ft [4.27 m]	Unshielded	Booted	1-406483-4	1-219241-4	1-219242-4	1-219243-4	1-219244-4	1-219245-4	1-219246-4	1-219184-4	1-1499094-4
		Bootless	1-1499110-4	1-1499111-4	1-1499112-4	1-1499113-4	1-1499114-4	1-1499115-4	1-1499116-4	1-1499117-4	1-1499118-4
	Shielded	Booted	–	1-1499479-4	–	–	–	–	–	–	–
15 ft [4.57 m]	Unshielded	Booted	1-406483-5	1-219241-5	1-219242-5	1-219243-5	1-219244-5	1-219245-5	1-219246-5	1-219184-5	1-1499094-5
		Bootless	1-1499110-5	1-1499111-5	1-1499112-5	1-1499113-5	1-1499114-5	1-1499115-5	1-1499116-5	1-1499117-5	1-1499118-5
	Shielded	Booted	–	1-1499479-5	–	–	–	–	–	–	–
16 ft [4.88 m]	Unshielded	Booted	1-406483-6	1-219241-6	1-219242-6	1-219243-6	1-219244-6	1-219245-6	1-219246-6	1-219184-6	1-1499094-6
		Bootless	1-1499110-6	1-1499111-6	1-1499112-6	1-1499113-6	1-1499114-6	1-1499115-6	1-1499116-6	1-1499117-6	1-1499118-6
	Shielded	Booted	–	1-1499479-6	–	–	–	–	–	–	–
20 ft [6.10 m]	Unshielded	Booted	2-406483-0	2-219241-0	2-219242-0	2-219243-0	2-219244-0	2-219245-0	2-219246-0	2-219184-0	2-1499094-0
		Bootless	2-1499110-0	2-1499111-0	2-1499112-0	2-1499113-0	2-1499114-0	2-1499115-0	2-1499116-0	2-1499117-0	2-1499118-0
	Shielded	Booted	–	2-1499479-0	–	–	–	–	–	–	–
25 ft [7.62 m]	Unshielded	Booted	2-406483-5	2-219241-5	2-219242-5	2-219243-5	2-219244-5	2-219245-5	2-219246-5	2-219184-5	2-1499094-5
		Bootless	2-1499110-5	2-1499111-5	2-1499112-5	2-1499113-5	2-1499114-5	2-1499115-5	2-1499116-5	2-1499117-5	2-1499118-5
	Shielded	Booted	–	2-1499479-5	–	–	–	–	–	–	–
30 ft [9.14 m]	Unshielded	Booted	3-406483-0	3-219241-0	3-219242-0	3-219243-0	3-219244-0	3-219245-0	3-219246-0	3-219184-0	3-1499094-0
		Bootless	3-1499110-0	3-1499111-0	3-1499112-0	3-1499113-0	3-1499114-0	3-1499115-0	3-1499116-0	3-1499117-0	3-1499118-0
	Shielded	Booted	–	3-1499479-0	–	–	–	–	–	–	–
40 ft [12.19 m]	Unshielded	Booted	4-406483-0	4-219241-0	4-219242-0	4-219243-	4-219244-0	4-219245-0	4-219246-0	4-219184-0	4-1499094-0
		Bootless	4-1499110-0	4-1499111-0	4-1499112-0	4-1499113-	4-1499114-0	4-1499115-0	4-1499116-0	4-1499117-0	4-1499118-0
	Shielded	Booted	–	4-1499479-0	–	–	–	–	–	–	–
50 ft [15.24 m]	Unshielded	Booted	5-406483-0	5-219241-0	5-219242-0	5-219243-	5-219244-0	5-219245-0	5-219246-0	5-219184-0	5-1499094-0
		Bootless	5-1499110-0	5-1499111-0	5-1499112-0	5-1499113-	5-1499114-0	5-1499115-0	5-1499116-0	5-1499117-0	5-1499118-0
	Shielded	Booted	–	5-1499479-0	–	–	–	–	–	–	–

NOTE: Jacket colors are approximate and for reference only.

1-800-553-0938
http://www.ampnetconnect.com

Tyco Electronics

Category 5e Products

Ethernet Crossover Cable Assemblies

- ⊙ Category 5e crossover cables are compatible with IEEE 802.3 10/100BASE-TFor other lengths and wiring diagrams, see Customer Drawing
- ⊙ Lead-Free (no heavy metals)

Performance	Cable	Boot Color	Length	Part Number
Category 5e	White	Black	3 ft [0.91 m]	1499151-3
			5 ft [1.52 m]	1499151-5
			10 ft [3.05 m]	1-1499151-0
			12 ft [3.66 m]	1-1499151-2
			15 ft [4.57 m]	1-1499151-5

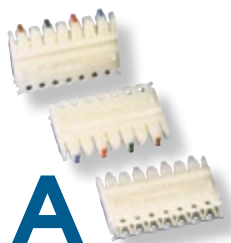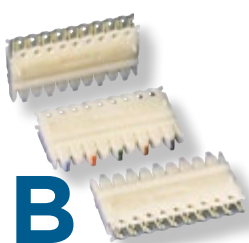## 110Connect XC Category 5e Cable Assemblies

RJ45 Plug

110Connect XC Plug

- ⊙ Meets or exceeds Category 5e performance requirements
- ⊙ 4-Pair stranded unshielded 24 AWG conductors
- ⊙ Modular RJ45 plugs feature color-matched snagless boots
- ⊙ 110Connect XC to RJ45 patch cable assemblies must be selected to match wiring pattern of work area outlet wiring
- ⊙ Non-plenum (CM rated)
- ⊙ Universal wiring (T568A/T568B)
- ⊙ Lead-Free (no heavy metals)

Connector End A	End B	Pair Count	Wiring	2 ft [0.61 m]	4 ft [1.22 m]	6 ft [1.83 m]	8 ft [2.44 m]	10 ft [3.05 m]
110Connect XC	110Connect XC	1	–	569523-2	569523-4	569523-6	569523-8	1-569523-0
		2	–	569524-2	569524-4	569524-6	569524-8	1-569524-0
		4	–	569526-2	569526-4	569526-6	569526-8	1-569526-0
	RJ45	4	T568A	569527-2	569527-4	569527-6	569527-8	1-569527-0
		4	T568B	569528-2	569528-4	569528-6	569528-8	1-569528-0
		2	T568A, 10/100BASE-T	569685-2	569685-4	569685-6	569685-8	1-569685-0
		2	T568B, 10/100BASE-T	569669-2	569669-4	569669-6	569669-8	1-569669-0

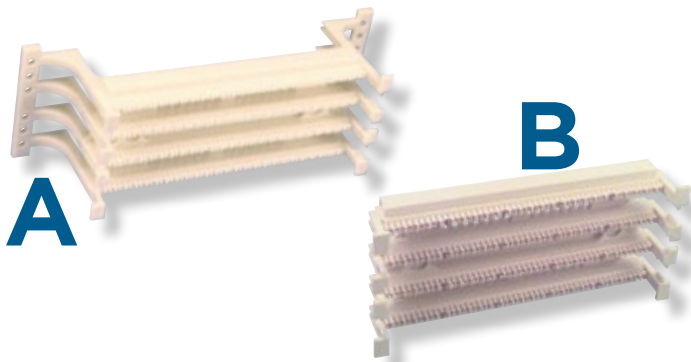## 110Connect XC Category 5e Connecting Blocks

A

B

- ⊙ Utilize double-ended insulation displacement contacts (IDC) that terminate 24-22 AWG solid or stranded conductors with a maximum O.D. of .063 inch
- ⊙ Available in 4- and 5-pair sizes with the appropriate color coding
- ⊙ Supports applications from voice to high-speed data
- ⊙ Meets or exceeds the TIA specifications for Category 5e
- ⊙ All components compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter XXX), the
- ⊙ KRONE Tool and the 788J1 5-pair tool
- ⊙ UL listed
- ⊙ CSA and Austel approved

Description	Pair Count	Figure	Part Number
Connecting Blocks	4	A	558401-1
	5	B	558402-1

1-800-553-0938
http://www.ampnetconnect.com

03-09

AMP, AMP NETCONNECT, NETCONNECT, TE LOGO AND TYCO ELECTRONICS ARE TRADEMARKS.
OTHER PRODUCTS, LOGOS AND COMPANY NAMES MENTIONED HEREIN MAY BE TRADEMARKS OF THEIR RESPECTIVE OWNERS.

Tyco Electronics

Category 5e Products
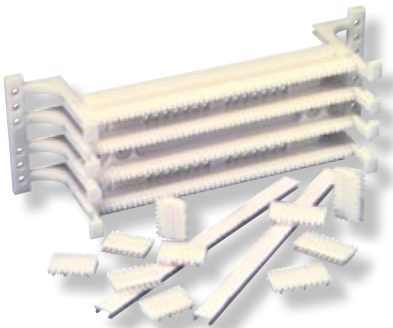
110Connect XC Category 5e Wiring Blocks

A
B

- Accept 24-22 AWG conductor
- Blocks are available in 50, 100 and 300-pair sizes with legs for blackboard mounting
- Labels available, see Chapter 17
- Supports applications from voice to high-speed data
- Offers a reliable and economical high-density system

- Meets or exceeds the TIA specifications for Category 5e
- All components are compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter 22), the KRONE Tool and the 788J1 5-pair tool
- UL listed
- CSA and Austel approved

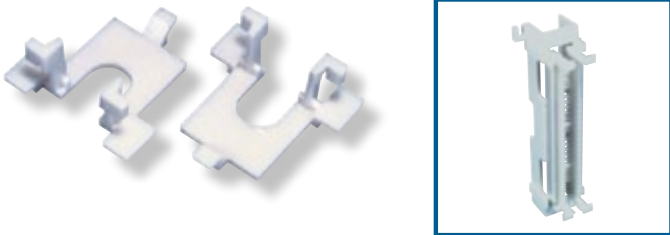| Description	Legs	Pair Count	Figure	Part Number
Wiring Blocks	With	50		558841-1
		100	A	558842-1
		300		558843-1
	Without	50		558839-1
		100	B	558840-1

110Connect XC Category 5e Kits

- Kits include wiring blocks with legs, connecting blocks, designation strips and white labels for the pair counts identified
- Additional labels available, see Chapter 17
- Supports applications from voice to high-speed data
- Offers a reliable and economical high-density system

- Meets or exceeds the TIA specifications for Category 5e
- All components compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter 22), the KRONE Tool and the 788J1 5-pair tool
- UL listed
- CSA and Austel approved

Pair Count	Included 4-Pair Connecting Blocks	Included 5-Pair Connecting Blocks	Part Number
50	10	2	569433-1
	0	10	569434-1
100	20	4	569439-1
	0	20	569440-1
300	60	12	569445-1
	0	60	569446-1

Adapter for 89B Bracket

- Used to mount a 50-pair 110Connect XC wiring block on a 89B bracket
- Two adapters are required for each assembly

- Wiring blocks and 89B brackets purchased separately

Description	Part Number
Adapter for 89B Bracket	558838-1

Tyco Electronics

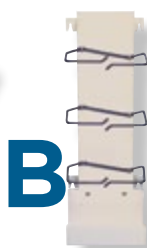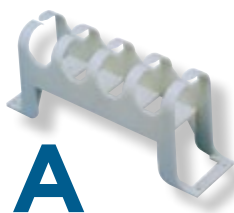## 110Connect XC Category 5e Cross-Connect Distribution Frame Kits

- Reduce time needed for planning and installing a cross-connect on a backboard
- Include metal back frame, wiring blocks, connecting blocks, cable management troughs, designation strips and appropriate hardware
- Quick and easy installation

- Available in 300 and 900-pair sizes with 4 and 5-pair connecting blocks
- Supports applications from voice to high-speed data
- Offers a reliable and economical high-density system
- Meets or exceeds the TIA specifications for Category 5e

- All components compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter 22), the
- KRONE Tool and the 788J1 5-pair tool
- UL listed
- CSA and Austel approved

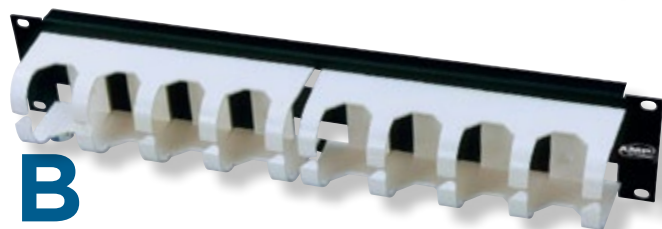| Pair Count	Included 4-Pair Connecting Blocks	Included 5-Pair Connecting Blocks	Part Number
300	60	12	569854-1
	0	60	569855-1
900	120	24	569857-1
	0	120	569858-1

110Connect XC Cable Management

- Cable Management Frames and Cable Management Rings provide high capacity storage of patch cables and jumper wire
- Cable Management Trough provides horizontal management and organization of patch cables and jumper wire

- Troughs are available with or without legs
- Suitable for mounting directly to a plywood backboard
- Quick and easy installation

Description	Color	Option	Figure	Part Number
Cable Management Trough	White	With Legs	A	569389-1
		Without Legs		569597-1
Vertical Cable Management Frame	White	300-Pair	B	569851-1
		900-Pair		569852-1
Cable Management Rings	Black	5.7" W	C	569431-1
		8.5" W		569599-1

110Connect XC Category 5e Cross-Connect Rack Mount Panel

- For mounting cross-connect hardware on a 19" rack
- Wiring block and cable management panels available
- Labels available, see Chapter 17
- Connecting blocks and plastic label covers purchased separately, see Chapter 17
- Rack Mount Cable Management Panels provide horizontal management and organization of patch cables and jumper wire
- Supports applications from voice to high-speed data

- Offers a reliable and economical high-density system
- Meets or exceeds the TIA specifications for Category 5e
- All components compatible with industry standard AMP NETCONNECT Impact Tools (see Chapter 22), the KRONE Tool and the 788J1 5-pair tool
- UL listed
- CSA and Austel approved

Description		Pair Count	Height	Width	Figure	Part Number
Rack Mount Panel Kits	110Connect XC Cross-Connect	100	1U (1.75 in)	19 in		558635-1
		200	2U (3.50 in)	19 in	A	558637-1
		400	5U (8.75 in)	19 in		558639-1
	Cable Management Trough	–	2U (3.50 in)	19 in	B	406641-1

Tyco Electronics

Category 5e Products

Category 5e Patch Panels

03

- For multimedia (no included connectivity) patch panels, see Chapter 15
- Meet or exceed TIA and ISO Category 5e/Class D component performance requirements
- Universal wiring – ports may be terminated to T568A or T568B
- Replacement labels and clear label covers for standard density panels are in Chapter 17

- 110Connect termination patch panels may be terminated using single-wire or 5-pair tools
- Angled and integrated cable managment panels allow the elimination of horizontal cable management for higher rack densities and ease of cable dress
- 12-Port Mini Patch Panels mount vertically on included 89D bracket

- SL Series termination patch panels:
  - Feature individually replaceable ports
  - Are packaged unloaded with jacks bagged separately for termination with SL Series jack termination tool, see Chapter 22

- 48-port 1U patch panels:
  - Accommodate adhesive labels or icons for port identification
  - Are supplied with 48 specially developed jacks, bagged separately for termination with SL Series jack termination tool (Individual jacks included with these panels can not be purchased separately. Jacks supplied with panel assembly only.)

F Standard

G Standard

C Angled

D Angled

F Angled

G Angled

E Standard

D Integrated Cable Management

E Angled

SL Series Panels

Back Detail

Front Detail

A

110Connect Panels

Back Detail

Front Detail

B

Port Count	Height	Width	Termination Style	Figure	Standard	Angled	Integrated Cable Management
12	10.00 in	2.3 in	SL Series	A	1479153-2	–	–
			110Connect	B	406390-1	–	–
	1U (1.75 in)	19.0 in	110Connect		406981-1	–	–
24	1U (1.75 in)	19.0 in	SL Series	C	1479154-2	1499602-2	–
			110Connect	D	406330-1	1499604-1	1479206-1
48	1U (1.75 in)	19.0 in	Individual Jack*	E	1933457-1*	1933657-1*	–
	2U (3.50 in)	19.0 in	SL Series	F	1479155-2	1499603-2	–
			110Connect	G	406331-1	1499605-1	–
96	4U (7.00 in)	19.0 in	SL Series		1479156-2	–	–
			110Connect		406332-1	–	–

*1U 48-port panel does not accept standard SL Series jacks. Included jacks are compatible with the SL Series termination tool.

Tyco Electronics

Need more information?

Visit our web site at http://www.ampnetconnect.com

- ⊙ Instruction Sheets
- ⊙ Cut Sheets
- ⊙ Authorized NETCONNECT Design and Installation (ND&I) contractor listings
- ⊙ Data Sheets
- ⊙ White Papers
- ⊙ Authorized AMP NETCONNECT product distributor listings
- ⊙ AMP NETCONNECT product sales engineer contact listings

Send us an e-mail at networking.help@tycoelectronics.com

Give our customer service center (USA) a call: 1-800-553-0938

- ⊙ Technical Support
- ⊙ Order Literature
- ⊙ Product Samples Obtain a Quote
- ⊙ Place an Order
- ⊙ Product Information
- ⊙ Tyco Electronics Fax Service

Get Training - AMP NETCONNECT Product Training Services: 1-800-331-9857 ext 63809

- ⊙ Designing LAN Cabling
- ⊙ Installing and Connectorizing LAN Cabling
- ⊙ Certifying and Troubleshooting LAN Cabling

Globally Connected for all your cabling needs

Americas
Argentina	54-11-4733-2200
Brazil	55 11 2103-6120
Canada	905-475-6222
Chile	56-2-3450347
Colombia	57-1-3198999
Mexico	52-55-1106-0800
Peru	51-1-3197900
United States	1-800-553-0938
Venezuela	57-1-3198999

Asia/Pacific
Australia	
Sydney	61-2-9554-2600
Melbourne	61-3-9389-5677
Brisbane	61-7-3623-0340
China	
Beijing	86-10-65816181
Chongqing	86-23-89808860
Guangzhou	86-20-86672071
Hong Kong	852-2735-1628
Shanghai	86-21-24071588
Shenzhen	86-755-25154700
Wuhan	86-27-68850166
Indonesia	6221-526-7852
Japan	
Kawasaki	81-44-844-8071
Osaka	81-6-6533-8240
Korea	82-2-3274-0535
Malaysia	603-705-3055
New Zealand	
Auckland	64-9-634-4580
Wellington	64-4-384-1495
Philippines	632-848-0171
Singapore	65-482-0311
Taiwan	886-2-87682788
Thailand	66-2-955-0500
Vietnam	848-9305-546

Europe/Middle East/Africa
Armenia	374-10-381083	Lithuania	370-5-213-1402
Austria	43-1-90560-1204	Luxemburg	31-73-6246-246
Azerbaijan	49-6103-709-3301	Netherlands	31-73-6246-246
Belarus	375-172374794	Norway	47-66-77-88-99
Belgium	32-16-35-2190	Poland	48-22-4576-700
Bulgaria	359-2-971-2152	Portugal	351-961-377-331
Cyprus	30-210-9370-396	Romania	40-21-311-3479
Czech Republic	420-5-41-162-112	Russia	7-495-790-7902
Denmark	45-70-15-52-00	Slovakia	420-5-41-162-112
Egypt	20-2-2419-2334	Slovenia	385-1-3666-733
Estonia	358-95-12-34-20	Spain	34-93-291-0330
Finland	358-95-1234-20	Netherlands	31-73-6246-211
France	33-1-3420-212	Norway	47-66-77-88-99
Georgia	49-6103-709-3301	Poland	48-22-4576-700
Germany	49-6103-709-1547	Russia	7-095-926-55-06
Greece	30-210-9370-396	Spain	34-93-291-0330
Hungary	36-1-289-1007	Sweden	46-8-5072-5000
India	91-80-4011-5000	Switzerland	41-71-447-0447
Ireland	44-208-420-8140	Turkey	90-212-281-8181
Italy	39-011-4012-111	U.A.E. (United Arab Emirates)	971-4-3210201
Kazasthan	7-327-244-5875	Ukraine	380-44-206-226
Latvia	370-5-213-14-02	United Kingdom	44-208-420-8140

For Eastern European Countries not shown 49-6103-709-1166
For Middle East/African Countries not shown 33-1-3420-2122
For BeNeLux 31-73-6246-246

Tyco Electronics

Tyco Electronics Corporation AMP NETCONNECT Global Offices:

North America
Harrisburg, PA, USA
Ph: +1-800-553-0938
Fx: +1-717-986-7406

Europe
Kessel-Lo, Belgium
Ph: +32-16-352-300
Fx: +32-16-352-353

Mid East & Africa
Cergy-Pontoise, France
Ph: +33-1-3420-2122
Fx: +33-1-3420-2268

Latin America
Buenos Aires, Argentina
Ph: +54-11-4733-2200
Fx: +54-11-4733-2282

Asia
Hongkong, China
Ph: +852-2735-1628
Fx: +852-2735-1625

Pacific
Sydney, Australia
Ph: +61-2-9407-2600
Fx: +61-2-9407-2519

Tyco Electronics Corporation AMP NETCONNECT North American Offices:

United States
Greensboro, NC, USA
Ph: +1-800-553-0938
Fx: +1-717-986-7406

Canada
Markham, Ontario, Canada
Ph: 905-475-6222
Fx: 905-474-5519

AMP NETCONNECT™

Tyco Electronics

Our commitment. Your advantage.