

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Communication Connectors

More than 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 is now more important than ever. Through the years, we have learned new technologies while building on the original successful design, shape, color-coded cap concepts, and element configuration of the original insulation displacement contact design. We offer many connectors tested to Cat. 5 compliance allowing service providers the ability to meet the demand for enhanced services such as high speed Internet, video-on-demand, and video conferencing. Double elements in many products, solvent-resistant plastic construction, full wire range product offering and factory installed sealant are just some of the features and benefits of 3M Scotchlok communication connectors.

#### 3M<sup>™</sup> Scotchlok<sup>™</sup> 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 process displaces the wire insulation and grasps all conductors with a firm pressure, all in one motion. No stripping of wire insulation is required. Some connectors include a factory installed sealant to help protect against corrosion and provide moisture resistance. They are also available in dry versions for central office and vault applications. RoHS compliant.\*







#### 3M<sup>™</sup> Scotchlok<sup>™</sup> Connector UR2

- Most universal butt connector
- Gel filled for moisture resistance and for PIC cable applications
- 2 or 3 wire, 0.4mm 0.9mm (26-19 AWG)
- 2.08mm/.082" max insulation O.D.
- Polypropylene, UL listed, Cat. 5

#### Also available:

- UR2-D—Dry version—for use where moisture resistance is not needed (central office and vault)
- UR—Gel filled for moisture resistance and for PIC cable applications, 2 or 3 wire, 0.4mm 0.9mm (26-19 AWG), 1.52mm/.060" maximum insulation O.D., polycarbonate, UL listed, Cat. 5
- UP3—Dry, flame retardent applications, 2 or 3 wire, 0.4mm 0.9mm (26-19 AWG), 1.52mm/.06" maximum insulation O.D., polycarbonate, UL listed
- UAL—Gel filled for moisture resistance and for PIC cable applications, 2 or 3 wire CU (0.5mm 0.9mm or 24-19 AWG) or AL (0.8mm 1.2mm or 20–17 AWG) or combination of both, 2.08mm/.082" maximum insulation O.D., polycarbonate







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### 3M<sup>™</sup> Scotchlok<sup>™</sup> Connector UY2

- Approximately half size of UR2—can handle a higher pair count cable and keep the splicing bundle O.D. to a minimum
- Gel filled for moisture resistance and for PIC cable applications
- 2 wire, 0.4mm 0.9mm (26-19 AWG)
- 2.08mm/.082" maximum insulation O.D.
- Polypropylene, UL listed, Cat. 5

#### Also available:

- UY2-D—Dry for PIC, pulp or paper cable applications, 2 wire, 0.4mm 0.9mm (26-19 AWG), 2.08mm/.082" maximum insulation O.D., polypropylene
- UY—Gel filled for moisture resistance and for PIC cable applications, 2 wire, 0.4mm 0.7mm (26-22 AWG), 1.52mm/.06" maximum insulation O.D., polypropylene, UL listed, Cat. 5
- UP2—Dry, flame retardent applications, 2 wire, 0.4mm 0.7mm (26-22 AWG), 1.52mm/.06" maximum insulation O.D., polycarbonate, UL listed
- UYF—Gel filled for moisture resistance and for PIC cable applications, 2 wire, 0.4 0.8mm (26–20 AWG), 1.52mm/0.06" maximum insulation O.D., polycarbonate, UL listed

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Trim-out Connector 211

- · Used primarily to cut out defective connectors without interrupting service
- Side loading design and pre-crimp feature—make it especially useful where conductor length is limited.
- Contains a built-in cut-off blade and a test port with built-in strain relief.
- Can also be used for standard butt splicing
- · Gel filled for moisture resistance and for PIC cable applications
- 2 wire, 0.4mm 0.9mm (26-19 AWG)
- 2.08mm/.082" maximum insulation O.D.
- Polypropylene, UL listed, Cat. 5

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Clearing Cap UCC

- Used to isolate a full cable pair
- Contains a non-conductive plastic blade to hold conductors in place
- · Gel filled for moisture resistance and for PIC cable applications
- 0.4mm 0.7mm (26-22 AWG)
- 1.52mm/.060" maximum insulation O.D.
- Polycarbonate, UL listed

#### Also available:

• UPC—Dry, flame retardant applications, 0.4mm - 0.7mm (26-22 AWG), 1.52mm/.060" maximum insulation O.D., polycarbonate, UL listed



# 3M<sup>™</sup> Scotchlok<sup>™</sup> Self Stripping Dropwire Connector 557TG2

- Aerial drop wire connector
- Gel filled for moisture resistance
- 2 wire, 0.6mm 1.3mm (22–16 AWG)
- 3.0mm/.12" maximum insulation O.D.
- Polypropylene



#### 3M<sup>™</sup> Scotchlok<sup>™</sup> TAP Connectors

 $3M^{\mathbb{M}}$  Scotchlok<sup> $\mathbb{M}</sup>$  tap connectors enable the user to tap into another wire without interrupting service. This saves the splicer</sup> valuable time. A U-shaped element inside each connector displaces wire insulation material and makes contact with the copper conductor. Some Scotchlok tap connectors also include factory-installed sealant to help protect against corrosion and provide moisture resistance. They are also available in dry versions for central office and vault applications. RoHS compliant.\*



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#### 3M<sup>™</sup> Scotchlok<sup>™</sup> Connector UB2A

- · Allows direct tapping into existing plastic, paper, or pulp insulated solid copper conductors without interrupting service.
- Accepts the widest wire gauge range of all 3M tap connectors
- Pre-crimp feature—equates to a time saver for the craft person
- · Gel filled for moisture resistance and for PIC cable applications
- 0.4mm 0.9mm (26-19 AWG)
- 2.08mm/.082" maximum insulation O.D.
- Polypropylene, UL listed, Cat. 5

#### Also available:

• UB2A-D—Dry for PIC, pulp or paper cable applications, 0.4mm - 0.9mm (26-19 AWG), 2.08mm/.082" maximum insulation O.D., polypropylene, UL listed





#### 3M<sup>™</sup> Scotchlok<sup>™</sup> Connector UG

- · Allows direct tapping into existing plastic insulated solid copper conductors without interrupting service.
- Gel filled for moisture resistance and for PIC cable applications
- 0.4mm 0.9mm (26-19 AWG) tap; 0.4mm 0.7mm (26-22 AWG) run
- 1.54mm/.061" tap; 1.12mm/.044" run maximum insulation O.D.
- Polycarbonate

#### Also available:

• UPB—Dry, flame retardant applications, 0.4mm - 0.7mm (26-22 AWG), 1.27mm/.050" maximum insulation O.D., polycarbonate

#### 3M<sup>™</sup> Scotchlok<sup>™</sup> Inline Connectors

3M Scotchlok inline connectors are designed to accommodate larger gauge solid copper or copper coated steel conductors. They are a safe, simple way of making a secure connection for four wire or one full pair applications. All are sealed and moisture resistant. RoHS compliant.\*



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#### 3M<sup>™</sup> Scotchlok<sup>™</sup> Connector UDW2

- Four wire (1 full pair) inline aerial drop-wire connector
- Copper or copper coated steel conductors.
- Used for mid-span splices where strain relief is provided
- Gel filled for moisture resistance and for PIC cable applications
- 0.9mm 1.3mm (19-16 AWG), for copper/copper clad steel conductors
- 4.4mm/.175" maximum insulation O.D.
- Polycarbonate



#### 3M<sup>™</sup> Scotchlok<sup>™</sup> Connector U1B

- Four wire (1 full pair) inline connector for 16-19 AWG solid copper wire
- · Gel filled for moisture resistance and for PIC cable applications
- 0.9 1.3mm (19–16 AWG)
- 3.18mm/.125" maximum insulation O.D.
- Polycarbonate

#### Also available:

• U1R—Gel filled for moisture resistance and for PIC cable applications, 0.5mm - 0.9mm or 24–19 AWG, 3.18mm/.125", maximum insulation O.D., polycarbonate

#### 3M<sup>™</sup> Scotchlok<sup>™</sup> Tools

To complement the 3M 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.





### 3M<sup>™</sup> Scotchlok<sup>™</sup> Hand Crimping Tool E-9R

- Lightweight and handheld
- Single-stroke crimping action with a work-saving 10:1 mechanical advantage over applied hand force
- Innovative ratchet-release design indicates a positive crimp by automatically releasing after each successful connection
- Integrated wire cutter allows the user to trim conductors prior to each connection without changing tools
- Ergonomic design enhances user productivity by reducing fatigue
- The E-9R crimping tool is compatible with all Scotchlok connectors, except inline and dropwire connectors



### 3M<sup>™</sup> Scotchlok<sup>™</sup> Hand Crimping Tool E-9Y

- Stepped jaws and a long nose plus side wire cutter makes the E-9Y tool one of the most versatile
- Used for two or three conductor splicing on conductors smaller than 19 gauge (0.9mm)
- 3:1 mechanical advantage

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### 3M<sup>™</sup> Scotchlok<sup>™</sup> Hand Crimping Tool E-9J

- · Ideal for increasing accuracy and accelerating installation and repairs
- Lightweight, handheld—single-stroke, crimping action with a work-saving 10:1 mechanical advantage over applied hand force
- · Ergonomic design enhances user productivity-reduces fatigue
- · Compatible with all connectors except inline and dropwire connectors



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### 3M<sup>™</sup> Scotchlok<sup>™</sup> Hand Crimping Tool E-9BM

- · Heavy-duty tool-capable of crimping all Scotchlok connectors
- Adjustable jaws
- 10:1 mechanical advantage which allows it to handle all wire gauges



### 3M<sup>™</sup> Scotchlok<sup>™</sup> Cartridge Crimping Tool E-9C

- Automatic cartridge feed (7:1 mechanical advantage and ratchet action)—allows the craftsperson to complete a crimp with one hand, freeing the other hand for wire handling. One squeeze of the handle crimps the connector and ejects it, automatically advancing another connector into the crimping position
- The 10-, 12- or 16-connector cartridge is easily inserted into the E-9C tool
- · Designed for use with most butt type Scotchlok connectors



### 3M<sup>™</sup> Scotchlok<sup>™</sup> Hand Crimping Tool E-9E

- Completely parallel closing action and a 4:1 mechanical advantage—one of the most versatile tools
- Crimps all Scotchlok butt and tap connectors
- Handles all wire gauges

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\*"RoHS Compliant 2005/95/EC" means that the product or part ("Product") does not contain any of the substances in excess of the maximum concentration values in EU Directive 2002/95/EC, as amended by Commission Decision 2005/618/EC, unless the substance is in an application that is exempt under EU RoHS. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.

#### **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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