

Communication Markets Division
3M™ Scotchlok™ Connectors and Tools



Proven Solutions for Today's Applications





A Proven Series of Tools and Connectors from 3M.

50 years ago, 3M introduced the industry's original insulation displacement connector—the 3M™ Scotchlok™ Connector UR. 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 Scotchlok series of 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. 3M™ Scotchlok™ Connectors additionally offer full wire-range capability, increased port size to accommodate up to 2.08 mm (0.082 in.) 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 required. Scotchlok butt connectors include a factory-installed sealant to protect against corrosion and seal out moisture. They are also available in a dry/flame retardant version for central office and vault. A variety of sizes and wire combinations are available to accommodate almost any need.

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. RUS Listed.



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. RUS Listed.



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. RUS Listed.



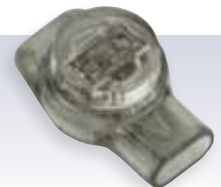
3M™ Scotchlok™ Butt Connector UY2/UY2-D

The small size of the UY2/UY2-D, solvent resistant connectors, reduce 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. RUS Listed.



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. RUS Listed.



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™ Butt Connector UP2

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



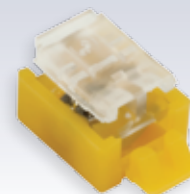
3M™ Scotchlok™ Clearing Cap UCC

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



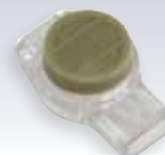
3M™ Scotchlok™ Trim-out Connector 211

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. RUS Listed.



3M™ Scotchlok™ Butt Connector UP3

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. UL Listed.



3M™ Scotchlok™ Self-Stripping Dropwire Connector 557TG

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



3M™ Scotchlok™ Clearing Cap UPC

The UPC connector is a UL-listed dry, flame-retardant version of the UCC clearing cap making it suitable for use in buildings. RUS Listed.



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. Tap connectors allow direct tapping into existing solid copper conductors without interrupting service. The pre-crimp feature helps hold the wires in place until the connector is crimped and the splice is complete.

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™ Butt Connector UP2. RUS Listed.



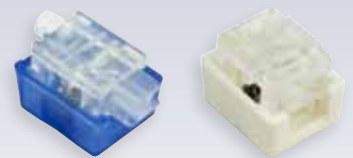
3M™ Scotchlok™ Tap Connector UPB

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



3M™ Scotchlok™ Tap Connector UB2A/UB2A-D

The 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 sealant protects against corrosion and seals out moisture. In ready-access closures, these connectors help eliminate cutting cable pairs, opening circuits, and piecing out wires. The UB2A-D connector is a dry version of the UB2A. RUS Listed.

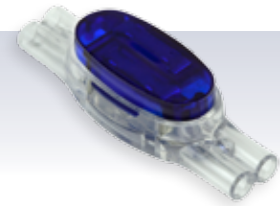


3M™ Scotchlok™ Inline Connectors

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 ranges 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. AWG 19-16 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. AWG 24-19 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. This inline connector is for mid-span splices where strain-relief is provided. Tape over-wrap is not required. RUS Listed.



Built to do the
job right,^{and}
do it fast.



3M™ Scotchlok™ Tools

To complement our line of efficient, reliable 3M™ Scotchlok Connectors, 3M™ Scotchlok™ Crimping Tools are built to do the job right, and do it fast. All Scotchlok tools are engineered to fit comfortably in 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 E-9C with Case and Gauge

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 parallel closing action and adjustable jaws provide a 10-to-1 mechanical advantage, allowing it to handle all wire gauges.



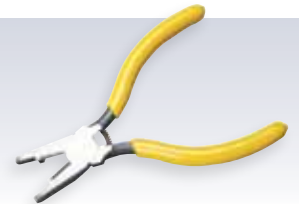
3M™ Scotchlok™ Crimping Tool E-9E

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 can be purchased individually or in combination with a mesh pouch (E-9Y-P). 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 parallel crimping and 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, parallel crimping action 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 Polypropylene Cat. 5 RUS Listed	2.08	0.082	26-19	0.4-0.9	N/A	N/A
UR2-D 		Dry Polypropylene RUS Listed	2.08	0.082	26-19	0.4-0.9	26-19	0.4-0.9
UR 		Gel-filled Polycarbonate Cat. 5 RUS Listed	1.67	0.066	26-19	0.4-0.9	N/A	N/A
UY2 		Gel-filled Polypropylene Cat. 5 RUS Listed	2.08	0.082	26-19	0.4-0.9	N/A	N/A
UY2-D 		Dry Polypropylene RUS Listed	2.08	0.082	26-19	0.4-0.9	26-19	0.4-0.9
UY 		Gel-filled Polycarbonate Cat. 5 RUS Listed	1.67	0.066	26-22	0.4-0.7	N/A	N/A
*557-TG2 		Gel-filled Polypropylene	3.0	0.12	22-16	0.6-1.3	N/A	N/A
UYF 		Gel-filled Polycarbonate	1.52	0.060	26-20	0.4-0.8	N/A	N/A
UP2 		Dry Polycarbonate Flame Retardant RUS Listed UL Listed	1.52	0.060	26-22	0.4-0.7	26-22	0.4-0.7
UP3 		Dry Polycarbonate Flame Retardant UL Listed	1.67	0.066	26-19	0.4-0.9	26-19	0.4-0.9
UAL 		Gel-filled For Aluminum Polycarbonate RUS Listed	Outside Ports: 2.08 Middle Port: 1.88	Outside Ports: 0.082 Middle Port: 0.074	20-17 AL 24-19 CU	0.8-1.2 AL 0.5-0.9 CU	N/A	N/A
211 		Gel-filled Polypropylene Cat. 5 RUS Listed	2.08	0.082	26-19	0.4-0.9	N/A	N/A

Butt Splicing

*557-TG2 connectors can only be used with 3M™ Scotchlok™ Crimp Tool E-9BM or E-9J.

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)
UB2A 		Gel-filled Polypropylene Cat. 5 RUS Listed	2.08	0.082	26-19	0.4-0.9	N/A	N/A
UB2A-D 		Dry Polypropylene RUS Listed	2.08	0.082	26-19	0.4-0.9	26-19	0.4-0.9
UG 		Gel-filled Polycarbonate RUS Listed	Butt 1.67 Tap 1.12	0.066 0.044	26-19 26-22	0.4-0.9 0.4-0.7	N/A	N/A
UPB 		Dry Polycarbonate Flame Retardant RUS Listed UL Listed	1.27	0.050	26-22	0.4-0.7	26-22	0.4-0.7
*UDW2 		Full Pair Drop Pair Polycarbonate RUS Listed	4.4	0.175	19-16	0.9-1.3	N/A	N/A
*U1B 		Gel-filled Full Pair Polycarbonate	3.18	0.125	19-16	0.9-1.3	N/A	N/A
*U1R 		Gel-filled Full Pair Polycarbonate	3.18	0.125	24-19	0.5-0.9	N/A	N/A
UCC 		Gel-filled Polycarbonate RUS Listed	1.52	0.060	26-22	0.4-0.7	N/A	N/A
UPC 		Dry Polycarbonate Flame Retardant RUS Listed UL Listed	1.52	0.060	26-22	0.4-0.7	26-22	0.4-0.7

Tap Splicing

Inline Splicing

Clear/Cap Only

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 3M™ Scotchlok™ Crimp Tool E-9BM.

**Not recommended for 19 gauge (0.9 mm) conductor and larger.

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 054007-68538	500/box, 5000/cs. 6.7 (15.2) Min. Order: 5000 connectors 054007-56390	10/cart, 100/pak., 1000/cs. 2.09 (4.6) Min. Order: 1000 connectors 054007-68541	500/box, 5000/cs. 5.9 (13.1) Min. Order: 5000 connectors 051115-22977	25/Pak, 1000/cs. 1.8 (3.9) Min. Order: 1000 connectors 051115-22985
UR2-D	N/A N/A N/A N/A	500/box, 5000/cs. 6.7 (15.2) Min. Order: 5000 connectors 054007-33277	10/cart, 100/pak., 1000/cs. 2.09 (4.6) Min. Order: 1000 connectors 054007-27816	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 054007-68537	500/box, 5000/cs. 6.7 (15.2) Min. Order: 5000 connectors 054007-68535	10/cart, 100/pak., 1000/cs. 2.09 (4.6) Min. Order: 1000 connectors 054007-68534	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 054007-14911	1000/box, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 054007-33278	12/cart, 120/pak., 1200/cs. 1.4 (3.5) Min. Order: 1200 connectors 054007-27817	500/Jar, 5000/cs. 3.8 (8.3) Min. Order: 5000 connectors 051115-22979	25/Pak, 1000/cs. 1.3 (2.8) Min. Order: 1000 connectors 051115-22984
UY2-D	N/A N/A N/A N/A	1000/box, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 051138-57359	12/cart, 120/pak., 1200/cs. 1.4 (3.5) Min. Order: 1200 connectors 054007-71478	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 054007-14911	1000/box, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 054007-33278	16/cart, 160/pak., 1600/cs. 1.4 (3.5) Min. Order: 1600 connectors 054007-27817	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 051138-57359	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 051115-18516	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 054007-33420	16/cart, 160/pak., 1600/cs. 1.4 (3.2) Min. Order: 1600 connectors 054007-32698	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 054007-33419	10/cart, 100/pak., 1000/cs. 2.0 (4.4) Min. Order: 1000 connectors 054007-32700	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 054007-27828	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

*Not recommended for 19 AWG and larger.

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
211	100/box, 1000/cs. 1.2 (2.6) Min. Order: 1000 connectors 054007-34079	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 054007-92693	500/box, 5000/cs. 6.7 (15.2) Min. Order: 5000 connectors 054007-33277	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 051115-22886
UB2A-D	100/box, 1000/cs. 1.2 (2.6) Min. Order: 1000 connectors 054007-92694	500/box, 5000/cs. 6.7 (15.2) Min. Order: 5000 connectors 054007-68535	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 054007-56391	1000/box, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 054007-33278	N/A N/A N/A N/A	500/Jar, 5000/cs. 3.8 (8.3) Min. Order: 5000 connectors 051115-22979	N/A N/A N/A N/A
UPB	100/box, 1000/cs. 0.6 (1.4) Min. Order: 1000 connectors 054007-34173	1000/box, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 051138-57359	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 051138-11505	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 054007-71340	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 054007-56388	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 054007-31734	500/Jar, 5000/cs. 2.8 (6.1) Min. Order: 5000 connectors 051115-22980	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 054007-33721	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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Important Notice

Warranty Statement

3M™ Scotchlok™ connectors and tools are engineered to work together to achieve consistently superior performance in the field. Tools from other manufacturers may not meet the tight quality tolerances of 3M tools and may damage the crimping and performance of a 3M connector. Therefore, the published 3M warranty does not extend to any 3M connectors crimped in tools not made by 3M. The warranty on 3M Scotchlok splicing tools can also be voided if used on non-3M connectors.

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