3M

Scotchlok™
Connectors and Tools



Proven Solutions For Today's Applications

3M *Innovation*

A New Series of Tools and Connectors from 3M.



50 years ago, 3M introduced the industry's original insulation displacement connector—the 3M™ Scotchlok™ UR Connector. Today, with increased demand for high-speed and high-bandwidth networks, the complete series of 3M connectors and tools has evolved again. We've leveraged new technologies while building on the original successful design, shape, color-coded cap concepts and element configuration.

With the latest tools and connectors from 3M, service providers can meet the demand for enhanced customer services such as high speed internet, video-on-demand and video conferencing. Series 2 connectors additionally offer full wire range capability, increased port size to accommodate up to 2.08 mm (0.082") insulation sizes, double elements in all products and solvent resistant plastic construction.

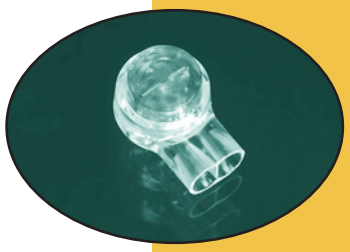
As new technologies migrate into the local loop, the importance of reliable connections in the embedded plant has increased exponentially. Each connection is a potential point of failure in high-bandwidth applications which could require additional time and expense for a technician to repair. That is where the full line of 3M Scotchlok connectors really makes a difference.

3M™ Scotchlok™ Butt Connectors

Scotchlok butt connectors employ a specially designed, wire insulation displacement contact to make a reliable electrical connection to each wire. A “live-spring” joint is made by driving the wire down into the “U” contact connector. This simple process displaces the insulation and grasps all conductors with a firm, resilient pressure, all in one motion. No stripping of wire insulation is required. Scotchlok butt connectors include a factory-installed sealant to protect against corrosion and seal out moisture. They are also available in a dry version for central office and vault applications. A variety of sizes and wire combinations are available to accommodate any need. See the specification chart for UL listing information.

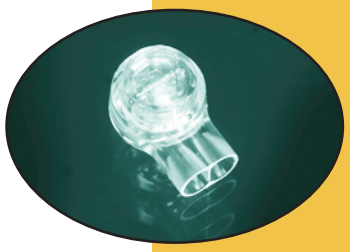
3M™ SCOTCHLOK™ BUTT CONNECTOR UR

The UR connector accepts two or three solid copper conductors for butt splicing. The connector is filled with a sealant to provide moisture resistance.



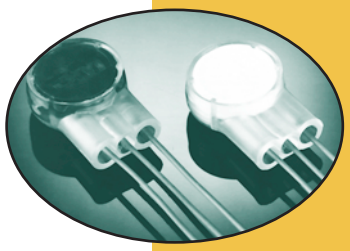
3M™ SCOTCHLOK™ BUTT CONNECTOR UY

The small size of the UY connector reduces the splicing bundle O.D. to a minimum. The connector’s two ports accept two solid copper conductors. The connector is filled with a sealant to provide moisture resistance.



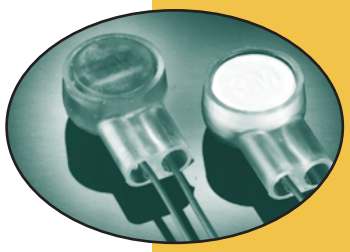
3M™ SCOTCHLOK™ BUTT CONNECTOR UR2/UR2-D

The UR2/UR2-D solvent resistant connectors accept two or three solid copper conductors that can be of different wire gauges, for butt splicing. The UR2 connectors are filled with a sealant to provide moisture resistance. The UR2-D connector is a dry version.



3M™ SCOTCHLOK™ BUTT CONNECTOR UY2/UY2-D

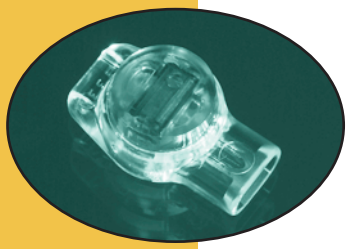
The small size of the UY2/UY2-D solvent resistant connectors reduces the splicing bundle O.D. to a minimum. Their two ports accept two solid copper conductors that can be of different wire gauges. The connector is filled with a sealant to provide moisture resistance. In addition, the UY2 connector is available in a dry version, UY2-D connector.



3M™ SCOTCHLOK™ BUTT CONNECTOR UAL

The UAL connector is a sealed, moisture-resistant two- or three-wire connector. Outside ports accept solid-copper, aluminum, or a combination of both conductor types.





3M™ SCOTCHLOK™ BUTT CONNECTOR UYF (OUS ONLY)

The UYF connector employs a specially designed insulation displacement contact which makes an electrical connection to each wire. The connector is filled with a sealant to provide moisture resistance. The small size of the UYF connector reduces the splicing bundle O.D. to a minimum.



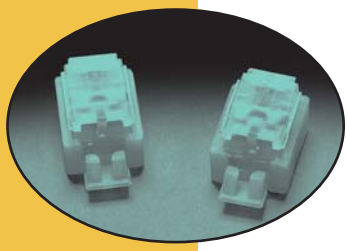
3M™ SCOTCHLOK™ UP2 BUTT CONNECTOR

The UP2 connector is a dry, flame-retardant two-wire connector for use on paper, pulp or PIC cable where moisture resistance is not needed.



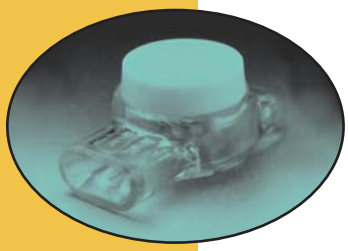
3M™ SCOTCHLOK™ UCC CLEARING CAP

Each moisture-resistant UCC clearing cap isolates a full cable pair. The conductors are held rigidly in place with a plastic blade. The UCC cap accepts two-wire combinations.



3M™ SCOTCHLOK™ TRIM-OUT CONNECTOR 211

The 211 trim-out connector is a moisture-resistant, self-stripping insulation displacement connector with a built-in cut-off blade and a test port. Wires are positioned in the connector from the sides, allowing the 211 connector to be used without interrupting service. The 211 connector, may also be used for standard two-wire butt type splicing operations.



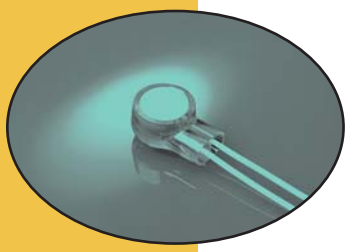
3M™ SCOTCHLOK™ UP3 BUTT CONNECTOR

The UP3 connector is a dry, flame-retardant two- or three-wire connector for paper, pulp or PIC cable where moisture resistance is not needed.



3M™ SCOTCHLOK™ SELF-STRIPPING DROPWIRE CONNECTOR 557TG2

Use the 557TG2 aerial dropwire connector to electrically connect two solid copper conductors, insulate the connection and provide moisture protection.



3M™ SCOTCHLOK™ UPC CLEARING CAP

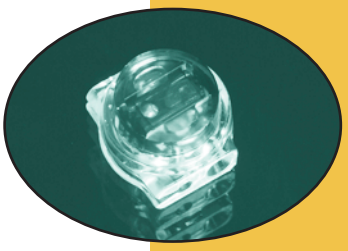
The UPC clearing cap is a flame-retardant version of the UCC clearing cap and is suitable for use in buildings.

3M™ Scotchlok™ Tap Connectors

Scotchlok tap connectors are real time savers. They enable the user to tap into another wire without interrupting service. A U-shaped element inside each connector displaces insulation material and makes contact with the copper conductor. Scotchlok tap connectors also include factory-installed sealant to protect against corrosion and seal out moisture. They are also available in a dry version for central office and vault. Scotchlok tap connectors are fast to install, easy to work with and available in a wide range of common wire gauges. The pre-crimp feature helps hold the wires in place until the connector is crimped and the splice is complete. See the specification chart for UL listing information.

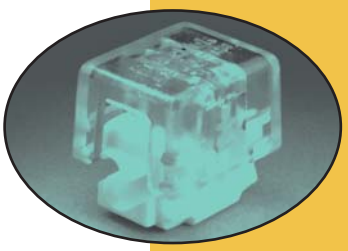
3M™ SCOTCHLOK™ TAP CONNECTOR UG

The UG connector is a sealed two-wire connector for solid copper, air core, or filled cable. The connector is filled with a sealant to provide moisture resistance.



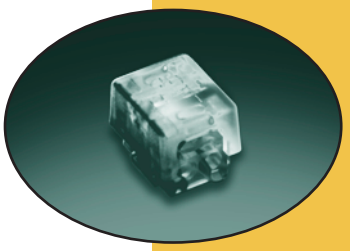
3M™ SCOTCHLOK™ UPB TAP CONNECTOR

The UPB connector is a dry, flame-retardant two-wire connector with a pre-crimp feature for use on pulp, paper or PIC cable where moisture resistance is not needed.



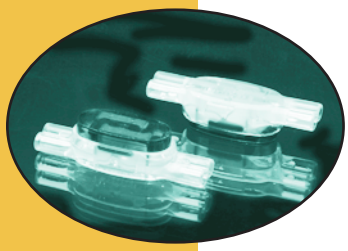
3M™ SCOTCHLOK™ UB2A/UB2A-D TAP CONNECTOR

UB2A/UB2A-D connectors have a pre-crimp feature that gives the craftsperson a time-saving edge. By positioning the connector on the conductor and pre-crimping, the conductor is prevented from slipping out of the connector before the crimp is completed. A factory installed sealant protects against corrosion and seals out moisture. The UB2A/UB2A-D connectors permit tapping directly onto an existing conductor without interrupting service. In ready access closures, these connectors eliminate cutting cable pairs, opening circuits, and piecing out wires. The UB2A-D connector is a dry version of the UB2A model.



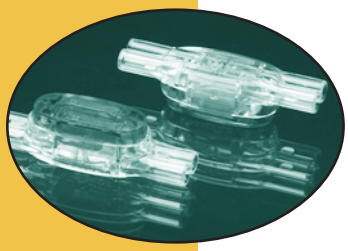
3M™ Scotchlok™ Inline Connectors

Scotchlok inline connectors are a safe and simple way to make a secure connection. These full pair, sealed, moisture-resistant connectors are designed to accommodate a wide range of wire sizes in copper or copper-coated steel conductors.



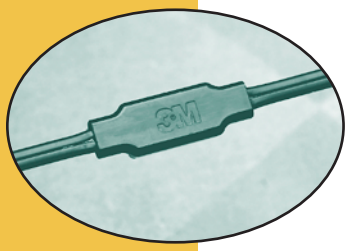
3M™ SCOTCHLOK™ INLINE CONNECTOR U1B

The U1B connector is a sealed moisture-resistant four-wire (1 full pair) inline connector for larger gauge solid copper conductors.



3M™ SCOTCHLOK™ INLINE CONNECTOR U1R

The U1R connector is a sealed moisture-resistant four-wire (1 full pair) inline connector for larger gauge solid copper conductors.

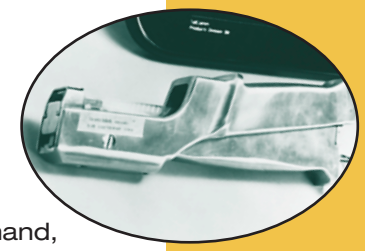


3M™ SCOTCHLOK™ INLINE CONNECTOR UDW2

A sealed moisture-resistant, four-wire (1 full pair) inline aerial dropwire connector for copper or copper-coated steel conductors, the inline connector is for mid-span splices where strain-relief is provided. Tape over-wrap is not required.

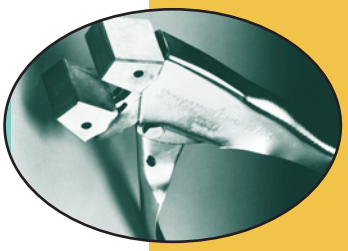
3M™ Scotchlok™ Tools

To complement our line of efficient, reliable Scotchlok connectors, Scotchlok crimping tools are built to do the job right, and do it fast. All Scotchlok tools are engineered to fit comfortably in the hand while providing high mechanical advantage for less operator fatigue. From automatic cartridges to adjustable jaws, there's a tool designed to meet your specific application needs.



3M™ SCOTCHLOK™ CARTRIDGE TOOL WITH CASE AND GAUGE E-9C

With an automatic cartridge feed, 7-to-1 mechanical advantage and ratchet action, the E-9C tool allows the craftsperson to complete a crimp with one hand, freeing the other hand for wire handling. The tool is designed for cartridges with Scotchlok butt connectors.



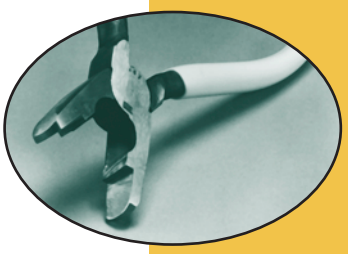
3M™ SCOTCHLOK™ CRIMPING TOOL E-9BM

This heavy-duty tool is capable of crimping all Scotchlok connectors. Its closing action and adjustable jaws provide a 10-to-1 mechanical advantage, allowing it to handle all wire gauges.



3M™ SCOTCHLOK™ CRIMPING TOOL E-9E

A completely parallel closing action and a 4-to-1 mechanical advantage make the lightweight E-9E crimping tool a versatile addition to any craftsperson's pouch. With these features, the E-9E tool will crimp all Scotchlok butt and tap connectors in all wire gauges.



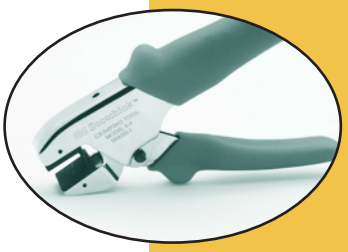
3M™ SCOTCHLOK™ CRIMPING TOOL E-9Y

The E-9Y tool has stepped jaws and a long nose and side wire cutter which provide crimping action for two- or three-conductor splicing. The E-9Y tool is not recommended for 19 gauge (0.9 mm) and larger conductors.



3M™ SCOTCHLOK™ CRIMPING TOOL E-9R

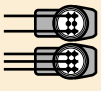
This tool features a 10-to-1 mechanical advantage. Its ratchet-release and integrated wire cutter save time by not having to change tools. The E-9R tool is compatible with all Scotchlok connectors (except inline and drop connectors) across the entire range of applicable wire sizes.



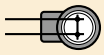
3M™ SCOTCHLOK™ CRIMPING TOOL E-9J

The E-9J tool is a lightweight, handheld tool featuring a single stroke, with a work-saving 10-to-1 mechanical advantage over applied hand force. For use with Scotchlok butt and tap connectors.

3M™ SCOTCHLOK™ CONNECTORS AND TOOLS SPECIFICATION CHART

Connector	Type Connector	Special Features	Maximum Insulation O.D.		PIC-unfilled and PIC-filled		Pulp or Paper	
			Metric (mm)	Inches	AWG	Metric (mm)	AWG	Metric (mm)
UR2 		Gel-filled UL Listed Polypropylene	2.08	0.082	19-26	0.9-0.4	N/A	N/A
UR2-D 		Dry Polypropylene	2.08	0.082	19-26	0.9-0.4	19-26	0.9-0.4
UR 		Gel-filled UL Listed Polycarbonate	1.52	0.060	19-26	0.9-0.4	N/A	N/A
UY2 		Gel-filled UL Listed Polypropylene	2.08	0.082	19-26	0.9-0.4	N/A	N/A
UY2-D 		Dry Polypropylene	2.08	0.082	19-26	0.9-0.4	19-26	0.9-0.4
UY 		Gel-filled UL Listed Polycarbonate	1.52	0.060	22-26	0.7-0.4	N/A	N/A
*557TG2 		Gel-filled Flame Retardant Polypropylene	3.0	0.12	16-22	1.3-0.6	N/A	N/A
UYF 		Gel-filled UL Listed Polycarbonate	1.52	0.060	20-26	0.8-0.4	N/A	N/A
UP2 		Dry Flame Retardant UL Listed Polycarbonate	1.52	0.060	22-26	0.7-0.4	22-26	0.7-0.4
UP3 		Dry Flame Retardant UL Listed Polycarbonate	1.52	0.060	19-26	0.9-0.4	19-26	0.9-0.4
UAL 		Gel-filled For Aluminum Polycarbonate	2.08	0.082	17-20 AL 19-24 CU	1.2-0.8 AL 0.9-0.5 CU	N/A	N/A
211 		Gel-filled UL Listed Polypropylene	2.08	0.082	19-26	0.9-0.4	N/A	N/A

*Inline and drop wire connectors can only be used with E-9BM.

Connector	Type Connector	Special Features	Maximum Insulation O.D.		PIC-unfilled and PIC-filled		Pulp or Paper	
			Metric (mm)	Inches	AWG	Metric (mm)	AWG	Metric (mm)
UB2A 		Gel-filled UL Listed Polypropylene	2.08	0.082	19-26	0.9-0.4	N/A	N/A
UB2A-D 		Dry Polypropylene	2.08	0.082	19-26	0.9-0.4	N/A	N/A
UG 		Gel-filled Polycarbonate	Butt 1.67 Tap 1.12	0.066 0.044	19-26 22-26	0.9-0.4 0.7-0.4	N/A	N/A
UPB 		Dry UL Listed Flame Retardant Polycarbonate	1.27	0.050	22-26	0.7-0.4	22-26	0.7-0.4
***UDW2** 		Full Pair Drop Pair Polycarbonate	4.4	0.175	16-19	1.3-0.9	N/A	N/A
***U1B** 		Gel-filled Full Pair Polycarbonate	3.18	0.125	16-19	1.3-0.9	N/A	N/A
***U1R** 		Gel-filled Full Pair Polycarbonate	3.18	0.125	19-24	0.9-0.5	N/A	N/A
UCC 		Gel-filled UL Listed Polycarbonate	1.52	0.060	22-26	0.7-0.4	N/A	N/A
UPC 		UL Listed Flame Retardant Polycarbonate	1.52	0.060	22-26	0.7-0.4	22-26	0.7-0.4

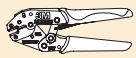
To reduce fatigue, use tool within each group with highest mechanical advantage, indicated in ( ).

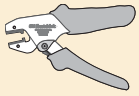

E-9BM
(10:1)


E-9C
(7:1)


E-9E
(4:1)


E-9Y**
(3:1)


E-9R
(10:1)


E-9J
(10:1)

*Inline and drop wire connectors can only be used with E-9BM.
**Not recommended for 19 gauge (0.9mm) conductor and larger.

Tap Splicing

Inline Splicing

Clear/Cap Only

3M™ SCOTCHLOK™ CONNECTORS AND TOOLS ORDERING INFORMATION

Connector	Box Packaging Weight kg (lbs.) Minimum Order UPC Code	Bulk Packaging Weight kg (lbs.) Minimum Order UPC Code	Cartridge Packaging Weight kg (lbs.) Minimum Order UPC Code	Jar Packaging Weight kg (lbs.) Minimum Order UPC Code	Clamshell Packaging Weight kg (lbs.) Minimum Order UPC Code
UR2	100/box, 1000/cs. 1.36 (3) Min. Order: 1000 connectors 05400768538	500/box, 5000/cs. 6.7 (15.2) Min. Order: 5000 connectors 05400756390	10/cart, 100/pak., 1000/cs. 2.09 (4.6) Min. Order: 1000 connectors 05400768541	500/Jar, 5000/cs. 5.9 (13.1) Min. Order: 5000 connectors 05111522977	25/Pak, 1000/cs. 1.8 (3.9) Min. Order: 1000 connectors 05111522985
UR2-D	N/A N/A N/A N/A	500/box, 5000/cs. 6.7 (15.2) Min. Order: 5000 connetors 05400733277	10/cart, 100/pak., 1000/cs. 2.09 (4.6) Min. Order: 1000 connectors 05400727816	N/A N/A N/A N/A	N/A N/A N/A N/A
UR	100/box, 1000/cs. 1.36 (3) Min. Order: 1000 connectors 05400768537	500/box, 5000/cs. 6.7 (15.2) Min. Order: 5000 connectors 05400768535	10/cart, 100/pak., 1000/cs 2.09 (4.6) Min. Order: 1000 connectors 05400768534	N/A N/A N/A N/A	N/A N/A N/A N/A
UY2	100/box, 1000/cs. 0.9 (1.3) Min. Order: 1000 connectors 05400714911	1000/box, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 05400733278	12/cart, 120/pak., 1200/cs. 1.4 (3.5) Min. Order: 1200 connectors 05400727817	500/Jar, 5000/cs. 3.8 (8.3) Min. Order: 5000 connectors 05111522979	25/Pak, 1000/cs. 1.3 (2.8) Min. Order: 1000 connectors 05111522984
UY2-D	N/A N/A N/A N/A	1000/box, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 05113857359	12/cart, 120/pak., 1200/cs. 1.4 (3.5) Min. Order: 1200 connectors 05400771478	N/A N/A N/A N/A	N/A N/A N/A N/A
UY	100/box, 1000/cs. 0.9 (1.3) Min. Order: 1000 connectors 05400714911	1000/box, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 05400733278	16/cart, 160/pak., 1600/cs. 1.4 (3.5) Min. Order: 1600 connectors 05400727817	N/A N/A N/A N/A	N/A N/A N/A N/A
557TG	N/A N/A N/A N/A	500/bag, 5000/box 9.09 (20) Min. Order: 5000 connectors 05113857359	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
UYF	500/box, 2500/cs. 2.15 (4.75) Min. Order: 2500 connectors 05111518516	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
UP2	N/A N/A N/A N/A	1000/box, 5000/cs. 2.4 (5.4) Min. Order: 5000 connectors 05400733420	16/cart, 160/pak., 1600/cs. 1.4 (3.2) Min. Order: 1600 connectors 05400732698	N/A N/A N/A N/A	N/A N/A N/A N/A
UP3	N/A N/A N/A N/A	1000/box, 5000/cs. 7.1 (13.3) Min. Order: 5000 connectors 05400733419	10/cart, 100/pak., 1000/cs. 2.0 (4.4) Min. Order: 1000 connectors 05400732700	N/A N/A N/A N/A	N/A N/A N/A N/A
UAL	N/A N/A N/A N/A	N/A N/A N/A N/A	10/cart, 100/pak., 1000/cs. 2.1 (4.7) Min. Order: 1000 connectors 05400727828	N/A N/A N/A N/A	N/A N/A N/A N/A

TOOLS	E-9BM CRIMPING TOOL	E-9C CARTRIDGE TOOL	E-9R CRIMPING TOOL	E-9E CRIMPING TOOL	E-9Y CRIMPING TOOL*	E-9Y-P CRIMPING TOOL*	E-9J CRIMPING TOOL
Packaging kg (lbs.)/cs.	4.3 (9.5)	1/cs., 0.91 (2)	1/bag,10/cs.,2.59 (5.7)	1/bag,10/cs.,2.7 (6)	1/bag,10/cs.,1.53 (3.3)	1/bag,10/cs.,1.53 (3.3)	1/bag,10/cs., 4.1 (9.02)
Minimum Order	10 each	1 each	10 each	10 each	10 each	10 each	10 each
UP Code	054007-33482	054007-34211	051138-87649	054007-10577	054007-15625	051115-22987	051115-19004-9

*Not recommended for 19 AWG and larger.

Connector	Box Packaging Weight kg (lbs.) Minimum Order UPC Code	Bulk Packaging Weight kg (lbs.) Minimum Order UPC Code	Cartridge Packaging Weight kg (lbs.) Minimum Order UPC Code	Jar Packaging Weight kg (lbs.) Minimum Order UPC Code	Clamshell Packaging Weight kg (lbs.) Minimum Order UPC Code
211	100/box, 1000/cs. 1.2 (2.6) Min. Order: 1000 connectors 05400734079	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
UB2A	100/box, 1000/cs. 1.2 (2.6) Min. Order: 1000 connectors 05400792693	500/box, 5000/cs. 5.9 (12.9) Min. Order: 5000 connectors 05400792696	N/A N/A N/A N/A	N/A N/A N/A N/A	25/Pak, 1000/cs. 1.5 (3.4) Min. Order: 1000 connectors 05111522986
UB2A-D	100/box, 1000/cs. 1.2 (2.6) Min. Order: 1000 connectors 05400792694	500/box, 5000/cs. 5.9 (12.9) Min. Order: 5000 connectors 05400757279	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
UG	100/box, 1000/cs. 1.1 (2.5) Min. Order: 1000 connectors 05400756391	1000/box, 5000/cs. 5.2 (11.6) Min. Order: 5000 connectors 05400733280	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
UPB	100/box, 1000/cs. 0.6 (1.4) Min. Order: 1000 connectors 05400734173	1000/box, 5000/cs. 3.0 (6.6) Min. Order: 5000 connectors 05400733416	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
UDW2	25/bag, 100/box N/A Min. Order: 1000 connectors 05113811505	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
U1B	100/box, 1000/cs. 7.3 (16.0) Min. Order: 5000 connectors 05400771340	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
U1R	100/box, 1000/cs. 7.4 (16.2) Min. Order: 2500 connectors 05400756388	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A	N/A N/A N/A N/A
UCC	N/A N/A N/A N/A	N/A N/A N/A N/A	16/cart, 160/pak., 1600/cs. 1.6 (3.5) Min. Order: 1600 connectors 05400731734	500/Jar, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 05111522980	N/A N/A N/A N/A
UPC	N/A N/A N/A N/A	N/A N/A N/A N/A	16/cart, 160/pak., 1600/cs. 1.5 (3.0) Min. Order: 1600 connectors 05400733721	N/A N/A N/A N/A	N/A N/A N/A N/A

* Not recommended for 19 AWG and larger.

To order, call 800/426 8688. For more information, please contact your local 3M representative.

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