The reliability of a copper conductor communication system depends greatly upon the reliability of the individual splices that hold it together. Each point is a critical junction where electrical impulses pass through splice connectors as voice and data signals connect sender with receiver.

For more than 30 years, 3M™ 710 Modular Splice Connectors have been used on a worldwide basis to improve splicing productivity and help increase the efficiency of copper conductor cable. Modular in design, the 3M 710 system electrically joins multiple pairs of copper conductor cable concurrently, with modules capable of splicing five or 25 pairs at a time. The 3M 710 system consists of a complete complement of tools, supplies and replacement parts.

**Fast and reliable insulation displacement technology**

3M 710 modules contain an IDC (insulation displacement connection) device. Electrical connections are made by metallic contact elements that displace the insulation, creating a contact point between the conductor and the contact element. This design provides a gas-tight connection.

Strain relief is achieved through unique design features. Plastic sheath retention grip points known as “bat wings” and “cathedral windows,” maintain retention on the conductor insulation. The small dimensions of the 5-pair splicing unit are ideal for small spaces.

**Straight, half-tap and bridge splicing**

Several splice module configurations allow multiple options when designing a communications system. Straight connectors permit the joining of conductors when making a straight splice. Half-tap modules permit the joining of two cables but can also be used for rearranging and transferring cables without interruption of service, while bridge modules are used in conjunction with either straight or half-tap connectors.
Splicing range of 26 to 22 AWG
Multiple pairs (5 or 25) of PIC, PVC, pulp or paper insulated copper conductors are quickly and easily spliced at one time. 3M™ 710 Connectors may be used to splice conductors ranging in size between 26 to 22 AWG (0.4 mm to 0.65 mm).

Manufactured from flame-retardant plastic
Flame-retardant engineering-grade plastic is used in the manufacture of all connectors. 3M 710 connectors may be used in the outside plant for aerial, underground or buried applications or for making connections in central-office mainframe distribution systems* in an approved enclosure.

Available either dry or filled
Dry connectors are universal in application and may be used with PIC, PVC, pulp or paper insulated conductors. For maximum moisture protection, filled connectors are used with either PIC or PVC insulated conductors.

A waterproof sealant
Each 3M 710 filled connector contains its own moisture-resistant compound that is pressed outward when the module body and index strip or cap are pressed together. The preloaded compound is designed to fill all voids, when properly installed, to eliminate air or moisture pockets that could surround the contacts and/or conductors. It’s a superior design that affords a high degree of integrity for moisture protection as well as maximizing the space constraints that may be confronted by the splicer.

Easy modular splice maintenance
Each module cap may be reopened without loss of customer service while one pair may be removed and replaced with another without others being disturbed (the index strip cannot be opened).

A minimum amount of metal component parts
Contact elements are the only metal components within 3M 710 module bodies. The metal, utilized for contact element fabrication, is resistant to various forms of localized corrosion, stress corrosion cracking and pitting.

Applications
- Aerial closures
- Underground/vault closures
- Direct buried closures
- Encapsulated closures
- Building distribution systems*
- Central office/main frame distribution*

* In a UL1863 Compliant Enclosure
3M™ 710 Modular Connectors

**Straight Connectors**
Used for making a straight or through splice. A full plastic “skirt” protects cut conductor ends from moisture attack.

![3M710-SC1-25](image)

**Straight/Half-Tap Connectors**
Permit the joining of two cables (straight splice) or one cable to through cable conductors without interruption of service (half-tap splice).

One connector therefore does the job of two, drastically reducing your connector inventory requirements.

![3M710-SD1-25](image)

**Bridge Connectors**
Exposed contact elements are accepted by either a straight or half-tap module for bridging applications.

![3M710-BD1-25](image)
**3M™ 710 Modular Connectors**

<table>
<thead>
<tr>
<th>PRODUCT NUMBER</th>
<th>DESCRIPTION</th>
<th>GAUGE MM (IN.)</th>
<th>PKG. (LBS.)</th>
<th>MIN. ORDER</th>
<th>UPC 051138-</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>25-Pair Straight-only Modular Splice Connectors</strong> Straight-only splices connect 25 pairs at a time, in a communication distribution system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3M710-SC1-25</td>
<td>Splice module, full skirt body, standard index strip, cap - encap.</td>
<td>26-24 gauge, 0.40/0.51 (0.016/0.020)</td>
<td>384 each (34.36)</td>
<td>384 each</td>
<td>78470</td>
</tr>
<tr>
<td>3M710-SCL-25</td>
<td>Splice module, full skirt body, 22 ga. index strip, cap - encap.</td>
<td>24-22 gauge, 0.51/0.65 (0.020/0.026)</td>
<td>384 each (35.35)</td>
<td>384 each</td>
<td>78472</td>
</tr>
<tr>
<td><strong>25-Pair Straight/Half-Tap Modular Splice Connectors</strong> Straight/half-tap splices connect 25 pairs at a time. They may also be used for rearranging and transferring cables without interrupting service.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3M710-SD1-25</td>
<td>Splice module, half-tap body, standard index strip, cap - dry</td>
<td>26-24 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>384 each (31.57)</td>
<td>384 each</td>
<td>78475</td>
</tr>
<tr>
<td>3M710-SCL-25</td>
<td>Splice module, half-tap body, 22 ga. index strip, cap - dry</td>
<td>24-22 gauge, 0.51/0.65 (0.020/0.026)</td>
<td>384 each (30.88)</td>
<td>384 each</td>
<td>77092</td>
</tr>
<tr>
<td>3M710-TC1-25</td>
<td>Splice module, half-tap body, standard index strip, cap - encap.</td>
<td>26-24 gauge, 0.40/0.51 (0.016/0.020)</td>
<td>384 each (35.36)</td>
<td>384 each</td>
<td>78478</td>
</tr>
<tr>
<td>3M710-TC1-25</td>
<td>Splice module, half-tap body, standard index strip, cap - encap.</td>
<td>26-24 gauge, 0.40/0.51 (0.016/0.020)</td>
<td>384 each (34.09)</td>
<td>384 each</td>
<td>78480</td>
</tr>
<tr>
<td><strong>25-Pair Bridge Splice Connectors</strong> Bridge connectors are used in conjunction with either straight-only connectors or straight/half-tap connectors to permit plugable 3-way splices, 25 pairs at a time.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3M710-BC1-25</td>
<td>Bridge module, bridge body, solid cap - encap.</td>
<td>26-22 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>384 each (40.00)</td>
<td>384 each</td>
<td>78452</td>
</tr>
<tr>
<td>3M710-BD1-25</td>
<td>Bridge module, bridge body, solid cap - dry</td>
<td>26-22 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>384 each (40.00)</td>
<td>384 each</td>
<td>78456</td>
</tr>
<tr>
<td><strong>5-Pair Straight-only Modular Splice Connectors</strong> Straight-only splices connect 5 pairs at a time, in a communication distribution system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3M710-SC1-5</td>
<td>Splice module, full skirt body, standard index strip, cap - encap.</td>
<td>26-22 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>100 each (22.41)</td>
<td>100 each</td>
<td>78471</td>
</tr>
<tr>
<td><strong>5-Pair Straight/Half-Tap Modular Splice Connectors</strong> Straight/half-tap splices connect 5 pairs at a time. They may also be used for rearranging and transferring cables without interrupting service.</td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3M710-SD1-5</td>
<td>Splice module, half-tap body, standard index strip, cap - dry</td>
<td>26-22 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>100 each (19.49)</td>
<td>100 each</td>
<td>78476</td>
</tr>
<tr>
<td>3M710-TC1-5</td>
<td>Splice module, half-tap body, standard index strip, cap - encap.</td>
<td>26-22 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>100 each (22.13)</td>
<td>100 each</td>
<td>78479</td>
</tr>
<tr>
<td><strong>5-Pair Bridge Splice Connectors</strong> Bridge connectors are used in conjunction with either straight-only connectors or straight/half-tap connectors to permit plugable 3-way splices, 5 pairs at a time.</td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>3M710-BC1-5</td>
<td>Bridge module, bridge body, cap - encap.</td>
<td>26-22 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>100 each (17.78)</td>
<td>100 each</td>
<td>78453</td>
</tr>
<tr>
<td>3M710-BD1-5</td>
<td>Bridge module, bridge body, cap - dry</td>
<td>26-22 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>100 each (15.28)</td>
<td>100 each</td>
<td>78457</td>
</tr>
<tr>
<td><strong>25-Pair Caps</strong> Caps are used as a replacement item for the 3M 710 25-pair modular splicing system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3M710-CC1-25</td>
<td>Cap - encap., gray</td>
<td>26-22 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>100 each (23.60)</td>
<td>100 each</td>
<td>78461</td>
</tr>
<tr>
<td>3M710-CD1-25</td>
<td>Cap - dry, gray</td>
<td>26-22 gauge, 0.40/0.65 (0.016/0.026)</td>
<td>100 each (23.60)</td>
<td>100 each</td>
<td>77602</td>
</tr>
<tr>
<td><strong>25-Pair Index Strips</strong> Index strips are used as a replacement item for the 25-pair modular splicing system.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3M710-ID1-25</td>
<td>Gray index strip, standard, color-coded</td>
<td>26-24 gauge, 0.40/0.51 (0.016/0.020)</td>
<td>100 each (25.95)</td>
<td>100 each</td>
<td>78467</td>
</tr>
<tr>
<td>3M710-IDL-25</td>
<td>Blue index strip, 22 ga., color-coded</td>
<td>24-22 gauge, 0.51/0.65 (0.020/0.026)</td>
<td>100 each (25.95)</td>
<td>100 each</td>
<td>77073</td>
</tr>
<tr>
<td><strong>25-Pair Filler Strips</strong> Filler strips are used with dry 3M 710 models in an encapsulated splice to give additional protection to the 3M 710 splice module by covering and sealing the bridge module port section of the module.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3M710-FS-25</td>
<td>Filler strip</td>
<td>N/A</td>
<td>800 each (41.9)</td>
<td>800 each</td>
<td>78465</td>
</tr>
</tbody>
</table>
3M™ 710 25-Pair Splicing Tool Kit

3M’s 710 splicing modules have been used worldwide for more than 30 years to create high quality splices in copper conductor cable. The 710 system includes splicing modules as well as several tools, supplies and replacement parts to create a complete solution for your copper connections.

3M710-UTK25A

Carrying Kit
Instructions
25-Pair Splicing Tool
Threaded Mounting Rod

25-Pair Maintenance Kit
- 25-Pair Bridge Module Support
- 25-Pair Splice Support
- Cleaning Brush
- Allen Wrench
- Error Tester
- Spare Assorted Hardware and Lubricant

25-Pair Splice Support
25-Pair Bridge Module Support
Spare Assorted Hardware and Lubricant

3M™ 710 25-Pair Splicing Tool

3M710-UT25A

Instructions
25-Pair Bridge Module Support
25-Pair Splice Support
Threaded Mounting Rod
Allen Wrench

25-Pair Splicing Tool
3M™ 710 5-Pair Hand Presser Kit
3M710-HT05A

Carrying Case
25-Pair Connector Holder Assembly
Support Clamp
Bottle of Oil
L Mounting Rod
Threaded Mounting Rod

Includes: Test Leads, 5-Pair Bridge and Splice Supports, 5-Pair Blade, Allen Wrench and Assorted Hardware

3M™ 710 5-Pair Hand Presser Tool
3M710-HT05A

5-Pair Hand Presser Tool
5-Pair Petite Holder
25-Pair Bridge Module Support
25-Pair Splice Support
5-Pair Bridge Support

Instructions
5-Pair Connector Holder Assembly
25-Pair Connector Holder Assembly
5-Pair Splice Support
25-Pair Splice Support
**3M™ 710 25-Pair Splicing Rig**

When it comes to copper cable, good splices are absolutely critical to reliable connections—especially with the unprecedented demand that DSL and other advanced technologies exert on networks today. That is why the secure, high-integrity splice that the 3M™ 710 Splicing Rig offers is so important. It’s a factory-calibrated, low-maintenance tool that makes it fast and easy to create a good splice every time.

---

**Splicing Rig Features**

<table>
<thead>
<tr>
<th>Feature</th>
<th>Advantage</th>
<th>Benefit</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bridge module support</td>
<td>Optimally locates the bridge module</td>
<td>Helps ensure proper wire insertion and cut-off location</td>
</tr>
<tr>
<td>Red stuffer assembly</td>
<td>Improved stuffer tooth design</td>
<td>More consistent wire insertion</td>
</tr>
<tr>
<td>Ergonomic handle</td>
<td>Easier to push forward and down when crimping</td>
<td>High-quality crimp</td>
</tr>
<tr>
<td>Two-piece blade design with</td>
<td>Prevents blade flex to provide a more consistent cut-off location</td>
<td>High-quality splice</td>
</tr>
<tr>
<td>separate blade holder</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Conductor group holder</td>
<td>Keeps binder groups organized during splicing</td>
<td>Less time spent keeping cables in order</td>
</tr>
<tr>
<td>Color coding</td>
<td>Easy pair identification at a glance</td>
<td>Increased productivity</td>
</tr>
<tr>
<td>Aluminum die-cast components</td>
<td>Lightweight</td>
<td>Efficient handling</td>
</tr>
</tbody>
</table>
3M™ 710 Splicing Tools and Accessories

**3M™ 5-Pair Maintenance Kit**
3M710-HMK05A
- Contents include: test leads, 25 and 5-pair bridge support, 25 and 5-pair splice support, one 5-pair spare blade, allen wrench, assorted hardware (2 thumb screws, one washer, two plungers, two springs, one socket screw), plastic case and blade replacement instruction sheet.

**3M™ Metal Blade Holder**
3M710-AP105-25-SH
- Protective metal blade holder for steel blade.

**3M™ 25-Pair Steel Blade**
3M710-AP105-25S
- 25-pair steel blade fits into 3M710-AP105-25-SH metal blade holder.

**3M™ Tripod Kit**
3M710-TPK10
- A one-piece telescoping tripod used for floor supporting splicing tools.

**3M™ Group Holder Kit**
3M710-GHK
- Group holder kit.

**3M™ Bridge to Splice Tool**
3M710-BSP
- For insertion and pressing of 3M™ 710 Bridge Connector modules into half-tap or straight splice connector modules.

**3M™ 25-Pair Maintenance Kit**
3M710-UMK-25A
- Contents include: 25-pair bridge support, 25-pair splice support, one 25-pair spare blade, error tester, lubricant, allen wrench, cleaning brush, hardware kit (2 thumb screws, 10 lock washers, 1 set screw, 2 socket head screws 12 mm, 10 socket head screws 18 mm), plastic case and blade replacement instruction sheet.

**3M™ Test Leads**
3M710-AP120
- For testing one conductor pair at a time through bridge access ports on all 710 modules.

**3M™ Conductor Wire Cut-off Tool**
3M710-CCT10
- For cutting off through-conductor wires that will no longer be used after half-tapping. All wires are cut individually in a single operation to virtually eliminate the possibility of shorting and interrupting service.
3M™ 710 Splicing Tools and Accessories

<table>
<thead>
<tr>
<th>Tool Description</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>3M™ Insertion Cutting Tool 3M710-ICT10</strong></td>
<td>For cutting and terminating one conductor pair at a time in a 710 connector module. This facilitates rearrangement of the modular splice when space is limited or for individual pair maintenance.</td>
</tr>
<tr>
<td><strong>3M™ Cap Removal Tool 3M710-CRT10</strong></td>
<td>For removal of caps from connector modules to rearrange pairs or perform maintenance wire work.</td>
</tr>
<tr>
<td><strong>3M™ Bridge Removal Tool 3M710-BRT10A</strong></td>
<td>For removing bridge connectors from the connector module.</td>
</tr>
<tr>
<td><strong>3M™ Half-Tap Cover 3M710-HTC-25</strong></td>
<td>Used to cover and seal the removed half-tap cable pairs following the cutting operation with the conductor wire cut-off tool.</td>
</tr>
<tr>
<td><strong>3M™ “L” Mounting Rods with Support Clamp 3M710-AP100</strong></td>
<td>“L” mounting rods with support clamp.</td>
</tr>
<tr>
<td><strong>3M™ Ladder Tool Mount Kit 3M710/MS2-TMK-LK</strong></td>
<td>A multi-piece set designed to securely mount and support cable splicing when splicing operations are performed in conjunction with the use of a ladder. Kit contents include two spare rig clamp assemblies, 48” (122 cm) aluminum ladder bar, extended 3M710-TMK-A6 swivel/knob, rugged carrying case, 6 mm hex key, and instructions.</td>
</tr>
<tr>
<td><strong>3M™ Tool Mount Kit Extended Length Swivel/Knob 3M710/MS2-TMK-A6L</strong></td>
<td>Extended length 36” (91.5 cm) swivel/knob.</td>
</tr>
<tr>
<td><strong>3M™ Ladder Tool Mount Ladder Bar 3M710/MS2-TMK-LB</strong></td>
<td>48” (122 cm) aluminum ladder bar for Ladder Tool Mount Kit.</td>
</tr>
<tr>
<td><strong>3M™ Ladder Tool Mount Kit Carrying Case 3M710/MS2-TMK-LC</strong></td>
<td>Rugged soft-sided carrying case for the Ladder Tool Mount Kit large enough to transport splicing rig equipment with Ladder Tool Mount Kit.</td>
</tr>
<tr>
<td><strong>3M™ Tool Mounting Kit 3M710-TMK10-A</strong></td>
<td>A multi-piece set designed to mount and support all splicing tools on splicer boxes, pedestals or racking.</td>
</tr>
</tbody>
</table>
3M™ 710 Splicing Tools and Accessories

3M™ Base
3M710-TMK10-A1

Base

3M™ Tool Clamp
3M710-TMK10-A2

Tool Clamp

3M™ Swivel Bar
3M710-TMK10-A3

Swivel Bar

3M™ Tube Clamp
3M710-TMK10-A4

Tube Clamp

3M™ Vise Clamp
3M710-TMK10-A5

Vise Clamp

3M™ Swivel Knob
3M710-TMK10-A6

Swivel Knob

3M™ Tube/Tool Clamp
3M710-TMK10-A7

Tube/Tool Clamp

3M™ 90° Mount
3M710-TMK10-A8

90° Mount

3M™ Plastic Case
3M710-TMK10-A9

Plastic Case
3M and MS® are trademarks of 3M Company.

Special Warranty Statement:
3M™ 710 splicing rigs, tools and modules are engineered to work together to achieve consistently superior performance in the field. Modules from other manufacturers may not meet the tight quality tolerances of 3M modules and may damage the calibration and performance of a 3M rig or tool. Therefore, the published 3M warranty does not extend to any 3M modules spliced in rigs or tools not made by 3M. The warranty on 3M 710 splicing rigs and tools can also be voided if used on non-3M modules.

Important Notice
Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use.

Warranty; Limited Remedy; Limited Liability.
3M’s product warranty is stated in its Product Literature available upon request. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M’s option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any indirect, special, incidental or consequential loss or damage arising from this 3M product, regardless of the legal theory asserted.