

Electrical Wire Connectors and Tools

The best connectors do more than fit your application; they also fit your hand, and they feel good to use. At 3M, we design connectors that are as comfortable and easy to use as they are dependable. Our complete line provides a wide range of connector choices. Simply choose the connector that fits your personal preference, as well as the application. We give you plenty of choices.



| Section | Page |
|---------------------------------------------------------------------------------|--------------|
| Spring Connectors and Tools | 65-70 |
| 3M™ Performance Plus Wire Connectors | 65 |
| 3M™ Wire Connectors for Residential | 66-67 |
| 3M™ Scotchlok™ Electrical Spring Connectors 312, 512 and 512G | 67-68 |
| 3M™ Highland™ Wire Connectors | 68-69 |
| 3M™ Wire Connector Drivers WCD | 70 |
| Crimp Sleeve Connectors | 71 |
| 3M™ Scotchlok™ Insulated Electrical Crimp Sleeve Connectors S-11 and S-31 | 71 |
| Insulation Displacement Connectors and Tools | 72-82 |
| 3M™ Scotchlok™ IDC Connectors for Electrical Applications..... | 72-77 |
| 3M™ Scotchlok™ IDC Pigtail Connectors | 72 |
| 3M™ Scotchlok™ IDC Double Run or Tap Connectors..... | 73-74 |
| 3M™ Scotchlok™ IDC Run and Tap Connector..... | 75-76 |
| 3M™ Scotchlok™ T-Tap Connector | 76-77 |
| 3M™ Scotchlok™ Fuse Holder..... | 77 |
| 3M™ Scotchlok™ IDC Connectors for Communication Applications..... | 78-81 |
| 3M™ Scotchlok™ IDC Butt Connectors..... | 78-81 |
| 3M™ Scotchlok™ IDC Tap Connector..... | 81 |
| 3M™ Crimping Tools | 82 |
| 3M™ Crimping Tools..... | 82 |
| Moisture Resistant Connectors | 83 |
| 3M™ Scotchlok™ Moisture Resistant Connectors..... | 83 |
| 3M™ Scotchlok™ IDC Butt/Trim Out Connector 211 | 83 |
| Direct Bury | 84 |
| 3M™ Direct Bury Splice Kit DBO/B-6..... | 84 |

SPRING CONNECTORS

| FEATURES | ADVANTAGES | BENEFITS |
|----------------------------------------------------------------------------|----------------------------------|---------------------------------|
| 3M™ PERFORMANCE PLUS WIRE CONNECTORS (T/R+, T/Y+, O/B+, R/Y+, B/G+) | | |
| Wires feed deeper | Increases level of pull-out | Security |
| Wide wire ranges | Three connectors replace seven | Saves time and cost effective |
| Flexible skirt | Covers overstripped wires | Safety |
| New internal design | Smoother and faster installation | Improves quality and saves time |
| 3M ELECTRICAL SPRING AND GROUNDING CONNECTORS (312, 412, 512, 512G) | | |
| Hard shell | Easy to grip | Easy to use |
| Wings | Easy to turn | Easy to use |
| 3M HIGHLAND™ WIRE CONNECTORS (H-29, H-30, H-31, H-33, H-35) | | |
| Low price | Economical | Cost effective |

Wire Range for 3M Performance Plus Wire Connectors



Spring Connectors and Tools

3M™ Performance Plus Wire Connectors

Because of their increased wire range, just three 3M™ Performance Plus Wire Connectors handle the work of eight standard connectors. O/B+ replaces the orange, blue and gray wire connector style connectors, as well as 70% of the yellow wire connector and wing style connectors. R/Y+ replaces both red and yellow wing style connectors. B/G+ covers both the large blue and gray connectors.

This simplifies selection of the right connector for a wide range of wiring jobs. There's also less inventory to manage, and a better chance you'll have the connector you need to do every job.

A Better Bite for a Better Connection. 3M™ Performance Plus Wire Connectors O/B+, R/Y+ and B/G+ now have a better bite. Wires feed into the connector more easily, improving the security of the connection and increasing the level of pull out.

New Design Allows Easier Installation. We have modified the internal design of the O/B+, R/Y+ and B/G+ wire connectors. Installation is smooth, fast and easy on the hands.

Flexible Skirts Provide Safety. The flexible skirts on the O/B+, R/Y+ and B/G+ wire connectors make the workplace a safer environment. The flexible skirt provides protection against potential shock situations.

| | |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection Type | Wire |
| Connector Style | Twist On |
| Flame Retardant | Yes |
| Maximum Voltage Rating | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Operating Temperature | 221°F (105°C) |
| RoHS 2011/65/EU | No |
| Agency Approval |     |



| | B/G+BOX | B/G+JUG | O/B+BOX | O/B+JUG |
|-----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-43150 | 054007-43151 | 054007-43152 | 054007-43153 |
| Color | Blue/Gray | Blue/Gray | Orange/Blue | Orange/Blue |
| Conductor Size | 14–6 AWG | 14–6 AWG | 22–12 AWG | 22–12 AWG |
| Connectors per Carton | 50 | 250 | 100 | 500 |
| Connectors per Case | 500 | 2000 | 1000 | 10,000 |
| | R/Y+BOX | R/Y+JUG | R/Y+KEG | |
| |  |  |  | |
| UPC | 054007-43154 | 054007-43155 | 051128-57943 | |
| Color | Red/Yellow | Red/Yellow | Red/Yellow | |
| Conductor Size | 22–8 AWG | 22–8 AWG | 22–8 AWG | |
| Connectors per Carton | 100 | 500 | - | |
| Connectors per Case | 1000 | 4000 | 17,000 | |

3M™ Wire Connectors for Residential

Specifically created for the residential markets, the T/R+ replaces the yellow, tan and red connectors in the majority of field applications. T/Y+ replaces the yellow, orange, blue and gray wire nuts in most applications. Use the 412 (tan) connector for wire combinations from 2 #20 to 3 #10 AWG. This simplifies selection of the right connector for a wide range of wiring jobs. There's also less inventory to manage, and a better chance you'll have the connector you need to do every job.



Connection Type Wire

Connector Style Twist On

Flame Retardant Yes





Maximum Voltage 600 V (1000 V in signs, lighting fixtures and luminaires)

Operating Temperature 221°F (105°C)

RoHS 2011/65/EU No


| | T/R+BOX | T/R+JUG | T/R+KEG | T/Y+BOX |
|-----------------------|--------------|--------------|--------------|--------------|
| | | | | |
| UPC | 051128-54454 | 051128-54455 | 051128-54456 | 051128-55218 |
| Color | Tan/Red | Tan/Red | Tan/Red | Tan/Yellow |
| Conductor Size | 22-8 AWG | 22-8 AWG | 22-8 AWG | 22-12 AWG |
| Agency Approval | | | | |
| Connectors per Carton | 100 | 750 | - | 100 |
| Connectors per Case | 1000 | 6000 | 25,000 | 1000 |
| | T/Y+JUG | T/Y+KEG | 412-BOX | 412-BULK |
| | | | | |
| UPC | 051128-55219 | 051128-58623 | 051128-54451 | 051128-54452 |
| Color | Tan/Yellow | Tan/Yellow | Tan | Tan |
| Conductor Size | 22-12 AWG | 22-12 AWG | 22-10 AWG | 22-10 AWG |
| Agency Approval | | | | |
| Connectors per Carton | 500 | - | 100 | 500 |
| Connectors per Case | 10,000 | 40,000 | 1000 | 10,000 |









3M™ Wire Connectors for Residential (continued)

| | 412-JUG | 412-KEG |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |
| UPC | 051128-55695 | 051128-54453 |
| Color | Tan | Tan |
| Conductor Size | 22-10 AWG | 22-10 AWG |
| Agency Approval |  |  |
| Connectors per Carton | 500 | - |
| Connectors per Case | 4000 | 20,000 |









3M™ Scotchlok™ Electrical Spring Connectors 312, 512 and 512G

The quick-spin, wing-torque design of 3M™ Scotchlok™ Electrical Spring Connector 312 and 512 is easy on your fingers. The day's last connection will feel almost as good as the first. Generous expansion room accommodates a wide range of solid or stranded wire. Use the 312 (yellow) connector for wire combinations from 3 #20 to 3 #12 AWG, and the 512 (red) connector for 2 #18 to 5 #12 AWG. The 512G (green) is used for grounding connections.

Connection Type Wire
Connector Style Twist On
Maximum Voltage Rating 600 V (1000 V in signs, lighting fixtures and luminaries)
Operating Temperature 221 °F (105 °C)
RoHS 2011/65/EU Yes
Country of Origin 

| | 312-BOX | 312-BULK | 312-KEG | 512-BOX |
|-----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-08159 | 054007-08160 | 051128-56280 | 054007-08161 |
| Color | Yellow | Yellow | Yellow | Red |
| Conductor Size | 22-8 AWG | 22-8 AWG | 22-8 AWG | 22-8 AWG |
| Flame Retardant | Yes | Yes | Yes | Yes |
| Agency Approval |  |  |  |  |
| Connectors per Carton | 100 | 500 | - | 100 |
| Connectors per Case | 1000 | 10,000 | 25,000 | 1000 |

3M™ Scotchlok™ Electrical Spring Connectors 312, 512 and 512G (continued)

| | 512-BULK | 512-KEG | 512G-BAG | 512G-POUCH |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-08162 | 051128-56281 | 054007-50232 | 051128-59098 |
| Color | Red | Red | Green | Green |
| Conductor Size | 22-8 AWG | 22-8 AWG | 14-10 AWG | 14-10 AWG |
| Flame Retardant | Yes | Yes | Yes | Yes |
| Agency Approval |  |  |  |  |
| Connectors per Carton | 500 | - | 500 | - |
| Connectors per Case | 10,000 | 25,000 | 10,000 | 100 |

3M™ Highland™ Wire Connectors

3M™ Highland™ Wire Connectors make it quick and easy to match the right connector to the size of the wire. The shells are designed to withstand temperatures up to 221°F (105°C). Highland color-coded wire connectors are UL Listed, CSA Certified, and work equally well with either solid or stranded wire.





Connection Type Wire





Connector Style Twist On

Flame Retardant No

Operating Temperature
221°F (105°C)

RoHS 2011/65/EU Yes

Agency Approval  



| | H-29-BIN | H-29-BOX | H-30-BIN | H-30-BOX |
|------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-43134 | 054007-43133 | 054007-43123 | 054007-43122 |
| Color | Gray | Gray | Blue | Blue |
| Conductor Size | 22-16 AWG | 22-16 AWG | 22-16 AWG | 22-16 AWG |
| Maximum Voltage Rating | 300 V | 300 V | 300 V | 300 V |
| Connectors per Carton | - | 100 | - | 100 |
| Connectors per Case | 1000 | 1000 | 1000 | 1000 |

3M™ Highland™ Wire Connectors (continued)

| | H-30-KEG | H-31-BIN | H-31-BOX | H-31-BULK |
|------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-43124 | 054007-43119 | 054007-43117 | 054007-43118 |
| Color | Blue | Orange | Orange | Orange |
| Conductor Size | 22–16 AWG | 18–14 AWG | 18–14 AWG | 18–14 AWG |
| Maximum Voltage Rating | 300 V | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Connectors per Carton | - | - | 100 | 500 |
| Connectors per Case | 10,000 | 1000 | 1000 | 10,000 |
| | H-31-KEG | H-33-BIN | H-33-BOX | H-33-BULK |
| |  |  |  |  |
| UPC | 054007-43120 | 054007-43137 | 054007-43136 | 054007-43138 |
| Color | Orange | Yellow | Yellow | Yellow |
| Conductor Size | 18–14 AWG | 18–12 AWG | 18–12 AWG | 18–12 AWG |
| Maximum Voltage Rating | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Connectors per Carton | - | - | 100 | 500 |
| Connectors per Case | 10,000 | 1000 | 1000 | 5000 |
| | H-33-KEG | H-35-BIN | H-35-BOX | H-35-BULK |
| |  |  |  |  |
| UPC | 054007-43139 | 054007-43141 | 054007-43140 | 054007-43142 |
| Color | Yellow | Red | Red | Red |
| Conductor Size | 18–12 AWG | 18–10 AWG | 18–10 AWG | 18–10 AWG |
| Maximum Voltage Rating | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Connectors per Carton | - | - | 100 | 250 |
| Connectors per Case | 5000 | 1000 | 1000 | 2500 |

3M™ Wire Connector Drivers WCD

These application tools for 3M™ Performance Plus Wire Connectors O/B+, R/Y+, T/R+ and T/Y+, 3M™ Electrical Spring Connectors 312 and 512, and 3M™ Scotchlok™ Wire Connectors Y, R, and G quickly spin on the connector and position the wire bundle in the box. The WCD-H driver is a hand driver and the WCD-P driver is a power driver that fits a standard chuck.

| | WCD-H | WCD-P |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| |  |  |
| UPC | 054007-49948 | 054007-49919 |
| Product Name | 3M™ Hand Wire Connector Driver WCD-H | 3M™ Power Wire Connector Driver WCD-P |
| Description | Hand driver for 3M™ Performance Plus Wire Connectors O/B+, R/Y+, 3M™ Scotchlok™ Wire Connectors Y, R, G, and 3M™ Electrical Spring Connectors 312 and 512. | Power driver using a standard chuck, drill or screw driver for 3M™ Performance Plus Wire Connectors O/B+, R/Y+, 3M™ Scotchlok™ Wire Connectors Y, R, G, and 3M™ Electrical Spring Connectors 312 and 512. |
| Case Qty. | 10 | 10 |

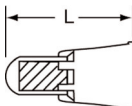
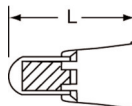

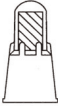
Crimp Sleeve Connectors

3M™ Scotchlok™ Insulated Electrical Crimp Sleeve Connectors S-11 and S-31

3M™ Scotchlok™ Insulated Electrical Crimp Sleeve Connectors S-11-A and S-31-A make fast work of splicing 22 to 10 AWG copper conductors. Smooth flared entry makes wire insertion fast — simply twist conductors together and crimp. The S-11-A and S-31-A are insulated, closed-end crimp sleeve connectors with a copper insert. The rugged and resilient nylon insulator allows these connectors to be used in light fixtures, appliances and other electrical OEM applications.

| | |
|-----------------------|-----------------|
| Connector Style | Crimp Sleeve |
| Insulation Material | Nylon |
| Barrel Style | Insulation Grip |
| Terminal Type | Closed End |
| Terminal Style | Copper |
| Flame Retardant | No |
| Maximum Voltage | 600 V |
| Operating Temperature | 221°F (105°C) |
| RoHS 2011/65/EU | Yes |



| | S-11-A(BOXED) | S-11-A(BULK) | S-31-A(BOXED) | S-31-A(BULK) |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 051128-58997 | 051138-98052 | 051128-58996 | 051138-98044 |
| Conductor Size | 22–16 AWG | 22–16 AWG | 18–10 AWG | 18–10 AWG |
| Length | 0.83" (21,1 mm) | 0.83" (21,1 mm) | 1.00" (25,4 mm) | 1.00" (25,4 mm) |
| Cu Solid/Stranded Wire Combinations | 2–5 #22; 1–4 #22 with 1–2 #20; 1–3 #22 with 1 #18; 1 #22 with 1 #16; 2–3 #20 | 2–5 #22; 1–4 #22 with 1–2 #20; 1–3 #22 with 1 #18; 1 #22 with 1 #16; 2–3 #20 | 1 #22 with 1 #12 or #10; 1 #22 with 2 #14 or #16; 1 #22 with 1 #20 with 1 #12 or #14; 1 #22 with 1 #18 with 1 #12 or #14; 1 #22 with 1 #16 with 1 #12 or #14; 1 #22 with 1 #14 with 1 #12; 1–2 #20 with 1–2 #14; 1–2 #20 with 1 #12; 1 #20 with 1 #10; 1 #20 with 1 #16 with 1 #12; 1 #18 with 1 #14; 1 #18 with 1 #12; 1 #18 with 2 #16; 1 #18 with 1 #16 with 1 #12 or #14; 1 #16 with 1 #12 or #14; 3 #16; 1 #14 with 1 #12; 2 #14 | 1 #22 with 1 #12 or #10; 1 #22 with 2 #14 or #16; 1 #22 with 1 #20 with 1 #12 or #14; 1 #22 with 1 #18 with 1 #12 or #14; 1 #22 with 1 #16 with 1 #12 or #14; 1 #22 with 1 #14 with 1 #12; 1–2 #20 with 1–2 #14; 1–2 #20 with 1 #12; 1 #20 with 1 #10; 1 #20 with 1 #16 with 1 #12; 1 #18 with 1 #14; 1 #18 with 1 #12; 1 #18 with 2 #16; 1 #18 with 1 #16 with 1 #12 or #14; 1 #16 with 1 #12 or #14; 3 #16; 1 #14 with 1 #12; 2 #14 |
| Connectors per Carton | 100 | - | 50 | - |
| Connectors per Case | 500 | 10,000 | 500 | 5000 |

3M™ Scotchlok™ IDC Pigtail Connectors

3M™ Scotchlok™ Self-Stripping, Moisture Resistant Electrical Pigtail Connector 314 provides a moisture-resistant seal. The 3M™ Scotchlok™ Electrical Connector IDC 314U is a self-stripping, flame retardant, electrical pigtail connector for dry environment applications. The 3M™ Scotchlok™ Electrical Connector IDC 316-IR provides a moisture-resistant seal and are recommended for use with low energy underground circuit wires, sprinkler systems, landscape lighting or other moisture-resistance wires for applications of less than 30 V. Its sealant is a mineral oil-based grease.

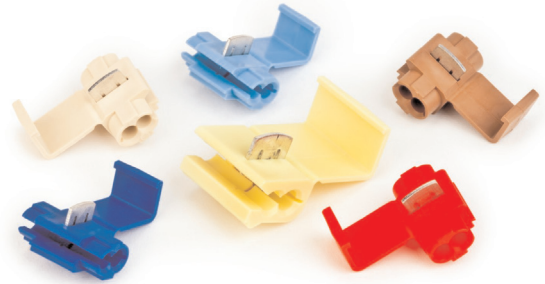


Connection Type Pigtail
Connector Style Insulation Displacement
Flame Retardant Yes
Operating Temperature 221°F (105°C)
Recommended Crimping Tool 3M™ Crimping Tool No. E-9BM
RoHS 2011/65/EU Yes









| | 314-BIN | 314-BOX | 314U-BOX | 314U-BIN |
|-----------------------|-----------------|------------------|------------------|-----------------|
| | | | | |
| UPC | 054007-09231 | 054007-09230 | 054007-09232 | 054007-09233 |
| Color | Blue | Blue | White | White |
| Conductor Size | 22–14 AWG | 22–14 AWG | 22–14 AWG | 22–14 AWG |
| Max. Insulation O.D. | 0.150" (3,8 mm) | 0.150" (3,8 mm) | 0.150" (3,8 mm) | 0.150" (3,8 mm) |
| Agency Approval | | | | |
| Connectors per Carton | - | 50 | 50 | - |
| Connectors per Case | 1000 | 500 | 500 | 1000 |
| | 316-IR BAG | 557-BOX | 557-BULK | |
| | | | | |
| UPC | 054007-50419 | 054007-21494 | 054007-21502 | |
| Color | Black/White | Red | Red | |
| Conductor Size | 22–16 AWG | 22–16 AWG | 22–16 AWG | |
| Max. Insulation O.D. | 0.155" (3,9 mm) | 0.120" (3,05 mm) | 0.120" (3,05 mm) | |
| Agency Approval | | | | |
| Connectors per Carton | 30 | 100 | 500 | |
| Connectors per Case | 300 | 1000 | 5000 | |

3M™ Scotchlok™ IDC Double Run or Tap Connectors














The 3M™ Scotchlok™ Electrical Connector IDC 560 and 560N electrically connect a (tap) wire end to a through (run) wire and insulate the connection. They are used for tap and parallel splicing. The 3M™ Scotchlok™ Electrical Connector IDC 564 electrically connects two through (run) wires and insulates the connection. It is used for parallel splicing. The 3M™ Scotchlok™ Electrical Connector IDC 560B electrically connects a (tap) wire end to a through (run) wire and insulates the connection. For general-purpose electrical connections on auto, boat, van or trailer. Used for tap and parallel splicing. The 3M™ Scotchlok™ Electrical Connector IDC 905 and 905N electrically connect a (tap) wire end to a through (run) wire and insulate the connection. Suitable for low-voltage accessories such as radios, stereo speakers, tape decks and CB radios. Used for tap, in-line parallel and pigtail splicing.



| | |
|-----------------|-------------------------|
| Connection Type | Double Run or Tap |
| Connector Style | Insulation Displacement |
| RoHS 2011/65/EU | Yes |

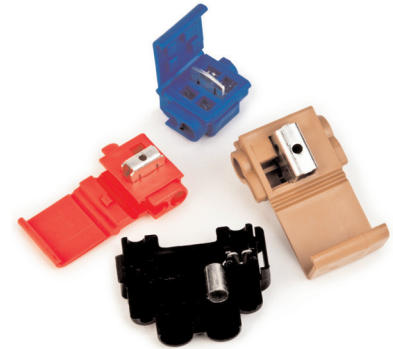
| | 560-BOX | 560-BULK | 560B-BOX | 560B-BULK |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-00839 | 054007-00840 | 054007-20090 | 054007-20181 |
| Color | Light Blue | Light Blue | Blue | Blue |
| Conductor Size | 18–16 AWG / 14 AWG Str | 18–16 AWG / 14 AWG Str | 18–16 AWG / 14 AWG Str | 18–16 AWG / 14 AWG Str |
| Maximum Insulation Outside Diameter | 0.145" (3,68 mm) | 0.145" (3,68 mm) | 0.145" (3,68 mm) | 0.145" (3,68 mm) |
| Operating Temperature | 221°F (105°C) | 221°F (105°C) | 194°F (90°C) | 194 °F (90 °C) |
| Flame Retardant | Yes | Yes | Yes | Yes |
| Agency Approval |  |  |  |  |
| Connectors per Carton | 100 | 500 | 100 | 500 |
| Connectors per Case | 1000 | 5000 | 1000 | 5000 |

3M™ Scotchlok™ IDC Double Run or Tap Connectors (continued)

| | 560N-BULK | 562-BOX | 562-BIN | 564-BULK |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-09513 | 054007-11032 | 054007-11040 | 054007-06118 |
| Color | Brown | Yellow | Yellow | White |
| Conductor Size | 18–16 AWG / 14 AWG Str | 12 AWG / 10 AWG Str | 12 AWG / 10 AWG Str | 18–14 AWG |
| Maximum Insulation Outside Diameter | 0.145" (3,68 mm) | 0.190" (4,82 mm) | 0.190" (4,82 mm) | 0.145" (3,68 mm) |
| Operating Temperature | 221°F (105°C) | 194°F (90°C) | 194°F (90°C) | 194°F (90°C) |
| Flame Retardant | Yes | Yes | Yes | No |
| Agency Approval |  |  |  |  |
| Connectors per Carton | 500 | 100 | - | 500 |
| Connectors per Case | 5000 | 1000 | 1000 | 5000 |
| | 905-BOX | 905-BULK | 905N | |
| |  |  |  | |
| UPC | 054007-06128 | 054007-06129 | 054007-06124 | |
| Color | Red | Red | Red | |
| Conductor Size | Tap: 22–18 AWG Run: 18–14 AWG | Tap: 22–18 AWG Run: 18–14 AWG | 18–22 AWG | |
| Maximum Insulation Outside Diameter | Tap: 0.110" (2,79 mm) Run: 0.145" (3,68 mm) | Tap: 0.110" (2,79 mm) Run: 0.145" (3,68 mm) | 0.145" (3,68 mm) | |
| Operating Temperature | 194°F (90°C) | 194°F (90°C) | 194°F (90°C) | |
| Flame Retardant | No | No | No | |
| Agency Approval |  |  | N/A | |
| Connectors per Carton | 50 | 500 | 500 | |
| Connectors per Case | 500 | 5000 | 5000 | |

3M™ Scotchlok™ IDC Run and Tap Connector





Electrically connects a (tap) wire end to a through (run) wire and insulates the connection. Designed for control circuit wiring, fixture wiring, appliance wiring, signal and PA systems, and automotive/boat/RV wiring.



| | |
|----------------------------------|---------------------------------|
| Connection Type | Run and Tap |
| Connector Style | Insulation Displacement |
| Recommended Crimping Tool | 3M™ E-9BM or 9" Linemans Pliers |
| RoHS 2011/65/EU | Yes |

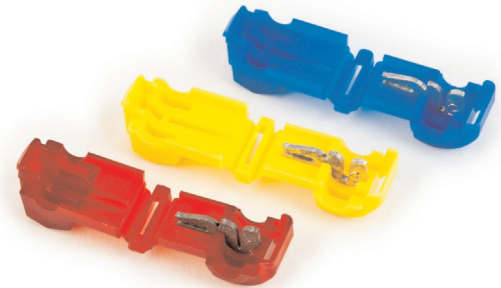
| | 558-BOX | 558-BULK | 567-BOX |
|-------------------------------------|----------------------------------------------|------------------------|----------------------------------------------|
| | | | |
| UPC | 054007-14861 | 054007-14879 | 054007-14887 |
| Color | Red | Red | Brown |
| Max. Recommended Voltage Rating | 600 V | 600 V | 600 V |
| Conductor Size (Tap) | 22–16 AWG | 22–16 AWG | Tap: 18–14 AWG Run: 12–10 AWG |
| Maximum Insulation Outside Diameter | 0.120" (3,1 mm) | 0.120" (3,1 mm) | Tap: 0.145" (3,7 mm) Run: 0.190" (4,8 mm) |
| Operating Temperature | 221°F (105°C) | 221°F (105°C) | 221°F (105°C) |
| Flame Retardant | Yes | Yes | Yes |
| Agency Approval | | | |
| Connectors per Carton | 100 | - | 100 |
| Connectors per Case | 1000 | 5000 | 1000 |
| | 567-BIN | 804-100/BAG | 804-BOX |
| | | | |
| UPC | 054007-14895 | 054007-50188 | 054007-06134 |
| Color | Brown | Blue | Blue |
| Max. Recommended Voltage Rating | 600 V | 600 V | 600 V |
| Conductor Size (Tap) | Tap: 18–14 AWG Run: 12–10 AWG | 18–16 AWG / 14 AWG Str | 18–16 AWG / 14 AWG Str |
| Maximum Insulation Outside Diameter | Tap: 0.145" (3,7 mm) Run: 0.190" (4,8 mm) | 0.145" (3,7 mm) | 0.145" (3,7 mm) |
| Operating Temperature | 221°F (105 °C) | 194°F (90°C) | 194°F (90°C) |
| Flame Retardant | Yes | Yes | Yes |
| Agency Approval | | | |
| Connectors per Carton | - | 100 | 25 |
| Connectors per Case | 1000 | 1000 | 250 |



3M™ Scotchlok™ IDC Run and Tap Connector (continued)




| | 804-BULK | 901-BOX | 901-BULK |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |
| UPC | 054007-06135 | 054007-06106 | 054007-06107 |
| Color | Blue | Black | Black |
| Max. Recommended Voltage Rating | 600 V | 32 V | 32 V |
| Conductor Size (Tap) | 18–16 AWG / 14 AWG Str | 18–14 AWG | 18–14 AWG |
| Maximum Insulation Outside Diameter | 0.145" (3,7 mm) | 0.145" (3,7 mm) | 0.145" (3,7 mm) |
| Operating Temperature | 194°F (90°C) | 194°F (90°C) | 194°F (90°C) |
| Flame Retardant | Yes | No | No |
| Agency Approval |  | - | - |
| Connectors per Carton | 500 | 50 | 500 |
| Connectors per Case | 5000 | 500 | 5000 |

3M™ Scotchlok™ T-Tap Connector




Use 3M™ Scotchlok™ Self-Stripping Electrical Tap Connectors 951, 952 and 953 to electrically tap into a wire in mid-span without cutting or stripping the wire. Connector then mates with a .250" (6,35 mm) male tab, making a reusable quick-connect wiring termination.



Connection Type T-tap
 Connector Style Insulation Displacement
 RoHS 2011/65/EU Yes
 Agency Approvals  

| | 951X-BOTTLE | 951K-BULK | 952X-BOTTLE |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |
| UPC | 054007-12312 | 054007-12313 | 054007-08427 |
| Conductor Size | 22-18 AWG | 22-18 AWG | 18-14 AWG |
| Flame Retardant | Yes | Yes | Yes |
| Maximum Insulation Outside Diameter | 0.150" (3,8 mm) | 0.150" (3,8 mm) | 0.150" (3,8 mm) |
| Operating Temperature | 221°F (105°C) | 221°F (105°C) | 221°F (105°C) |
| Connectors per Carton | 50 | - | 50 |
| Connectors per Case | 500 | 1000 | 500 |

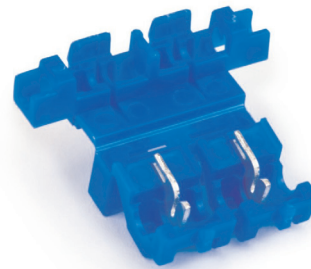
3M™ Scotchlok™ T-Tap Connector (continued)

| | 952K-BULK | 953X-BOTTLE | 953K-BULK |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |
| UPC | 054007-08428 | 054007-12314 | 054007-12315 |
| Conductor Size | 18-14 AWG | 12 AWG | 12 AWG |
| Flame Retardant | Yes | Yes | Yes |
| Maximum Insulation Outside Diameter | 0.150" (3,8 mm) | 0.150" (3,8 mm) | 0.150" (3,8 mm) |
| Operating Temperature | 221°F (105°C) | 221°F (105°C) | 221°F (105°C) |
| Connectors per Carton | - | 50 | - |
| Connectors per Case | 1000 | 500 | 1000 |

3M™ Scotchlok™ Fuse Holder

The 3M™ Scotchlok™ Fuse Holder 972 is used to install a blade-type automotive fuse between power source and device.

| | |
|--------------------------|-------------------------|
| Terminal Type | Fuse |
| Connection Type | Wire |
| Connector/Connector Tool | Connector |
| Connector Style | Insulation Displacement |
| Insulation Material | Polypropylene |
| Flame Retardant | No |
| RoHS 2011/65/EU | Yes |



| Order No. | UPC | Color | Conductor Size | Maximum Insulation Outside Diameter | Operating Temperature | Connectors per Carton | Connectors per Case |
|------------|--------------|-------|-----------------------------------------|-------------------------------------|-----------------------|-----------------------|---------------------|
| 972X-A-BOX | 051128-57558 | Blue | 18-14 AWG (0,75 - 1,5 mm ²) | 0.150" (3,8 mm) | 194°F (90°C) | 25 | 250 |
| 972-A-BULK | 051128-57557 | Blue | 18-14 AWG (0,75 - 1,5 mm ²) | 0.150" (3,8 mm) | 194°F (90°C) | - | 1000 |

3M™ Scotchlok™ IDC Butt Connectors

Over 30 years ago, 3M introduced the industry's original U element connector, the 3M™ Scotchlok™ Connector UR. The latest series of connectors—the 3M Scotchlok Connectors UR2, UY2 and UB2A—features that same originality in technological advantages, building on the successful Scotchlok connector's design, shape, color-coded cap concepts and element technology. The Series 2 connectors additionally offer full wire range capability, increased port size to accommodate up to 0.082" (2,1 mm) insulation sizes, double elements in all products and a solvent-resistant plastic construction.













RoHS 2011/65/EU Yes

| | UAL(BX) | UAL(CART) | UCC(CART) | UCC-JAR500 |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 051115-26188 | 051115-26187 | 051115-26195 | 051115-26196 |
| Connector Type | Butt | Butt | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Filled | Filled |
| Cable Type | PIC | PIC | PIC | PIC |
| Conductor Size (Min.) | 24 AWG | 24 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 17 AWG | 17 AWG | 22 AWG | 22 AWG |
| Maximum Insulation Outside Diameter | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.060" (1,5 mm) | 0.060" (1,5 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | - | - | - | - |
| Connectors per Case | 1000 | 10 | 10 | 500 |
| | UCC(BULK) | UG(BX) | UP2(BULK) | UP2(CART) |
| |  |  |  |  |
| UPC | 051115-26194 | 051115-26197 | 054007-33420 | 054007-32698 |
| Connector Type | Butt/ 2 Conductor | Bridge Tap/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Dry | Dry |
| Cable Type | PIC | PIC | PIC, PULP, PAPER | PIC, PULP, PAPER |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 22 AWG | 19 AWG | 22 AWG | 22 AWG |
| Maximum Insulation Outside Diameter | 0.060" (1,5 mm) | 0.044" (Tap); 0.066" (Run) | 0.060" (1,5 mm) | 0.060" (1,5 mm) |
| Flame Retardant | No | No | Yes | Yes |
| Connectors per Carton | - | - | 1000 | 16 |
| Connectors per Case | 5000 | 1000 | 5000 | 160 |



3M™ Scotchlok™ IDC Butt Connectors (continued)

| | UP3(BULK) | UP3(CART) | UR2(BX) | UR2(CART) |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-33419 | 054007-32700 | 051115-26201 | 051115-26202 |
| Connector Type | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor |
| Application | Dry | Dry | Filled | Filled |
| Cable Type | PIC, PULP, PAPER | PIC, PULP, PAPER | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.060" (1,5 mm) | 0.060" (1,5 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) |
| Flame Retardant | Yes | Yes | No | No |
| Connectors per Carton | 500 | 10 | - | - |
| Connectors per Case | 5000 | 100 | 1000 | 10 |
| | UR2(BULK) | UR2-25/PACK | UR2-JAR500 | UR2-PK50 |
| |  |  |  |  |
| UPC | 051115-26200 | 051115-26117 | 051115-26207 | 051115-26212 |
| Connector Type | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor |
| Application | Filled | Filled | Filled | Filled |
| Cable Type | PIC | PIC | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | - | - | - | 50 |
| Connectors per Case | 5000 | 40 | 5000 | 1000 |
| | UR2-D(CART) | UR2-D-JAR500 | UR(CART) | UR(BX) |
| |  |  |  |  |
| UPC | 054007-71475 | 051115-30060 | 051115-26232 | 051115-26230 |
| Connector Type | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor |
| Application | Dry | Dry | Filled | Filled |
| Cable Type | PIC, PULP, PAPER | PIC, PULP, PAPER | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.060" (1,5 mm) | 0.060" (1,5 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | 10 | - | - | - |
| Connectors per Case | 100 | 5000 | 10 | 1000 |

3M™ Scotchlok™ IDC Butt Connectors (continued)

| | UR-25/PACK | UY2(BX) | UY2(BULK) | UY2(CART) |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 051115-26238 | 051115-26121 | 051115-26224 | 051115-26225 |
| Connector Type | Butt/ 2 or 3 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Filled | Filled |
| Cable Type | PIC | PIC | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.060" (1,5 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | 25 | - | - | - |
| Connectors per Case | 250 | 1000 | 5000 | 10 |
| | UY2-JAR500 | UY2-25/PACK | UY2-PK50 | UY2-D(CART) |
| |  |  |  |  |
| UPC | 051115-26228 | 051115-26119 | 051115-26213 | 054007-71478 |
| Connector Type | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Filled | Dry |
| Cable Type | PIC | PIC | PIC | PIC, PULP, PAPER |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | - | - | 50 | 12 |
| Connectors per Case | 5000 | 40 | 1000 | 120 |
| | UY(BULK) | UY(BX) | UY(CART) | UY-25/PACK |
| |  |  |  |  |
| UPC | 051115-26221 | 051115-26214 | 051115-26223 | 051115-26237 |
| Connector Type | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Filled | Filled |
| Cable Type | PIC | PIC | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 22 AWG | 22 AWG | 22 AWG | 22 AWG |
| Maximum Insulation Outside Diameter | 0.060" (1,5 mm) | 0.060" (1,5 mm) | 0.060" (1,5 mm) | 0.060" (1,5 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | - | - | - | 25 |
| Connectors per Case | 5000 | 1000 | 10 | 250 |


3M™ Scotchlok™ IDC Butt Connectors (continued)





| | UPB(BULK) | 211(BX) |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |
| UPC | 054007-33416 | 051115-26185 |
| Connector Type | Tap/ 2 Conductor | Butt Trim-out/ 2 Conductor |
| Application | Dry | Filled |
| Cable Type | PIC, PULP, PAPER | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 22 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.050" (1,3 mm) | 0.082" (2,1 mm) |
| Flame Retardant | Yes | No |
| Connectors per Carton | - | - |
| Connectors per Case | 5000 | 1000 |

3M™ Scotchlok™ IDC Tap Connector

By positioning the 3M™ Scotchlok™ IDC Tap Connector UB2A on the conductor and pre-crimping, the conductor is prevented from slipping out of the connector before the crimp is completed. A thin membrane molded into the tap wire entry port also assists the craftsperson by securing the tap wire until the crimp is completed. Like the 3M™ Scotchlok™ Connector UR2, a factory-installed sealant insulates against corrosion, and seals out moisture. The UB2A-D, a dry version, is available as well.

The UB2A connector permits tapping directly onto an existing conductor without interrupting service. In ready access closures, the UB2A eliminates cutting cable pairs, opening pairs, and piecing out wires. Fast and easy to work with the UB2A accepts 19–26 AWG (0,9–0,4 mm) plastic-, paper-, or pulp- insulated solid copper wire with a maximum O.D. of .082" (2,08 mm). The wires joined can be of different wire gauges.

- Connection Style Insulation Displacement
- Connector Type Bridge Tap/2 Conductor
- Flame Retardant No
- RoHS 2011/65/EU Yes
- Agency Approval 








| | UB2A-25/PACK | UB2A(BX) | UB2A-JAR500 | UB2A-D(BX) |
|-----------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 051115-26120 | 051115-26189 | 051115-26193 | 054007-92694 |
| Application | Filled | Filled | Filled | Dry |
| Cable Type | PIC | PIC | PIC | PIC, PULP, PAPER |
| Conductor Size Range | 26–19 AWG | 26–19 AWG | 26–19 AWG | 26–19 AWG |
| Insulation Outside Diameter | 0.082" (2,08 mm) | 0.082" (2,08 mm) | 0.082" (2,08 mm) | 0.082" (2,08 mm) |
| Connectors per Carton | 25 | - | 500 | 100 |
| Connectors per Case | 1000 | 1000 | 5000 | 1000 |

Insulation Displacement Connectors and Tools: 3M™ Crimping Tools

3M™ Crimping Tools

The 3M™ Crimping Tool E-9BM is used with most 3M™ Scotchlok™ Connectors, and has parallel closing action with adjustable jaws and a high mechanical advantage. The 3M™ Cartridge Tool E-9C with case holds connectors (in cartridges) firmly in place, allowing the craftsman use of the other hand for guiding wires. A time-saving tool, the E-9C tool holds cartridges of UR2, UR, UY2, UY, or UAL connectors. The 3M™ Scotchlok™ Hand Crimping Tool E-9E is a parallel closing action tool for use with Scotchlok butt and tap connectors. The E-9Y tool's stepped jaws and long nose provide parallel crimping action. Its features include a side wire cutter, cushioned handles and a return spring. The E-9R tool features single-stroke, parallel crimping action with a work-saving 10:1 mechanical advantage over applied hand force. The tool's innovative ratchet-release design indicates a positive crimp by automatically releasing after each successful connection. The E-9R tool is compatible with all 3M™ Scotchlok™ Connectors including UY, UR, UY2, UR2, UP2, UAL, UP3, UB, 211 and UB2A units across the entire range of applicable wire sizes.



RoHS 2011/65/EU Yes

| | E-9BM | E-9C | E-9E | E-9J |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-33482 | 054007-34211 | 054007-10577 | 051115-19004 |
| Product Name | 3M™ Scotchlok™ Hand Crimping Tool E-9BM | 3M™ Scotchlok™ Cartridge Crimping Tool E-9C | 3M™ Scotchlok™ Hand Crimping Tool E-9E | 3M™ Scotchlok™ Hand Crimping Tool E-9J |
| Description | 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. | With an automatic cartridge feed, 7-to-1 mechanical advantage and ratchet action, the E-9C tool allows the craftsman to complete a crimp with one hand, freeing the other hand for wire handling. The tool is designed for cartridges with Scotchlok butt connectors. | A completely parallel closing action and a 4-to-1 mechanical advantage make the lightweight E-9E crimping tool a versatile addition to any craftsman's pouch. With these features, the E-9E tool will crimp all Scotchlok butt and tap connectors in all wire gauges. | The E-9J tool is a lightweight, hand-held 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. |
| Tools per Case | 6 | 1 | 10 | 10 |
| | E-9R | E-9Y | E-9Y-P | |
| |  |  |  | |
| UPC | 051138-87649 | 054007-15625 | 051115-22987 | |
| Product Name | 3M™ Scotchlok™ Hand Crimping Tool E-9R | 3M™ Scotchlok™ Hand Crimping Tool E-9Y | 3M™ Scotchlok™ Hand Crimping Tool E-9Y-P | |
| Description | 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. | 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 AWG (0.9 mm) and larger conductors. | In package. It is not recommended for 19 AWG (.9 mm) and larger conductors. Mechanical advantage of 3-to-1. Includes integrated wire cutter. | |
| Tools per Case | 10 | 10 | 10 | |

Moisture Resistant Connectors

3M™ Scotchlok™ Moisture Resistant Connectors

The 3M™ Moisture Guard Connector MGC provides a convenient way to connect wires for landscape irrigation and lighting applications. Just press the MGC cap and a metal element inside pushes through the wire insulation to make a secure, reliable connection. The grease in the MGC protects against moisture while the MGC housing is UV resistant for above-ground applications.

| | |
|-------------------------------|-----------------------------------------------------------------------------------|
| Connection Type | Moisture Resistant |
| Connector Style | Insulation Displacement |
| Flame Retardant | No |
| Maximum Voltage Rating | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Operating Temperature | 221°F (105 °C) |
| RoHS 2011/65/EU | Yes |
| Agency Approval |  |
| Country of Origin |  |



| Order No. | UPC | Conductor Size | Wire Range: Outside Port | Wire Range: Inside Port | Outside Port Maximum Insulation Diameter | Inside Port Maximum Insulation Diameter | Connectors per Carton | Connectors per Case |
|--------------|--------------|----------------|-----------------------------------------------|--------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------|---------------------|
| MGC(25/BAG) | 051128-56827 | 14 AWG | 12 AWG, Stranded 14–16 AWG, Solid/Stranded | 20 AWG, Stranded 18 AWG, Solid/Stranded | 0.21" (5,3 mm) | 0.15" (3,8 mm) | 25 | 250 |
| MGC(100/JUG) | 051128-56828 | 14 AWG | 12 AWG, Stranded 14–16 AWG, Solid/Stranded | 20 AWG, Stranded 18 AWG, Solid/Stranded | 0.21" (5,3 mm) | 0.150" (3,8 mm) | 100 | 400 |

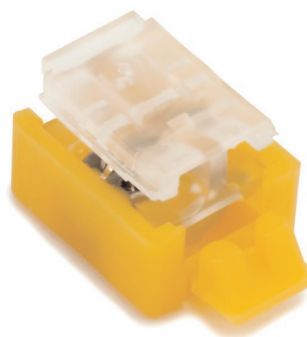
3M™ Scotchlok™ IDC Butt/Trim Out Connector 211

The 3M™ Scotchlok™ IDC Butt/Trim Out Connector 211 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.

For interruption free butt splice replacement.

Choose any one of the 3M™ Scotchlok™ Crimping Tools E-9 to use with the 211 connector.

| | |
|------------------------|----------------------------|
| Connector Type | Butt Trim-out/ 2 Conductor |
| Application | Filled |
| Cable Type | PIC |
| Flame Retardant | No |




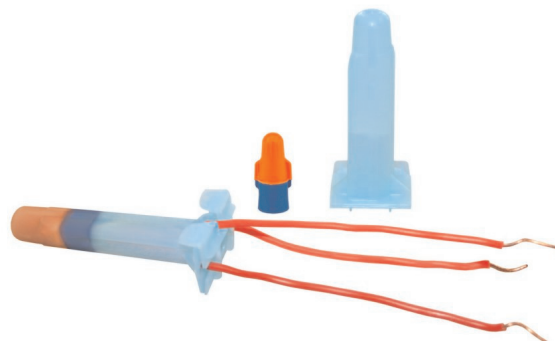
| Order No. | UPC # | Conductor Size (Min.) | Conductor Size (Max.) | Insulation Outside Diameter | Min. Order Qty. | Case Qty. |
|-----------|--------------|-----------------------|-----------------------|-----------------------------|-------------------------------------|-----------|
| 211(BX) | 051115-26185 | 26 AWG | 19 AWG | 0.082 inches | 100 each per Box, 10 Boxes per Case | 1000 each |

Direct Bury

3M™ Direct Bury Splice Kit DB0/B-6

The 3M™ Direct Bury Splice Kit DB0/B-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector O/B+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.


| | |
|-------------------------------|-----------------------------------------------------------------------------------|
| Voltage | 600 V |
| Splice Type | Direct Bury |
| Application Temperature Range | 32–120°F (0–49°C) |
| Operating Temperature Range | 221°F (105°C) |
| Flame Retardant | Yes |
| RoHS 2011/65/EU | Yes |
| Agency Approval |  |

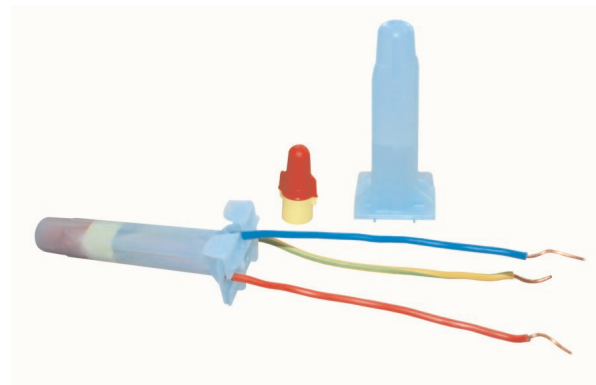


| Order No. | UPC | Conductor Size | Common AWG Wire Combinations (CU only) | Case Qty. |
|--------------|--------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| DB0/B-6 KIT | 051128-59075 | 18–10 AWG | 2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str | 25 Kits |
| DB0/B-6 BULK | 051128-59076 | 18–10 AWG | 2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str | 100 Kits |

3M™ Direct Bury Splice Kit DBR/Y-6

The 3M™ Direct Bury Splice Kit DBR/Y-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector R/Y+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.

| | |
|-------------------------------|-------------------------------------------------------------------------------------|
| Voltage | 600 V |
| Splice Type | Direct Bury |
| Application Temperature Range | 32–120°F (0–49°C) |
| Operating Temperature Range | -40–221°F (-40–105°C) |
| Flame Retardant | Yes |
| RoHS 2011/65/EU | Yes |
| Agency Approval |  |



| Order No. | UPC | Conductor Size | Common AWG Wire Combinations (CU only) | Case Qty. |
|--------------|--------------|----------------|------------------------------------------------------------------------------------------------------|-----------|
| DBR/Y-6 KIT | 051128-58573 | 18–10 AWG | 2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18 | 25 Kits |
| DBR/Y-6 BULK | 051128-58574 | 18–10 AWG | 2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18 | 100 Kits |

Electrical Wire Connectors and Tools

The best connectors do more than fit your application; they also fit your hand, and they feel good to use. At 3M, we design connectors that are as comfortable and easy to use as they are dependable. Our complete line provides a wide range of connector choices. Simply choose the connector that fits your personal preference, as well as the application. We give you plenty of choices.

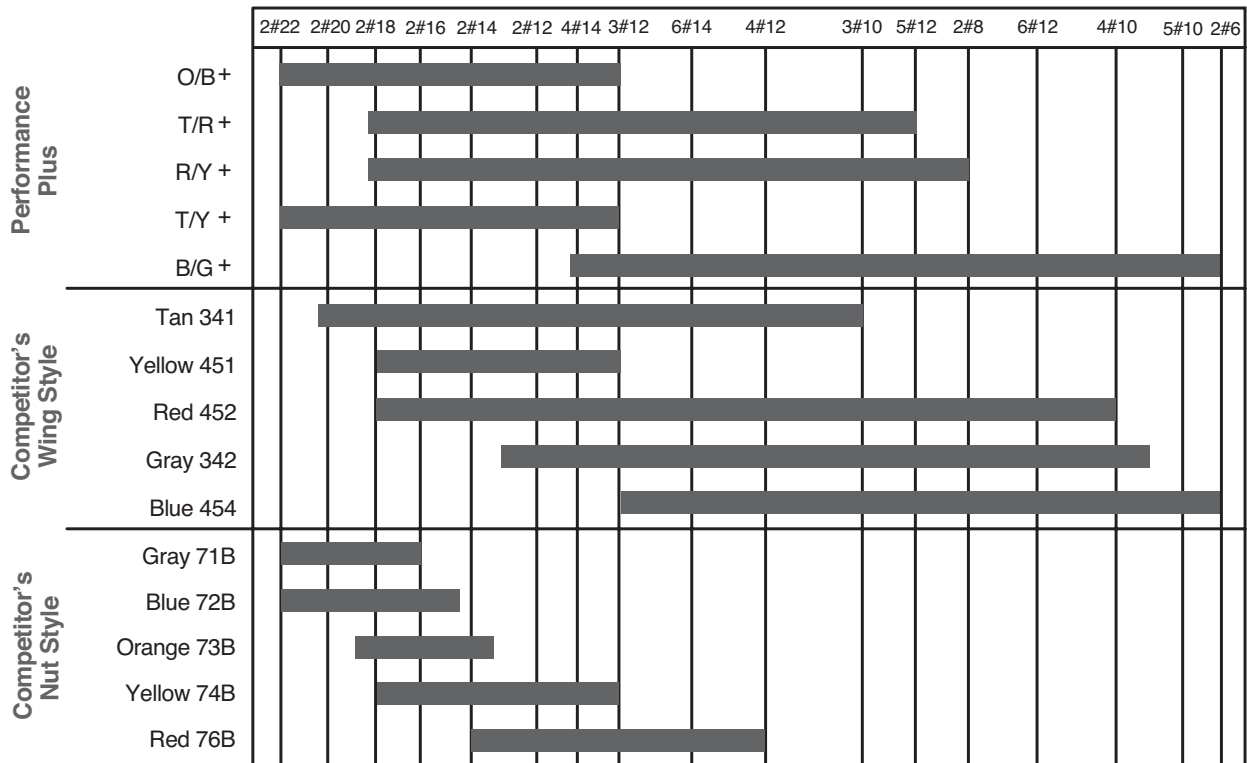


| Section | Page |
|---------------------------------------------------------------------------------|--------------|
| Spring Connectors and Tools | 65-70 |
| 3M™ Performance Plus Wire Connectors | 65 |
| 3M™ Wire Connectors for Residential | 66-67 |
| 3M™ Scotchlok™ Electrical Spring Connectors 312, 512 and 512G | 67-68 |
| 3M™ Highland™ Wire Connectors | 68-69 |
| 3M™ Wire Connector Drivers WCD | 70 |
| Crimp Sleeve Connectors | 71 |
| 3M™ Scotchlok™ Insulated Electrical Crimp Sleeve Connectors S-11 and S-31 | 71 |
| Insulation Displacement Connectors and Tools | 72-82 |
| 3M™ Scotchlok™ IDC Connectors for Electrical Applications..... | 72-77 |
| 3M™ Scotchlok™ IDC Pigtail Connectors | 72 |
| 3M™ Scotchlok™ IDC Double Run or Tap Connectors..... | 73-74 |
| 3M™ Scotchlok™ IDC Run and Tap Connector..... | 75-76 |
| 3M™ Scotchlok™ T-Tap Connector | 76-77 |
| 3M™ Scotchlok™ Fuse Holder..... | 77 |
| 3M™ Scotchlok™ IDC Connectors for Communication Applications..... | 78-81 |
| 3M™ Scotchlok™ IDC Butt Connectors..... | 78-81 |
| 3M™ Scotchlok™ IDC Tap Connector..... | 81 |
| 3M™ Crimping Tools | 82 |
| 3M™ Crimping Tools..... | 82 |
| Moisture Resistant Connectors | 83 |
| 3M™ Scotchlok™ Moisture Resistant Connectors..... | 83 |
| 3M™ Scotchlok™ IDC Butt/Trim Out Connector 211 | 83 |
| Direct Bury | 84 |
| 3M™ Direct Bury Splice Kit DBO/B-6..... | 84 |

SPRING CONNECTORS

| FEATURES | ADVANTAGES | BENEFITS |
|----------------------------------------------------------------------------|----------------------------------|---------------------------------|
| 3M™ PERFORMANCE PLUS WIRE CONNECTORS (T/R+, T/Y+, O/B+, R/Y+, B/G+) | | |
| Wires feed deeper | Increases level of pull-out | Security |
| Wide wire ranges | Three connectors replace seven | Saves time and cost effective |
| Flexible skirt | Covers overstripped wires | Safety |
| New internal design | Smoother and faster installation | Improves quality and saves time |
| 3M ELECTRICAL SPRING AND GROUNDING CONNECTORS (312, 412, 512, 512G) | | |
| Hard shell | Easy to grip | Easy to use |
| Wings | Easy to turn | Easy to use |
| 3M HIGHLAND™ WIRE CONNECTORS (H-29, H-30, H-31, H-33, H-35) | | |
| Low price | Economical | Cost effective |

Wire Range for 3M Performance Plus Wire Connectors



Spring Connectors and Tools

3M™ Performance Plus Wire Connectors





Because of their increased wire range, just three 3M™ Performance Plus Wire Connectors handle the work of eight standard connectors. O/B+ replaces the orange, blue and gray wire connector style connectors, as well as 70% of the yellow wire connector and wing style connectors. R/Y+ replaces both red and yellow wing style connectors. B/G+ covers both the large blue and gray connectors.

This simplifies selection of the right connector for a wide range of wiring jobs. There's also less inventory to manage, and a better chance you'll have the connector you need to do every job.








A Better Bite for a Better Connection. 3M™ Performance Plus Wire Connectors O/B+, R/Y+ and B/G+ now have a better bite. Wires feed into the connector more easily, improving the security of the connection and increasing the level of pull out.

New Design Allows Easier Installation. We have modified the internal design of the O/B+, R/Y+ and B/G+ wire connectors. Installation is smooth, fast and easy on the hands.

Flexible Skirts Provide Safety. The flexible skirts on the O/B+, R/Y+ and B/G+ wire connectors make the workplace a safer environment. The flexible skirt provides protection against potential shock situations.

| | |
|------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Connection Type | Wire |
| Connector Style | Twist On |
| Flame Retardant | Yes |
| Maximum Voltage Rating | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Operating Temperature | 221°F (105°C) |
| RoHS 2011/65/EU | No |
| Agency Approval |     |



| | B/G+BOX | B/G+JUG | O/B+BOX | O/B+JUG |
|-----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-43150 | 054007-43151 | 054007-43152 | 054007-43153 |
| Color | Blue/Gray | Blue/Gray | Orange/Blue | Orange/Blue |
| Conductor Size | 14–6 AWG | 14–6 AWG | 22–12 AWG | 22–12 AWG |
| Connectors per Carton | 50 | 250 | 100 | 500 |
| Connectors per Case | 500 | 2000 | 1000 | 10,000 |
| | R/Y+BOX | R/Y+JUG | R/Y+KEG | |
| |  |  |  | |
| UPC | 054007-43154 | 054007-43155 | 051128-57943 | |
| Color | Red/Yellow | Red/Yellow | Red/Yellow | |
| Conductor Size | 22–8 AWG | 22–8 AWG | 22–8 AWG | |
| Connectors per Carton | 100 | 500 | - | |
| Connectors per Case | 1000 | 4000 | 17,000 | |

3M™ Wire Connectors for Residential





Specifically created for the residential markets, the T/R+ replaces the yellow, tan and red connectors in the majority of field applications. T/Y+ replaces the yellow, orange, blue and gray wire nuts in most applications. Use the 412 (tan) connector for wire combinations from 2 #20 to 3 #10 AWG. This simplifies selection of the right connector for a wide range of wiring jobs. There's also less inventory to manage, and a better chance you'll have the connector you need to do every job.



- Connection Type Wire
- Connector Style Twist On
- Flame Retardant Yes
- Maximum Voltage 600 V (1000 V in signs, lighting fixtures and luminaires)
- Operating Temperature 221°F (105°C)
- RoHS 2011/65/EU No


| | T/R+BOX | T/R+JUG | T/R+KEG | T/Y+BOX |
|-----------------------|--------------|--------------|--------------|--------------|
| | | | | |
| UPC | 051128-54454 | 051128-54455 | 051128-54456 | 051128-55218 |
| Color | Tan/Red | Tan/Red | Tan/Red | Tan/Yellow |
| Conductor Size | 22-8 AWG | 22-8 AWG | 22-8 AWG | 22-12 AWG |
| Agency Approval | | | | |
| Connectors per Carton | 100 | 750 | - | 100 |
| Connectors per Case | 1000 | 6000 | 25,000 | 1000 |
| | T/Y+JUG | T/Y+KEG | 412-BOX | 412-BULK |
| | | | | |
| UPC | 051128-55219 | 051128-58623 | 051128-54451 | 051128-54452 |
| Color | Tan/Yellow | Tan/Yellow | Tan | Tan |
| Conductor Size | 22-12 AWG | 22-12 AWG | 22-10 AWG | 22-10 AWG |
| Agency Approval | | | | |
| Connectors per Carton | 500 | - | 100 | 500 |
| Connectors per Case | 10,000 | 40,000 | 1000 | 10,000 |









3M™ Wire Connectors for Residential (continued)

| | 412-JUG | 412-KEG |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |
| UPC | 051128-55695 | 051128-54453 |
| Color | Tan | Tan |
| Conductor Size | 22-10 AWG | 22-10 AWG |
| Agency Approval |  |  |
| Connectors per Carton | 500 | - |
| Connectors per Case | 4000 | 20,000 |









3M™ Scotchlok™ Electrical Spring Connectors 312, 512 and 512G

The quick-spin, wing-torque design of 3M™ Scotchlok™ Electrical Spring Connector 312 and 512 is easy on your fingers. The day's last connection will feel almost as good as the first. Generous expansion room accommodates a wide range of solid or stranded wire. Use the 312 (yellow) connector for wire combinations from 3 #20 to 3 #12 AWG, and the 512 (red) connector for 2 #18 to 5 #12 AWG. The 512G (green) is used for grounding connections.

Connection Type Wire
Connector Style Twist On
Maximum Voltage Rating 600 V (1000 V in signs, lighting fixtures and luminaries)
Operating Temperature 221 °F (105 °C)
RoHS 2011/65/EU Yes
Country of Origin 

| | 312-BOX | 312-BULK | 312-KEG | 512-BOX |
|-----------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-08159 | 054007-08160 | 051128-56280 | 054007-08161 |
| Color | Yellow | Yellow | Yellow | Red |
| Conductor Size | 22-8 AWG | 22-8 AWG | 22-8 AWG | 22-8 AWG |
| Flame Retardant | Yes | Yes | Yes | Yes |
| Agency Approval |  |  |  |  |
| Connectors per Carton | 100 | 500 | - | 100 |
| Connectors per Case | 1000 | 10,000 | 25,000 | 1000 |



3M™ Scotchlok™ Electrical Spring Connectors 312, 512 and 512G (continued)





| | 512-BULK | 512-KEG | 512G-BAG | 512G-POUCH |
|-----------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-08162 | 051128-56281 | 054007-50232 | 051128-59098 |
| Color | Red | Red | Green | Green |
| Conductor Size | 22-8 AWG | 22-8 AWG | 14-10 AWG | 14-10 AWG |
| Flame Retardant | Yes | Yes | Yes | Yes |
| Agency Approval |  |  |  |  |
| Connectors per Carton | 500 | - | 500 | - |
| Connectors per Case | 10,000 | 25,000 | 10,000 | 100 |

3M™ Highland™ Wire Connectors

3M™ Highland™ Wire Connectors make it quick and easy to match the right connector to the size of the wire. The shells are designed to withstand temperatures up to 221°F (105°C). Highland color-coded wire connectors are UL Listed, CSA Certified, and work equally well with either solid or stranded wire.



Connection Type Wire
Connector Style Twist On
Flame Retardant No
Operating Temperature 221°F (105°C)
RoHS 2011/65/EU Yes
Agency Approval  



| | H-29-BIN | H-29-BOX | H-30-BIN | H-30-BOX |
|------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-43134 | 054007-43133 | 054007-43123 | 054007-43122 |
| Color | Gray | Gray | Blue | Blue |
| Conductor Size | 22-16 AWG | 22-16 AWG | 22-16 AWG | 22-16 AWG |
| Maximum Voltage Rating | 300 V | 300 V | 300 V | 300 V |
| Connectors per Carton | - | 100 | - | 100 |
| Connectors per Case | 1000 | 1000 | 1000 | 1000 |

3M™ Highland™ Wire Connectors (continued)

| | H-30-KEG | H-31-BIN | H-31-BOX | H-31-BULK |
|------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-43124 | 054007-43119 | 054007-43117 | 054007-43118 |
| Color | Blue | Orange | Orange | Orange |
| Conductor Size | 22-16 AWG | 18-14 AWG | 18-14 AWG | 18-14 AWG |
| Maximum Voltage Rating | 300 V | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Connectors per Carton | - | - | 100 | 500 |
| Connectors per Case | 10,000 | 1000 | 1000 | 10,000 |
| | H-31-KEG | H-33-BIN | H-33-BOX | H-33-BULK |
| |  |  |  |  |
| UPC | 054007-43120 | 054007-43137 | 054007-43136 | 054007-43138 |
| Color | Orange | Yellow | Yellow | Yellow |
| Conductor Size | 18-14 AWG | 18-12 AWG | 18-12 AWG | 18-12 AWG |
| Maximum Voltage Rating | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Connectors per Carton | - | - | 100 | 500 |
| Connectors per Case | 10,000 | 1000 | 1000 | 5000 |
| | H-33-KEG | H-35-BIN | H-35-BOX | H-35-BULK |
| |  |  |  |  |
| UPC | 054007-43139 | 054007-43141 | 054007-43140 | 054007-43142 |
| Color | Yellow | Red | Red | Red |
| Conductor Size | 18-12 AWG | 18-10 AWG | 18-10 AWG | 18-10 AWG |
| Maximum Voltage Rating | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Connectors per Carton | - | - | 100 | 250 |
| Connectors per Case | 5000 | 1000 | 1000 | 2500 |

3M™ Wire Connector Drivers WCD

These application tools for 3M™ Performance Plus Wire Connectors O/B+, R/Y+, T/R+ and T/Y+, 3M™ Electrical Spring Connectors 312 and 512, and 3M™ Scotchlok™ Wire Connectors Y, R, and G quickly spin on the connector and position the wire bundle in the box. The WCD-H driver is a hand driver and the WCD-P driver is a power driver that fits a standard chuck.

| | WCD-H | WCD-P |
|--------------|------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| |  |  |
| UPC | 054007-49948 | 054007-49919 |
| Product Name | 3M™ Hand Wire Connector Driver WCD-H | 3M™ Power Wire Connector Driver WCD-P |
| Description | Hand driver for 3M™ Performance Plus Wire Connectors O/B+, R/Y+, 3M™ Scotchlok™ Wire Connectors Y, R, G, and 3M™ Electrical Spring Connectors 312 and 512. | Power driver using a standard chuck, drill or screw driver for 3M™ Performance Plus Wire Connectors O/B+, R/Y+, 3M™ Scotchlok™ Wire Connectors Y, R, G, and 3M™ Electrical Spring Connectors 312 and 512. |
| Case Qty. | 10 | 10 |

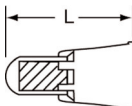
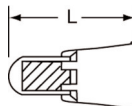

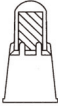
Crimp Sleeve Connectors

3M™ Scotchlok™ Insulated Electrical Crimp Sleeve Connectors S-11 and S-31

3M™ Scotchlok™ Insulated Electrical Crimp Sleeve Connectors S-11-A and S-31-A make fast work of splicing 22 to 10 AWG copper conductors. Smooth flared entry makes wire insertion fast — simply twist conductors together and crimp. The S-11-A and S-31-A are insulated, closed-end crimp sleeve connectors with a copper insert. The rugged and resilient nylon insulator allows these connectors to be used in light fixtures, appliances and other electrical OEM applications.

| | |
|-----------------------|-----------------|
| Connector Style | Crimp Sleeve |
| Insulation Material | Nylon |
| Barrel Style | Insulation Grip |
| Terminal Type | Closed End |
| Terminal Style | Copper |
| Flame Retardant | No |
| Maximum Voltage | 600 V |
| Operating Temperature | 221°F (105°C) |
| RoHS 2011/65/EU | Yes |



| | S-11-A(BOXED) | S-11-A(BULK) | S-31-A(BOXED) | S-31-A(BULK) |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 051128-58997 | 051138-98052 | 051128-58996 | 051138-98044 |
| Conductor Size | 22–16 AWG | 22–16 AWG | 18–10 AWG | 18–10 AWG |
| Length | 0.83" (21,1 mm) | 0.83" (21,1 mm) | 1.00" (25,4 mm) | 1.00" (25,4 mm) |
| Cu Solid/Stranded Wire Combinations | 2–5 #22; 1–4 #22 with 1–2 #20; 1–3 #22 with 1 #18; 1 #22 with 1 #16; 2–3 #20 | 2–5 #22; 1–4 #22 with 1–2 #20; 1–3 #22 with 1 #18; 1 #22 with 1 #16; 2–3 #20 | 1 #22 with 1 #12 or #10; 1 #22 with 2 #14 or #16; 1 #22 with 1 #20 with 1 #12 or #14; 1 #22 with 1 #18 with 1 #12 or #14; 1 #22 with 1 #16 with 1 #12 or #14; 1 #22 with 1 #14 with 1 #12; 1–2 #20 with 1–2 #14; 1–2 #20 with 1 #12; 1 #20 with 1 #10; 1 #20 with 1 #16 with 1 #12; 1 #18 with 1 #14; 1 #18 with 1 #12; 1 #18 with 2 #16; 1 #18 with 1 #16 with 1 #12 or #14; 1 #16 with 1 #12 or #14; 3 #16; 1 #14 with 1 #12; 2 #14 | 1 #22 with 1 #12 or #10; 1 #22 with 2 #14 or #16; 1 #22 with 1 #20 with 1 #12 or #14; 1 #22 with 1 #18 with 1 #12 or #14; 1 #22 with 1 #16 with 1 #12 or #14; 1 #22 with 1 #14 with 1 #12; 1–2 #20 with 1–2 #14; 1–2 #20 with 1 #12; 1 #20 with 1 #10; 1 #20 with 1 #16 with 1 #12; 1 #18 with 1 #14; 1 #18 with 1 #12; 1 #18 with 2 #16; 1 #18 with 1 #16 with 1 #12 or #14; 1 #16 with 1 #12 or #14; 3 #16; 1 #14 with 1 #12; 2 #14 |
| Connectors per Carton | 100 | - | 50 | - |
| Connectors per Case | 500 | 10,000 | 500 | 5000 |

3M™ Scotchlok™ IDC Pigtail Connectors

3M™ Scotchlok™ Self-Stripping, Moisture Resistant Electrical Pigtail Connector 314 provides a moisture-resistant seal. The 3M™ Scotchlok™ Electrical Connector IDC 314U is a self-stripping, flame retardant, electrical pigtail connector for dry environment applications. The 3M™ Scotchlok™ Electrical Connector IDC 316-IR provides a moisture-resistant seal and are recommended for use with low energy underground circuit wires, sprinkler systems, landscape lighting or other moisture-resistance wires for applications of less than 30 V. Its sealant is a mineral oil-based grease.



Connection Type Pigtail
Connector Style Insulation Displacement
Flame Retardant Yes
Operating Temperature 221°F (105°C)
Recommended Crimping Tool 3M™ Crimping Tool No. E-9BM
RoHS 2011/65/EU Yes

| | 314-BIN | 314-BOX | 314U-BOX | 314U-BIN |
|-----------------------|-----------------|------------------|------------------|-----------------|
| | | | | |
| UPC | 054007-09231 | 054007-09230 | 054007-09232 | 054007-09233 |
| Color | Blue | Blue | White | White |
| Conductor Size | 22–14 AWG | 22–14 AWG | 22–14 AWG | 22–14 AWG |
| Max. Insulation O.D. | 0.150" (3,8 mm) | 0.150" (3,8 mm) | 0.150" (3,8 mm) | 0.150" (3,8 mm) |
| Agency Approval | | | | |
| Connectors per Carton | - | 50 | 50 | - |
| Connectors per Case | 1000 | 500 | 500 | 1000 |
| | 316-IR BAG | 557-BOX | 557-BULK | |
| | | | | |
| UPC | 054007-50419 | 054007-21494 | 054007-21502 | |
| Color | Black/White | Red | Red | |
| Conductor Size | 22–16 AWG | 22–16 AWG | 22–16 AWG | |
| Max. Insulation O.D. | 0.155" (3,9 mm) | 0.120" (3,05 mm) | 0.120" (3,05 mm) | |
| Agency Approval | | | | |
| Connectors per Carton | 30 | 100 | 500 | |
| Connectors per Case | 300 | 1000 | 5000 | |

3M™ Scotchlok™ IDC Double Run or Tap Connectors














The 3M™ Scotchlok™ Electrical Connector IDC 560 and 560N electrically connect a (tap) wire end to a through (run) wire and insulate the connection. They are used for tap and parallel splicing. The 3M™ Scotchlok™ Electrical Connector IDC 564 electrically connects two through (run) wires and insulates the connection. It is used for parallel splicing. The 3M™ Scotchlok™ Electrical Connector IDC 560B electrically connects a (tap) wire end to a through (run) wire and insulates the connection. For general-purpose electrical connections on auto, boat, van or trailer. Used for tap and parallel splicing. The 3M™ Scotchlok™ Electrical Connector IDC 905 and 905N electrically connect a (tap) wire end to a through (run) wire and insulate the connection. Suitable for low-voltage accessories such as radios, stereo speakers, tape decks and CB radios. Used for tap, in-line parallel and pigtail splicing.



| | |
|-----------------|-------------------------|
| Connection Type | Double Run or Tap |
| Connector Style | Insulation Displacement |
| RoHS 2011/65/EU | Yes |

| | 560-BOX | 560-BULK | 560B-BOX | 560B-BULK |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-00839 | 054007-00840 | 054007-20090 | 054007-20181 |
| Color | Light Blue | Light Blue | Blue | Blue |
| Conductor Size | 18–16 AWG / 14 AWG Str | 18–16 AWG / 14 AWG Str | 18–16 AWG / 14 AWG Str | 18–16 AWG / 14 AWG Str |
| Maximum Insulation Outside Diameter | 0.145" (3,68 mm) | 0.145" (3,68 mm) | 0.145" (3,68 mm) | 0.145" (3,68 mm) |
| Operating Temperature | 221°F (105°C) | 221°F (105°C) | 194°F (90°C) | 194 °F (90 °C) |
| Flame Retardant | Yes | Yes | Yes | Yes |
| Agency Approval |  |  |  |  |
| Connectors per Carton | 100 | 500 | 100 | 500 |
| Connectors per Case | 1000 | 5000 | 1000 | 5000 |

3M™ Scotchlok™ IDC Double Run or Tap Connectors (continued)

| | 560N-BULK | 562-BOX | 562-BIN | 564-BULK |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-09513 | 054007-11032 | 054007-11040 | 054007-06118 |
| Color | Brown | Yellow | Yellow | White |
| Conductor Size | 18–16 AWG / 14 AWG Str | 12 AWG / 10 AWG Str | 12 AWG / 10 AWG Str | 18–14 AWG |
| Maximum Insulation Outside Diameter | 0.145" (3,68 mm) | 0.190" (4,82 mm) | 0.190" (4,82 mm) | 0.145" (3,68 mm) |
| Operating Temperature | 221°F (105°C) | 194°F (90°C) | 194°F (90°C) | 194°F (90°C) |
| Flame Retardant | Yes | Yes | Yes | No |
| Agency Approval |  |  |  |  |
| Connectors per Carton | 500 | 100 | - | 500 |
| Connectors per Case | 5000 | 1000 | 1000 | 5000 |
| | 905-BOX | 905-BULK | 905N | |
| |  |  |  | |
| UPC | 054007-06128 | 054007-06129 | 054007-06124 | |
| Color | Red | Red | Red | |
| Conductor Size | Tap: 22–18 AWG Run: 18–14 AWG | Tap: 22–18 AWG Run: 18–14 AWG | 18–22 AWG | |
| Maximum Insulation Outside Diameter | Tap: 0.110" (2,79 mm) Run: 0.145" (3,68 mm) | Tap: 0.110" (2,79 mm) Run: 0.145" (3,68 mm) | 0.145" (3,68 mm) | |
| Operating Temperature | 194°F (90°C) | 194°F (90°C) | 194°F (90°C) | |
| Flame Retardant | No | No | No | |
| Agency Approval |  |  | N/A | |
| Connectors per Carton | 50 | 500 | 500 | |
| Connectors per Case | 500 | 5000 | 5000 | |

3M™ Scotchlok™ IDC Run and Tap Connector

Electrically connects a (tap) wire end to a through (run) wire and insulates the connection. Designed for control circuit wiring, fixture wiring, appliance wiring, signal and PA systems, and automotive/boat/RV wiring.



| | |
|----------------------------------|---------------------------------|
| Connection Type | Run and Tap |
| Connector Style | Insulation Displacement |
| Recommended Crimping Tool | 3M™ E-9BM or 9" Linemans Pliers |
| RoHS 2011/65/EU | Yes |

| | 558-BOX | 558-BULK | 567-BOX |
|-------------------------------------|----------------------------------------------|------------------------|----------------------------------------------|
| | | | |
| UPC | 054007-14861 | 054007-14879 | 054007-14887 |
| Color | Red | Red | Brown |
| Max. Recommended Voltage Rating | 600 V | 600 V | 600 V |
| Conductor Size (Tap) | 22–16 AWG | 22–16 AWG | Tap: 18–14 AWG Run: 12–10 AWG |
| Maximum Insulation Outside Diameter | 0.120" (3,1 mm) | 0.120" (3,1 mm) | Tap: 0.145" (3,7 mm) Run: 0.190" (4,8 mm) |
| Operating Temperature | 221°F (105°C) | 221°F (105°C) | 221°F (105°C) |
| Flame Retardant | Yes | Yes | Yes |
| Agency Approval | | | |
| Connectors per Carton | 100 | - | 100 |
| Connectors per Case | 1000 | 5000 | 1000 |
| | 567-BIN | 804-100/BAG | 804-BOX |
| | | | |
| UPC | 054007-14895 | 054007-50188 | 054007-06134 |
| Color | Brown | Blue | Blue |
| Max. Recommended Voltage Rating | 600 V | 600 V | 600 V |
| Conductor Size (Tap) | Tap: 18–14 AWG Run: 12–10 AWG | 18–16 AWG / 14 AWG Str | 18–16 AWG / 14 AWG Str |
| Maximum Insulation Outside Diameter | Tap: 0.145" (3,7 mm) Run: 0.190" (4,8 mm) | 0.145" (3,7 mm) | 0.145" (3,7 mm) |
| Operating Temperature | 221°F (105 °C) | 194°F (90°C) | 194°F (90°C) |
| Flame Retardant | Yes | Yes | Yes |
| Agency Approval | | | |
| Connectors per Carton | - | 100 | 25 |
| Connectors per Case | 1000 | 1000 | 250 |

3M™ Scotchlok™ IDC Run and Tap Connector (continued)

| | 804-BULK | 901-BOX | 901-BULK |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |
| UPC | 054007-06135 | 054007-06106 | 054007-06107 |
| Color | Blue | Black | Black |
| Max. Recommended Voltage Rating | 600 V | 32 V | 32 V |
| Conductor Size (Tap) | 18–16 AWG / 14 AWG Str | 18–14 AWG | 18–14 AWG |
| Maximum Insulation Outside Diameter | 0.145" (3,7 mm) | 0.145" (3,7 mm) | 0.145" (3,7 mm) |
| Operating Temperature | 194°F (90°C) | 194°F (90°C) | 194°F (90°C) |
| Flame Retardant | Yes | No | No |
| Agency Approval |  | - | - |
| Connectors per Carton | 500 | 50 | 500 |
| Connectors per Case | 5000 | 500 | 5000 |

3M™ Scotchlok™ T-Tap Connector

Use 3M™ Scotchlok™ Self-Stripping Electrical Tap Connectors 951, 952 and 953 to electrically tap into a wire in mid-span without cutting or stripping the wire. Connector then mates with a .250" (6,35 mm) male tab, making a reusable quick-connect wiring termination.



Connection Type T-tap
 Connector Style Insulation Displacement
 RoHS 2011/65/EU Yes
 Agency Approvals  

| | 951X-BOTTLE | 951K-BULK | 952X-BOTTLE |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |
| UPC | 054007-12312 | 054007-12313 | 054007-08427 |
| Conductor Size | 22-18 AWG | 22-18 AWG | 18-14 AWG |
| Flame Retardant | Yes | Yes | Yes |
| Maximum Insulation Outside Diameter | 0.150" (3,8 mm) | 0.150" (3,8 mm) | 0.150" (3,8 mm) |
| Operating Temperature | 221°F (105°C) | 221°F (105°C) | 221°F (105°C) |
| Connectors per Carton | 50 | - | 50 |
| Connectors per Case | 500 | 1000 | 500 |

3M™ Scotchlok™ T-Tap Connector (continued)

| | 952K-BULK | 953X-BOTTLE | 953K-BULK |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| |  |  |  |
| UPC | 054007-08428 | 054007-12314 | 054007-12315 |
| Conductor Size | 18-14 AWG | 12 AWG | 12 AWG |
| Flame Retardant | Yes | Yes | Yes |
| Maximum Insulation Outside Diameter | 0.150" (3,8 mm) | 0.150" (3,8 mm) | 0.150" (3,8 mm) |
| Operating Temperature | 221°F (105°C) | 221°F (105°C) | 221°F (105°C) |
| Connectors per Carton | - | 50 | - |
| Connectors per Case | 1000 | 500 | 1000 |

3M™ Scotchlok™ Fuse Holder

The 3M™ Scotchlok™ Fuse Holder 972 is used to install a blade-type automotive fuse between power source and device.

| | |
|--------------------------|-------------------------|
| Terminal Type | Fuse |
| Connection Type | Wire |
| Connector/Connector Tool | Connector |
| Connector Style | Insulation Displacement |
| Insulation Material | Polypropylene |
| Flame Retardant | No |
| RoHS 2011/65/EU | Yes |



| Order No. | UPC | Color | Conductor Size | Maximum Insulation Outside Diameter | Operating Temperature | Connectors per Carton | Connectors per Case |
|------------|--------------|-------|-----------------------------------------|-------------------------------------|-----------------------|-----------------------|---------------------|
| 972X-A-BOX | 051128-57558 | Blue | 18-14 AWG (0,75 - 1,5 mm ²) | 0.150" (3,8 mm) | 194°F (90°C) | 25 | 250 |
| 972-A-BULK | 051128-57557 | Blue | 18-14 AWG (0,75 - 1,5 mm ²) | 0.150" (3,8 mm) | 194°F (90°C) | - | 1000 |

3M™ Scotchlok™ IDC Butt Connectors

Over 30 years ago, 3M introduced the industry's original U element connector, the 3M™ Scotchlok™ Connector UR. The latest series of connectors—the 3M Scotchlok Connectors UR2, UY2 and UB2A—features that same originality in technological advantages, building on the successful Scotchlok connector's design, shape, color-coded cap concepts and element technology. The Series 2 connectors additionally offer full wire range capability, increased port size to accommodate up to 0.082" (2,1 mm) insulation sizes, double elements in all products and a solvent-resistant plastic construction.

RoHS 2011/65/EU Yes

| | UAL(BX) | UAL(CART) | UCC(CART) | UCC-JAR500 |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 051115-26188 | 051115-26187 | 051115-26195 | 051115-26196 |
| Connector Type | Butt | Butt | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Filled | Filled |
| Cable Type | PIC | PIC | PIC | PIC |
| Conductor Size (Min.) | 24 AWG | 24 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 17 AWG | 17 AWG | 22 AWG | 22 AWG |
| Maximum Insulation Outside Diameter | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.060" (1,5 mm) | 0.060" (1,5 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | - | - | - | - |
| Connectors per Case | 1000 | 10 | 10 | 500 |
| | UCC(BULK) | UG(BX) | UP2(BULK) | UP2(CART) |
| |  |  |  |  |
| UPC | 051115-26194 | 051115-26197 | 054007-33420 | 054007-32698 |
| Connector Type | Butt/ 2 Conductor | Bridge Tap/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Dry | Dry |
| Cable Type | PIC | PIC | PIC, PULP, PAPER | PIC, PULP, PAPER |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 22 AWG | 19 AWG | 22 AWG | 22 AWG |
| Maximum Insulation Outside Diameter | 0.060" (1,5 mm) | 0.044" (Tap); 0.066" (Run) | 0.060" (1,5 mm) | 0.060" (1,5 mm) |
| Flame Retardant | No | No | Yes | Yes |
| Connectors per Carton | - | - | 1000 | 16 |
| Connectors per Case | 5000 | 1000 | 5000 | 160 |

3M™ Scotchlok™ IDC Butt Connectors (continued)

| | UP3(BULK) | UP3(CART) | UR2(BX) | UR2(CART) |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-33419 | 054007-32700 | 051115-26201 | 051115-26202 |
| Connector Type | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor |
| Application | Dry | Dry | Filled | Filled |
| Cable Type | PIC, PULP, PAPER | PIC, PULP, PAPER | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.060" (1,5 mm) | 0.060" (1,5 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) |
| Flame Retardant | Yes | Yes | No | No |
| Connectors per Carton | 500 | 10 | - | - |
| Connectors per Case | 5000 | 100 | 1000 | 10 |
| | UR2(BULK) | UR2-25/PACK | UR2-JAR500 | UR2-PK50 |
| |  |  |  |  |
| UPC | 051115-26200 | 051115-26117 | 051115-26207 | 051115-26212 |
| Connector Type | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor |
| Application | Filled | Filled | Filled | Filled |
| Cable Type | PIC | PIC | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | - | - | - | 50 |
| Connectors per Case | 5000 | 40 | 5000 | 1000 |
| | UR2-D(CART) | UR2-D-JAR500 | UR(CART) | UR(BX) |
| |  |  |  |  |
| UPC | 054007-71475 | 051115-30060 | 051115-26232 | 051115-26230 |
| Connector Type | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor | Butt/ 2 or 3 Conductor |
| Application | Dry | Dry | Filled | Filled |
| Cable Type | PIC, PULP, PAPER | PIC, PULP, PAPER | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.060" (1,5 mm) | 0.060" (1,5 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | 10 | - | - | - |
| Connectors per Case | 100 | 5000 | 10 | 1000 |

3M™ Scotchlok™ IDC Butt Connectors (continued)

| | UR-25/PACK | UY2(BX) | UY2(BULK) | UY2(CART) |
|-------------------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 051115-26238 | 051115-26121 | 051115-26224 | 051115-26225 |
| Connector Type | Butt/ 2 or 3 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Filled | Filled |
| Cable Type | PIC | PIC | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.060" (1,5 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | 25 | - | - | - |
| Connectors per Case | 250 | 1000 | 5000 | 10 |
| | UY2-JAR500 | UY2-25/PACK | UY2-PK50 | UY2-D(CART) |
| |  |  |  |  |
| UPC | 051115-26228 | 051115-26119 | 051115-26213 | 054007-71478 |
| Connector Type | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Filled | Dry |
| Cable Type | PIC | PIC | PIC | PIC, PULP, PAPER |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 19 AWG | 19 AWG | 19 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) | 0.082" (2,1 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | - | - | 50 | 12 |
| Connectors per Case | 5000 | 40 | 1000 | 120 |
| | UY(BULK) | UY(BX) | UY(CART) | UY-25/PACK |
| |  |  |  |  |
| UPC | 051115-26221 | 051115-26214 | 051115-26223 | 051115-26237 |
| Connector Type | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor | Butt/ 2 Conductor |
| Application | Filled | Filled | Filled | Filled |
| Cable Type | PIC | PIC | PIC | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 22 AWG | 22 AWG | 22 AWG | 22 AWG |
| Maximum Insulation Outside Diameter | 0.060" (1,5 mm) | 0.060" (1,5 mm) | 0.060" (1,5 mm) | 0.060" (1,5 mm) |
| Flame Retardant | No | No | No | No |
| Connectors per Carton | - | - | - | 25 |
| Connectors per Case | 5000 | 1000 | 10 | 250 |

3M™ Scotchlok™ IDC Butt Connectors (continued)

| | UPB(BULK) | 211(BX) |
|-------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------------------------------------------|
| |  |  |
| UPC | 054007-33416 | 051115-26185 |
| Connector Type | Tap/ 2 Conductor | Butt Trim-out/ 2 Conductor |
| Application | Dry | Filled |
| Cable Type | PIC, PULP, PAPER | PIC |
| Conductor Size (Min.) | 26 AWG | 26 AWG |
| Conductor Size (Max.) | 22 AWG | 19 AWG |
| Maximum Insulation Outside Diameter | 0.050" (1,3 mm) | 0.082" (2,1 mm) |
| Flame Retardant | Yes | No |
| Connectors per Carton | - | - |
| Connectors per Case | 5000 | 1000 |

3M™ Scotchlok™ IDC Tap Connector

By positioning the 3M™ Scotchlok™ IDC Tap Connector UB2A on the conductor and pre-crimping, the conductor is prevented from slipping out of the connector before the crimp is completed. A thin membrane molded into the tap wire entry port also assists the craftsperson by securing the tap wire until the crimp is completed. Like the 3M™ Scotchlok™ Connector UR2, a factory-installed sealant insulates against corrosion, and seals out moisture. The UB2A-D, a dry version, is available as well.

The UB2A connector permits tapping directly onto an existing conductor without interrupting service. In ready access closures, the UB2A eliminates cutting cable pairs, opening pairs, and piecing out wires. Fast and easy to work with the UB2A accepts 19–26 AWG (0,9–0,4 mm) plastic-, paper-, or pulp- insulated solid copper wire with a maximum O.D. of .082" (2,08 mm). The wires joined can be of different wire gauges.

- Connection Style Insulation Displacement
- Connector Type Bridge Tap/2 Conductor
- Flame Retardant No
- RoHS 2011/65/EU Yes
- Agency Approval 

| | UB2A-25/PACK | UB2A(BX) | UB2A-JAR500 | UB2A-D(BX) |
|-----------------------------|-------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 051115-26120 | 051115-26189 | 051115-26193 | 054007-92694 |
| Application | Filled | Filled | Filled | Dry |
| Cable Type | PIC | PIC | PIC | PIC, PULP, PAPER |
| Conductor Size Range | 26–19 AWG | 26–19 AWG | 26–19 AWG | 26–19 AWG |
| Insulation Outside Diameter | 0.082" (2,08 mm) | 0.082" (2,08 mm) | 0.082" (2,08 mm) | 0.082" (2,08 mm) |
| Connectors per Carton | 25 | - | 500 | 100 |
| Connectors per Case | 1000 | 1000 | 5000 | 1000 |

Insulation Displacement Connectors and Tools: 3M™ Crimping Tools

3M™ Crimping Tools

The 3M™ Crimping Tool E-9BM is used with most 3M™ Scotchlok™ Connectors, and has parallel closing action with adjustable jaws and a high mechanical advantage. The 3M™ Cartridge Tool E-9C with case holds connectors (in cartridges) firmly in place, allowing the craftsman use of the other hand for guiding wires. A time-saving tool, the E-9C tool holds cartridges of UR2, UR, UY2, UY, or UAL connectors. The 3M™ Scotchlok™ Hand Crimping Tool E-9E is a parallel closing action tool for use with Scotchlok butt and tap connectors. The E-9Y tool's stepped jaws and long nose provide parallel crimping action. Its features include a side wire cutter, cushioned handles and a return spring. The E-9R tool features single-stroke, parallel crimping action with a work-saving 10:1 mechanical advantage over applied hand force. The tool's innovative ratchet-release design indicates a positive crimp by automatically releasing after each successful connection. The E-9R tool is compatible with all 3M™ Scotchlok™ Connectors including UY, UR, UY2, UR2, UP2, UAL, UP3, UB, 211 and UB2A units across the entire range of applicable wire sizes.



RoHS 2011/65/EU Yes

| | E-9BM | E-9C | E-9E | E-9J |
|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| |  |  |  |  |
| UPC | 054007-33482 | 054007-34211 | 054007-10577 | 051115-19004 |
| Product Name | 3M™ Scotchlok™ Hand Crimping Tool E-9BM | 3M™ Scotchlok™ Cartridge Crimping Tool E-9C | 3M™ Scotchlok™ Hand Crimping Tool E-9E | 3M™ Scotchlok™ Hand Crimping Tool E-9J |
| Description | 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. | With an automatic cartridge feed, 7-to-1 mechanical advantage and ratchet action, the E-9C tool allows the craftsman to complete a crimp with one hand, freeing the other hand for wire handling. The tool is designed for cartridges with Scotchlok butt connectors. | A completely parallel closing action and a 4-to-1 mechanical advantage make the lightweight E-9E crimping tool a versatile addition to any craftsman's pouch. With these features, the E-9E tool will crimp all Scotchlok butt and tap connectors in all wire gauges. | The E-9J tool is a lightweight, hand-held 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. |
| Tools per Case | 6 | 1 | 10 | 10 |
| | E-9R | E-9Y | E-9Y-P | |
| |  |  |  | |
| UPC | 051138-87649 | 054007-15625 | 051115-22987 | |
| Product Name | 3M™ Scotchlok™ Hand Crimping Tool E-9R | 3M™ Scotchlok™ Hand Crimping Tool E-9Y | 3M™ Scotchlok™ Hand Crimping Tool E-9Y-P | |
| Description | 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. | 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 AWG (0.9 mm) and larger conductors. | In package. It is not recommended for 19 AWG (.9 mm) and larger conductors. Mechanical advantage of 3-to-1. Includes integrated wire cutter. | |
| Tools per Case | 10 | 10 | 10 | |

Moisture Resistant Connectors

3M™ Scotchlok™ Moisture Resistant Connectors

The 3M™ Moisture Guard Connector MGC provides a convenient way to connect wires for landscape irrigation and lighting applications. Just press the MGC cap and a metal element inside pushes through the wire insulation to make a secure, reliable connection. The grease in the MGC protects against moisture while the MGC housing is UV resistant for above-ground applications.

| | |
|-------------------------------|-----------------------------------------------------------------------------------|
| Connection Type | Moisture Resistant |
| Connector Style | Insulation Displacement |
| Flame Retardant | No |
| Maximum Voltage Rating | 600 V (1000 V in signs, lighting fixtures and luminaries) |
| Operating Temperature | 221°F (105 °C) |
| RoHS 2011/65/EU | Yes |
| Agency Approval |  |
| Country of Origin |  |



| Order No. | UPC | Conductor Size | Wire Range: Outside Port | Wire Range: Inside Port | Outside Port Maximum Insulation Diameter | Inside Port Maximum Insulation Diameter | Connectors per Carton | Connectors per Case |
|--------------|--------------|----------------|-----------------------------------------------|--------------------------------------------|------------------------------------------|-----------------------------------------|-----------------------|---------------------|
| MGC(25/BAG) | 051128-56827 | 14 AWG | 12 AWG, Stranded 14–16 AWG, Solid/Stranded | 20 AWG, Stranded 18 AWG, Solid/Stranded | 0.21" (5,3 mm) | 0.15" (3,8 mm) | 25 | 250 |
| MGC(100/JUG) | 051128-56828 | 14 AWG | 12 AWG, Stranded 14–16 AWG, Solid/Stranded | 20 AWG, Stranded 18 AWG, Solid/Stranded | 0.21" (5,3 mm) | 0.150" (3,8 mm) | 100 | 400 |

3M™ Scotchlok™ IDC Butt/Trim Out Connector 211

The 3M™ Scotchlok™ IDC Butt/Trim Out Connector 211 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.

For interruption free butt splice replacement.

Choose any one of the 3M™ Scotchlok™ Crimping Tools E-9 to use with the 211 connector.

| | |
|------------------------|----------------------------|
| Connector Type | Butt Trim-out/ 2 Conductor |
| Application | Filled |
| Cable Type | PIC |
| Flame Retardant | No |



| Order No. | UPC # | Conductor Size (Min.) | Conductor Size (Max.) | Insulation Outside Diameter | Min. Order Qty. | Case Qty. |
|-----------|--------------|-----------------------|-----------------------|-----------------------------|-------------------------------------|-----------|
| 211(BX) | 051115-26185 | 26 AWG | 19 AWG | 0.082 inches | 100 each per Box, 10 Boxes per Case | 1000 each |

Direct Bury

3M™ Direct Bury Splice Kit DB0/B-6

The 3M™ Direct Bury Splice Kit DB0/B-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector O/B+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.


| | |
|-------------------------------|-----------------------------------------------------------------------------------|
| Voltage | 600 V |
| Splice Type | Direct Bury |
| Application Temperature Range | 32–120°F (0–49°C) |
| Operating Temperature Range | 221°F (105°C) |
| Flame Retardant | Yes |
| RoHS 2011/65/EU | Yes |
| Agency Approval |  |



| Order No. | UPC | Conductor Size | Common AWG Wire Combinations (CU only) | Case Qty. |
|--------------|--------------|----------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|
| DB0/B-6 KIT | 051128-59075 | 18–10 AWG | 2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str | 25 Kits |
| DB0/B-6 BULK | 051128-59076 | 18–10 AWG | 2–3#16 sol/str; 2–3#14 sol/str; 2#12 sol/str; 1#14 to 1#12 sol/str; 1#18 to 1–2#14 sol/str; 1#18 to 1–2#12 sol/str; 1#16 to 1–2#14 sol/str; 1#16 to 1–2#12 sol/str | 100 Kits |

3M™ Direct Bury Splice Kit DBR/Y-6

The 3M™ Direct Bury Splice Kit DBR/Y-6 is used to electrically connect two or more pre-stripped copper wires and moisture seal the connection for direct burial. The kit includes a 3M™ Performance Plus Wire Connector R/Y+ and a high impact, UV-resistant polypropylene tube prefilled with moisture-resistant grease.

| | |
|-------------------------------|-------------------------------------------------------------------------------------|
| Voltage | 600 V |
| Splice Type | Direct Bury |
| Application Temperature Range | 32–120°F (0–49°C) |
| Operating Temperature Range | -40–221°F (-40–105°C) |
| Flame Retardant | Yes |
| RoHS 2011/65/EU | Yes |
| Agency Approval |  |



| Order No. | UPC | Conductor Size | Common AWG Wire Combinations (CU only) | Case Qty. |
|--------------|--------------|----------------|------------------------------------------------------------------------------------------------------|-----------|
| DBR/Y-6 KIT | 051128-58573 | 18–10 AWG | 2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18 | 25 Kits |
| DBR/Y-6 BULK | 051128-58574 | 18–10 AWG | 2–7#18; 2–6#16; 2–4#14; 2–4#12; 2–3#10; 1–3#12 w/ 1#18; 1–2#10 w/1#18; 1–2#10 w/1#12; 1–2#14 w/ 1#18 | 100 Kits |