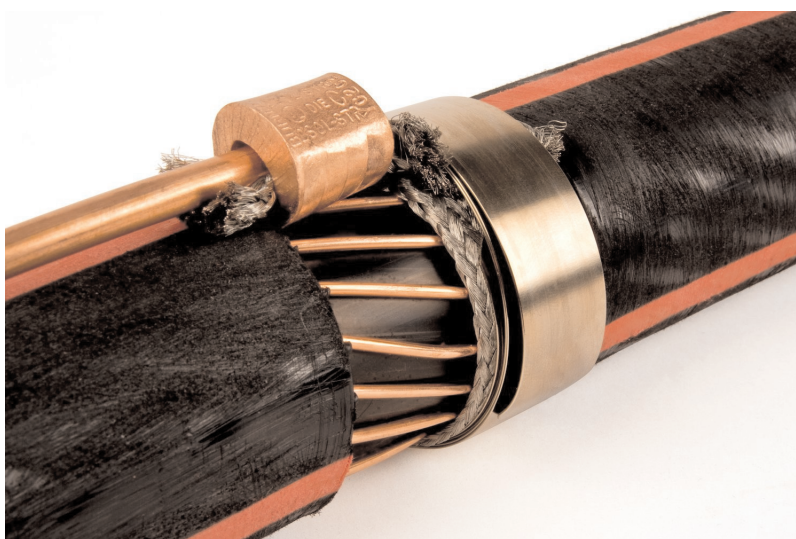


# Cable Accessory Products

3M offers accessory products to assist with splice re-jacketing, cable jacket sealing, grounding and cable preparation. Many of the products shown here are used with 3M splices and terminations. Remember to reference those sections for more product information.



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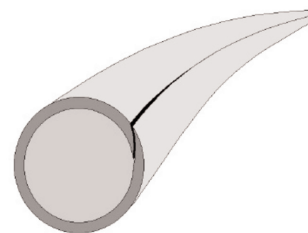
## Overhead Conductor Animal Guard Cover

3M™ Conductor Covers CCI Series are extruded silicone rubber tubes designed for field installation over bare conductors to insulate them from adjacent phases, grounded equipment, and animal contact. These covers are made with a full-length longitudinal bias cut to allow for easy slip-on installation, and provide an increased creepage distance between the conductor and the outer surface of the cover.

The covers are offered in two thickness sizes for covering both 15 kV and 25 kV rated conductors, and are available in ACSR conductor sizes from 2 AWG–266 kcmil.

Features:

- ◆ Excellent UV, arc and ozone resistance
- ◆ Good dielectric strength, conformability and cold weather installation
- ◆ Munsel grey color
- ◆ Bias cut enables easy field installation without any special tools



CCI Series  
Conductor Covers

**Voltage** 15–25 kV

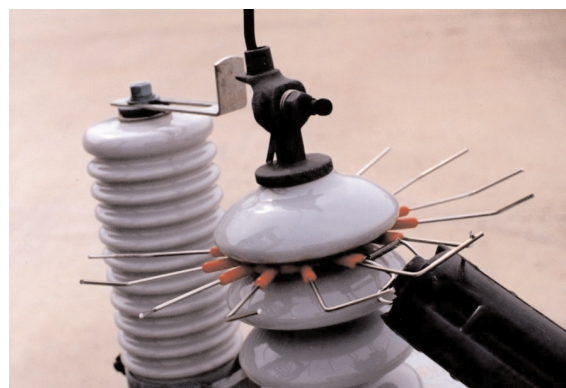
| Order No.   | UPC          | ACSR Conductor Size | Conductor Voltage Rating | Insulation Diameter | Insulation Thickness | Case Qty.     |
|-------------|--------------|---------------------|--------------------------|---------------------|----------------------|---------------|
| CCI-2-125   | 051141-04238 | 2 AWG               | 15 kV                    | 0.34" (9 mm)        | 0.125" (3 mm)        | 100 ft. rolls |
| CCI-2/0-125 | 051141-04239 | 2/0 AWG             | 15 kV                    | 0.46" (12 mm)       | 0.125" (3 mm)        | 100 ft. rolls |
| CCI-266-125 | 051141-04241 | 266 kcmil           | 15 kV                    | 0.63" (16 mm)       | 0.125" (3 mm)        | 100 ft. rolls |
| CCI-2/0-200 | 051141-04240 | 2/0 AWG             | 25 kV                    | 0.46" (12 mm)       | 0.200" (5 mm)        | 100 ft. rolls |
| CCI-266-200 | 051141-04242 | 266 kcmil           | 25 kV                    | 0.63" (16 mm)       | 0.200" (5 mm)        | 100 ft. rolls |

## 3M™ Electrostatic Animal Guard

This is a patented electrostatic barrier that attaches to energized electrical insulators/bushings rated up to 35 kV.

The 3M™ Electrostatic Animal Guard consists of rugged plastic with metal spokes radiating outward. When an animal touches the spokes, it receives an electric shock, similar to those generated by electrified livestock fences. The animal is not injured and power service is not interrupted.

Note: Insulator neck diameter range is defined as the diameter of the insulator in between the skirts.



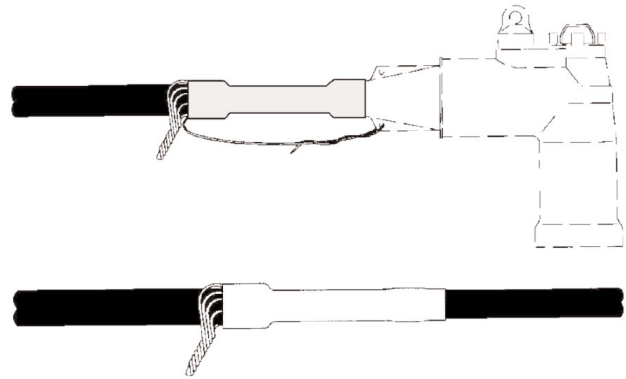
**Voltage** 35 kV and less

| Order No. | UPC          | Insulator Neck Diameter Range | Case Qty. |
|-----------|--------------|-------------------------------|-----------|
| GG-7525   | 054007-43128 | 0.75"–2.50" (19,1–63,7 mm)    | 100       |
| GG-1525   | 054007-43125 | 1.50"–2.50" (38,2–63,7 mm)    | 100       |
| GG-2545   | 054007-43126 | 2.50"–4.50" (63,7–114,7 mm)   | 100       |
| GG-4565   | 054007-43127 | 4.50"–6.50" (114,7–165,7 mm)  | 100       |

## 3M™ Cold Shrink Cable Accessory Sealing Kits 8450 Series

The 3M™ Cold Shrink Cable Accessory Sealing Kits 8450 Series are designed to seal the jacket end of power cables where elbows or other cable accessories are installed. Both the sealing tube and mastic are compatible with commonly used power cable jacketing and semiconductive materials.

Each kit contains enough materials to seal one cable jacket end. Kit contents include: Cold Shrink sealing tube; 6" (15,24 cm) mastic sealing strips (3 strips in 8452/8452L, 4 strips in 8453, 6 strips in 8454); and Instruction sheet.



|                             |                                   |
|-----------------------------|-----------------------------------|
| <b>Voltage</b>              | 15-35 kV                          |
| <b>Cable/Shielding Type</b> | Jacketed Concentric Neutral (JCN) |
| <b>Component Type</b>       | Accessory Kit                     |
| <b>RoHS 2011/65/EU</b>      | Yes                               |

|                              | 8452                                   | 8452L                                  | 8453  | 8454   |
|------------------------------|--|--|---|--|
| UPC                          | 054007-08336                           | 054007-44312                           | 054007-09676                                    | 054007-49938                                 |
| Typical Expanded Tube Length | 4.50" (114 mm)                         | 5.00" (127 mm)                         | 6.50" (165 mm)                                  | 7.50" (190 mm)                               |
| Typical Relaxed Tube Length  | 6.00" (150 mm)                         | 6.50" (165 mm)                         | 8.00" (200 mm)                                  | 9.00" (225 mm)                               |
| Expanded Tube Diameter       | 2.12" (53 mm)                          | 2.12" (53 mm)                          | 2.85" (73 mm)                                   | 3.87" (98 mm)                                |
| Minimum Seal Diameter        | 0.95" (24 mm)                          | 0.95" (24 mm)                          | 1.28" (33 mm)                                   | 1.60" (41 mm)                                |
| Maximum Installed Diameter   | 1.94" (49 mm)                          | 1.94" (49 mm)                          | 2.67" (68 mm)                                   | 3.50" (89 mm)                                |
| Cable Size for 15 kV Class   | 2-4/0 AWG<br>(35-100 mm <sup>2</sup> ) | 2-4/0 AWG<br>(35-100 mm <sup>2</sup> ) | 2/0 AWG-1000 kcmil<br>(70-500 mm <sup>2</sup> ) | 750-1500 kcmil<br>(380-725 mm <sup>2</sup> ) |
| Cable Size for 25 kV Class   | 2-2/0 AWG<br>(35-50 mm <sup>2</sup> )  | 2-2/0 AWG<br>(35-50 mm <sup>2</sup> )  | 1/0 AWG-750 kcmil<br>(60-380 mm <sup>2</sup> )  | 600-1250 kcmil<br>(325-625 mm <sup>2</sup> ) |
| Cable Size for 35 kV Class   | 1/0 AWG<br>(60 mm <sup>2</sup> )       | 1/0 AWG<br>(60 mm <sup>2</sup> )       | 1/0 AWG-500 kcmil<br>(60-250 mm <sup>2</sup> )  | 350-1000 kcmil<br>(180-500 mm <sup>2</sup> ) |
| Kits per Case                | 10                                     | 10                                     | 10  | 10   |

## Sealing and Grounding Kits

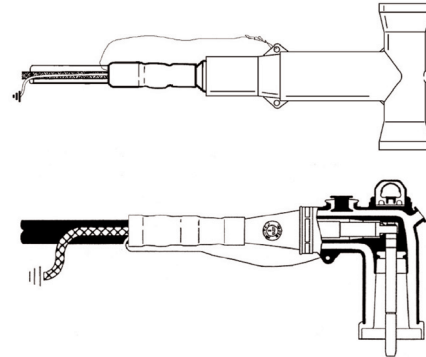
### 3M™ Cold Shrink Shield Adapter Kits 8459/8460 Series

3M™ Cold Shrink Shield Adapter Kits are designed for grounding and sealing tape shield, wire shield and Unishield® power cables when using cable accessories such as elbows, modular splices and terminations. The Shield Adapter Kit design provides a fault current capacity of 600 amps on 15–35 kV class cables.

These cold shrink kits require no heat, special tools or special skills to install. The cold shrink kits come complete with all necessary components (except the cable accessory) and are installed in a few simple steps. We've even attached a "bleeder wire" to the ground strap eliminating the need for additional wire and connectors.

Each kit contains enough material to ground one cable accessory.

|                             |                                      |
|-----------------------------|--------------------------------------|
| <b>Voltage</b>              | 15-35 kV                             |
| <b>Current</b>              | 600 Ampere                           |
| <b>Cable/Shielding Type</b> | Tape Shield, Wire Shield, Unishield® |
| <b>Component Type</b>       | Accessory                            |



| Order No. | UPC          | Jacket O.D. Size              | Cond. Size 5/8 kV                              | Cond. Size 15 kV                              | Cond. Size 25 kV                              | Cond. Size 35 kV                               | Kits/Case |
|-----------|--------------|-------------------------------|--|---|---|--|-----------|
| 8459      | 051128-53236 | 0.59"-1.05"<br>(15,0-26,6 mm) | 8-1 AWG<br>(10-38 mm <sup>2</sup> )            | -   | -   | -  | 3         |
| 8460      | 054007-41458 | 0.83"-1.64"<br>(21,1-41,6 mm) | 1/0 AWG-350 kcmil<br>(50-200 mm <sup>2</sup> ) | 2 AWG-250 kcmil<br>(35-150 mm <sup>2</sup> )  | 2 AWG-250 kcmil<br>(35-150 mm <sup>2</sup> )  | 2-1/0 AWG<br>(35-60 mm <sup>2</sup> )          | 3         |
| 8461      | 054007-41459 | 1.27"-2.17"<br>(32,3-55,1 mm) | 500-1000 kcmil<br>(240-500 mm <sup>2</sup> )   | 350-1000 kcmil<br>(185-500 mm <sup>2</sup> )  | 350-750 kcmil<br>(185-500 mm <sup>2</sup> )   | 2/0 AWG-350 kcmil<br>(70-200 mm <sup>2</sup> ) | 3         |
| 8462      | 051128-53131 | 1.70"-2.60"<br>(43,2-66,0 mm) | -  | 1250-1750 kcmil<br>(600-850 mm <sup>2</sup> ) | 1000-1500 kcmil<br>(600-725 mm <sup>2</sup> ) | 500-1000 kcmil<br>(240-500 mm <sup>2</sup> )   | 3         |

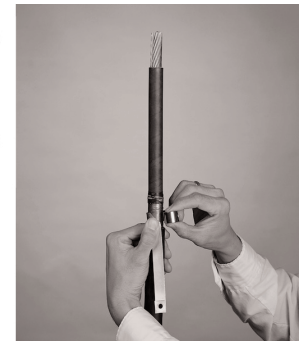
## Sealing and Grounding Kits

### 3M™ Ground Strap Assembly GS Series

3M™ Ground Strap Assembly Kits GS Series are designed for grounding tape- and wire-shielded power cables.

**Voltage** 5-35 kV

**Cable/Shielding Type** Tape- & Wire-Shielded Power Cables



| Order No. | UPC<br>054007- | Strap (LxW)                           | Conductor Size 5<br>kV-100% (90<br>mil)           | Conductor Size 5 kV-<br>133%/<br>8 kV-100% (115 mil) | Conductor<br>Size 8 kV-<br>133% (140<br>mil)       | Conductor<br>Size 15 kV-<br>100% (175<br>mil)      | Conductor<br>Size 15 kV-<br>133% (220<br>mil)      | Conductor<br>Size 25 kV<br>(260 mil)                   | Conductor<br>Size 35 kV<br>(345 mil)                  | Bags/<br>Case |
|-----------|----------------|---------------------------------------|---|--|--|--|--|--|---|---------------|
| GS-1      | 33976          | 4.75" x 0.31"<br>(120,7 x 7,9<br>mm)  | 8-3/0 AWG<br>(10-80 mm <sup>2</sup> )             | 8-1/0 AWG<br>(10-50 mm <sup>2</sup> )                | 8-1 AWG<br>(10-38 mm <sup>2</sup> )                | -  | -  | -  | -   | 9             |
| GS-2      | 33977          | 7.12" x 0.62"<br>(180,8 x 15,7<br>mm) | 2/0 AWG-750<br>kcmil<br>(70-325 mm <sup>2</sup> ) | 1/0 AWG-750 kcmil<br>(60-325 mm <sup>2</sup> )       | 1 AWG-600<br>kcmil<br>(50-300<br>mm <sup>2</sup> ) | 2 AWG-500<br>kcmil<br>(35-250<br>mm <sup>2</sup> ) | 2 AWG-350<br>kcmil<br>(35-180<br>mm <sup>2</sup> ) | 2 AWG-400<br>kcmil<br>(35-200<br>mm <sup>2</sup> )     | 1/0 AWG-<br>300 kcmil<br>(60-150<br>mm <sup>2</sup> ) | 9             |
| GS-3      | 33978          | 6.87" x 0.62"<br>(175,0 x 15,7<br>mm) | 600-2000 kcmil<br>(325-1000 mm <sup>2</sup> )     | 500-2000 kcmil<br>(300-1000 mm <sup>2</sup> )        | 400-1750<br>kcmil<br>(240-850<br>mm <sup>2</sup> ) | 350-1750<br>kcmil<br>(180-850<br>mm <sup>2</sup> ) | 250-1500<br>kcmil<br>(125-725<br>mm <sup>2</sup> ) | 3/0 AWG-<br>1000 kcmil<br>(95-500<br>mm <sup>2</sup> ) | 1/0 AWG-<br>750 kcmil<br>(60-325<br>mm <sup>2</sup> ) | 9             |

### 3M™ Constant Force Spring

3M™ Constant Force Springs are a range of solderless connections for earthing or grounding use on:

- ♦ Lead and aluminium cable sheaths
- ♦ Cable screening tapes or wires
- ♦ Steel or aluminum armour wires

The springs are easily applied by rolling onto the cable core or outside diameter, whereupon it continues to exert a constant radial pressure.

**RoHS 2011/65/EU** Yes





| Order No.      | UPC          | Application Range           | Width            | Springs per Case |
|----------------|--------------|-----------------------------|------------------|------------------|
| CFS-.47/1.78   | 054007-42372 | 0.50"-0.75" (12,7-19,0 mm)  | 0.500" (12,7 mm) | 30               |
| CFS-.80/1.50   | 054007-42374 | 0.80"-1.50" (20,3-38,1 mm)  | 0.625" (15,9 mm) | 30               |
| CFS-1.00/2.20  | 054007-42375 | 1.00"-2.20" (25,4-56,0 mm)  | 0.625" (15,9 mm) | 30               |
| CFS-1.50-3.00  | 054007-42376 | 1.50"-3.00" (38,1-76,2 mm)  | 0.625" (15,9 mm) | 9                |
| CFS-1.50/3.00W | 054007-42378 | 1.50"-3.00" (38,1-76,2 mm)  | 0.750" (19,0 mm) | 9                |
| CFS-1.80/4.00  | 054007-42379 | 1.80"-4.00" (45,7-101,6 mm) | 0.625" (15,9 mm) | 9                |

## 3M™ Shield Grounding Accessory Kits GSK

3M™ Shield Grounding Accessory Kits GSK Series are designed to convert concentric neutral (CN) or jacketed concentric neutral (JCN) QT-II or QT-III termination kits for use on longitudinally corrugated (LC) and tape shielded power cables. The GSK kits eliminate the need to stock separate termination kits for shielded power cables. The ground braids provided in the GSK kits are designed for applications where high ampacity grounding is desired.

\* **Conductor Size Ranges expressed in AWG & kcmil.**

|                                       |   |  |
|---------------------------------------|---|--|
| <b>Voltage</b>                        | 5–35 kV                                     | <br>Tape Shielded Cable<br><br><br>Longitudinally Corrugated (LC) Shielded Cable |
| <b>Cable/Shielding Type</b>           | Tape Shield, Longitudinally Corrugated (LC) |  |
| <b>Shield Diameter Range (GSK-22)</b> | 0.74"–1.18" (18,8–30,0 mm)                  |  |
| <b>Shield Diameter Range (GSK-34)</b> | 0.82"–1.63" (20,8–41,4 mm)                  |  |
| <b>Shield Diameter Range (GSK-56)</b> | 1.15"–2.42" (29,2–61,5 mm)                  |  |
| <b>Packaging</b>                      | 3 kits per case                             |  |

| Order No.       | UPC          | Compatible with   | 5 kV (90 mil)<br>AWG & kcmil | 5/8 kV<br>(115 mil)<br>AWG & kcmil | 8 kV (140 mil)<br>AWG & kcmil | 15 kV (175 mil)<br>AWG & kcmil | 15 kV (220 mil)<br>AWG & kcmil | 25/28 kV<br>(260/280 mil)<br>AWG & kcmil | 35 kV<br>(345 mil)<br>AWG & kcmil |
|-----------------|--------------|-------------------|------------------------------|------------------------------------|-------------------------------|--------------------------------|--------------------------------|--|-----------------------------------|
| GSK-22          | 051128-53087 | QT-II 5641        | 3/0-300                      | 2/0-250                            | 1/0-4/0                       | 2-3/0                          | 2-1/0                          | -  | -                                 |
|                 |              | QT-II 5651        | 3/0-300                      | 2/0-250                            | 1/0-4/0                       | 2-3/0                          | 2-1/0                          | 2-1                                      | -                                 |
|                 |              | QT-III 7642-T-110 | 4/0-400                      | 3/0-350                            | -                             | 2-4/0                          | 2-4/0                          | -  | -                                 |
|                 |              | QT-III 7642-S-2   | 4/0-400                      | 3/0-350                            | -                             | 2-4/0                          | 2-4/0                          | -  | -                                 |
|                 |              | QT-III 7652-S-4   | 4/0-400                      | 3/0-350                            | -                             | 2-4/0                          | 2-4/0                          | -  | -                                 |
| GSK-34          | 051128-53088 | QT-II 5642        | 350-750                      | 300-750                            | 250-600                       | 3/0-500                        | 2/0-350                        | -  | -                                 |
|                 |              | QT-II 5652        | 350-750                      | 300-750                            | 250-600                       | 3/0-500                        | 2/0-350                        | 1/0-250                                  | -                                 |
|                 |              | QT-II 5646        | 350-750                      | 300-750                            | 250-600                       | 3/0-500                        | 2/0-350                        | 1/0-250                                  | 2-3/0                             |
|                 |              | QT-III 7653-S-4   | 300-500                      | 250-500                            | 4/0-350                       | 2/0-300                        | 2/0-300                        | 2-4/0                                    | -                                 |
|                 |              | QT-III 7654-S-4   | 500-750                      | 350-700                            | 250-500                       | 4/0-500                        | 4/0-500                        | 2/0-250                                  | -                                 |
|                 |              | QT-III 7644-T-110 | 500-750                      | 350-700                            | 250-500                       | 4/0-500                        | 4/0-500                        | -  | -                                 |
|                 |              | QT-III 7653-T-150 | 300-500                      | 250-500                            | 4/0-350                       | 2/0-300                        | 2/0-300                        | 2-4/0                                    | 2-2/0                             |
|                 |              | QT-III 7663-S-8   | 300-500                      | 250-500                            | 4/0-350                       | 2/0-300                        | 2/0-300                        | 2-4/0                                    | 2-2/0                             |
| QT-III 7664-S-8 | 500-750      | 350-700           | 250-500                      | 4/0-500                            | 4/0-500                       | 2/0-250                        | 2-4/0                          |  |                                   |
| GSK-56          | 051128-53089 | QT-II 5643        | 750-1500                     | 750-1250                           | 600-1000                      | 500-1000                       | 350-500                        | -  | -                                 |
|                 |              | QT-II 5644        | 1000-2000                    | 1000-2000                          | 800-1750                      | 750-1750                       | 600-1500                       | -  | -                                 |
|                 |              | QT-II 5653        | 750-1500                     | 750-1250                           | 600-1000                      | 500-1000                       | 350-500                        | 300-500                                  | -                                 |
|                 |              | QT-II 5654        | 1000-2000                    | 1000-2000                          | 800-1750                      | 750-1750                       | 600-1500                       | 600-1250                                 | -                                 |
|                 |              | QT-II 5647        | 750-1500                     | 750-1250                           | 600-1000                      | 500-1000                       | 350-500                        | 300-500                                  | 4/0-400                           |
|                 |              | QT-II 5648        | 1000-2000                    | 1000-2000                          | 800-1750                      | 750-1750                       | 600-1500                       | 600-1250                                 | 500-1000                          |
|                 |              | QT-III 7655-S-4   | 700-1500                     | 600-1250                           | 500-1000                      | 500-1000                       | 500-1000                       | 250-800                                  | -                                 |
|                 |              | QT-III 7656-S-4   | 1750-2000                    | 1500-2000                          | 1250-1750                     | 1250-2000                      | 1250-2000                      | 900-1750                                 | -                                 |
|                 |              | QT-III 7645-T-110 | 700-1500                     | 600-1250                           | 500-1000                      | 500-1000                       | 500-1000                       | -  | -                                 |
|                 |              | QT-III 7646-T-110 | 1750-2000                    | 1500-2000                          | 1250-1750                     | 1250-2000                      | 1250-2000                      | -  | -                                 |
|                 |              | QT-III 7655-T-150 | 700-1500                     | 600-1250                           | 500-1000                      | 500-1000                       | 500-1000                       | 250-800                                  | 3/0-600                           |
|                 |              | QT-III 7656-T-150 | 1750-2000                    | 1500-2000                          | 1250-1750                     | 1250-2000                      | 1250-2000                      | 900-1750                                 | 700-1500                          |
|                 |              | QT-III 7665-S-8   | 700-1500                     | 600-1250                           | 500-1000                      | 500-1000                       | 500-1000                       | 250-800                                  | 3/0-600                           |
|                 |              | QT-III 7666-S-8   | 1750-2000                    | 1500-2000                          | 1250-1750                     | 1250-2000                      | 1250-2000                      | 900-1750                                 | 700-1500                          |

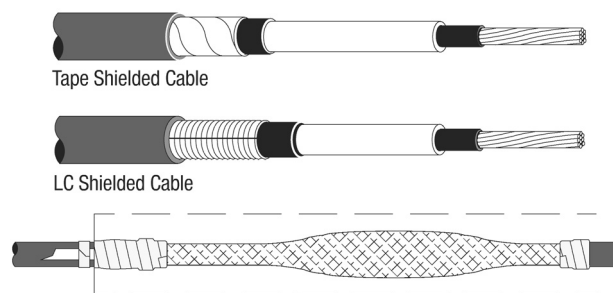
## Sealing and Grounding Kits

## 3M™ Hi-Amp Splice Grounding Accessory Kits SG-2 and SG-3

3M™ Hi-Amp Splice Grounding Accessory Kits SG-2 and SG-3 are designed to accommodate the shielding and grounding of inline splices made on longitudinally corrugated (LC) shield, heavy-duty tape and conventional tape-shielded power cables. The SG-2 and SG-3 designs provide a fault current capacity of 15,000 Amps for 15 cycles on 15 kV, 25 kV and 35 kV class cables. The 3M kits SG-2 and SG-3 were designed to accommodate 3M™ QS bodies as well as most other rubber-molded inline splices currently used in the electrical power distribution industry.

The 3M Copper Screen Sleeves SG-2 and SG-3 are applied over molded rubber splices on cables with shield diameters ranging from 1.25"-2.25" (31,8-57,2 mm). In most cases this will include conductor sizes between 350-1000 kcmil and voltage classes of 15-35 kV. The 3M copper screen sleeves SG-2 and SG-3 and the preformed ground connection braid have a capacity greater than that of 4 AWG copper wire and are fault current rated at 15,000 amps for 15 cycles. The 3M Kit SG-3 has a larger CMA (greater than 2 AWG) copper screen sleeve and two constant force springs per end. This provides additional neutral current capacity.

Each kit provides shielding and grounding for one splice.



**Voltage** 15–35 kV

**Cable/Shielding Type** Tape Shield, Longitudinally Corrugated (LC)

| Order No. | UPC          | Shield O.D. Range          | Conductor Size Range | Circular Mil Area | Kits per Case |
|-----------|--------------|----------------------------|----------------------|-------------------|---------------|
| SG-2      | 054007-50041 | 1.25"-2.25" (31,8-57,2 mm) | 350-1000 kcmil       | 61,000            | 10            |
| SG-3      | 054007-41511 | 1.25"-2.25" (31,8-57,2 mm) | 350-1000 kcmil       | 72,000            | 10            |

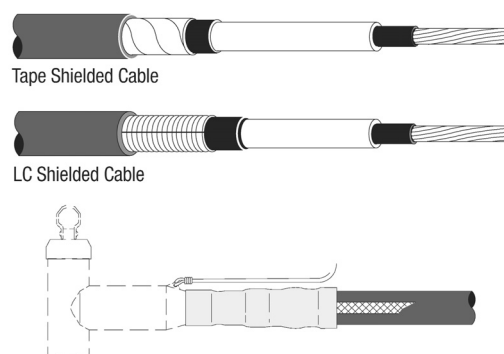
## 3M™ Hi-Amp Accessory Grounding Kits 8473 and GSHA-8 QT-II

3M™ Hi-Amp Accessory Grounding Kits 8473 and GSHA-8 QT-II are both designed to accommodate the grounding of accessories installed on 15 kV, 25 kV and 35 kV Class longitudinally corrugated (LC), heavy-duty tape and conventional tape-shielded power cables.

The 8473 kit is a cold shrink design to be used with 600-Amp elbows and other accessories where cable jacket-to-accessory sealing and high-ampacity grounding is desired. Its preformed ground braid has a fault current capacity of 15,000 Amps for 15 cycles with an equivalent cross-sectional area greater than 4 AWG copper wire.

The GSHA-8 is designed to accommodate the grounding of terminations made on 15 kV, 25 kV and 35 kV Class longitudinally corrugated (LC), heavy-duty tape and conventional tape-shielded power cables. The 3M Kit GSHA-8 QT-II preformed ground braid design also provides a fault current capacity of 15,000 Amps for 15 cycles on 15–35 kV class cables.

Each kit provides grounding and/or sealing for one accessory or termination.



**Voltage** 15 kV, 25/28 kV, 35 kV

**Cable/Shielding Type** Tape Shield, Longitudinally Corrugated (LC)

| Order No. | UPC          | Shield O.D. Range          | Conductor Size Range AWG and kcmil | Kits per Case |
|-----------|--------------|----------------------------|------------------------------------|---------------|
| 8473      | 054007-50043 | 1.25"-2.25" (31,8-57,2 mm) | 350-1000 kcmil                     | 10            |
| GSHA-8    | 054007-50042 | 1.25"-2.25" (31,8-57,2 mm) | 350-1000 kcmil                     | 10            |

## Sealing and Grounding Kits

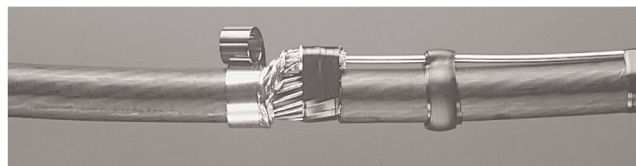
### 3M™ Cable Grounding Kits 2252, 2253 and 2254

The 3M™ Cable Grounding Kits 2252, 2253 and 2254 provide a simple, reliable and secure method for grounding and resealing of the jacket of direct buried distribution cables. These kits are designed for use with jacketed concentric neutral (JCN) power cables ranging from 2–4/0 AWG, rated through 35 kV. A common kit application is for grounding a primary neutral at least every 1320' (1/4 mile) per Rural Utilities Service (RUS) Bulletin 83-1.

Each kit provides enough material for one cable ground.



Jacketed Concentric Neutral Cable (JCN)



**Voltage** 35 kV  
**Cable/Shielding Type** Jacketed Concentric Neutral (JCN)

**Agency Approvals** 

| Order No. | UPC          | Conductor Size Range | Kits per Case |
|-----------|--------------|----------------------|---------------|
| 2252      | 054007-08335 | 2–4/0 AWG            | 10            |
| 2253      | 051128-55648 | 250–500 kcmil        | 10            |
| 2254      | 051128-56939 | 500–1000 kcmil       | 10            |

### 3M™ Cold Shrink Insertion Seal

Seals open space between a steel casing and plastic, gas, or utility pipe. Seal consists of EPDM rubber tubing that is expanded over a removable core and shrinks in diameter.



**Technology** Cold Shrink  
**Material** EPDM Rubber  
**RoHS 2011/65/EU** Yes

| Order No. | UPC          | Case Qty. |
|-----------|--------------|-----------|
| PS-2      | 054007-49886 | 10        |
| PS-3      | 054007-50201 | 10        |
| PS-4      | 054007-49887 | 10        |

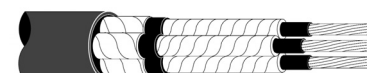


## Splice Repair

## Lead Sheath Repair Kit



Paper Insulated Lead Covered (PILC) Cable



Three-Conductor Paper Insulated Lead Covered (PILC) Cable

| Order No.              | UPC          | Description                          | Kits per Case |
|------------------------|--------------|--------------------------------------|---------------|
| LEAD-SHEATH-REPAIR-KIT | 054007-44246 | For sealing oil leaks on PILC cable. | 1             |

## Cable Breakout Boots and Phase Rejacketing System

## 3M™ Cold Shrink Silicone Rubber Cable Breakout Boots 8560 Series

3M™ Cold Shrink Silicone Rubber Cable Breakout Boots 8560 Series are a series of open-ended molded rubber sealing assemblies that are factory expanded and mounted on removable inner supporting plastic cores. They are supplied for field installation in a pre-stretched condition. The supporting cores are removed after the seal has been positioned for installation around the breakout area of a 3/C (three-conductor) cable. Core removal allows the silicone rubber boot to shrink down to a pre-determined diameter, creating an environmental enclosure for individual cable phase legs and the overall cable jacket.

3M™ Cold Shrink Silicone Rubber Cable Breakout Boots 8560 Series are designed to protect the phase leg breakout area of 3/C medium voltage shielded power cable from exposure to moisture, contamination, corrosion, ozone, ultra-violet radiation, physical contact and other hazards associated with 3/C termination operating environments.

The 8560 Series Breakout Boots can be used in conjunction with 3M™ Cold Shrink Silicone Rubber Termination Assemblies and 3M™ RJS Series Rejacketing Sleeves for 3/C shielded power cable terminating applications.

|                      |                      |
|----------------------|----------------------|
| Voltage              | 35 kV and less       |
| Number of Conductors | Three Conductors     |
| Cable/Shielding Type | Shielded Power Cable |
| Color                | Dark Gray            |
| RoHS 2011/65/EU      | Yes                  |



| Order No. | UPC          | Cable Phase Shield Diameter Range | Cable Outer Jacket Diameter Range | Case Qty. |
|-----------|--------------|-----------------------------------|-----------------------------------|-----------|
| 8561      | 054007-43143 | 0.48"–0.72" (12,2–18,3 mm)        | 1.30"–1.94" (33,0–49,3 mm)        | 1         |
| 8562      | 054007-43144 | 0.61"–0.95" (15,5–24,1 mm)        | 1.46"–2.67" (37,1–67,8 mm)        | 1         |
| 8563      | 054007-43145 | 0.82"–1.18" (20,8–30,0 mm)        | 1.92"–3.10" (48,8–78,7 mm)        | 1         |
| 8564      | 054007-43146 | 1.02"–1.63" (25,9–41,4 mm)        | 2.52"–4.32" (64,0–109,7 mm)       | 1         |
| 8565      | 054007-43147 | 1.09"–1.94" (27,7–49,3 mm)        | 2.60"–4.70" (66,0–119,4 mm)       | 1         |
| 8566      | 051128-58283 | 1.23"–2.17" (31,2–55,1 mm)        | 3.18"–5.52" (80,7–140,2 mm)       | 1         |

## 3M™ RJS Series Rejacketing Sleeves

The 3M™ RJS Series Rejacketing Sleeves are designed so that 3M™ Cold Shrink QT-III and QT-III Silicone Rubber Terminations can be used on three-conductor (3/C) medium voltage shielded power cables of tape shield, wire shield, armored and non-armored configurations.

The RJS Series rejacketing assemblies are a series of silicone rubber insulators incorporating an inner-expandable polyester braid designed to reduce sliding friction and deliver the insulator onto the cable. Rejacketing sleeves are designed to protect the phase legs (core) of 3/C shielded power cable from exposure to moisture, corrosion, ozone, ultra-violet radiation, physical contact and other hazards associated with termination operating environments.

Rejacketing sleeves are designed to be used in conjunction with 3M™ Cold Shrink Breakout Boots and Silicone Rubber Terminations.



**Voltage 35 kV and less**

**Number of Conductors Three Conductors**

**Cable/Shielding Type Tape Shield, Wire Shield**

**RoHS 2011/65/EU Yes**

|                                | RJS-1-4FT                  | RJS-1-10FT                 | RJS-2-4FT                  | RJS-2-10FT                 |
|--------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| UPC                            | 054007-43098               | 054007-43099               | 054007-43100               | 054007-43101               |
| Length                         | 4' (1,22 m)                | 10' (3,05 m)               | 4' (1,22 m)                | 10' (3,05 m)               |
| Metallic Shield Diameter Range | 0.43"-0.60" (10,9-15,2 mm) | 0.43"-0.60" (10,9-15,2 mm) | 0.60"-0.80" (15,2-20,3 mm) | 0.60"-0.80" (15,2-20,3 mm) |
| Conductor Size 3.3 kV - IEC    | 16-35 mm <sup>2</sup>      | 16-35 mm <sup>2</sup>      | 50-95 mm <sup>2</sup>      | 50-95 mm <sup>2</sup>      |
| Conductor Size 3.3 kV - JIS    | 8-22 mm <sup>2</sup>       | 8-22 mm <sup>2</sup>       | 38-60 mm <sup>2</sup>      | 38-60 mm <sup>2</sup>      |
| Conductor Size 5.0 kV - AEIC   | 8-2 AWG                    | 8-2 AWG                    | 1-3/0 AWG                  | 1-3/0 AWG                  |
| Conductor Size 6.6 kV - JIS    | 16-25 mm <sup>2</sup>      | 16-25 mm <sup>2</sup>      | 35-70 mm <sup>2</sup>      | 35-70 mm <sup>2</sup>      |
| Conductor Size 6.6 kV - IEC    | 8-10 mm <sup>2</sup>       | 8-10 mm <sup>2</sup>       | 14-38 mm <sup>2</sup>      | 14-38 mm <sup>2</sup>      |
| Conductor Size 8.0 kV - AEIC   | 6-4 AWG                    | 6-4 AWG                    | 2-2/0 AWG                  | 2-2/0 AWG                  |
| Conductor Size 10 kV - IEC     | -                          | -                          | 10-50 mm <sup>2</sup>      | 10-50 mm <sup>2</sup>      |
| Conductor Size 15 kV - AEIC    | -                          | -                          | 2-1 AWG                    | 2-1 AWG                    |
| Conductor Size 20 kV - IEC     | -                          | -                          | -                          | -                          |
| Conductor Size 25 kV - AEIC    | -                          | -                          | -                          | -                          |
| Conductor Size 30 kV - IEC     | -                          | -                          | -                          | -                          |
| Conductor Size 35 kV - AEIC    | -                          | -                          | -                          | -                          |
| Sleeves per Case               | 10                         | 1                          | 10                         | 1                          |
|                                | RJS-3-4FT                  | RJS-3-10FT                 | RJS-4-4FT                  | RJS-4-10FT                 |
| UPC                            | 054007-43102               | 054007-43103               | 054007-43104               | 054007-43105               |
| Length                         | 4' (1,22 m)                | 10' (3,05 m)               | 4' (1,22 m)                | 10' (3,05 m)               |
| Metallic Shield Diameter Range | 0.80"-1.02" (20,3-25,9 mm) | 0.80"-1.02" (20,3-25,9 mm) | 1.02"-1.28" (25,9-32,5 mm) | 1.02"-1.28" (25,9-32,5 mm) |
| Conductor Size 3.3 kV - IEC    | 120-185 mm <sup>2</sup>    | 120-185 mm <sup>2</sup>    | 240-300 mm <sup>2</sup>    | 240-300 mm <sup>2</sup>    |
| Conductor Size 3.3 kV - JIS    | 100-150 mm <sup>2</sup>    | 100-150 mm <sup>2</sup>    | 200-250 mm <sup>2</sup>    | 200-250 mm <sup>2</sup>    |
| Conductor Size 5.0 kV - AEIC   | 4/0 AWG-400 kcmil          | 4/0 AWG-400 kcmil          | 500-750 kcmil              | 500-750 kcmil              |
| Conductor Size 6.6 kV - JIS    | 95-150 mm <sup>2</sup>     | 95-150 mm <sup>2</sup>     | 185-300 mm <sup>2</sup>    | 185-300 mm <sup>2</sup>    |
| Conductor Size 6.6 kV - IEC    | 60-100 mm <sup>2</sup>     | 60-100 mm <sup>2</sup>     | 150-250 mm <sup>2</sup>    | 150-250 mm <sup>2</sup>    |
| Conductor Size 8.0 kV - AEIC   | 3/0 AWG-350 kcmil          | 3/0 AWG-350 kcmil          | 400-600 kcmil              | 400-600 kcmil              |
| Conductor Size 10 kV - IEC     | 70-150 mm <sup>2</sup>     | 70-150 mm <sup>2</sup>     | 185-300 mm <sup>2</sup>    | 185-300 mm <sup>2</sup>    |
| Conductor Size 15 kV - AEIC    | 1/0-4/0 AWG                | 1/0-4/0 AWG                | 250-450 kcmil              | 250-450 kcmil              |
| Conductor Size 20 kV - IEC     | 25-70 mm <sup>2</sup>      | 25-70 mm <sup>2</sup>      | 95-185 mm <sup>2</sup>     | 95-185 mm <sup>2</sup>     |
| Conductor Size 25 kV - AEIC    | 2-1/0 AWG                  | 2-1/0 AWG                  | 2/0 AWG-250 kcmil          | 2/0 AWG-250 kcmil          |
| Conductor Size 30 kV - IEC     | -                          | -                          | 35-70 mm <sup>2</sup>      | 35-70 mm <sup>2</sup>      |
| Conductor Size 35 kV - AEIC    | -                          | -                          | 1/0-3/0 AWG                | 1/0-3/0 AWG                |
| Sleeves per Case               | 10                         | 1                          | 10                         | 1                          |

## 3M™ RJS Series Rejacketing Sleeves (continued)

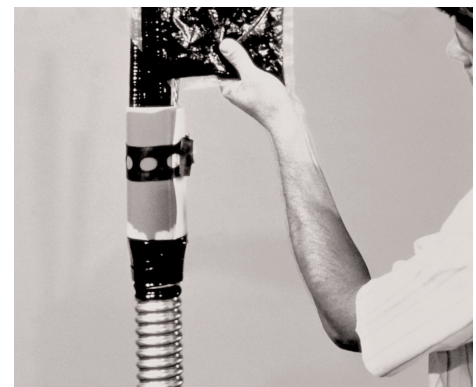
|                                | RJS-5-4FT                  | RJS-5-10FT                 | RJS-6-4FT                  | RJS-6-10FT                 |
|--------------------------------|----------------------------|----------------------------|----------------------------|----------------------------|
| UPC                            | 054007-43106               | 054007-43107               | 051128-54320               | 051128-54319               |
| Length                         | 4' (1,22 m)                | 10' (3,05 m)               | 4' (1,22 m)                | 10' (3,05 m)               |
| Metallic Shield Diameter Range | 1.28"-1.62" (32,5-41,1 mm) | 1.28"-1.62" (32,5-41,1 mm) | 1.62"-1.91" (41,1-48,5 mm) | 1.62"-1.91" (41,1-48,5 mm) |
| Conductor Size 3.3 kV - IEC    | -                          | -                          | -                          | -                          |
| Conductor Size 3.3 kV - JIS    | 300-325 mm <sup>2</sup>    | 300-325 mm <sup>2</sup>    | -                          | -                          |
| Conductor Size 5.0 kV - AEIC   | 800-1000 kcmil             | 800-1000 kcmil             | -                          | -                          |
| Conductor Size 6.6 kV - JIS    | -                          | -                          | -                          | -                          |
| Conductor Size 6.6 kV - IEC    | 300-325 mm <sup>2</sup>    | 300-325 mm <sup>2</sup>    | -                          | -                          |
| Conductor Size 8.0 kV - AEIC   | 750-1000 kcmil             | 750-1000 kcmil             | -                          | -                          |
| Conductor Size 10 kV - IEC     | -                          | -                          | -                          | -                          |
| Conductor Size 15 kV - AEIC    | 500-750 kcmil              | 500-750 kcmil              | -                          | -                          |
| Conductor Size 20 kV - IEC     | 240-300 mm <sup>2</sup>    | 240-300 mm <sup>2</sup>    | -                          | -                          |
| Conductor Size 25 kV - AEIC    | 300-500 kcmil              | 300-500 kcmil              | -                          | -                          |
| Conductor Size 30 kV - IEC     | 95-240 mm <sup>2</sup>     | 95-240 mm <sup>2</sup>     | -                          | -                          |
| Conductor Size 35 kV - AEIC    | 4/0 AWG-500 kcmil          | 4/0 AWG-500 kcmil          | -                          | -                          |
| Sleeves per Case               | 10                         | 1                          | 1                          | 1                          |

### Sheath Seal Kits

## 3M™ Sheath Seal Kits 5831 and 5832

The 3M™ Sheath Seal Kits 5831 and 5832 are designed to seal the sheath area for multi-conductor cables with or without ground wires. These kits handle copper or aluminum cable from 2 AWG-500 kcmil (35-250 mm<sup>2</sup>). Each kit makes one seal.

Number of Conductors Multiple Conductor  
RoHS 2011/65/EU Yes



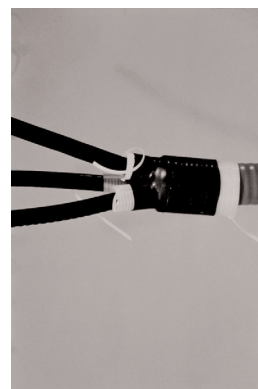
| Order No. | UPC          | Conductor Size                               | Maximum Jacket or Armor O.D. | Kits per Case |
|-----------|--------------|--|------------------------------|---------------|
| 5831      | 051128-59173 | 2-3/0 AWG (35-80 mm <sup>2</sup> )           | 2.60" (66,0 mm)              | 1             |
| 5832      | 051128-59174 | 4/0 AWG-500 kcmil (120-250 mm <sup>2</sup> ) | 3.75" (95,3 mm)              | 1             |

## Sheath Seal Kits

### 3M™ Cold Shrink Sheath Seal Kits 5841 and 5842

The 3M™ Cold Shrink Sheath Seal Kits 5841 and 5842 are designed to seal the sheath area for three-conductor (3/C) cables without ground wires. They handle both copper and aluminum cables from 2AWG-500 kcmil (35-250 mm<sup>2</sup>). No heat is required when using these kits. Each kit makes one seal.

**Number of Conductors** Three Conductor  
**RoHS 2011/65/EU** Yes



| Order No. | UPC          | Conductor Size                               | Conductor Insulation O.D.  | Cable Jacket Range         | Kits per Case |
|-----------|--------------|--|----------------------------|----------------------------|---------------|
| 5841      | 054007-12291 | 2-4/0 AWG (35-100 mm <sup>2</sup> )          | 0.30"-1.18" (7,6-30,0 mm)  | 1.20"-1.90" (30,5-48,3 mm) | 1             |
| 5842      | 054007-12292 | 4/0 AWG-500 kcmil (120-250 mm <sup>2</sup> ) | 0.77"-1.38" (19,6-35,1 mm) | 1.80"-3.10" (45,7-78,7 mm) | 1             |

## Electrical Resins

### 3M™ Scotchcast™ Electrical Insulating Resin 4

3M™ Scotchcast™ Electrical Insulating Resin 4 is a two-part epoxy insulating and encapsulating resin. This resin, mixed in its two-part closed mixing pouch, generates its own heat to cure. Its compatibility with solid and synthetic cable insulations and jackets makes Resin 4 an excellent insulator and sealer for cable splicing. Use 3M™ Scotchcast™ Electrical Insulating Resin 4 to splice solid dielectric and oil filled cables up to 8 kV and to jacket high voltage splices. It is included in the 3M™ Scotchcast™ Splice Kits 82-H Series, 82-B1, 85-14CP and 90-B1. Gel time is 16 min. at 23°C.

\*At 73°F (23°C) and cooler temperatures, resin will cure slower. Do not energize until resin has cooled and solidified.

|                                   |  |
|-----------------------------------|--|
| <b>Voltage</b>                    | 8 kV or less (for splicing solid dielectric and oil filled cables) |
| <b>Cure Time</b>                  | 1 to 2 Hours at 70°F (21°C)<br>4 to 8 Hours at 50°F (10°C)         |
| <b>Energize Time</b>              | 45 minutes*  |
| <b>Max. Operating Temperature</b> | 194°F (90°C) continuous  |
| <b>Color</b>                      | Black  |
| <b>RoHS 2011/65/EU</b>            | Yes  |
| <b>Used in these kits</b>         | 82-A Series; 82-B1; 85-14CP; 90-B1                                 |



| Order No. | UPC          | Packaging Description | Weight oz (g) | Volume in <sup>3</sup> (cm <sup>3</sup> ) | Containers per Case |
|-----------|--------------|-----------------------|---------------|---|---------------------|
| 4A        | 054007-43165 | 2-part pouch          | 3.1 (88)      | 4.8 (78,6)                                | 10                  |
| 4B        | 054007-43166 | 2-part pouch          | 7.2 (205)     | 11.1 (181,9)                              | 10                  |
| 4C        | 054007-43167 | 2-part pouch          | 14.6 (414)    | 22.5 (368,7)                              | 10                  |
| 4D        | 054007-04206 | 2-part pouch          | 21.8 (619)    | 33.6 (550,6)                              | 10                  |
| 4E        | 054007-04207 | 2-part pouch          | 10.1 (288)    | 15.6 (255,6)                              | 10                  |

## Electrical Resins

## 3M™ Armorcast Structural Material 4560

3M™ Armorcast Structural Material 4560 is a flexible fiberglass knit fabric strip that has been saturated with a black urethane resin syrup. The material is rolled and packed dry in a sealed foil envelope. Armorcast structural material is completely safe for use in manholes, vaults, and other hazardous environments, because no heat source is required. No flames, electric heaters or chemicals are needed. The only thing your crews will ever have to add is water.

|                  |            |
|------------------|------------|
| Material         | Fiberglass |
| RoHS 2011/65/EU  | Yes        |
| Agency Approvals | RUS        |



| Order No. | UPC          | Color | Roll Size      | Case Qty. |
|-----------|--------------|-------|----------------|-----------|
| 4560-5    | 051138-57719 | Black | 5 ft (1,52 m)  | 5         |
| 4560-10   | 051138-57717 | Black | 10 ft (3,05 m) | 5         |
| 4560-15   | 051138-57718 | Black | 15 ft (4,57 m) | 5         |

## 3M™ Scotchcast™ Electrical Insulating Resin 2104

3M™ Scotchcast™ Electrical Insulating Resin 2104 is a hard, two-part, polyurethane resin encapsulant designed specifically for permanent splice protection. Resin 2104 is formulated for virtually every electrical application requiring hard, non-reenterable resin with good handling and performance characteristics. Resin 2104 is also used as the insulating material for cable splices operating at 1000 volts or less and is rated for continuous use at 194°F (90°C) with an overload rating of 266°F (130°C). It may be stocked to cover all hard resin needs, ending the need for multiple encapsulant inventories.

|                            |  |
|----------------------------|--|
| Voltage                    | 1000 Volts or less                               |
| Cure Time                  | 1 Hour at 70°F (21°C)<br>20 Hours at 20°F (-4°C) |
| Energize Time              | Immediately                                      |
| Max. Operating Temperature | 194°F (90°C) continuous                          |
| Color                      | Dark Green                                       |
| RoHS 2011/65/EU            | Yes  |
| Used in these kits         | 72-N; 85 Series                                  |



| Order No. | UPC          | Packaging Description | Weight oz (g) | Volume in <sup>3</sup> (cm <sup>3</sup> ) | Containers per Case |
|-----------|--------------|-----------------------|---------------|---|---------------------|
| 2104A     | 054007-31189 | 2-part pouch          | 3.46 (98)     | 5.7 (93,4)                                | 10                  |
| 2104B     | 054007-31382 | 2-part pouch          | 7.40 (210)    | 12.6 (206,4)                              | 10                  |
| 2104C     | 054007-31383 | 2-part pouch          | 14.82 (420)   | 25.4 (416,2)                              | 10                  |
| 2104D     | 054007-11849 | 2-part pouch          | 23.80 (675)   | 40.8 (668,5)                              | 10                  |
| 2104E     | 054007-31187 | 2-part pouch          | 10.6 (300)    | 19.1 (313,5)                              | 10                  |

## 3M™ Scotchcast™ Re-Enterable Electrical Insulating Resin 2123

3M™ Scotchcast™ Re-enterable Electrical Resin 2123 is a soft, two-part polybutadiene resin encapsulant designed especially for re-enterable splice protection. It is formulated for virtually every electrical application requiring a soft, re-enterable resin with good handling and performance characteristics. This resin is also used as the insulating material for cable splices operating at 1000 volts, and is rated for continuous use at 194°F (90°C) with an overload rating at 266°F (130°C). It may be stocked to cover most re-enterable resin needs, ending the need for multiple encapsulant inventories.

Scotchcast Resin 2123 is formulated with excellent wetting properties and low viscosity. The resin flows well even at low temperatures, filling the enclosure and minimizing voids. Scotchcast Resin 2123 is packaged in a convenient two-part closed mixing pouch.

|                                   |                         |
|-----------------------------------|-------------------------|
| <b>Voltage</b>                    | 1000 Volts or less      |
| <b>Cure Time</b>                  | 24 Hours @70°F (21°C)   |
| <b>Energize Time</b>              | Immediately             |
| <b>Max. Operating Temperature</b> | 194°F (90°C) continuous |
| <b>Color</b>                      | Amber, Translucent      |
| <b>RoHS 2011/65/EU</b>            | Yes                     |
| <b>Used in these kits</b>         | 78-R Series             |



| Order No. | UPC          | Package Description | Weight, oz (g) | Volume, in <sup>3</sup> (cm <sup>3</sup> ) | Containers per Case |
|-----------|--------------|---------------------|----------------|--|---------------------|
| 2123C     | 051128-55120 | 2-part pouch        | 12.3 (350)     | 23.7 (338,3)                               | 10                  |
| 2123D     | 051128-55121 | 2-part pouch        | 21.2 (600)     | 40.6 (665,3)                               | 10                  |

## Electrical Resins

### 3M™ Scotchcast™ Flame-Retardant Compound 2131

3M™ Scotchcast™ Flame-Retardant Compound 2131 is a two-part polyurethane resin designed to replace the cable jacket when splicing or repairing mine and portable cables. Its unique formulation makes it particularly suited to withstand the rugged conditions under which mine and portable cables must operate. When used in accordance with the appropriate kit configuration, Compound 2131 conforms to MSHA Part 7, Title 30 CFR.

Flame-Retardant Compound 2131 is also used as the insulating material for cable splices operating at up to 1000 volts and designed for 194°F (90°C) at continuous use and for 266°F (130°C) at temporary, overload temperature.

3M™ Scotchcast™ Flame-Retardant Compound 2131 comes in two sizes of 2-part pouch containers, as well as separate 5 gallon jugs for both Part A and Part B. (Note: 2.1 parts of B required for every 1 part of A by weight.)

|                                   |  |
|-----------------------------------|--|
| <b>Voltage</b>                    | 1000 Volts or less   |
| <b>Cure Time</b>                  | 16 to 24 Hours at 70°F (21°C)                                  |
| <b>Energize Time</b>              | Immediately  |
| <b>Max. Operating Temperature</b> | 194°F (90°C) continuous  |
| <b>Color</b>                      | Black  |
| <b>RoHS 2011/65/EU</b>            | Yes  |
| <b>Used in these kits</b>         | 5750; 5760; 5831; 5832; 82-F1; 82-F2; 82-BF1; M-20; M-30; M-40 |



| Order No.         | UPC          | Packaging Description | Weight            | Volume in³ (cm³) | Case Qty. |
|-------------------|--------------|-----------------------|-------------------|------------------|-----------|
| 2131B             | 051128-59166 | 2-part pouch          | 7.5 oz (213 g)    | 10.6 (175)       | 10        |
| 2131C             | 051128-59167 | 2-part pouch          | 21.5 oz (612 g)   | 30.6 (502)       | 10        |
| 2131-Part A 5 Gal | 051128-59181 | 5 gallon jug, Part A  | 44.5 lb (20.1 kg) |                  | 1 pail    |
| 2131-Part B 5 Gal | 051128-59182 | 5 gallon jug, Part B  | 46.5 lb (21 kg)   |                  | 1 pail    |

## Electrical Resins

### 3M™ Scotchcast™ Potting Kit 2136

The 3M™ Scotchcast™ Potting Kit 2136 is designed to provide protection against corrosion and possible deteriorating effects of fresh swimming pool or fountain water and sunlight by reliably encapsulating the 8 AWG ground connection in a wet-niche shell as required by NEC® when using rigid, non-metallic conduit in the installation of wet-niche

underwater lighting fixtures. Scotchcast 2136 compound is UL Listed as a potting compound for swimming pool, fountain, or spa equipment and is for use only where adhering to copper, copper alloy and stainless steel materials.

3M™ Scotchcast™ Potting Compound 2136 is a thixotropic polyurethane resin, designed to resist dripping or sagging, and contained in an easy mix 1.5 oz. closed mixing pouch. At temperatures above 40°F (18°C) the compound will firm up in minutes. Encapsulated connections should be allowed to cure for 4 hours prior to submersion.

|                                   |  |
|-----------------------------------|--|
| <b>Voltage</b>                    | Up to 1000 Volts;<br>UL Listed up to 600 Volts |
| <b>Cure Time</b>                  | 4 Hours at 70°F (21°C)                         |
| <b>Energize Time</b>              | Immediately                                    |
| <b>Max. Operating Temperature</b> | UL Listed 20L02 220°F (105°C)                  |
| <b>Color</b>                      | Black  |
| <b>RoHS 2011/65/EU</b>            | Yes  |



| Order No. | UPC          | Material         | Weight, oz (g) | Containers per Case |
|-----------|--------------|------------------|----------------|---------------------|
| 2136      | 051128-59190 | Potting Compound | 1.50 (42,5)    | 10                  |

### Resin Kit Accessories

| Order No. | UPC          | Product Name                           | Description   | Items per Case |
|-----------|--------------|--|---|----------------|
| F-10      | 054007-09142 | 3M™ Funnel PE 2.75 Large M-Series F-10 | Funnel used with M-series molds for resin re-jacketing or cable repair with 3M Scotchcast™ Resins 2130. | 1              |
| E-4       | 054007-25701 | 3M™ Resin Pressure Gun E-4             | Reusable resin pressure gun used for constructing a resin pressure splice.                              | 1              |



Cold Shrink Trifurcating Accessory Kit

## 3M™ Cold Shrink MT-C & MT-E Trifurcating Accessory Kits (One 3/C to Three 1/C) for 5/8 kV

3M™ Cold Shrink MT-C and MT-E Trifurcating Accessory Kits are used to break out and seal a transition from 3/C to three 1/C.

For use with 3M™ Cold Shrink QS-III Splicing Series 5700A-MT.

**NOTE: Cable sizes shown below are for standard insulation thickness. Final determining factor is cable insulation O.D.**

**Voltage:** 5/8 kV

**Number of Conductors:** One 3/C to three 1/C



### Selection Table

| 3M™ Splice 57XXA-MT                       | 5/8 kV (90/140 mil) | Appropriate MT Transition Kit |
|---|---------------------|-------------------------------|
| *Typical Conductor Size Range – AWG/kcmil |                     |                               |
| 5775A-MT                                  | 3/0-250             | MT-C                          |
| 5776A-MT                                  | 350                 | MT-C                          |
| 5776A-MT                                  | 500                 | MT-E                          |
| 5777A-MT                                  | —                   | MT-E                          |

| Order No. | UPC          | Single Conductor Jacket O.D. | Kits per Case |
|-----------|--------------|------------------------------|---------------|
| MT-C      | 051128-55208 | 0.62"-1.13" (15,7-28,7 mm)   | 1             |
| MT-E      | 051128-54318 | 1.13"-1.80" (28,7-45,7 mm)   | 1             |

## Cold Shrink Corrosion Protection Kits

### 3M™ Cold Shrink Corrosion Protection Kit CPT Series

3M™ Cold Shrink Corrosion Protection Kit CPT Series are designed to provide a quick and easy method for protecting bulkhead termination connectors from the corrosive influences of wet and salt-fog installation environments.

A CPT series assembly is an open-ended tubular rubber sleeve which is factory expanded and assembled onto a removable core. The core is removed after the assembly has been positioned for installation over a bulkhead terminator connector. Mastic strips are provided for sealing between NPT fitting threads and the enclosure in use (junction box, cabinet, panel board, etc.). CPT insulating sleeves are made of an EPDM rubber that contains no chlorides or sulfers.

RoHS 2011/65/EU Yes

Agency Approvals Meets salt spray requirements



| Order No. | UPC          | Min. Cable O.D. | Max. Connector O.D. | Max. Connector Installed Length | Kits per Case |
|-----------|--------------|-----------------|---------------------|---------------------------------|---------------|
| CPT-1/2   | 054007-43021 | 0.50" (12,7 mm) | 1.60" (40,6 mm)     | 4.50" (114 mm)                  | 10            |
| CPT-3/4   | 054007-43022 | 0.66" (16,8 mm) | 1.90" (48,3 mm)     | 4.80" (122 mm)                  | 10            |
| CPT-1     | 054007-43023 | 0.66" (16,8 mm) | 2.20" (55,9 mm)     | 4.80" (122 mm)                  | 10            |
| CPT-1-1/4 | 054007-43024 | 1.22" (31,0 mm) | 2.65" (67,3 mm)     | 4.80" (122 mm)                  | 10            |
| CPT-1-1/2 | 054007-43025 | 1.40" (35,6 mm) | 3.00" (76,2 mm)     | 5.50" (140 mm)                  | 10            |
| CPT-2     | 054007-43026 | 1.68" (42,7 mm) | 3.60" (91,4 mm)     | 6.50" (165 mm)                  | 10            |
| CPT-2-1/2 | 054007-43027 | 1.97" (50,0 mm) | 4.30" (109,2 mm)    | 8.50" (215 mm)                  | 5             |
| CPT-3     | 054007-43028 | 2.60" (66,0 mm) | 5.40" (137,2 mm)    | 10.50" (266 mm)                 | 5             |
| CPT-3-1/2 | 054007-43029 | 2.90" (73,7 mm) | 6.00" (152,4 mm)    | 13.50" (343 mm)                 | 5             |
| CPT-4     | 054007-43030 | 2.90" (73,7 mm) | 6.00" (152,4 mm)    | 13.00" (330 mm)                 | 5             |

## Cold Shrink End Caps

### 3M™ Cold Shrink End Caps EC-Series

3M™ Cold Shrink End Caps EC-Series are close-ended, tubular rubber sleeves that are factory expanded and loaded onto a removable core. When positioned over the end of a cable or other cylindrical object, the core is removed to provide a reliable environmental seal. Four different end caps are available to accommodate a wide range of sizes.

Color Black

RoHS 2011/65/EU Yes



| Order No. | UPC          | Use Range                  | Sleeves per Case |
|-----------|--------------|----------------------------|------------------|
| EC-1      | 051128-58388 | 0.46"–0.82" (11,6–20,9 mm) | 10               |
| EC-2      | 051128-58389 | 0.63"–1.18" (15,9–30,1 mm) | 10               |
| EC-3      | 051128-58390 | 1.02"–1.94" (26,0–49,3 mm) | 10               |
| EC-4      | 051128-58391 | 1.79"–3.32" (45,6–84,3 mm) | 10               |

## Mounting Brackets

### 3M™ Cross-Arm Mounting Brackets MB-1

The 3M™ Cross-Arm Mounting Bracket MB-1 is a cross-arm bracket for use in holding terminated cable. The MB-1 is ideal to use when ordering the MB or MBS termination mounting brackets featured on this page.



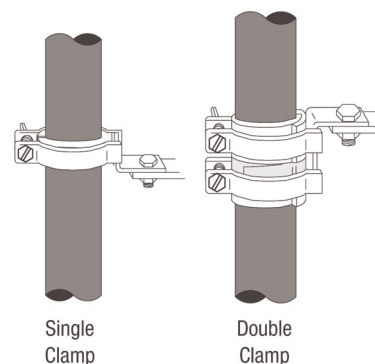
| Order No. | UPC          | Compatible with                         | Brackets per Case |
|-----------|--------------|---|-------------------|
| MB-1      | 054007-11230 | 3M™ Mounting Brackets MB and MBS Series | 10 each           |

### 3M™ Mounting Brackets MB and MBS Series

The 3M™ Mounting Brackets MB and MBS Series have been designed to mount 3M™ Molded Rubber Terminations. The MB series brackets are made from galvanized steel, while the MBS series brackets are made from stainless steel to provide corrosion protection in highly contaminated environments. These brackets are attached to the cable just below the termination. This provides a tongue that can then be attached to an MB-1 mounting bracket or to any other support.

\* CAUTION: Use cable O.D., not insulation O.D. for determining the proper size.

\*\* Has double-clamps.



| Order No. | UPC          | Cable O.D. Range           | Brackets per Case |
|-----------|--------------|----------------------------|-------------------|
| MB-3      | 054007-14754 | 0.80"–1.25" (20,3–31,8 mm) | 10 each           |
| MB-4      | 054007-14755 | 1.10"–1.50" (27,9–38,1 mm) | 10 each           |
| MB-5**    | 054007-08200 | 1.45"–1.95" (36,8–49,5 mm) | 10 each           |
| MB-6**    | 054007-08286 | 1.80"–2.40" (45,7–61,0 mm) | 10 each           |
| MBS-4**   | 054007-49685 | 1.10"–1.70" (27,9–43,2 mm) | 10 each           |
| MBS-5**   | 054007-49686 | 1.45"–1.95" (36,8–49,5 mm) | 10 each           |
| MBS-6**   | 054007-49687 | 1.80"–2.40" (45,7–61,0 mm) | 10 each           |

## Preparation and Cleaning

### 3M™ Scotch-Brite™ Hand Pads 7440 Series

3M™ Scotch-Brite™ Hand Pads 7440 Series make the toughest cleaning jobs easier. They resist tearing, splintering, shredding and loading and will never rust. Blending pads are made of a coarse mineral abrasive. General Purpose Pads are reusable—they rinse clean and are constructed of a nylon web. Ultra Fine Pads are highly conformable. 3M Scotch-Brite Hand Pads measure 6" x 9" (152 x 228 mm).

Select the 3M Scotch-Brite Hand Pads for your specific abrasion needs and carry them with you everywhere you work. You can use them on virtually any surface material, including all kinds of metals, plastics, composites, ceramics, porcelain, glass and rubber.



|                       | 7446   | 7447   | 7448  |
|-----------------------|--|--|---|
|                       |  |  |   |
| UPC                   | 048011-04051   | 048011-04029   | 048011-04028  |
| Description           | Open, aggressive web that is excellent to grain, clean, denib, defuzz and finish. Resistant to loading. May be used by hand, on a hand pad block, or on an in-line sander. | Most universally used in a variety of applications. Excellent starting point to clean, finish, grain, denib and defuzz. May be used by hand, with a hand pad block, or on an in-line sander. | Conformable web and finest silicon carbide hand pad available. Excellent for final finishing and light cleaning. May be used by hand, with a hand block, or on an in-line sander. |
| Abrasive Mineral Type | Silicon Carbide  | Aluminum Oxide   | Silicon Carbide   |
| Grade                 | Medium   | Very Fine  | Ultra Fine  |
| Color                 | Gray   | Maroon   | Light Gray  |
| Length                | 9" (228,6 mm)  | 9" (228,6 mm)  | 9" (228,6 mm)   |
| Width                 | 6" (152,4 mm)  | 6" (152,4 mm)  | 6" (152,4 mm)   |
| Pads per Box          | 10   | 20   | 20  |
| Boxes per Case        | 4  | 3  | 3   |

### 3M™ Cable Cleaning System CC Series

3M™ Cable Cleaning System CC Series cleans cable insulation, metal, electrical and mechanical parts. It can be used for PCB cleanup and in parts cleaners for degreasing.

CC-Dry contains three each 4" x 8" (102 x 203 mm) lintless non-woven pads packed in a bag. These are used for drying the common citrus cable cleaner (CC series) off of cable installation when preparing cable. The CC-2-Dry Kit contains a CC-2 Kit and three each dry lintless pads.

RoHS 2011/65/EU Yes



| Order No. | UPC          | Description               | Kit Contents  | Kits per Case |
|-----------|--------------|---------------------------|---|---------------|
| CC-2      | 054007-49563 | Cable preparation kit     | (3) Saturated cable cleaning pads and<br>(1) Non-conductive grit abrasive cloth   | 10            |
| CC-DRY    | 054007-43415 | Dry wiping cloth          | (3) Unsaturated cable cleaning pads   | 10            |
| CC-2-DRY  | 054007-43414 | Dry cable preparation kit | (3) Unsaturated cable cleaning pads and<br>(1) Non-conductive grit abrasive cloth | 10            |
| CC-3      | 054007-49564 | Cable cleaning pad        | (3) Saturated cable cleaning pads   | 10            |

## Preparation and Cleaning

## 3M™ Scotch® Electricians' Abrasive Roll A-3

Scotch® Electricians' Abrasive Roll A-3 is a 120-grit, closed-coat aluminum oxide strip, which is nonconductive and flexible. It is packaged in a dispenser-type box.

|                         |                |
|-------------------------|----------------|
| Abrasive Mineral Type   | Aluminum Oxide |
| Abrasive Backing Weight | J Weight       |
| Abrasive Backing Type   | Cloth          |



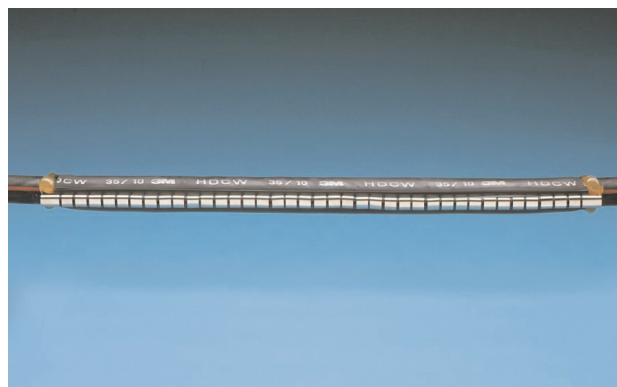
| Order No. | UPC          | Length        | Width        | Grade | Product Form | Rolls per Case |
|-----------|--------------|---------------|--------------|-------|--------------|----------------|
| A-3       | 054007-11560 | 75' (22,86 m) | 1" (25,4 mm) | 120   | Roll         | 10             |

## 3M™ Wraparound Heat Shrink Cable Repair HDCW Sleeves

### 3M™ Heat Shrink Wraparound Cable Repair Wrap Sleeve HDCW

3M™ Heat Shrink Wraparound Cable Repair Wrap Sleeves HDCW are designed to quickly repair damaged cable jacketing. They may also be used to re-jacket in-line splices. HDCW wrap sleeves can be used as insulation material on cable and splices up to 1000 volts and as jacket repair material on cable up to 35 kV. The design of the wrap sleeve allows it to be installed in tight spaces with ordinary heating equipment such as a torch.

HDCW wrap sleeves are made from modified cross-linked polyolefin, with a hot-melt adhesive liner on the inner side of the sleeve. Upon heating, the sleeve shrinks and the adhesive melts, creating a water-tight bond between the sleeve and the cable. 3M Heat Shrink Wraparound Cable Repair Wrap Sleeves HDCW meet ANSI C119.1 requirements. A corrosion proof metal channel is used to close the sleeve during installation.



|                 |   |
|-----------------|---|
| Voltage         | 1000 Volts Max.                         |
| Material        | Adhesive-lined, Cross-Linked Polyolefin |
| RoHS 2011/65/EU | Yes                                     |

| Order No.       | UPC          | Cable Size        | Sleeve Length   | Jacket Repair Use Range | Expanded/Recovered Diameter | Case Qty. |
|-----------------|--------------|-------------------|-----------------|-------------------------|-----------------------------|-----------|
| HDCW-35/10-250  | 051138-48416 | 8-2/0 AWG         | 9.8" (250 mm)   | 1.38"-0.39" (35-10 mm)  | 1.97"/0.32" (50/8 mm)       | 5         |
| HDCW-35/10-500  | 051138-48417 | 8-2/0 AWG         | 19.7" (500 mm)  | 1.38"-0.39" (35-10 mm)  | 1.97"/0.32" (50/8 mm)       | 5         |
| HDCW-35/10-750  | 051138-48418 | 8-2/0 AWG         | 29.5" (750 mm)  | 1.38"-0.39" (35-10 mm)  | 1.97"/0.32" (50/8 mm)       | 5         |
| HDCW-35/10-1000 | 051138-48419 | 8-2/0 AWG         | 39.4" (1000 mm) | 1.38"-0.39" (35-10 mm)  | 1.97"/0.32" (50/8 mm)       | 5         |
| HDCW-35/10-1200 | 051138-48436 | 8-2/0 AWG         | 47.2" (1200 mm) | 1.38"-0.39" (35-10 mm)  | 1.97"/0.32" (50/8 mm)       | 5         |
| HDCW-55/15-250  | 051138-48420 | 3/0 AWG-400 kcmil | 9.8" (250 mm)   | 2.17"-0.59" (55-15 mm)  | 2.95"/.51" (75/13 mm)       | 5         |
| HDCW-55/15-500  | 051138-48421 | 3/0 AWG-400 kcmil | 19.7" (500 mm)  | 2.17"-0.59" (55-15 mm)  | 2.95"/.51" (75/13 mm)       | 5         |
| HDCW-55/15-750  | 051138-48422 | 3/0 AWG-400 kcmil | 29.5" (750 mm)  | 2.17"-0.59" (55-15 mm)  | 2.95"/.51" (75/13 mm)       | 5         |
| HDCW-55/15-1000 | 051138-48423 | 3/0 AWG-400 kcmil | 39.4" (1000 mm) | 2.17"-0.59" (55-15 mm)  | 2.95"/.51" (75/13 mm)       | 5         |

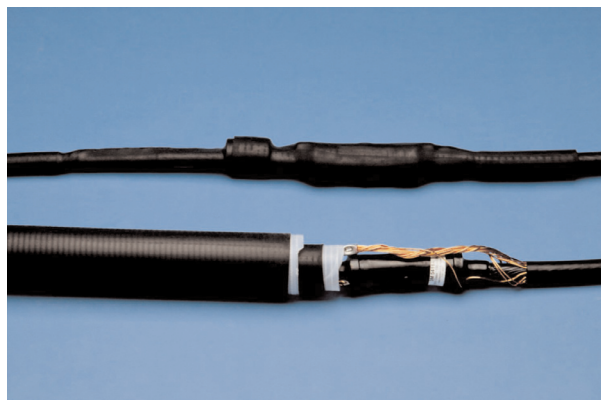
## 3M™ Wraparound Heat Shrink Cable Repair HDCW Sleeves

### 3M™ Heat Shrink Wraparound Cable Repair Wrap Sleeve HDCW (continued)

| Order No.        | UPC          | Cable Size        | Sleeve Length   | Jacket Repair Use Range | Expanded/Recovered Diameter | Case Qty. |
|------------------|--------------|-------------------|-----------------|-------------------------|-----------------------------|-----------|
| HDCW-55/15-1200  | 051138-48437 | 3/0 AWG-400 kcmil | 47.2" (1200 mm) | 2.17"-0.59" (55-15 mm)  | 2.95"/.51" (75/13 mm)       | 5         |
| HDCW-80/25-250   | 051138-48424 | 500-1000 kcmil    | 9.8" (250 mm)   | 3.15"-0.98" (80-25 mm)  | 3.94"/0.91" (100/23 mm)     | 5         |
| HDCW-80/25-500   | 051138-48425 | 500-1000 kcmil    | 19.7" (500 mm)  | 3.15"-0.98" (80-25 mm)  | 3.94"/0.91" (100/23 mm)     | 5         |
| HDCW-80/25-750   | 051138-48426 | 500-1000 kcmil    | 29.5" (750 mm)  | 3.15"-0.98" (80-25 mm)  | 3.94"/0.91" (100/23 mm)     | 5         |
| HDCW-80/25-1000  | 051138-48427 | 500-1000 kcmil    | 39.4" (1000 mm) | 3.15"-0.98" (80-25 mm)  | 3.94"/0.91" (100/23 mm)     | 5         |
| HDCW-80/25-1200  | 051138-48438 | 500-1000 kcmil    | 47.2" (1200 mm) | 3.15"-0.98" (80-25 mm)  | 3.94"/0.91" (100/23 mm)     | 5         |
| HDCW-110/30-500  | 051138-48429 | 1000-2000 kcmil   | 19.7" (500 mm)  | 4.33"-1.18" (110-30 mm) | 5.20"/0.98" (132/25 mm)     | 5         |
| HDCW-110/30-750  | 051138-48430 | 1000-2000 kcmil   | 29.5" (750 mm)  | 4.33"-1.18" (110-30 mm) | 5.20"/0.98" (132/25 mm)     | 5         |
| HDCW-110/30-1000 | 051138-48431 | 1000-2000 kcmil   | 39.4" (1000 mm) | 4.33"-1.18" (110-30 mm) | 5.20"/0.98" (132/25 mm)     | 5         |
| HDCW-110/30-1200 | 051138-48439 | 1000-2000 kcmil   | 47.2" (1200 mm) | 4.33"-1.18" (110-30 mm) | 5.20"/0.98" (132/25 mm)     | 5         |
| HDCW-140/40-1000 | 051138-48435 | N/A               | 39.4" (1000 mm) | 5.51"-1.57" (140-40 mm) | 5.71"/1.26" (145/32 mm)     | 5         |
| HDCW-140/40-1200 | 051138-48440 | N/A               | 47.2" (1200 mm) | 5.51"-1.57" (140-40 mm) | 5.71"/1.26" (145/32 mm)     | 5         |

# Splice Jacketing, Rejacketing and Cable Repair, For 15–35 kV Cables and Splices

The following 3M products cover splicing needs for applications 15-35 kV, and promote dependable performance, stability and long life with every splice you make.

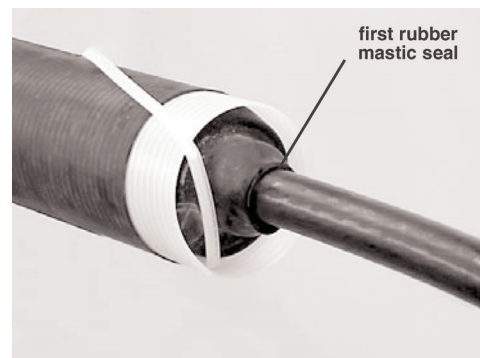


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## 3M™ Cold Shrink Foldback Splice Jacket Kits

3M™ Cold Shrink Foldback Splice Jacket Kits SJ-FB Series are a series of folded back, tubular, rubber sleeves that, combined with Scotch® Rubber Mastic Tape 2228, provide a sealed jacket over cable splices installed on jacketed power cable. The Scotch® Rubber Mastic Tape 2228 helps assure a seal between the cable jacket and cold shrink foldback jacket tube. Mastic strips are also used to seal around the optional, external ground conductor. The cold shrink jacket tube is provided in an expanded state, mounted on two inner supporting cores. As supplied in this pre-stretched condition, the tube is ready for field installation. The jacketing tube is made from EPDM rubber that contains no chlorides or sulfurs. The completed jacket tube will be continuous from cable jacket to cable jacket, with no seams. Four kit sizes cover an application range from 4 AWG, 15 kV to sizes larger than 4/0 AWG, 35 kV.

Each kit contains sufficient materials to jacket one cable splice.



|                             |                  |
|-----------------------------|------------------|
| <b>Voltage</b>              | 15–35 kV         |
| <b>Number of Conductors</b> | Single Conductor |
| <b>RoHS 2011/65/EU</b>      | Yes              |

| Order No. | UPC          | Min. Cable Jacket O.D. | Max. Splice O.D.    | Max. Cable Jacket Opening | Application Parking Space Required | Compatible With  | Kits per Case |
|-----------|--------------|------------------------|---------------------|---------------------------|------------------------------------|--|---------------|
| SJ-1FB    | 051128-55302 | 0.95"<br>(24,1 mm)     | 2.00"<br>(50,8 mm)  | 25.0"<br>(635 mm)         | 20.0"<br>(510 mm)                  | 15 kV: 3M™ Splice No. 5411, 5411A, and 5412  | 6             |
| SJ-2FB    | 051128-55303 | 1.15"<br>(29,2 mm)     | 3.00"<br>(76,2 mm)  | 31.0"<br>(787,4 mm)       | 22.0"<br>(560 mm)                  | 15 kV: 3M™ Splice No. 5403, 5404, 5405, and 5406<br>25 kV: 3M™ Splice No. 5420, 5421, 5422, 5451, 5451A, and 5452<br>35 kV: 3M™ Splice No. 5432 and 5461 | 6             |
| SJ-3FB    | 051128-55304 | 1.55"<br>(39,4 mm)     | 3.62"<br>(91,9 mm)  | 34.0"<br>(863,6 mm)       | 24.0"<br>(610 mm)                  | 15 kV: 3M™ Splice No. 5407, 5408, and 5409<br>25 kV: 3M™ Splice No. 5423, 5424, 5425, and 5426<br>35 kV: 3M™ Splice No. 5433                             | 6             |
| SJ-4FB    | 051128-55305 | 1.75"<br>(44,5 mm)     | 4.10"<br>(104,1 mm) | 32.0"<br>(812,8 mm)       | 24.0"<br>(610 mm)                  | -  | 6             |



## 3M™ Cold Shrink Splice Jacket Kits

3M™ Cold Shrink Splice Jacket Kits SJ Series are a series of open ended, tubular, rubber sleeves that combined with Scotch® Rubber Mastic Tape 2228 provide a sealed jacket over cable splices installed on jacketed power cable. The Scotch® Rubber Mastic Tape 2228 helps assure a seal between the cable jacket and the cold shrink jacket tube. It is also used to seal around a cable ground conductor. The cold shrink jacket tube is provided in an expanded state, mounted on two inner supporting plastic cores. As supplied in this prestretched condition, the tube is ready for field installation. The jacketing tube is made of EPDM rubber which contains no chlorides or sulfurs. Three kit sizes cover an application range of 0.95"-4.00" (24-102 mm).



**Voltage** 15–35 kV

**Number of Conductors** Single Conductor

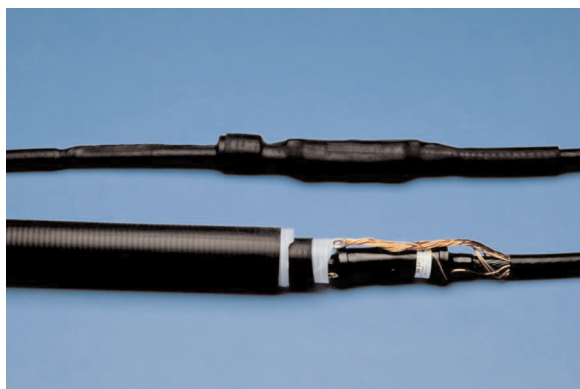
**RoHS 2011/65/EU** Yes

| Order No. | UPC          | Application Parking Length | Application Installed Length | Min. Cable Jacket O.D. | Max. Splice O.D. | Max. Cable Jacket Opening | Compatible With   | Kits per Case |
|-----------|--------------|----------------------------|------------------------------|------------------------|------------------|---------------------------|---|---------------|
| SJ-1A     | 054007-69742 | 29.0" (737 mm)             | 23.0"-27.0" (584,2-685,8 mm) | 0.95" (24,1 mm)        | 2.4" (61,0 mm)   | 20.0" (508 mm)            | 15 kV: 3M™ Splice No. 5411, 5411A, 5412, 5411R  | 6             |
| SJ-2A     | 054007-69743 | 36.0" (914 mm)             | 32.0"-35.0" (813-889 mm)     | 1.15" (29,2 mm)        | 3.3" (83,8 mm)   | 28.0" (711 mm)            | 15 kV: 3M™ Splice No. 5403, 5404, 5405, and 5406<br>25 kV: 3M™ Splice No. 5420, 5421, 5422, 5451, and 5452<br>35 kV: 3M™ Splice No. 5432 and 5461 | 6             |
| SJ-3A     | 054007-69744 | 38.0" (965 mm)             | 33.0"-37.0" (83,82-93,98 cm) | 1.55" (39,4 mm)        | 4.0" (101,6 mm)  | 30.0" (762,0 mm)          | 15 kV: 3M™ Splice No. 5407, 5408, and 5409<br>25 kV: 3M™ Splice No. 5423, 5424, 5425, and 5426<br>35 kV: 3M™ Splice No. 5433                      | 6             |

## 3M™ Cold Shrink Stacked Sleeve Splice Jacket Kits

3M™ Cold Shrink Stacked Sleeve Splice Jacket Kits SJ-SS Series are a series of open ended, tubular rubber sleeves that, combined with Scotch® Rubber Mastic Tape 2228 and a profile bushing, provide a sealed jacket over cable splices installed on jacketed power cable. The Scotch® Rubber Mastic Tape 2228 provides a seal between the cable jacket and cold shrink jacket tube. Mastic strips are also used to seal around an optional, external ground conductor. The cold shrink jacket tubes are provided in an expanded state, mounted on inner supporting plastic cores. As supplied in this prestretched condition, the tubes are ready for field installation. The jacketing tubes are made of EPDM rubber which contains no chlorides or sulfurs. Three kit sizes cover an application range of 0.95"–3.62" (24,1–92,0 mm).

Each kit jackets one cable splice.



|                             |                  |
|-----------------------------|------------------|
| <b>Voltage</b>              | 15–35 kV         |
| <b>Number of Conductors</b> | Single Conductor |
| <b>RoHS 2011/65/EU</b>      | Yes              |

| Order No. | UPC          | Min. Cable Jacket O.D. | Max. Splice O.D.   | Max. Cable Jacket Opening | Parking Space Required (approximate) | Compatible With  | Kits per Case |
|-----------|--------------|------------------------|--------------------|---------------------------|--------------------------------------|--|---------------|
| SJ-1SS    | 054007-50777 | 0.95"<br>(24,1 mm)     | 1.95"<br>(49,5 mm) | 23.0"<br>(584 mm)         | 19.0"<br>(483 mm)                    | 15 kV: 3M™ Splice No 5411, 5411A, and 5412   | 6             |
| SJ-2SS    | 054007-50778 | 1.15"<br>(29,2 mm)     | 3.00"<br>(76,2 mm) | 31.0"<br>(787 mm)         | 25.0"<br>(635 mm)                    | 15 kV: 3M™ Splice No. 5403, 5404, 5405, and 5406<br>25 kV: 3M™ Splice No. 5420, 5421, 5422, 5451, 5451A, and 5452<br>35 kV: 3M™ Splice No. 5432 and 5461 | 6             |
| SJ-3SS    | 054007-50779 | 1.55"<br>(39,4 mm)     | 3.62"<br>(92,0 mm) | 35.0"<br>(889 mm)         | 26.0"<br>(660 mm)                    | 15 kV: 3M™ Splice No. 5407, 5408, and 5409<br>25 kV: 3M™ Splice No. 5423, 5424, 5425, and 5426<br>35 kV: 3M™ Splice No. 5433                             | 6             |
| SJ-1SSR   | 054007-41956 | 0.95"<br>(24,1 mm)     | 1.95"<br>(49,5 mm) | 29.0"<br>(737 mm)         | 25.0"<br>(635 mm)                    | 15 kV: 3M™ Splice No. 5411R  | 6             |
| SJ-2SSR   | 054007-41957 | 1.15"<br>(29,2 mm)     | 3.00"<br>(76,2 mm) | 37.0"<br>(940 mm)         | 31.0"<br>(787 mm)                    | 15 kV: 3M™ Splice No. 5412R<br>25/28 kV: 3M™ Splice No. 5451R  | 6             |

## Splice Jacketing, Rejacketing and Cable Repair: 3M™ Splice Jacketing and Rejacketing Kits

### 3M™ Heat Shrinkable Splice Jacket Kits HSJ Series

3M™ Heat Shrinkable Splice Jacket Kits HSJ Series are designed to jacket power cable splices installed on jacketed power cable. The sleeves physically cover the cable neutral wires to environmentally protect the cable at the splice location. Fabricated from medium wall cross-linked polyolefin, the sleeves are flexible, highly split resistant and fast shrinking to provide rapid installation. The sleeves come with a factory applied adhesive/sealant. Sleeves are supplied in black only.

**Voltage** 15–35 kV  
**Number of Conductors** Single Conductor



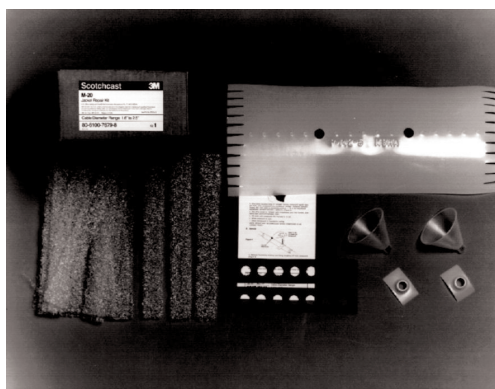
| Order No. | UPC          | Sleeve Length    | Expanded Sleeve I.D. | Min. Cable Jacket Diameter | Max. Splice Diameter | Max. Cable Jacket Opening | Compatible With   | Kits per Case |
|-----------|--------------|------------------|----------------------|----------------------------|----------------------|---------------------------|---|---------------|
| HSJ-1     | 054007-09270 | 33.0" (838,2 mm) | 2.50" (64 mm)        | 0.85" (22 mm)              | 1.90" (48,3 mm)      | 22.0" (559 mm)            | 15 kV: 3M™ Splice No 5411, 5411A and 5412   | 10            |
| HSJ-2     | 054007-09271 | 40.0" (1016 mm)  | 3.00" (76,2 mm)      | 1.00" (25,4 mm)            | 2.60" (66,0 mm)      | 28.0" (711,2 mm)          | 15 kV: 3M™ Splice No. 5403, 5404, 5405, and 5406<br>25 kV: 3M™ Splice No. 5420, 5421, 5422, 5451, 5451A, 5452, and 5451R<br>35 kV: 3M™ Splice No. 5432 and 5461 | 10            |
| HSJ-3     | 054007-09272 | 40.0" (1016 mm)  | 4.30" (109,2 mm)     | 1.50" (38,1 mm)            | 3.40" (86,4 mm)      | 28.0" (711,2 mm)          | 15 kV: 3M™ Splice No. 5407, 5408, and 5409<br>25 kV: 3M™ Splice No. 5423, 5424, 5425, and 5426<br>35 kV: 3M™ Splice No. 5433                                    | 5             |

## 3M™ Scotchcast™ Jacket Repair Kits M Series (up to 2 kV)

3M™ Scotchcast™ Jacket Repair Kits M Series contain a reusable wrap-around mold and accessory materials needed to make 10 permanent, flexible and moisture-resistant jacket repairs or splices of portable cable. The kit contains a wrap around mold that permits jacket repair without cutting through the cable. The M series kits, when used with 3M™ Scotchcast™ Flame-Retardant Compound 2131, provide durable, flexible jacket repair. Scotchcast kits can be used with portable power cable or standard cable.

Note: Scotchcast Flame-Retardant Compound 2131 needed to jacket the repair or splice is not included and must be ordered separately. U.S. Mine Safety and Health Administration acceptance No. 07-KA060007-MSHA.

|                             |  |
|-----------------------------|--|
| <b>Voltage</b>              | Up to 2 kV   |
| <b>Cable/Shielding Type</b> | Shielded and Non-Shielded  |
| <b>Splice Type</b>          | Jacket Repair  |
| <b>RoHS 2011/65/EU</b>      | Yes  |
| <b>Agency Approval</b>      | 07-KA060007-MSHA approved when used with Scotchcast Compound 2131. |



| Order No. | UPC          | Cable O.D.              | Max. Repair Length     | Case Qty. |
|-----------|--------------|-------------------------|------------------------|-----------|
| M-20      | 051128-59223 | 1.60"-2.50" (41-63 mm)  | 13.0"-15" (330-381 mm) | 1         |
| M-30      | 051128-59224 | 1.85"-4.00" (47-102 mm) | 20.0" (508 mm)         | 1         |
| M-40      | 051128-59225 | 1.85"-6.00" (47-152 mm) | 32.0" (813 mm)         | 1         |