



Undercarpet Cabling Products

Undercarpet Power, Voice and Data Distribution

TE Connectivity Enterprise Networks

Warranty

POWER DISTRIBUTION PRODUCT COVERAGE*

TE Connectivity warrants that all Undercarpet cabling system products within this catalog will be delivered free from defects in material and workmanship. TE Connectivity will repair or replace the product when*:

UNDERCARPET POWER CABLING SYSTEM WARRANTY:

90-day for the Undercarpet power components, providing they are installed per the applicable instruction sheet and the overall system is installed in accordance with the TE AMP NETCONNECT Undercarpet Cabling Planning and Installation Manual.

UNDERCARPET COMMUNICATIONS CABLING SYSTEM WARRANTY:

25-years system performance provided the Undercarpet communications cabling system is installed by a TE Connectivity authorized Network Design & Installation (ND&I) contractor or a 25-year component warranty if installed by a TE AMP NETCONNECT registered contractor.

WHO'S COVERED

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

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

Or call: 1-800-553-0938

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

People & Products to Answer the Cabling Challenge.

Network communications infrastructure implementations are complicated regardless of the business you're in. You need the right resources, products and services to achieve the high performance, flexible environment your business and end users demand. At TE Connectivity, we offer custom network infrastructure cabling products and solutions that can help you now and for years to come. Our in-depth technical expertise combined with our more than 70 years in the industry has made us the leading provider of premise cabling solutions. TE has one of the most diverse and complete product sets for a wide range of network needs including power, data, voice, video, IP and more.

More than just the technology you need, TE helps ensure the solutions are effectively and efficiently installed by working with our distributors and customers in a hands-on design process. You get the solutions you need when and where you need them and have them installed through our network of certified installation contractors.

Optimize your network performance, increase productivity and benefit from a more immediate return on your infrastructure investment with TE Enterprise Networks solutions that are engineered smarter, faster and better.

*Some conditions may apply. Contact TE customer service for more information at 800-553-0938.

Undercarpet Cabling

Undercarpet Power, Voice and Data Distribution

The AMP NETCONNECT undercarpet cabling system is a low profile, flexible system that makes even the most complex cabling job in office, retail, or gaming environments simple, economical and beautifully invisible. The cabling to provide power, voice and data services to your equipment can be handled with ease - from desk lights to network connections. And it's interchangeable! If changes are required after the initial installation, don't worry about the cabling. You can change it to fit your new requirements just about as easily as you move the furniture or retail display fixtures.

Take up a few sections of carpet squares, change the routing of the undercarpet cables and relocate the floor fittings. Presto! You're back in business. With this system, all your power, voice and data networks can be routed virtually anywhere under the carpet without the restrictions encountered with under-floor ducts, walls, partitions and power/data poles.

Facts

- Ideal for retail, gaming or office applications
- Economical alternative to power poles or trenching
- Eliminates the need to disturb or access adjacent stores in shopping locations to gain access to pull cables
- Provides better control of quality and work schedule
- UL Listed and CSA Certified
- Approved for use per NEC Article 324 and CEC Article 12-800
- Power available in 3 and 5 circuit design
- Isolated ground circuit cable and components available
- Category 5e and 6 cable to support voice/data applications
- Designed for use with carpet squares for accessibility to make system changes easy as requirements change
- Pre-packaged kits available for "store-in-a-box" concept
- Components design provides simple termination from undercarpet cable to round wire
- Suitable for use in slab-on-grade, first floor areas
- Use in open lobby, customer reception, or other areas whertraditional cabling methods

Undercarpet Cabling System, Layout and Planning Manual

- Everything you need to know to make your installation a success
- Example layouts, usage diagrams, interconnection instructions and more
- Get a free, downloadable copy today by visiting: <http://www.te.com/power>

Description	Part Number
Undercarpet Cabling System, Layout and Planning Manual	409-5566
Undercarpet Cabling Installation Video	1773443-5

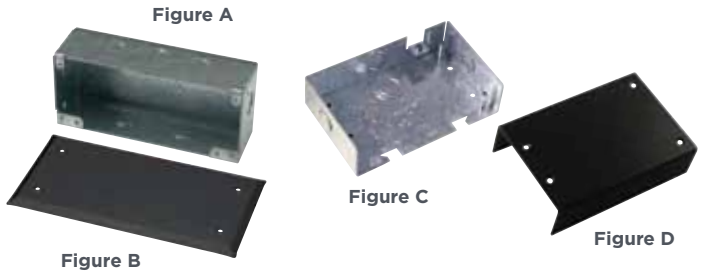


Undercarpet Cabling

Undercarpet Power, Voice and Data Distribution

Transition Boxes and Covers

- Holds transition block used to transition from round cable to undercarpet power cable
- Power transition block must be ordered separately
- Transition boxes may be used with communications transition blocks
- Transition boxes and covers can be ordered separately or as a kit



Mounting	Component	Figure	Color	Part Numbers
Flush, Wall Mounting	Kit (Includes Box and Cover)	A & B	Black	1375045-1
			Gray	1375045-3
	Box	A	-	554805-1
	Cover	B	Black	1-553292-1
Surface, Wall Mounting	Kit (Includes Box and Cover)	C&D	Black	1375032-1
			Gray	1375032-3
	Box	C	-	1375033-1
	Cover	D	Black	1375034-1
			Gray	1375034-3

Power Transition Block

- Used to transition from round cable to 3 or 5-conductor undercarpet power cable



Description	Part Number
Power Transition Block	554862-1

Power Whip Kits

- Used to transition from 3 or 5-conductor undercarpet to standard, round power cable at locations away from walls
- Includes power transition block
- Accepts AMPINNERGY power entry or line entry cable assemblies for easy interface between systems
- Accepts 0.5 in [12.7mm] fitting for conduit



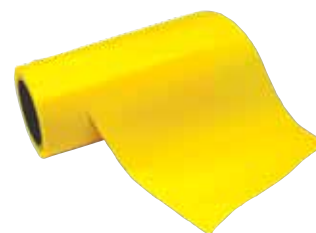
Description	Color	Part Number
Power Whip Kit	Black	554181-1
	Gray	554181-3

Undercarpet Cabling

Undercarpet Power, Voice and Data Distribution

Floor Preparation

- Yellow vinyl floor preparation
- Used with both 3 and 5-conductor undercarpet power cable
- Required for slab-on-grade installations
- Recommended for all installations
- Provides smooth, even surface for installation



Description	Width	Length on Roll	Part Number
Floor Preparation	8 in [203.2 mm]	50 ft [15.25 m]	554123-3
		100 ft [30.48 m]	554123-4
		250 ft [76.20 m]	554123-1

Top Shield

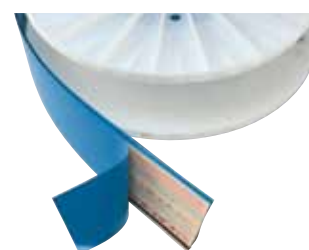
- Made of stainless steel
- Used with both 3 and 5-conductor undercarpet power cable
- Fully grounded component covering the entire system
- Protects the cable against penetration hazards
- Bonding clips are required to join two pieces of top shield together; bonding clips are sold separately (see page 4)



Description	Width	Length on Roll	Part Number
Top Shield	6.62 in [168.15 mm]	50 ft [15.25 m]	553536-3
		100 ft [30.48 m]	553536-4
		250 ft [76.20 m]	553536-1

Undercarpet Power Cable

- Available in 3 and 5-conductor versions
- Undercarpet cable with isolated ground is for use with sensitive computer equipment
- UL Listed, File Number: E73212
- CSA Certified, File Number: LR7189
- Flat conductor cable (Type FCC) permitted per Article 324 of the 2008 National Electrical Code (NEC) and Rule 12-800 of the Canadian Electrical Code (CEC)



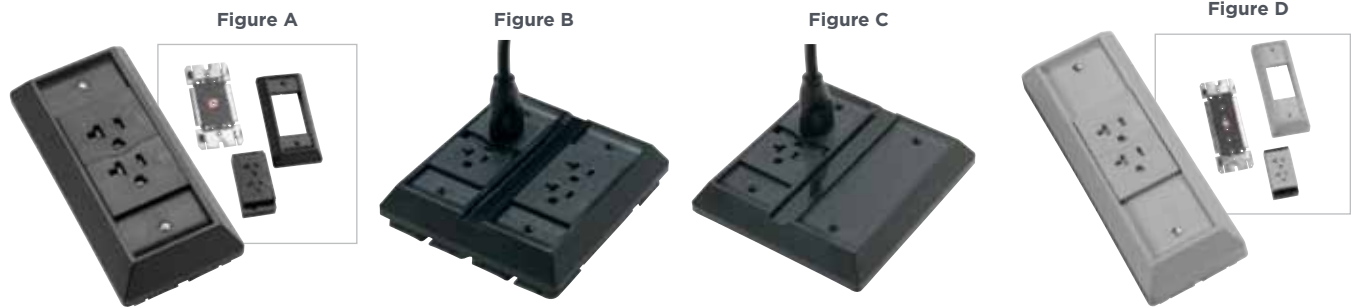
Ground	Conductor Size	Number of Conductors	Conductor Colors	Width inches [millimeters]	Part Number		
					50 ft [15.25 m]	100 ft [30.48 m]	250 ft [76.20 m]
Standard	12 AWG [3.32 mm ²]	3	White, Green, Black	2.77 [70.36]	3-553079-3	3-553079-4	3-553079-1
		5	White, Green, Black, Blue, Red	4.62 [117.35]	3-553239-3	3-553239-4	3-553239-1
Isolated	12 AWG [3.32 mm ²]	5	White, Green, Black, Red, Green/Yellow	4.62 [117.35]	3-553820-3	3-553820-4	3-553820-1

Undercarpet Cabling

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Direct Connecting Receptacle (DCR) Kits

- Available in 3 and 5-conductor versions
- Rated at 125 VAC, 20 A
- 5-Conductor DCR Kits require a circuit adapter to select which circuit the DCR will be used on

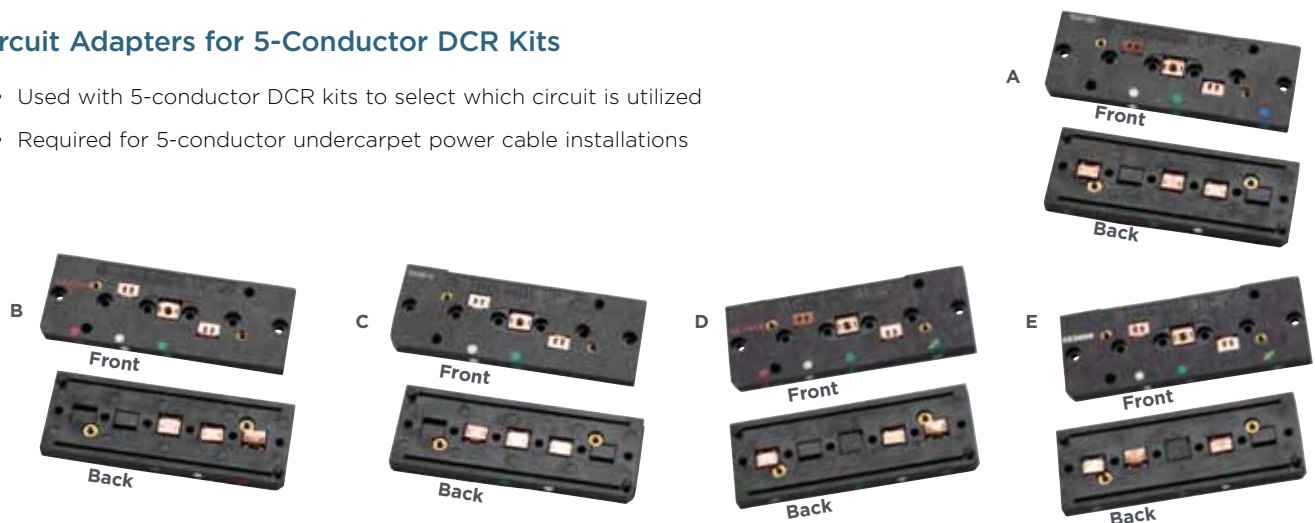


Description	Height	Duplex Receptacles	Figure	Color	Part Numbers
DCR Kit For Use With 3-Conductor Undercarpet Power Cable	1 in [25.4 mm]	Single	A	Black	553947-1
				Gray	553947-3
		Double	B	Black	554192-1
			Gray	554192-3	
DCR Kit For Use With 5-Conductor Undercarpet Power Cable	1.39 in [35.3 mm]	Single, with Dual Voice/Data Knockouts	C	Black	554142-1
				Gray	554142-3
DCR Kit For Use With 5-Conductor, Isolated Ground Undercarpet Power Cable	1.39 in [35.3 mm]	Single, Isolated Ground	D	Black	554186-1*
				Gray	554186-3*
				Black	558650-1*
				Gray	558650-3*

*NOTE: 5-conductor DCR kits require circuit adapters (ordered separately).

Circuit Adapters for 5-Conductor DCR Kits

- Used with 5-conductor DCR kits to select which circuit is utilized
- Required for 5-conductor undercarpet power cable installations



Description	Ground System	Circuit Selected	Figure	Part Numbers
5-Conductor Circuit Adapter	Standard	Blue	A	554188-1
		Red	B	554189-1
		Black	C	553910-1
	Isolated Ground	Red	D	553908-1
		Black	E	553909-1

Undercarpet Cabling

Undercarpet Power, Voice and Data Distribution

Power Cable Installation Tools and Accessories

- Taps allow additional undercarpet power runs to be added to undercarpet power circuits (connects two sections of undercarpet power cable)
- Splices allow two sections of undercarpet power cable to be joined to extend lengths of undercarpet power cable
- Taps and splices require the following components:
 - Tap or splice (one per undercarpet power cable conductor)
 - Hand tool
 - Insulator kit
 - Top shield
 - Top shield bonding clip (minimum of two per tap or splice)
 - Hold down tape
- Tap/splice hand tool crimps taps and splices securely to undercarpet power cable
- DCR removal requires floor fitting patch kit
- Floor fitting patch kit includes:
 - Insulator kit
 - Top shield
 - Top shield bonding clip
 - Hold down tape
- Spray adhesive is used to help seal the installation against residual moisture
- Hold down tape is used to install cable and top shield
- For more information on the use of these products see instruction sheets 409-5566 or 408-3150



Description	Package Quantity	Figure	Part Numbers
Individual Tap	15	A	553455-2
Individual Splice	15	B	553454-1
Tap/Splice Hand Tool	1	C	91392-1
Top Shield Bonding Clip*	50	D	553534-1*
	12		6-553534-1
Stainless Steel Bonding Clip†	50		554178-1†
Insulator Kit	5	E	556411-1
	12		553453-2
Spray Adhesive	1	F	6-553453-2
	1		553481-1
Hold Down Tape, 180 ft [45.72 m]	1	G	553481-1
Floor Fitting Patch Kit	1	H	1479151-1

*NOTE: Top shield bonding clips (553534) are required for turns, taps and splices.

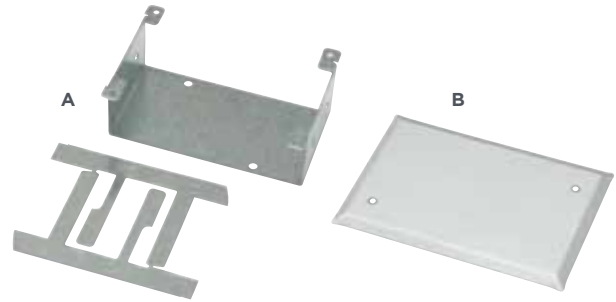
†NOTE: Stainless steel bonding clips (554178) can be used to replace lost DCR clips or for bonding top shield to transition boxes

Undercarpet Cabling

Undercarpet Power, Voice and Data Distribution

Communications Transition Boxes and Covers

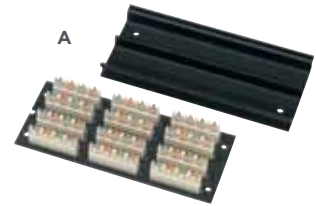
- Holds transition block used to transition from round cable to undercarpet communications cable
- Communications transition block must be ordered separately
- Transition boxes and covers must be ordered separately
- Power transition boxes may be used in place of communications transition boxes if desired; see part numbers 1375045 and 1375034 (Note: covers are not interchangeable)



Description	Figure	Part Numbers
Flush Wall Frame	A	553739-2
Flush Wall Frame Cover	B	553095-1

Communications Transition Blocks

- Transition blocks meet or exceed all TIA/ISO requirements for Enhanced Category 5 (Cat5e)/Class D or Category 6/Class E channel performance
- Transitions up to six (6) 4-pair cables
- 110Connect blocks may be terminated using standard 110-style punch-down tools (AMP NETCONNECT part number 1375308-1)



Description	TIA/EIA Category	Figure	Part Numbers
Universal Communications Transition Wiring Block	5e and 6	A	2111682-1

Punch-down tools

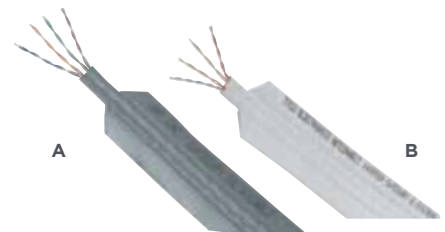
- Impact tool includes blade and can be used with all 110-style terminations including 110Connect, 610XC, and SL Series modular jacks



Description	Figure	Part Numbers
Pro Impact Tool with Extended-life Blade	A	1375308-1

Undercarpet Communications Cable

- Available on reels of 250 ft [76.2 m] and 100 ft [30.48 m]
- Exceeds TIA/EIA and ISO specifications for Categories specified
- Exceeds all requirements for Gigabit Ethernet
- Independently verified by Intertek ETL SEMKO testing services
- UL Listed; UL Type CMUC
- CSA Certified; CSA Type CMH
- Lead-free jacketing



Description	TIA/EIA Category	Figure	Part Numbers	
			100 ft [30.48 m]	250 ft [76.2 m]
Undercarpet Communications Cable, UTP, 4-Pair	5e	A	1499119-5	1499119-1
	6	B	1499539-5	1499539-1

Undercarpet Cabling

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Communications Cable Notching Tool

- For notching undercarpet communications cable to allow smooth turns in cable runs



Description	Part Numbers
Notching Tool for Undercarpet Communications Cable	1725698-1

Low Profile Communications Floor Fittings

- Modular jack kits are available separately, see below
- Matches the design of the DCR kits
- Accepts SL Series modular jacks or SL Series Multimedia Jacks & Inserts
- 2-port accepts up to two modular jacks
- 4-port accepts up to four modular jacks



Description		Figure	Part Numbers	
Low Profile Communications Floor Fittings	2-Port	Black	A	554206-1
		Gray		554206-3
	4-Port	Black	B	555287-1
		Gray		555287-3

Low Profile Multimedia Floor Fitting

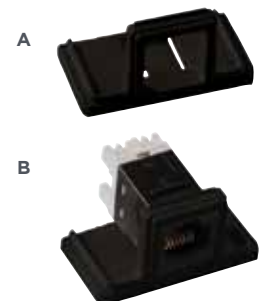
- Replicates the design of the DCR kits
- Mounts to floor with double sided tape (supplied), screws or studs (customer supplied)
- Cable entry from sides or bottom
- Can also accommodate up to four ACO (AMP Communications Outlet) single port installation kits (purchased separately)
- Accepts up to four SL Series modular jacks, or SL Series multimedia jacks or inserts
- Accepts up to two SVGA (or similar sized connector) connectors (ordered separately)



Description	Part Numbers
Low Profile Multimedia Floor Fitting Kit	1479542-1

Modular Jack Kits and Accessories

- Modular jack kits include black colored jack
- Bracket mounts to floor fitting with double sided tape (supplied)
- Bracket accepts SL Series modular and multimedia jacks and inserts
- Modular jacks meet or exceed TIA and ISO component performance requirements
- Modular jacks feature universal wiring labels to permit wiring to either T568A or T568B patterns
- For more SL Series modular jacks see Enterprise Networks Product Catalog #313948AE
- For SL Series termination Tooling see catalog #313948AE



Description	Jack Color	Figure	EIA/TIA Category	Part Numbers
Modular Jack Bracket	-	A	-	1499543-1
SL Series Modular Jack Bracket Kits	Black	B	Cat 5e	558054-1
			Cat 6	1933377-1

Undercarpet Cabling

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Surface Mount Floor Cover Kit

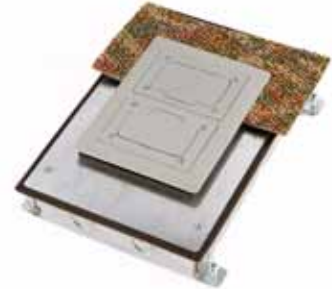
- Used as a surface-mount transition point between UnderCarpet and round cable
- Ideal for use over existing poke-thru fittings. Accommodates ½ or ¾ inch conduit fittings
- Can be used for UnderCarpet Power or Communications separately but not combined
- 2 inches high, 14 inches long, 11.25 inches wide
- Must order surface mount box (1375033-1) separately
- Transition blocks for power and communications not included



Description	Color	Part Numbers
Surface Mount Floor Cover Kit	Black	1479542-1

Flush Floor Outlet Box Kits

- Flush mount outlet alternative to DCRs
- Intended for use in concrete floors
- Used for UnderCarpet power or communications separately but not combined in the same box
- Maybe used as a transition point (1375130-1)
- Available with or without outlet covers. Designed to accept Thomas and Betts metallic or non-metallic floor box covers (640 and 840 Series)
- 2.5 inches deep, 12 inches long, 8 inches wide
- Duplex power or communications jacks not included



Description	Part Numbers
1-Gang, Flush Floor Outlet Box (outlet covers not included)	1375130-1
2-Gang, Flush Floor Outlet Box (outlet covers not included)	1375130-2
1-Gang, Flush Floor Outlet Box (outlet covers included)	2111353-1
2-Gang, Flush Floor Outlet Box (outlet covers included)	2111353-2

Undercarpet Cabling

Undercarpet Power, Voice and Data Distribution

Conference Room Kits

- Provides services for power and communications (4 ports of communications and 2 duplex power receptacles)
- Kits do not include carpet tiles
- Reduces cost of installation, no core drilling required
- Yields a more aesthetically pleasing and cleaner installation than power poles
- More flexible than any other method of service distribution
- No tripping over extension cords, unsightly “speed bumps” or duct taped cables
- Provides one circuit of power to two duplex receptacles in a compact, durable floor mounted outlet
- Provides four ports of any combination of voice or data on Category 5e or Category 6 cable to RJ45 modular jacks in a compact, durable floor mounted outlet
- Transition boxes can be easily retrofitted in place of existing power and communications wall outlets



Description	TIA/EIA Category	Figure	Part Number
Undercarpet Conference Room Kit	Category 5e	A	1479050-1
	Category 6	B	1933466-1
Kit Contents	Component*	1479050-1	1933466-1
Category 5e Undercarpet Communications Cable	1499119-1	100 ft	-
Category 6 Undercarpet Communications Cable	1499539-1	-	100 ft
3-Conductor, 12 AWG, Standard Ground, Undercarpet Power Cable	3-553079-3	50 ft	50 ft
Flush Wall Frame Communications Transition Box	553739-2	1	1
Flush Wall Frame Communications Transition Box Cover	553095-1	1	1
Universal Communications Transition Block, Cat 5e and 6	2111682-1	1	1
4-Port Low Profile Communications Floor Fitting	555287-1	1	1
Modular Jack Kit, Category 5e	558054-1	4	-
Modular Jack Kit, Category 6	1933377-1	-	4
Flush Wall Power Transition Box	554805-1	1	1
Flush Wall Power Transition Box Cover	1-553292-3	1	1
Transition Block for Power	554862-1	1	1
Top Shield	553536-3	50 ft	50 ft
Floor Preparation	554123-3	50 ft	50 ft
Spray Adhesive	6-553453-1	1 can	1 can
Hold Down Tape	553481-1	1 Roll	1 Roll
Dual Duplex Receptacle DCR Kit	554192-1	1	1

* Equivalent components may be used as a substitute.

NOTE: Custom pre-packaged kits available for a "store-in-a-box" concept for retail applications.

DATA SHEET



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