



# Splices

• <b>Glossary of Splicing Terms</b>	<b>pg. 245</b>				pg. 274
• <b>Cable Types for Splicing</b>	<b>pg. 246</b>				pg. 274
• <b>Low Voltage Splicing 0-600V</b>	<b>pg. 249</b>				
DBR/DBY and 3570-G Direct Bury	pg. 249				
Cold Shrink					
8420 Series	pg. 250		5417		
8430 Series	pg. 250		5418		
8440 Series	pg. 251		<i>1/C Shielded–Tape, Wire UniShield®, LC</i>		
Resins			Molded Rubber		
72-N Series	pg. 252		5500 Series		pg. 276
78-R Series	pg. 253		Cold Shrink		
7820 Spacer Web	pg. 252		5513 Series		pg. 277
85-14CP Series	pg. 254		5514 Series		pg. 277
85 Series	pg. 254		5515 Series		pg. 277
90-B1 Series	pg. 255		5516 Series		pg. 277
82-BF1 Series	pg. 255		Tape		
4 Resin	pg. 256		5700 Series		pg. 278
2104 Resin	pg. 256		<i>3/C Shielded</i>		pg. 279
2112 Resin	pg. 256		Resin/Cold Shrink		
2130 Resin	pg. 256		5760		pg. 279
2135 Wet-niche Potting Compound	pg. 256		Cold Shrink		
2135M Cable Repair Compound	pg. 256		5777-MT		pg. 279
5/8 kV, 1/C and 3/C Resin Splice	pg. 257		Cable Splices		
Heat Shrink			5700A-MT Series		pg. 279
UF Splice Kit	pg. 258				
USEB90 Flat Cable	pg. 258		• <b>25/28 kV Splices</b>	<b>pg. 280</b>	
IAL-3 Connector Sealing Kit	pg. 258		<i>1/C JCN/CN</i>	pg. 280	
• <b>1 kV to 5/8 kV Splices</b>	<b>pg. 259</b>		Molded Rubber		
<i>1/C Non-Shielded</i>	pg. 259		5420 Series		pg. 280
Resins			5450 Series		pg. 280
82-A Series	pg. 259		5451A		pg. 281
82-B1 (Wye)	pg. 259		5451R		pg. 282
82-F1	pg. 260		Cold Shrink		
82-F2	pg. 260		5456 Series		pg. 285
Cold Shrink			5457 Series		pg. 285
5740	pg. 260		5458 Series		pg. 285
<i>1/C Shielded</i>	pg. 261		<i>1/C Shielded–Tape, Wire UniShield®, LC</i>		
Cold Shrink			Cold Shrink		
5550 Series	pg. 261		5524 Series		pg. 286
9CK-300 Series	pg. 261		5525 Series		pg. 286
<i>3/C Non-Shielded</i>	pg. 262		5526 Series		pg. 286
Cold Shrink			• <b>35 kV Splices</b>	<b>pg. 287</b>	
5730 Series	pg. 262		<i>1/C JCN/CN</i>	pg. 287	
4560 Armorcast	pg. 262		Molded Rubber		
Resin/Cold Shrink			5430 Series		pg. 287
5750 Series	pg. 268		5461 Series		pg. 287
<i>3/C Shielded</i>	pg. 269		Cold Shrink		
Resin/Cold Shrink			5467 Series		pg. 289
5760 Series	pg. 269		5468 Series		pg. 289
• <b>15 kV Splices</b>	<b>pg. 270</b>		<i>1/C Shielded–Tape, Wire UniShield®, LC</i>		
<i>1/C JCN/CN</i>	pg. 270		5535 Series		pg. 289
Molded Rubber			5536 Series		pg. 289
5400 Series	pg. 270		5700A-MT Series		pg. 290
5411	pg. 270		• <b>PILC Splices &amp; Accessories</b>	<b>pg. 291</b>	
5411A	pg. 270		<i>1/C Low Voltage Splices 0-600V</i>	pg. 291	
5412	pg. 270		CS500 Series		pg. 291
5411R	pg. 270		<i>1/C to 1/C 15 kV Splices</i>		pg. 292
5412R	pg. 270		QS-2000T Series		pg. 292
Cold Shrink			<i>3/C to 1/C, 15 kV Splices</i>		
5415	pg. 274		QS-2000-3T Series		pg. 293
5416	pg. 274		QS-2000-3T-WS Series		pg. 293
			<i>3/C to 3/C, 15 kV Splices</i>		
			QS-2013-3T-3C		pg. 294
			5110-OS Series		pg. 294
			Connectors		
			2000T Series Oil Stop Connectors		pg. 295

3M™ splice solutions can help you reduce the time, labor and cost involved in a variety of electrical cable splicing applications. The 3M product line covers splicing needs from 0-600V to 35 kV applications. You can be assured of dependable performance, stability and long life with every splice you make.

With 3M, you can choose the right splice to fit your specific needs. 3M incorporates field proven technologies providing reliable, durable splicing products.

### Cold Shrink Splices

3M cold shrink splicing products are designed using 3M's unique cold shrink delivery system. Products are supplied pre-stretched on a removable core for efficiency and ease of installation. The removable core unwinds after positioning the splice, allowing the product to shrink into position and form a moisture resistant seal. The live-memory action of the specially formulated material ensures a permanent, durable environmental seal and insulation.

All 3M medium voltage (15-35 kV) QS-III kits meet the requirements of IEEE-404, and each splice is factory tested on power cable to ensure long-term reliability and quality. 3M QS-III splices can be used for direct burial applications, as well as in manholes, vaults, cable trays, and junction boxes. All 3M cold shrink products require no special tools, flame or training to install.

### Molded Rubber Splices

3M molded rubber QS and QS-II kits are molded from specially formulated, peroxide cured, EPDM rubber to provide a reliable medium voltage inline splice with a life expectancy equal to the cable.

### PILC Splices

3M cold shrink splice kits for Paper Insulated Lead Covered (PILC) cable use 3M patented oil stop technology. Kits install without soldering or lead wiping. 3M cold shrink PILC splices allow quick installation time without the need of open flame or heat. Single conductor splice kits rated 1000V and 15 kV allow inline splicing of PILC to PILC or PILC to Poly/EPR insulated cable. Three conductor cable splice kits rated 15 kV are designed to transition splice three conductor PILC to three single conductor poly/EPR insulated cables. All splices are jacketed and can be fully submersed. Modular splice kits are available for single conductor PILC equipment connections and tap splicing.

### Resin Splices

3M resin splicing kits are used in a variety of applications where conditions require the unique properties of 3M resins. The splicing kits have a high degree of mechanical strength for physical protection of connections and provide moisture-resistant insulation in above ground or direct burial applications.

### Tape Splices

When you want the versatility of tape, Scotch® cable splicing kits are the answer for almost any application, regardless of cable type or size. Scotch® splicing tape is designed for extra-long shelf life, so there's less chance of being caught without the supplies you need for emergencies. Tape products are available to splice cables from 600V to 69 kV.

## 3M Splices Meet Worldwide Standards



- ANSI-American National Standards Institute
- JCAA-Japan Power Cable Authority
- IEEE-Institute of Electrical and Electronics Engineer
- CSA-Canadian Standards Association
- VDE-Verband Deutcher Elektrotechniker
- Cenelec-European Standard

# Glossary of Splicing Terms

**Splice** – A splice may be considered as two or more conductors joined with a suitable connector...reinsulated, reshielded and rejacketed with compatible materials...applied over a properly prepared surface.

**High Voltage Cable Types** – Of the nearly limitless variety of cables in use today, seven of the most common are:

- Tape shielded
- Drain wire shielded
- BICC UniShield® Cable
- Longitudinally Corrugated (LC)
- Concentric Neutral (CN)
- Jacketed Concentric Neutral (JCN)
- PILC—Paper Insulated Lead Covered

See page 246 for illustrations.

**Insulation** – A third layer consisting of many different variations such as extruded solid dielectric, or laminar (oil paper or varnish cambric). Its function is to contain the voltage within the cable system. The most common solid dielectric insulations in use today are:

- cross-linked polyethylene (XLP)
- ethylene propylene rubber (EPR)

## Choosing the right splices.

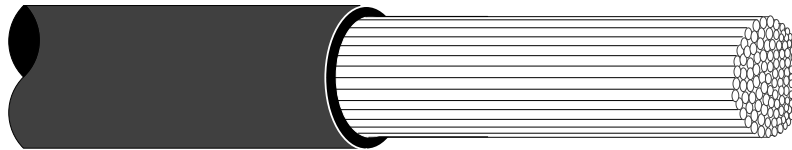
Questions to ask yourself before ordering a splicing product

<b>What is Voltage?</b>	1 kV___ 5 kV___ 8 kV___ 15 kV___ 25/28 kV___ 35 kV___ other___
<b>What is Insulation Level?</b>	100%___ 133%___ other___
<b>What is Conductor Size?</b>	_____ AWG/kcmil
<b>What type of Shielding?</b>	(tape, drain wire, UniShield®, LC Shielded, Jacketed Concentric Neutral, other) _____ none___
<b>What is Conductor Material?</b>	Copper_____ Aluminum (Al/Cu)_____

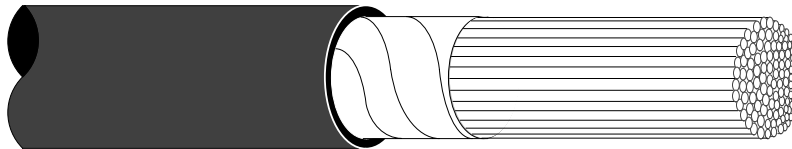
# Cable Types for Splicing



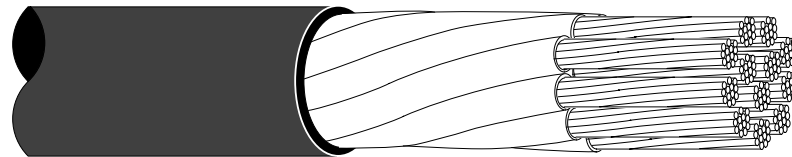
**Single Conductor Cable**



**Multiple Conductor Unshielded  
Signal & Control Cable**



**Multiple Conductor Shielded  
Signal & Control Cable**



**Multiple Conductor, to 1000 Volt, Cable**

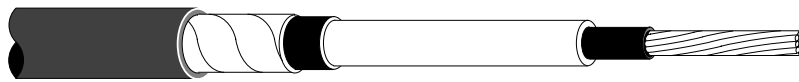


**Nonshielded (Dry) Cable**

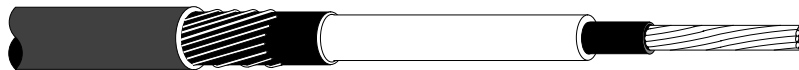


**Nonshielded (Wet or Dry) Cable**

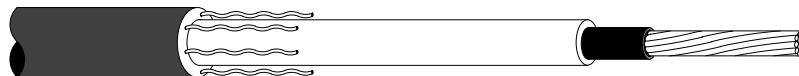
# Cable Types for Splicing



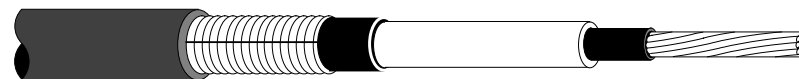
**Tape Shielded Cable**



**Wire Shielded Cable**



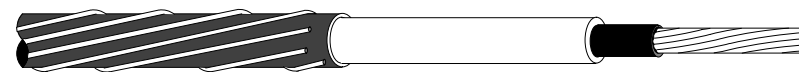
**UniShield® Cable**



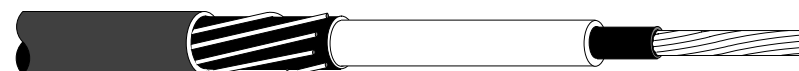
**Longitudinally Corrugated (LC) Shielded Cable**



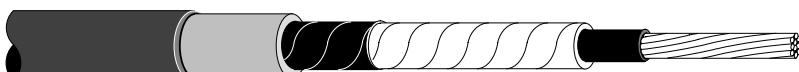
**EP-Lead or XLP-Lead Cable**



**Concentric Neutral (CN) Cable**

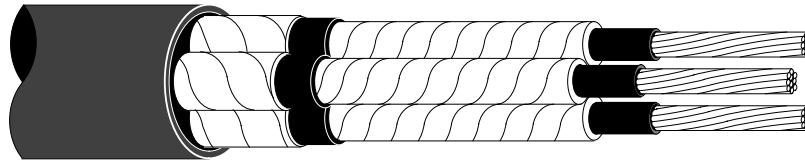


**Jacketed Concentric Neutral (JCN) Cable**

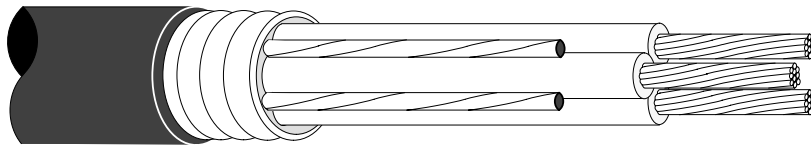


**Paper Insulated Lead Covered (PILC) Cable**

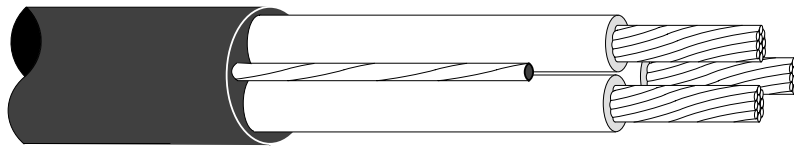
# Cable Types for Splicing



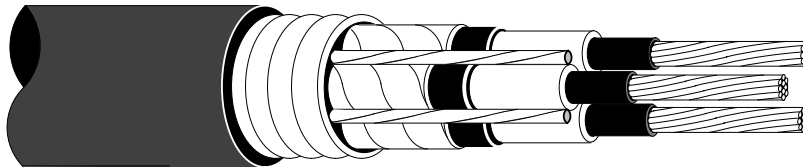
**Three-Conductor Paper Insulated Lead Covered (PILC) Cable**



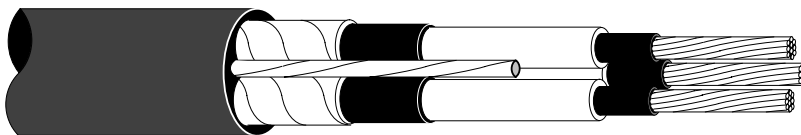
**Three-Conductor Armored, Nonshielded Cable**



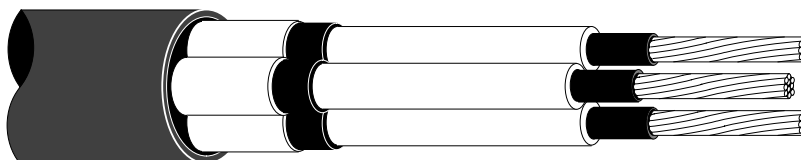
**Three-Conductor Non-Armored, Nonshielded Cable**



**Three-Conductor Armored, Shielded Cable**



**Three-Conductor Non-Armored, Shielded Cable**



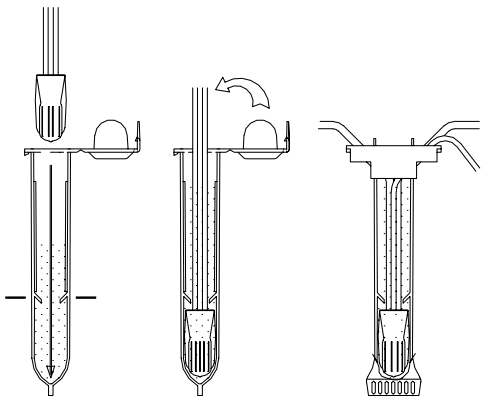
**Three-Conductor Portable Cable Type SHD-GC**

# Low Voltage Splices 0-600V

## DBR and DBY Series

### 3M™ Direct Bury Products

These 3M underground electrical wire connectors splice and effectively moisture-seal two or more conductors for remote-control circuits in irrigation and landscape lighting systems. **DBY-6 and DBR-6 are UL Listed and CSA Certified for 600V direct bury and submersion applications. UL File No. E102356 and CSA File No. LR91920. Each kit makes two splices.**



3M™ Direct Bury Splice Kit

109

### Specification Information for 3M Direct Bury Products

Product Number	Description and Kit Contents	Wire Range (AWG)	Volts	Temperature Range	UL File No. E102356 and CSA File No. LR91920
DBR	(2) Tubes (2) 3M Scotchlok™ R Connectors	5#16 thru 3#10 (5,0 thru 16,0 mm <sup>2</sup> )	30	32° - 120°F (0° - 49°C)	N/A
DBR-6	(2) Tubes (2) Scotchlok R Connectors	5#16 thru 3#10 (5,0 thru 16,0 mm <sup>2</sup> )	600	32° - 120°F (0° - 49°C)	CE UL SF
DBY	(2) Tubes (2) Scotchlok Y Connectors	2 - 5#18 thru 2#12 (2,0 thru 7,5 mm <sup>2</sup> )	30	32° - 120°F (0° - 49°C)	N/A
DBY-6	(2) Tubes (2) Scotchlok Y Connectors	2 - 5#18 thru 2#12 (2,0 thru 7,5 mm <sup>2</sup> )	600	32° - 120°F (0° - 49°C)	CE UL SF
3570-G	Connector sealing pack containing 3M Scotchcast™ epoxy resin	Accommodates 3M O/B+, R/Y+, Scotchlok Y, R, G, B and 3M 212, 312, 512	600	32° - 220°F (0° - 105°C)	N/A

### 3M Low Voltage Splices DBR and DBY Selection

Product Number	UPC (054007-)	Inner Unit Pack	Case Qty.
DBR	09964 49696	Kit- 2 Tubes and 2 Scotchlok R Connectors 100 tubes and 100 connectors	25 kits 100 each
DBR-6	69756 49697	Kit- 2 Tubes and 2 Scotchlok R Connectors 100 tubes and 100 connectors	25 kits 100 each
DBY	09053 49698	Kit- 2 Tubes and 2 Scotchlok Y Connectors 100 tubes and 100 connectors	25 kits 100 each
DBY-6	69757 49699	Kit- 2 Tubes and 2 Scotchlok Y Connectors 100 tubes and 100 connectors	25 kits 100 each
3570-G	53241*	10/box	100 each

\*UPC Prefix 051128

# Low Voltage Splices 0-600V (1000V rated) Cold Shrink Splices (0-1000V)

## 3M™ Series Splice Kits 8420 and 8430

Cold shrink splicing products are designed using 3M's unique cold shrink delivery system. Products are supplied prestretched on a removable core for efficiency and ease of installation. Removal of the core (unwind) after positioning the splice allows the product to shrink into position forming a moisture-tight seal. The live memory action of the specially formulated material ensures a permanent, durable environmental seal and insulation.

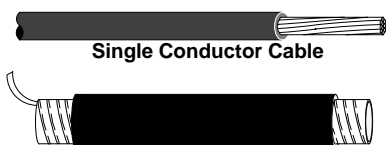
The 8420 meets requirements of ANSI C119-1 and Western Underground Guide 2.14 for secondary splices rated up to 1 kV.

## 3M Cold Shrink Silicone Insulators 8440 Series

Cold Shrink Silicone Insulators 8440

Series are insulating sleeves made from a specially formulated high-temperature

silicone rubber with an operating temperature range from -67°F (-55°C) to 500°F (260°C).



Cold Shrink 8426-9 Splice

110

## 3M Low Voltage Splices 8420 and 8430 Series Selection (0-1000V)

Product Series	UPC (054007-)	Typical Conductor Size	Minimum Cable Diameter for Seal	Maximum** Diameter Insulator Covers	Maximum Connector Length	Relaxed Tube Length	Inner Unit Pack	Case Qty.
<b>Single Conductor Cable</b> See above for cable type illustration.								
8423-6	42146	6 - 4 AWG (14 - 16 mm <sup>2</sup> )	0.31" (7,8 mm)	0.56" (4,3 mm)	2" (51 mm)	6" (152 mm)	1/bag	10
8424-8†	42390	10 - 1/0 AWG (6 - 16 mm <sup>2</sup> )	0.10" (2,5 mm)	0.82" (20,9 mm)	3" (76 mm)	8" (203 mm)	1/bag	10
8425-8	42391	2 - 1/0 AWG (35 - 50 mm <sup>2</sup> )	0.40" (10,1 mm)	0.82" (20,9 mm)	3" (76 mm)	8" (203 mm)	1/bag	10
8426-9	34457	2/0 AWG - 250 kcmil (70 - 125 mm <sup>2</sup> )	0.55" (13,9 mm)	1.18" (30,1 mm)	5" (127 mm)	9" (229 mm)	1/bag	10
8426-9M***	43436	2 - 4/0 AWG (30 - 90 mm <sup>2</sup> )	0.40" (10,1 mm)	1.18" (30,1 mm)	5" (127 mm)	9" (229 mm)	1/bag	10
8426-11	34458	2/0 AWG - 250 kcmil (70 - 125 mm <sup>2</sup> )	0.55" (13,9 mm)	1.18" (30,1 mm)	7" (178 mm)	11" (279 mm)	1/bag	10
8427-6†	09915	—	0.69" (17,5 mm)	1.38" (35,1 mm)	2" (51 mm)	6" (152 mm)	1/bag	10
8427-12	34459	250 - 400 kcmil (125 - 200 mm <sup>2</sup> )	0.69" (17,5 mm)	1.38" (35,1 mm)	8" (203 mm)	12" (305 mm)	1/bag	10
8427-16	34460	250 - 400 kcmil (125 - 200 mm <sup>2</sup> )	0.69" (17,5 mm)	1.38" (35,1 mm)	12" (305 mm)	16" (406 mm)	1/bag	10
8428-6†	09916	—	0.95" (24,1 mm)	1.94" (49,2 mm)	2" (51 mm)	6" (152 mm)	1/bag	10
8428-12	09056	500 - 800 kcmil (300 - 400 mm <sup>2</sup> )	0.95" (24,1 mm)	1.94" (49,2 mm)	8" (203 mm)	12" (305 mm)	1/bag	10
8428-18	34461	500 - 800 kcmil (300 - 400 mm <sup>2</sup> )	0.95" (24,1 mm)	1.94" (49,2 mm)	14" (356 mm)	18" (457 mm)	1/bag	10
8429-6†	09917	—	1.27" (32,2 mm)	2.67" (67,8 mm)	2" (51 mm)	6" (152 mm)	1/bag	10
8429-9	09931	900-1000 kcmil (500 mm <sup>2</sup> )	1.27" (32,2 mm)	2.67" (67,8 mm)	5" (127 mm)	9" (229 mm)	1/bag	10
8429-12	42389	900-1000 kcmil (500 mm <sup>2</sup> )	1.27" (32,2 mm)	2.67" (67,8 mm)	8" (203 mm)	12" (305 mm)	1/bag	10
8429-15	44198	900-1000 kcmil (500 mm <sup>2</sup> )	1.27" (32,2 mm)	2.67" (67,8 mm)	11" (279 mm)	15" (381 mm)	1/bag	10
8429-18	34462	900-1000 kcmil (500 mm <sup>2</sup> )	1.27" (32,2 mm)	2.67" (67,8 mm)	14" (356 mm)	18" (457 mm)	1/bag	10
8430-9	42147	1250 - 2000 kcmil	1.68" (42,6 mm)	3.69" (93,7 mm)	5" (127 mm)	9" (229 mm)	1/bag	10
8430-18	42388	1250 - 2000 kcmil	1.68" (42,6 mm)	3.69" (93,7 mm)	14" (356 mm)	18" (457 mm)	1/bag	10

\*Kit contains adapters.

\*\*Cable or connector diameter.

\*\*\*Mastic pads included for cable O.D. build-up.

† These sizes are listed for availability only and are not designed to be used as primary insulation. These tubes are for conduit sealing and breakouts.

Important: Use insulation jacket or connector O.D. for final ordering criteria.

Note: Additional sizes are available, consult your 3M sales representative.



### 3M™ Low Voltage Splices 8440 Series Selection (0-1000V)

Product Series	UPC (054007-)	Conductor Size	Minimum Cable Diameter for Seal	Maximum** Diameter Insulator Covers	Relaxed Tube Length	Inner Unit Pack	Case Qty.
<b>Single Conductor Cable</b> See page 250 for cable type illustration.							
8443-2	09485	6 - 2 AWG (14 - 30 mm <sup>2</sup> )	0.27" (7 mm)	0.56" (14 mm)	2" (51 mm)	1/bag	12
8443-6.5	09482	6 - 2 AWG (14 - 30 mm <sup>2</sup> )	0.27" (7 mm)	0.56" (14 mm)	6.5" (165 mm)	1/bag	12
8445-2.5	09486	2 - 1/0 AWG (35 - 50 mm <sup>2</sup> )	0.35" (9 mm)	0.72" (18 mm)	2.5" (64 mm)	1/bag	12
8445-7.5	09483	2 - 1/0 AWG (35 - 50 mm <sup>2</sup> )	0.35" (9 mm)	0.72" (18 mm)	7.5" (191 mm)	1/bag	12
8447-3.2	09487	1/0 - 3/0 AWG (60 - 80 mm <sup>2</sup> )	0.48" (12 mm)	0.95" (24 mm)	3.2" (81 mm)	1/bag	12
8447-8	09484	1/0 - 3/0 AWG (60 - 80 mm <sup>2</sup> )	0.48" (12 mm)	0.95" (24 mm)	8" (203 mm)	1/bag	12

\*\*Cable or connector diameter.

Note: Additional sizes are available, consult your 3M sales representative.



Product Referral Generator

Cold Shrink End Caps . . . . . pg. 312

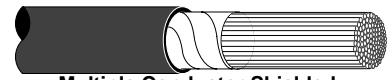
# 3M™ Resin Splices 0-600V (1000V rated)

## 3M Scotchcast™ Inline Splice Kits 72-N Series

Scotchcast kits 72-N series splice shielded or nonshielded plastic- and rubber-jacketed, signal and control (or power) cables rated up to 1 kV. **Connectors are not included, order separately.** See page 90 in the “Insulated Butt Connectors” section for connector ordering information. **Each kit makes one splice.**



Multiple Conductor Nonshielded Signal & Control Cable



Multiple Conductor Shielded Signal & Control Cable

## Scotchcast 72-N Series Selection

Product Series	UPC (054007-)	Molded Body Length	Cable O.D. Range	Inner Pack	Case Qty.
Multiple Conductor Nonshielded Signal & Control Cable, Multiple Conductor Shielded Signal & Control Cable See above for cable type illustrations.					
72-N1*	10623	7-1/8" (18,1 cm)	0.25 - 0.625" (6 - 16 mm)	1	10
72-N2	10625	10-7/16" (26,8 cm)	0.500 - 1.00" (13 - 25 mm)	1	10
72-N3	10627	15-7/16" (39,2 cm)	0.625 - 1.50" (16 - 38 mm)	1	10
72-N4	10629	15-5/8" (39,7 cm)	1.00 - 2.00" (25 - 51 mm)	—	1
72-N5	10631	20-5/16" (51,6 cm)	1.25 - 2.25" (32 - 57 mm)	—	1
72-N6	10633	25" (63,5 cm)	1.25 - 3.25" (32 - 83 mm)	—	1

\* Nonshielded cable only.

## Scotchcast 72-N Series Selection

Scotchlok™ Insulated Butt Connectors												
Kit No.	MV18BC 22-18 AWG				MV14BC 16-14 AWG				MV10BC 12-10 AWG			
	Shielded Cables**		Unshielded Cables**		Shielded Cables**		Unshielded Cables**		Shielded Cables**		Unshielded Cables**	
	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs
72-N1*	—	—	6	3	—	—	4	2	—	—	3	—
72-N2	18	9	32	16	12	6	19	9	8	4	13	6
72-N3	42	21	75	37	24	12	45	22	14	7	27	13
72-N4	74	37	160	80	50	25	90	45	40	20	60	30
72-N5	140	70	200	100	120	60	160	80	100	50	100	50
72-N6	360	180	400	200	220	110	250	125	180	90	200	100

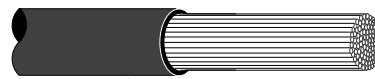
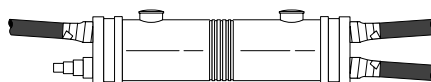
\* Nonshielded cable only.

\*\* Figures based on IMSA cable specifications.

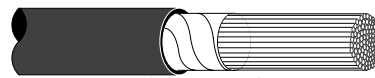
# 3M™ Resin Splices 0-600V (1000V rated)

## 3M Scotchcast™ Reenterable Inline and Tap Splice Kits 78-R Series

Scotchcast 78-R series kits make inline or tap splices on shielded or nonshielded, plastic- and rubber-jacketed, signal and control (or power) cable rated up to 1 kV. Connectors are not included, order separately. Refer to the “Terminals, IDCs and Wire Connectors” section for ordering information. **Each kit makes one splice.**



Multiple Conductor Nonshielded Signal & Control Cable



Multiple Conductor Shielded Signal & Control Cable

## Scotchcast Selection 78-R Series

Product Series	UPC (054007-)	Kit Size I.D. x L	Cable O.D. Range		Case Qty.
			Run	Tap	
Multiple Conductor Nonshielded Signal & Control Cable, Multiple Conductor Shielded Signal & Control Cable See above for cable type illustrations.					
78-R1	02411	2 x 12" (5,1 x 30,5 cm)	0.25 - 1.00" (6 - 25 mm)	0.25 - 1.00" (6 - 25 mm)	1
78-R2	02412	2 x 24" (5,1 x 61,0 cm)	0.25 - 1.00" (6 - 25 mm)	0.25 - 1.00" (6 - 25 mm)	1
78-R3	02413	3 x 24" (7,6 x 61,0 cm)	0.50 - 1.50" (13 - 38 mm)	0.50 - 1.00" (13 - 25mm)	1
78-R4	02414	4 x 24" (10,2 x 61,0 cm)	0.50 - 2.00" (13 - 51 mm)	0.50 - 1.75" (13 - 44 mm)	1
78-R5	02417	5 x 26" (12,7 x 66,0 cm)	1.00 - 2.50" (25 - 64 mm)	1.00 - 2.50" (25 - 64 mm)	1

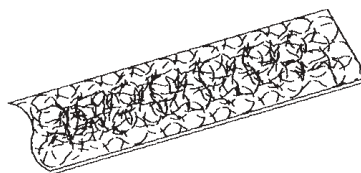
## Scotchcast Connector Selection 78-R Series

Scotchlok™ Connectors																		
Kit No.	Insulated Butt Connectors						Pigtail Connectors						Tap Connectors					
	MV18BC 22-18 AWG		MV14BC 16-14 AWG		MV10BC 12-10 AWG		"Y" 18-12 AWG		"R" 14-10 AWG		557 22-18 AWG		558 22-18 AWG		560 18-14 AWG		562 12-10 AWG	
	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs	No. Cond.	No. Pairs
78-R1	40	20	26	13	16	8	8	4	5	2	15	7	10	5	8	4	6	3
78-R2	66	33	45	22	26	13	20	10	10	5	30	15	20	10	16	8	12	6
78-R3	160	80	110	55	70	35	50	25	28	14	80	40	50	25	40	20	36	18
78-R4	300	150	180	90	110	55	84	42	60	30	142	71	100	50	80	40	68	34
78-R5	550	275	320	160	200	100	174	87	120	60	260	130	200	100	160	80	130	65

Note: Above figures based on IMSA cable specifications.

## Scotchcast Spacer Web 7820

Scotchcast spacer web is for use with the 78-R series splice kits after re-entry. It is a loosely woven polyester that keeps the splice bundle away from the mold body wall, providing even compound distribution around the splice.



## Scotchcast Spacer Web 7820 Selection

Product Series	UPC (054007-)	Size/Roll	Case Qty.
7820	02415	Two 3" x 20' rolls/box (76 mm x 6,1 m)	1

# 3M™ Resin Splices 0-600V (1000V rated)

## 3M Scotchcast™ Multi-Mold Resin Splice Kit 85-14CP

The Scotchcast Multi-Mold Resin Splicing Kit 85-14CP is rated for cables up to 1 kV to insulate odd-shaped and odd-sized splices. The 85-14CP is specifically designed for use in cathodic protection with a rigid epoxy resin, 3M™ Scotchcast 4. **Each kit makes one splice.**



**Single Conductor Cable**

## Scotchcast Multi-Mold Resin Splice Kits 85 Series

Scotchcast Multi-Mold Kits 85 Series are used to electrically insulate odd-sized and odd-shaped splices on cables rated through 1 kV. These flexible plastic molds are easily formed around splices. Within 30 minutes after the resin has been poured, the splice is ready for service – above ground or buried. **Each kit makes one splice.**



**Single Conductor Cable**



**Multiple Conductor Cable**

## Scotchcast 85 Series Selection

Product Series	UPC (054007-)	Maximum Conductor Size Split Bolt	Compression, H or C tap	Inner Pack	Case Qty.
<b>Single Conductor Cable</b> See above for cable type illustrations.					
85-14CP	31927	2/0 AWG stranded	4/0 AWG stranded	1/box	10
<b>Single Conductor Cable, Multiple Conductor, to 1000 Volt, Cable</b> See above for cable type illustrations.					
85-10	11846	8 AWG stranded	4 AWG stranded	1/box	10
85-12	11847	1 AWG stranded	2/0 AWG stranded	1/box	10
85-14	11848	2/0 AWG stranded	4/0 AWG stranded	1/box	10
85-16	02403	750 kcmil stranded* 250 kcmil (run) 2/0 AWG stranded (tap)	500 kcmil (run) 4/0 AWG stranded (tap)	1/box	10

\*Inline compression connector.



111

# 3M™ Resin Splices 0-600V (1000V rated)

## 3M Scotchcast™ Wye Resin Splice Kit 90-B1



3M™ Scotchcast Kit 90-B1 insulates and moisture-seals wye splices made with the split-bolt type connectors on cables rated through 1 kV. **Each kit makes one splice.**



Single Conductor Cable



Multiple Conductor Cable

112

### Scotchcast Splice 90-B1 Selection

Product Series	UPC (054007-)	Cable O.D. Range		Maximum Connector		Inner Pack	Case Qty.
		Run	Tap	Split Bolt	Crimped		
Single Conductor Cable, Multiple Conductor, to 1000 Volt, Cable See above for cable type illustrations.							
90-B1	25115	0.500 - 0.812" (13 - 21 mm)	0.375" max. (10 mm)	1/0 AWG	2/0 AWG	1/box	10

### Scotchcast Flexible Power Cable Tap Splice Kit 82-BF1

3M Scotchcast Kit 82-BF1 is for use on unshielded portable power cables and cords. 82-BF1 can be used on single conductor or multiple conductor cables using a compression "C" tap connector.

3M molds 82-BF1 are removable and reusable. The 82-BF1 is a permanent splice as assigned by the Mine Safety and Health Administration (P-142-5 MSHA). Connectors are not included, order separately. See page 131 in the "Lugs & Connectors" section for ordering information. **Each kit makes one splice.**



Single Conductor Cable



Multiple Conductor Cable

### Scotchcast Tap Splice Kit 82-BF1 Selection

Product Series	UPC (054007-)	Conductor Size	Cable O.D. Range	Inner Pack	Case Qty.
82-BF1	08309	Up to 1/0 AWG (50 mm <sup>2</sup> )	0.25 - 0.80" (6,4 - 20,3 mm)	1/box	10

# Resin

## 3M™ Scotchcast™ Electrical Insulating Resin 4



113

This Scotchcast resin is a two-part epoxy insulating and encapsulating resin packaged in five sizes. Use 3M Scotchcast Resin 4 to splice solid dielectric and oil-filled cables up to 8 kV. Flash point: 300°F (149°C) or higher.

## Scotchcast Electrical Insulating and Sealing Compound 2104



114

Scotchcast compound 2104 in a Unipak container is a two-part, low-viscosity polyurethane for permanent splice protection. This resin is included in the multi-mold splicing kits.

## Scotchcast Reenterable Electrical Insulating Resin 2112



115

Shield electrical connections from water damage with Scotchcast Reenterable Electrical Insulating and Sealing Compound 2112, the most effective moisture protection available. Unique mix-in-the-bag preparation of this polyolontadine resin makes

the resin easy to prepare and apply. The visible, reenterable moisture seal is a reliable barrier against the constant exposure to water in certain applications. Often used for potting flush mounted junction boxes.

## Scotchcast Flame Retardant Compound 2130



116

Scotchcast Compound 2130 is a flexible, permanent, urethane resin used for jacket repair or splicing portable cables. It is flame retardant and has MSHA approval number P-142-5.

## Scotchcast Wet-Niche Potting 2135



117

Scotchcast Wet-Niche Potting Compound 2135 is the first “listed” product that meets NEC requirements to allow the use of rigid nonmetallic conduit in the installation of wet-niche underwater lighting fixtures. 2135 provides protection against corrosion and

possible deteriorating effects of pool water by reliably encapsulating the 8 AWG ground connection in a wet-niche shell. The wet-niche forming shell is a corrosion-resistant metal housing for underwater fixtures in permanently installed pools. **Article 680-20(b)(1) National Electrical Code. UL Listed 2L02.**

Scotchcast 2135 potting compound is package in an easy-mix 1.8-oz. Unipak container. This thixotropic resin will not sag or drip. The encapsulated connection gels in minutes and can be submerged within four hours. Each kit contains enough material to complete one fixture.

## Specifications and Ordering Information for Scotchcast Resins

Product Number	UPC (054007-)	Size/Type of Package	Inner Unit Pack	Case Qty.
<b>Scotchcast Electrical Insulating Resin 4</b>				
4-A	43165	A/3.2 oz. (90 g), 4.8 cu. in. (78,6 cu. cm)	1/box	10 each
4-B	43166	B/7.4 oz. (209 g), 11.2 cu. in. (183,5 cu. cm)	1/box	10 each
4-C	43167	C/14.7 oz. (418 g), 22.3 cu. in. (365,4 cu. cm)	1/box	10 each
4-D	04206	D/22.2 oz. (630 g), 33.6 cu. in. (550,6 cu. cm)	1/box	10 each
4-E	04207	E/10.4 oz. (294 g), 15.7 cu. in. (257,2 cu. cm)	1/box	10 each
<b>Scotchcast Electrical Insulating and Sealing Compound 2104</b>				
2104-A	31189	A/3.46 oz. (98 g), 5.7 cu. in. (93,4 cu. cm)	1/box	10 each
2104-B	31382	B/7.4 oz. (210 g), 12.6 cu. in. (206,4 cu. cm)	1/box	10 each
2104-C	31383	C/14.82 oz. (420 g), 25.4 cu. in. (416,2 cu. cm)	1/box	10 each
2104-D	11849	D/23.8 oz. (675 g), 40.8 cu. in. (668,5 cu. cm)	1/box	10 each
<b>Scotchcast Reenterable Electrical Insulating Compound 2112</b>				
2112-C	42049	C/12.3 oz. (350 g), 23.7 cu. in. (338,3 cu. cm)	1/box	10 each
2112-D	42050	D/21.2 oz. (600 g), 40.6 cu. in. (665,3 cu. cm)	1/box	10 each
<b>Scotchcast Flame Retardant Compound 2130</b>				
2130-B	31401	B/7.6 oz. (216 g), 10.7 cu. in. (175,3 cu. cm)	1/box	10 each
2130-C	31402	C/21.7 oz. (616 g), 30.5 cu. in. (499,8 cu. cm)	1/box	10 each
2130 Part A	50237	A/5 gal. (18,93 L)		45
2130 Part B	50238	B/5 gal. (18,93 L)		54
<b>Scotchcast Wet-Niche Potting 2135</b>				
2135	69798	F/1.83 oz. (52,5 g), 3.3 cu. in. (54,0 cu. cm)	1/box	10 each
<b>Scotchcast Cable Repair Compound 2135M</b>				
2135M	50433	F/6.9 oz. (195 g), 12.25 cu. in. (31,12 cu. cm)	1/bag	10 each

# 5/8 kV, 15 kV and 25 kV Resin Pressure System

The 3M™ Resin Pressure System is comprised of several components that are used for constructing splices or splice jackets on medium voltage power cables for harsh environments. 3M Scotchcast™ Electrical Insulating Resin 4 is a key component of the system, which can be used as the primary insulation for shielded and non-shielded splices rated up to 8 kV. The system is also available as a

resin-jacketed tape-splice (TapeCast™) rated up to 25 kV. The resin is a two-part epoxy, packaged in a special Unipak container that provides the exact mixing ratio for making a strong, dependable and long-lasting splice or splice jacket. The versatile resin system accommodates a variety of splice configurations and cables.

Voltage Class	Number of Conductors	Shielding	Insulation Material	Splice Configuration
5 and 8 kV	1/C, multi/C and transitions from multi-to single conductor	Non-shielded, Tape Shielded, Wire Shielded, UniShield®, LC, CN and JCN	Solid Dielectric (EPR, XLPE, etc.), PILC and transitions from PILC to Solid Dielectric	Inline, Wye and Tee Resin Splice
15 kV	1/C, multi/C and transitions from multi-to single conductor	Tape Shielded, Wire Shielded, UniShield®, LC, CN and JCN	Solid Dielectric (EPR, XLPE, etc.), PILC and transitions from PILC to Solid Dielectric	Inline and Tee TapeCast™ Splice
25 kV	1/C, multi/C and transitions from multi-to single conductor	Tape Shielded, Wire Shielded, UniShield®, LC, CN and JCN	Solid Dielectric (EPR, XLPE, etc.), PILC and transitions from PILC to Solid Dielectric	Inline and Tee TapeCast™ Splice

These Resin and 3M™ TapeCast Splices will also work on sector shaped conductors.

A resin pressure system splice is suitable for submerged locations (e.g., manholes and vaults), underground direct burial, and aerial applications. **Detailed instructions containing bill-of-materials are available by contacting the 3M Electrical Products Division’s Energy Helpline at (512) 984-5000.** All parts are ordered separately. See “Insulating and Splicing Tapes,” “Cable Accessory Products” and “Cable Accessory Products-Preparation and Cleaning” for ordering information on other parts for TapeCast Systems. Contact your local 3M representative for further details.

Product	UPC (054007-)	Description	Case Qty.
4-B	43166	Scotchcast Electrical Insulating Resin 4 (7.4 oz./209 gm)	10
4-C	43167	Scotchcast Electrical Insulating Resin 4 (14.7 oz./418 gm)	10
E-4	25701	Scotchcast Resin-Pressure Gun (reusable tool)	1
P-1B*	11857	Scotchcase Injection Fitting	50
P-5B*	11858	Scotchcast Nozzle	50
P-3	25735	Scotchcast Spacer Tape	50
P-4	25743	Scotchcast Restricting Tape	

\* Ordered by the box; each box contains 10 fittings or nozzles

# Heat Shrink Splices 0-600V

## UF Splice Kit



118

3M™ UF Splice Kit is designed to provide a reliable, moisture proof electrical connection for Type U.F.-B underground feeder cable rated for 600 volts ranging from #14/3 without ground wire up to #8/3 with ground wire.

The UF Splice Kit consists of a connector-insulation assembly and a heat shrink tube. The connector assembly contains four cylindrical set screw connectors separated by a piece of vinyl insulation.

The heat shrink tube is a heavy-wall, adhesive-lined tube.

Underground Feeder (UF)-B cables are flat, and typically have three solid conductors without ground or two solid conductors with a ground. They range in size from 8 AWG to 14 AWG. The most common UF cable size is 10-14 AWG.

The 3M UF Splice Kit is offered in two versions: UF1 Standard Kit includes a 1.8" length terminal connector and an 8" length of heavy-wall, adhesive-lined heat shrink tube. UF2 Stretcher Kit has an 11.7" terminal connector and a 20" length of heavy-wall, adhesive-lined heat shrink tube.

The Standard Kit is used in most of the applications.

The Stretcher Kit is used in situations where a 7-10" section of the cable has been damaged or destroyed. It eliminates two connectors and a short piece of cable during repair.

## Ordering Information for 3M UF Splice Kits

Product Number	UPC (054007-)	Description	Inner Unit Pack	Case Qty.
UF1	42920	UF Splice Kit-Standard 1.8" connector/ 8" heat shrink tube	One kit/ peggable blister pack	6 kits/cs.
UF2	42921	UF Splice Kit-Stretcher 11.7" connector/ 20" heat shrink tube	One kit/ peggable printed bag	6 kits/cs.

## Ordering Information for 600V In-line Splice Kits, for Flat Cable USEB90

Product Number	UPC (051141-)	Description	Case Qty.
USEB90-2	03449	Conductor Size #2 AWG	5 kits/cs.
USEB90-1/0	03448	Conductor Size 1/0 AWG	5 kits/cs.
USEB90-2/0	03450	Conductor Size 2/0 AWG	5 kits/cs.
USEB90-4/0	03451	Conductor Size 4/0 AWG	5 kits/cs.
9CK-FCM-1 • uses Scotchcast™ Resin	64031*	Conductor Size 1/0-4/0 AWG Mould length 14" (355mm) Cable Type USEB-90	1 kit/cs.
9CK-FCM-2 • uses Scotchcast Resin	64032*	Conductor Size #2-1/0 AWG Mould length 10.25" (260mm) Cable Type USEB-90	1 kit/cs.

\* UPC prefix 054007

For USEB90, these products are only available in Canada.

## 3M Airport Lighting Connector Sealing Kit IAL-3

3M Airport Lighting Connector Sealing Kit IAL-3 is designed especially to meet the high demands on airport lighting connections. It meets specifications for sealing FAA Specification L-823 connectors. Each kit includes a 16-inch heat shrinkable sleeve, cleaning pad and instructions.

## Specification and Ordering Information for 3M Airport Lighting Connector Sealing Kit IAL-3

Product Number	UPC (054007-)	Expanded/ Recovered I.D.	Inner Unit Pack	Case Qty.
IAL-3	08862	1.38/0.38" (34/10 mm)	1/bag	30



# 1 kV to 5/8 kV Splices

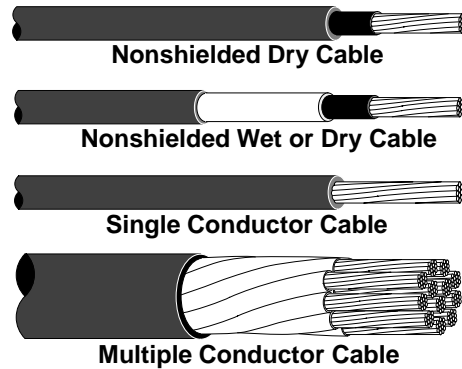
## 1/C, 1-5 kV, Non-Shielded Resin Splices

### 3M™ Scotchcast™ 82-A Series Inline Resin Splice Kits



119

Use the Scotchcast series kits 82-A to insulate and seal single conductor, unshielded cable splices through 5 kV and multiple conductor cables through 1 kV. The 82-A series is UL Listed 486D, File Number E102356. Connector is not included, order separately. **Each kit makes one splice.**



### Scotchcast Kits 82-A Series Selection

Product Series	UPC (054007-)	Maximum Cable O.D.	Maximum Connector O.D.	Conductor Size*	Inner Pack	Case Qty.
Nonshielded Dry Cable, 5 and 8 kV, Nonshielded Wet or Dry Cable, 5 and 8 kV, Single Conductor Cable to 1000 Volt, Multiple Conductor, to 1000 Volt, Cable See above for cable type illustrations.						
82-A	25016	0.750" (19 mm)	0.406" (10 mm)	10 - 2 AWG (6 - 30 mm <sup>2</sup> )	1/box	10
82-A1	25024	0.625" (16 mm)	0.406" (10 mm)	Up to 2 AWG (30 mm <sup>2</sup> )	1/box	10
82-A2	25032	1.000" (25 mm)	0.625" (16 mm)	2 - 3/0 AWG (35 - 80 mm <sup>2</sup> )	1/box	10
82-A3	25040	1.563" (40 mm)	1.000" (25 mm)	3/0 - 400 kcmil** (95 - 200 mm <sup>2</sup> )	1/box	10

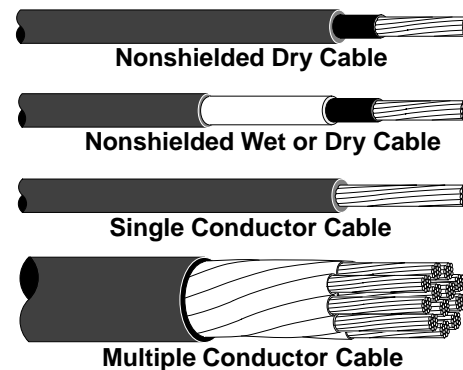
\* Important: Use insulation jacket or connector O.D. for final ordering criteria.  
\*\* 500 kcmil when using a Scotchlok 10014 copper compression connector.

### Scotchcast Wye Resin Splice Kit 82-B1



120

Scotchcast kit 82-B1 insulates and seals wye splices for compression tap connectors (e.g., C-tap or H-tap) rated for cables up to 5 kV. Use on nonshielded cables through 5 kV and on multiple conductor cables through 1 kV. **Each kit makes one splice.**



### Scotchcast Kit 82-B1 Selection

Product Series	UPC (054007-)	Voltage Rating	Maximum Connector Split Bolt	Maximum Connector Crimped	Cable O.D.	Inner Pack	Case Qty.
Nonshielded Dry Cable, Nonshielded Wet or Dry Cable, Single Conductor Cable, Multiple Conductor, to 1000 Volt, Cable See above for cable type illustrations.							
82-B1	25057	5 kV Single Conductor 1 kV Multiple Conductor	4 AWG	2 AWG	0.250 - 0.625" (6 - 16 mm)	1/box	10

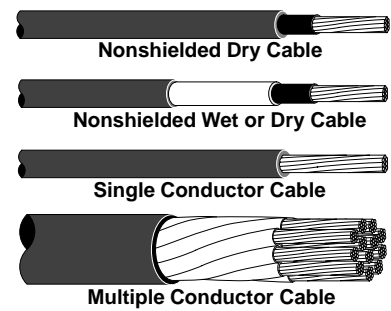
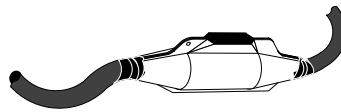
# 1/C, 1-5 kV, Non-Shielded Resin Splices

3M™ Scotchcast™ Inline Splice Kits for Flexible Power Cable 82-F1 and 82-F2

Scotchcast kits 82-F1 and 82-F2 are for use on unshielded, portable power cables. The kits are rated up to 5 kV for single conductor and up to 1 kV for multiple conductors. The kits are designed to be used with inline compression connectors.

The Scotchcast kits 82-F series are permanent splices as assigned by the Mine Safety and Health Administration (P-142-5 MSHA).

Connectors are not included, order separately.



## Scotchcast Kits 82-F1 and 82-F2 Inline Selection

Product Series	UPC (054007-)	Cable O.D. Range	Voltage Rating	Conductor Size	Number of Conductors	Maximum Connector O.D.	Inner Pack	Case Qty.
Nonshielded Dry Cable, Nonshielded Wet or Dry Cable, Single Conductor Cable, Multiple Conductor, to 1000 Volt, Cable See above for cable type illustrations.								
82-F1	08307	0.25 - 0.80" (6 - 20 mm)	5 kV 1 kV (600/2000)*	6 - 1/0 AWG** (16 - 50 mm <sup>2</sup> )	1 multi	0.62" (18 mm) 0.90" (23 mm)	1/box	10
82-F2	08308	0.80 - 1.20" (20 - 30 mm)	5 kV 1 kV (600/2000)*	2/0 - 4/0 AWG** (70 - 95 mm <sup>2</sup> )	1 multi	0.82" (21 mm) 1.30" (33 mm)	1/box	10

\* Mine portable cable rating  
\*\*Base selection on cable O.D. range.

# 1/C, 5/8 kV, Non-Shielded Cold Shrink Splices

3M™ 5/8 kV Inline Splice Kits 5740 Series



3M Splice Kits 5740 Series are used for single conductor, non-shielded 5/8 kV cables. Each kit is a cold shrink design and contains enough material to insulate three (3) splices.



121

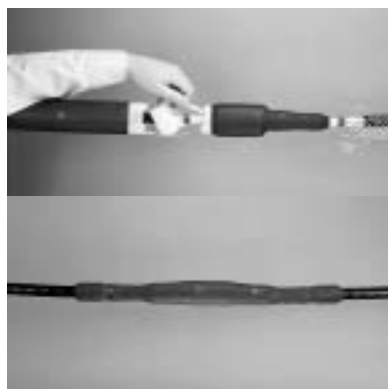
## 3M Cold Shrink Splice Kits 5740 Series Selection

Product Series	UPC (054007-)	Conductor Size Copper	Conductor Size Aluminum	Maximum Connector Length (Copper or Aluminum)	Typical Splice Length	Insulation / Jacket O.D. Range	Cable Case Qty.
Nonshielded Dry Cable, Nonshielded Wet or Dry Cable See above for cable type illustrations.							
5741	49491	8 - 4 AWG (10 - 25 mm <sup>2</sup> )		2.5" (64 mm)	10" (254 mm)	0.38 - 0.70" (9,7 - 17,8 mm)	1
5742	49492	2 AWG - 300 kcmil (35 - 150 mm <sup>2</sup> )		4.5" (108 mm)	12" (305 mm)	0.63 - 1.20" (16,0 - 30,5 mm)	1
5743	49493	350 - 1000 kcmil (185 - 500 mm <sup>2</sup> )	350 - 750 kcmil (185 - 400 mm <sup>2</sup> )	6.25" (159 mm)	15" (381 mm)	0.90 - 2.10" (22,9 - 53,3 mm)	1

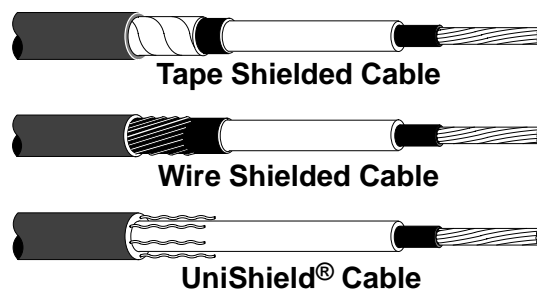
Note: Be sure to order the correct size connector to complete the splice, see pages 299-300.

# 1/C, 5/8 kV, Shielded-Tape, Wire, and UniShield® Cold Shrink Splices

3M™ Splice Kits 5550 Series



3M Cold Shrink Rubber Splice Kits 5550 Series are for splicing 5 kV and 8 kV shielded, solid dielectric, power cables. Each kit contains all the materials (except connectors and optional ground strap) required to construct three (3) single conductor splices on Tape Shield, Wire



122

Shield or UniShield® cables. Note: The kit can also be used to splice a shielded to a nonshielded 5-8 kV cable.

**Meets requirements of IEEE 404.**

Each kit makes three splices.

## 3M Cold Shrink Splice Kits 5550 Series Selection

Product Series	UPC (054007-)	Conductor Size		Maximum Connector Length		Typical Splice Length	Optional Ground Strap Kit No.	Case Qty.
		Copper	Aluminum	Copper	Aluminum			
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable See above for cable type illustrations.								
5551	09089	6 - 4/0 AWG (14 - 100 mm²)	6 - 3/0 AWG (14 - 80 mm²)	3.3" (84 mm)	2.7" (69 mm)	19" (483 mm)	GS-1	1
5552	09090	4/0 AWG - 500 kcmil (120 - 250 mm²)	4/0 AWG - 400 kcmil (120 - 200 mm²)	4.3" (109 mm)	3.7" (94 mm)	21" (533 mm)	GS-2	1
5553	09091	500 - 1000 kcmil (300 - 500 mm²)	500 - 1000 kcmil (300 - 500 mm²)	6.3" (160 mm)	5.3" (135 mm)	23" (584 mm)	GS-3	1

## 5 kV In-line Splice Kits, 1/C or Multiple Conductor Unshielded Cable

### Ordering Information for 9CK-300 Series

Product Number	UPC (054007-)	Description	Jacket Diam. Range	Inner Unit Pack
9CK-300	64860	Conductor Size Single #2-500 MCM Multiple #6-1/0 Mold length 15.75" (400mm)	1-1.95" (25-49.5 mm)	1 kit/cs.
9CK-302	64861	Conductor Size Single #3-1250 MCM Multiple #8-4/0 Mold length 20.5" (520mm)	0.94-2.25" (24-57 mm)	1 kit/cs.

For the 9CK-300 Series, these products are only available in Canada.

# 3/C, 600V and 1 kV, Non-Shielded Cold Shrink Splices

## 3M™ Splices 5730 Series for Three-Conductor Armor Power Cable (Teck 90)



123

3M Low Voltage Cold Shrink Splicing Kits are applicable for indoor and outdoor installations, including direct burial, aerial and submersible applications. The 5730 series accommodates a full range of cable sizes from 14 AWG-750 kcmil. The overall jacket diameter ranges from 0.62 to 4.0" (16 to 102 mm).

## 3M Low Voltage Inline Splice Kits 5730-5731

For use with 3/C or 4/C Armor Power Cable CSA Certified for 600V or less.\* 

## 3M Low Voltage Inline Splice Kits 5732-5735

For use with 3/C Armor Power Cable (Teck 90) up to 1000V.

Note: Armorcast™ 4650 is not included with these splices and must be ordered separately.

\* NRTL=CSA approved for use in the United States

## 3M Cold Shrink Splice Kits 5730-5731 Series Selection

Kit Number	Cable Sizes (AWG)	Overall Jacket Diameter	UPC (054007-)	Amount of Armorcast Required*
5730	14 - 10	0.62 - 1.0" (16 - 25 mm)	43171	1 roll
5731	8 - 4	0.95 - 1.4" (24 - 36 mm)	43172	1 roll

Note: Connectors are not included in the kit. Use only CSA Certified compression connectors. Vinyl or nylon butt connectors are preferable.

\*Amount of Armorcast needed based on two half lapped layers. Order the 15 ft. rolls.

## 3M Cold Shrink Splice Kits 5732-5735 Series Selection

Kit Number	Cable Sizes (AWG or kcmil)	Overall Jacket Diameter	UPC (054007-)	Amount of Armorcast Required*
5732	2 - 1/0	0.95 - 2.4" (24 - 61 mm)	43173	1 roll
5733	2/0 - 250	1.15 - 3.3" (29 - 84 mm)	43174	2 rolls
5734	250 - 500	1.55 - 4.0" (39 - 102 mm)	43175	2 rolls
5735	500 - 750	1.55 - 4.0" (39 - 102 mm)	43176	3 rolls

Note: Connectors are not included in the kit. Use only CSA Certified compression connectors.

\*Amount of Armorcast needed based on two half lapped layers. Order the 15 ft. rolls.

## 3M Armorcast™ Structural Material 4560

The Armorcast Structural Material 4560 creates maintenance free mechanical protection for power cable splices. Armorcast structural material is a flexible fiberglass knit fabric strip that has been saturated with black urethane resin syrup. It is rolled and packed dry in a sealed foil envelope.

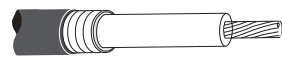
## Armorcast Structural Material 4560 Selection

Product Number	UPC (055128-)	Roll Size	Case Qty.
4560-5	53740	5'	5 rolls
4560-10	53741	10'	5 rolls
4560-15	53742	15'	5 rolls

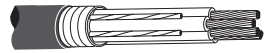
# 1/C, 3/C, 5/8 kV, Non-Shielded Armored or Non-Armored Armorcast/Cold Shrink Splices

## 3M™ Three-Conductor Inline Splicing Kits TS Series

3M Three-Conductor Inline Splicing Kits TS Series are designed for nonshielded armored and non-armored solid dielectric cables rated up to 8 kV. Connectors are not included, order separately. See page 131 in the “Lugs & Connectors” section for ordering information. **Meets requirements of IEEE 404.** Each kit makes one splice.



One-Conductor Unshielded, Stranded



Three-Conductor Unshielded, Stranded

### 3M TS-5/8 kV Series Selection (Stranded Conductor) Unshielded

Size AWG kcmil	1C Splice Kit	UPC (051141-)	3C Splice Kit	UPC (051141-)
8-4	TS-5kVU-1C-8-4	045276	TS-5kVU-3C-8-4	045818
3-300	TS-5kVU-1C-3-300	045269	TS-5kVU-3C-3-300	045795
350-1000	TS-5kVU-1C-350-1000	045283	TS-5kVU-3C-350-1000*	045801

\*Cu only for 1000 Mem.

These products are only available in Canada.

# 1/C, 3/C, 5/8 kV, Shielded Armored or Non-Armored Armorcast/Cold Shrink Splices

## 3M™ Armored/Aarmorcast/Non-Armored Cable Splices TS Series

The 3M™ Three-Conductor Inline Splicing Kits TS-Series are designed for splicing shielded armored and non-armored cables, 5 kV and 8 kV. Connectors are not included, order separately. See page 131 in the “Lugs & Connectors” section for ordering information. **Meets requirements of IEEE 404.** Each kit makes one splice.



One-Conductor, Shielded, Stranded



Three-Conductor, Shielded, Stranded

### 3M TS-5/8 kV Series Selection (Stranded Conductor) Shielded

Size AWG kcmil	1C Splice Kit	UPC (051141-)	3C Splice Kit	UPC (051141-)
6-2	TS-5kV-1C-6-3/0	045320	Call	
2-310	TS-5kV-1C-6-3/0	045320	TS-5kV-3C-2-3/0	
4/0-400	TS-5kV-1C-4/0-400	045375	TS-5kV-3C-4/0-500	
500	TS-5kV-1C-500-1000	045382	TS-5kV-3C-4/0-500*	
750	TS-5kV-1C-500-1000	045382	TS-5kV-3C-600-750†	
2000	TS-5kV-1C-500-1000	045382	Call	

\*Cu only.

† Resin Rejacketing.

These products are only available in Canada.

# 1/C & 3C , 15/25/28 kV Shielded Armored & Non-Armored Armorcast/Cold Shrink Splices

Designed for splicing shielded (Tape or Wire Shielded and Unishield™) armored or non-armored cables 15/25/28 kV. The completed splices are designed for use in cable tray, as well as weather-exposed and direct burial locations. The TS Series splices use Armorcast™ and Cold Shrink technology. Connectors not included, order separately. See page 131 for ordering connectors. Each kit makes one splice. **Splices meet requirements of IEEE 404.**



**One-Conductor, Shielded, Stranded**



**Three-Conductor, Shielded, Stranded**

## 3M TS-15 kV Series Selection (Stranded Conductor) Shielded

Size AWG kcmil	1C Splice Kit	UPC (051141-)	3C Splice Kit	UPC (051141-)
2-4/0	TS-15kV-1C-2-4/0		TS-15kV-3C-2-4/0	045771
4/0-500	TS-15kV-1C-4/0-500	045443	TS-15kV-3C-4/0-500	045481
500-750	TS-15kV-1C-500-1000	045337	TS-15kV-3C-350-750	045467
1000	TS-15kV-1C-500-1000	045337	Call	

## 3M TS-25/28 kV Series Selection (Stranded Conductor) Shielded

Size AWG kcmil	1C Splice Kit	UPC (051141-)	3C Splice Kit	UPC (051141-)
1-250	TS-25kV-1C-1-250		TS-25kV-3C-1-250	046044
250-750	TS-25kV-1C-250-750	046235	TS-25kV-3C-250-750	045450
500-1000	TS-25kV-1C-500-1000		TS-25kV-3C-500-1000	045498

# 1/C, 15/25/28 kV, JCN/CN, Tape Shield, Wire Shield, LC Shield Cold Shrink Repair Splices

## 3M™ QS-III/Cable Repair Splices

The 3M™ Quick Splice III repair splice is a 15/25/28 kV class inline splice designed to serve as a cable repair for distribution/feeder class power cables. It is designed to replace up to 10 inches (254 mm) of damaged cable, thus eliminating the need to splice in a new section of cable with two separate splices.

The 3M Cold Shrink splice body is a one-piece molded design made of specially formulated silicone rubber, while the cold shrink jacketing is made from EPDM rubber for physical protection. Each splice manufactured is factory tested to ensure reliability.

The splice can be used with 3M copper (Cu) or aluminum (Al/Cu) inline compression (crimp type) connectors, and can be used for size transitions within the listed kit size range. They are designed to exceed minimum industry test standards, and have a BIL rating of 200 kV (equal to a 35 kV voltage class). 5457AR and 5457ARS QS-III splices meet or exceed the 25 kV/28 kV Voltage Class rating requirements of ANSI/IEEE Std. 404-1993.



124

## 3M QS-III/Cable Repair Splices

Kit Number	Cable Type	Cable Installation O.D. Range	Conductor Size Range	
			15 kV	25/28 kV
5457ARSS-WG 5457ARSS	Concentric Jacketed Concentric	0.84"-0.99"	2/0-4/0	1-2/0
5457ARS-WG 5457ARS	Concentric Jacketed Concentric	0.972"-1.48" (25 mm-38 mm)	250-500	3/0-350
5457AR-WG 5457AR	Concentric Jacketed Concentric	1.05"-1.68" (26.7 mm-42.7 mm)	500-1000	350-750
5525ARS	Tape Shield Wire Shield LC Shield	0.972"-1.48" (25 mm-38 mm)	250-500	3/0-350
5525AR	Tape Shield Wire Shield LC Shield	1.05"-1.68"	500-1000	350-750

**Note:** 3M Repair Connectors are required with these splice kits. 3M Repair Connectors are 15" in length. They are designed for standard, compact, and compressed conductors. Connectors can be designed specially for any application. Special order connectors require 6-8 week lead times. Transition connectors are also available. Please consult your local 3M sales representative.  
The QS-III splices are only available in Canada.

## 3M™ Phase Rejacketing Kits

### RJK Kits for converting 3/c cable to three 1/c cables

Indoor/Outdoor Kits	Indoor Kits	Cable Metallic Shield Diameter Range	5 kV	8 kV	15 kV	25/28 kV
RJK-1	RJS-2/3	0.60-0.80	1-3/0	2-2/0	2-1/0	
RJK-2	RJS-3/3	0.80-1.02	4/0-400	3/0-350	1/0-4/0	2-1/0
RJK-3	RJS-4/3	1.02-1.28	500-750	400-600	250-450	2/0-250
RJK-4	RJS-5/3	1.28-1.62	800-1000	750-1000	500-750	300-500

#### Kit Contents

##### Indoor/Outdoor Kits

- 3M Cold Shrink break out boot, Cold Slip rejacketing sleeves (3 four foot lengths), provision to externally ground at breakout boot.

##### Indoor Kits

- 3M Cold Slip rejacketing sleeves (3 four foot lengths).

#### Cold Shrink

3M Cold Shrink splicing products are designed using 3M's unique cold shrink delivery system. Products are supplied pre-stretched on a removable core for efficiency and ease of installation.

#### Cold Slip

3M Cold Slip re-jacketing sleeves incorporate an inner-expandable polyester braid designed to reduce sliding friction and deliver the sleeve quickly onto the cable.






# 600 V and 1 kV, Non-Shielded Splices

3M™ Splices for 1C, 3C & 4C, Armored or Non-Armored CableTS Series

3M Low Voltage Tape Splicing Kits are applicable for indoor and outdoor installations, including direct burial, aerial and submersible applications. The TS series accommodates a full range of cable sizes.

## 1 kV Ordering Information

Size AWG kcmil	1C Splice Kit	3C Splice Kit	4C Splice Kit
			
14	TS	TS	TS
12	TS	TS	TS
10	TS	TS	TS
8	TS	TS	TS
6	TS	TS	TS
4	TS	TS	TS
3	TS	TS	TS
2	TS	TS	TS
1	TS	TS	TS
1/0	TS	TS	TS
2/0	TS	TS	TS
3/0	TS	TS	TS
4/0	TS	TS	TS
250	TS	TS1	TS1
300	TS	TS1	TS1
350	TS	TS1	TS1
400	TS	TS1	TS1
500	TS	TS1	TS1
600	TS	TS1	TS1
750	TS	TS1	TS1
1000	TS	TS1	TS1

# 3/C, 5 kV, Non-Shielded Armored or Non-Armored Resin/Cold Shrink Splices

## 3M™ Three-Conductor Inline Splicing Kits 5750 Series

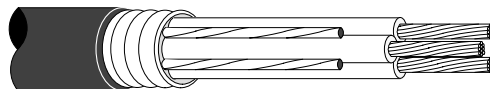


125

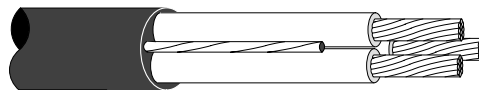
3M Three-Conductor Inline Splicing Kits 5750 Series are designed for nonshielded armored and non-armored solid dielectric cables rated up to 5 kV.

Connectors are not included, order separately. See page 131 in the "Lugs & Connectors" section for ordering information. **Meets**

requirements of IEEE 404. Each kit makes one 3/C splice.



**Three-Conductor Armored, Nonshielded Cable**



**Three-Conductor Non-Armored, Nonshielded Cable**

## 3M Splices 5750 Series Selection

Product Series	UPC (054007-)	Conductor Size (Copper or Aluminum)		Typical Splice Length	Case Qty.
		1 kV or Less	5 kV		
Three Conductor Armored, Nonshielded Cable, Three Conductor Non-Armored, Nonshielded Cable See above for cable type illustrations.					
5751	08310	6 - 1 AWG (14 - 38 mm <sup>2</sup> )	6 - 4 AWG (14 - 16 mm <sup>2</sup> )	19" (483 mm)	1
5752	08311	1/0 - 4/0 AWG (60 - 100 mm <sup>2</sup> )	2 - 4/0 AWG (35 - 100 mm <sup>2</sup> )	28" (711 mm)	1
5753	08312	250 - 750 AWG (150 - 325 mm <sup>2</sup> )	250 - 500 kcmil aluminum (150 - 250 mm <sup>2</sup> ) 250 - 750 kcmil copper only (150 - 325 mm <sup>2</sup> )	42" (1067 mm)	1

# 3/C, 5/8 kV, Shielded Armored or Non-Armored Resin/Cold Shrink Splices

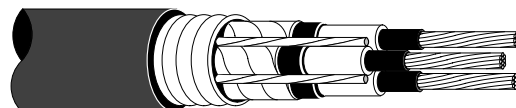
## 3M™ Armored/Non-Armored Cable Splices 5760 Series



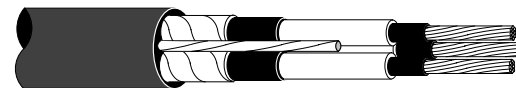
3M Three-Conductor Inline Splicing Kits 5760 Series are designed for splicing shielded armored and non-armored cables, 5 kV and 8 kV.

Connectors are not included, order separately. See page 131 in the “Lugs & Connectors” section for ordering information. **Meets**

126 requirements of IEEE 404. Each kit makes one 3/C splice.



Three-Conductor Armored, Shielded Cable



Three-Conductor Non-Armored, Shielded Cable

### 3M Splices 5760 Series Selection

Product Series	UPC (054007-)	Insulation O.D. Range	Conductor Size (Copper or Aluminum)	Maximum Connector O.D.	Maximum Connector Length	Typical Splice Length	Case Qty.
Three Conductor Armored, Shielded Cable, Three Conductor Non-Armored, Shielded Cable See above for cable type illustrations.							
5761	12260	0.65 - 1.00" (17 - 25 mm)	2/0 AWG - 350 kcmil (120 - 250 mm <sup>2</sup> )	0.90" (23 mm)	2.75" (70 mm)	29" (737 mm)	1
5762	12262	0.93 - 1.94" (24 - 49 mm)	500 - 1000 kcmil (300 - 500 mm <sup>2</sup> )	1.40" (36 mm)	5.00" (127 mm)	44" (1118 mm)	1

# 15 kV Splices

## 1/C JCN/CN Molded Rubber Splices

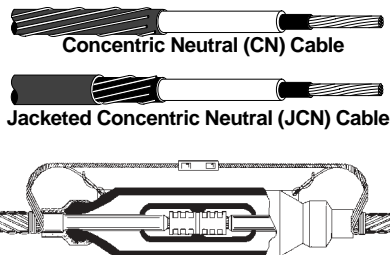
3M™ Molded Rubber QS and QS-II kits are inline splices made from specially formulated, peroxide-cured, EPDM rubbers to ensure a stable seal and a splice that will last the life of the cable. The continuous current rating of each splice is equal to the current rating of the cable it is sized to. Each molded rubber splice is tested at the factory on power cable to ensure long-term reliability. **Each molded rubber splice meets requirements of IEEE 404.**

### 3M™ Inline QS Splice Kits 5400 Series

3M QS kits 5400 series are inline splices designed for use on 15 kV CN or JCN cable.

To use the splice kit, select the appropriate size CI series compression connector. The connectors can be used on both stranded and solid, aluminum or copper conductors sized from 2/0 to 750 kcmil (70 to 300 mm<sup>2</sup>).

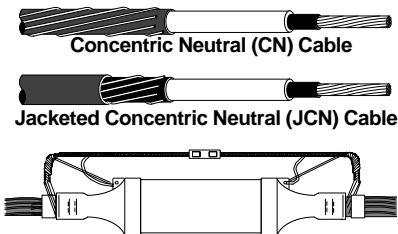
Meets requirements of IEEE Standard 404. See page 273-274 for 3M CI Connectors. **Each kit makes one splice.**



### 3M QS-II Splice Kits 5411 and 5412

3M QS-II kits 5411 and 5412 are one-piece inline splices designed for use on 15 kV rated CN and JCN cable. Meets requirements of IEEE Standard 404. (You may order some connectors with splice body in a kit.)

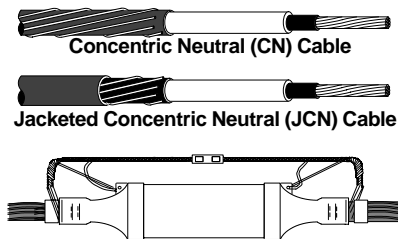
**Each kit makes one splice.**



### 3M QS-II Splice Kit 5411A

3M 5411A QS-II Splice Kit is a one-piece inline splice sized for #1 and 1/0 (220 mil) and 2/0 (175 mil) 15 kV rated, CN and JCN cables. The kit includes a cone-shaped device called “Porta-Pencil” that is used when sliding the splice body onto the cable. This Porta-Pencil feature plus an ID increase makes the 5411A install easily on the thicker 220-mil cables.

Meets requirements of IEEE Standard 404. See page 274 for 3M connectors. **Each kit makes one splice.**



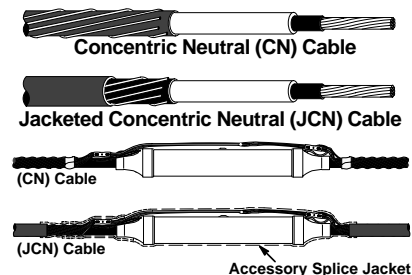
127

### 3M QS-II Cable Repair Splice Kit 5411R

3M QS-II cable repair kit 5411R is a specially elongated molded rubber splice designed to repair damaged cable.

It can be used on 15 kV copper or aluminum, CN or JCN cables. The splice is an elongated version of the QS-II. It is designed to replace up to 6" (152 mm) of damaged cable, thus eliminating the need to splice in a new section of cable with two separate splices.

Meets requirements of IEEE Standard 404. The 5411R can be ordered with the special connector packed in the kit or the kit and connector can be ordered as separate items. See page 272 for 3M connectors. **Each kit makes one splice repair.**

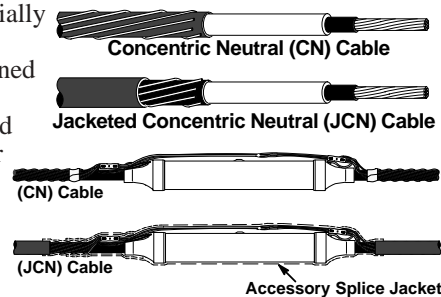


### 3M QS-II Cable Repair Splice Kit 5412R

3M QS-II cable repair kit 5412R is a specially elongated molded rubber splice designed to repair damaged cable. It can be used on 15 kV copper or aluminum, CN or JCN cables.

The splice is an elongated version of the QS-II. It is designed to replace up to 6" (152 mm) of damaged cable, thus eliminating the need to splice in a new section of cable with two separate splices. The 5412R is designed for use with a special inline compression connector, for connecting either aluminum or copper conductors.

Meets rating requirements of IEEE Standard 404. **Each kit makes one splice repair.**



# 1/C, 15 kV, JCN/CN Molded Rubber Splices

3M™ Rubber Splices 5400 Series, 5411, 5411A and 5412 Selection

Product Series	UPC (054007-)	Splice Jacket† Needed for JCN Cables	Conductor Size		Insulation O.D. Range	Primary Specified Connector	Case Qty.
			Cu or Al Stranded	Solid			
Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable See page 270 for cable type illustrations.							
5403	11818	SJ-2A or HSJ-2A	2/0 - 4/0 AWG (70 - 100 mm²)	—	0.795 - 0.940" (20 - 24 mm)	CI Series	1
5404	11826	SJ-2A or HSJ-2A	2/0 - 4/0 AWG (70 - 100 mm²)	—	0.920 - 1.080" (23 - 27 mm)	CI Series	1
5405	11834	SJ-2A or HSJ-2A	250 - 350 kcmil (125 - 180 mm²)	—	0.920 - 1.080" (23 - 27 mm)	CI Series	1
5406	11842	SJ-2A or HSJ-2A	250 kcmil (220 mil) 350 kcmil	—	1.060 - 1.210" (27 - 31 mm)	CI Series	1
5406-CI-350	41907	SJ-2A or HSJ-2A	350 kcmil	—	1.060 - 1.210" (27 - 31 mm)	CI-350	1
5407	25602	SJ-3A or HSJ-3A	500 kcmil	—	1.120 - 1.320" (28 - 34 mm)	CI Series	1
5408	25610	SJ-3A or HSJ-3A	750 kcmil	—	1.320 - 1.520" (34 - 39 mm)	CI Series	1
5408-CI-750	02314	SJ-3A or HSJ-3A	750 kcmil	—	1.320 - 1.520" (34 - 39 mm)	CI-750	1
5409	11859	SJ-3A or HSJ-3A	750 kcmil	—	1.490 - 1.660" (38 - 40 mm)	CI Series	1
5409-CI-750	30209	SJ-3A or HSJ-3A	750 kcmil	—	1.490 - 1.660" (38 - 40 mm)	CI-750	1
5411	11852	SJ-1A or HSJ-1A	4 - 2/0 AWG 2/0 (175 mil)	2 - 1/0 AWG	0.637 - 0.90" (16 - 23 mm)	CI Series, CI-T Series, or 20006	1
5411-CI-1/0*	11855	SJ-1A or HSJ-1A	1/0 AWG	—	0.637 - 0.90" (16 - 23 mm)	CI-1/0	1
5411-CI-2*	08005	SJ-1A or HSJ-1A	2 AWG	1 AWG	0.637 - 0.90" (16 - 23 mm)	CI-2	1
5411-CI-21*	11853	SJ-1A or HSJ-1A	2,1 AWG	1,1/0 AWG	0.637 - 0.90" (16 - 23 mm)	CI-21	1
5411-CI-22*	11854	SJ-1A or HSJ-1A	4 AWG (220 mil)	2 AWG	0.637 - 0.90" (16 - 23 mm)	CI-22	1
5411-20006*	11861	SJ-1A or HSJ-1A	2/0 AWG (175 mil)	—	0.637 - 0.90" (16 - 23 mm)	20006	1
5411A	09937	SJ-1A or HSJ-1A	1 AWG (220 mil) 1/0 AWG (220 mil) 2/0 AWG (175 mil)	1/0 AWG (220 mil)	0.775 - 0.90" (19,7 - 23 mm)	CI Series or 20006	1
5411A-CI-1*	09938	SJ-1A or HSJ-1A	1 AWG (220 mil)	1/0 AWG (220 mil)	0.775 - 0.90" (19,7 - 23 mm)	CI-1	1
5411A-CI-1/0*	09939	SJ-1A or HSJ-1A	1/0 AWG (220 mil)	—	0.775 - 0.90" (19,7 - 23 mm)	CI-1/0	1
5411A-20006*	09940	SJ-1A or HSJ-1A	2/0 AWG (175 mil)	—	0.775 - 0.90" (19,7 - 23 mm)	20006	1
5412	11862	SJ-1A or HSJ-1A	2/0 AWG (220 mil) 3/0 - 4/0 AWG 250 kcmil (175 mil)	—	0.840 - 1.05" (21 - 27 mm)	CI Series	1
5412-CI-2/0*	11865	SJ-1A or HSJ-1A	2/0 AWG (220 mil)	—	0.840 - 1.05" (21 - 27 mm)	CI-2/0	1
5412-CI-3/0*	11863	SJ-1A or HSJ-1A	3/0 AWG	—	0.840 - 1.05" (21 - 27 mm)	CI-3/0	1
5412-CI-4/0*	11864	SJ-1A or HSJ-1A	4/0 AWG	—	0.840 - 1.05" (21 - 27 mm)	CI-4/0	1

† To order splice jackets see page 301.

\*Kit includes the connector specified.

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

**Important:** Use the primary insulation O.D. range as the final ordering criteria. The above cable sizes include 175 and 220 mil insulations.

**Note:** The current rating, 200 Amp, of each unit meets or exceeds the conductor range it is sized to accommodate.

# 1/C, 15 kV, JCN/CN Molded Rubber Splices

## 3M™ Cable Repair Splice Selection 5411R and 5412R

Product Series	UPC (054007-)	Splice Jacket† Needed for JCN Cables	Conductor Size		Insulation O.D. Range	Specified Connector	Case Qty.
			Cu or Al Stranded	Solid			
Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable See page 270 for cable type illustrations.							
5411R	09352	SJ-1A or HSJ-1A, 8428-12**	4 AWG (220 mil only) 2 - 1/0 AWG	2 - 1/0 AWG	0.637 - 0.900" (16 - 31 mm)	CIR Series	1
5411R-CIR-1/0*	09355	SJ-1A or HSJ-1A, 8428-12**	1/0 AWG	—	0.637 - 0.900" (16 - 31 mm)	CIR-1/0	1
5411R-CIR-21*	09354	SJ-1A or HSJ-1A, 8428-12**	2 - 1 AWG	1 - 1/0 AWG	0.637 - 0.900" (16 - 31 mm)	CIR-21	1
5411R-CIR-22*	09353	SJ-1A or HSJ-1A 8428-12**	4 AWG (220 mil only)	2 AWG	0.637 - 0.900" (16 - 31 mm)	CIR-22	1
5412R-CIR-3/0*	43501	SJ-2A or HSJ-2A	3/0 AWG	—	0.870 - 1.055" (22 - 27 mm)	CIR-3/0	1
5412R-CIR-4/0*	50101	SJ-2A or HSJ-2A	4/0 AWG	—	0.870 - 1.055" (22 - 27 mm)	CIR-4/0	1

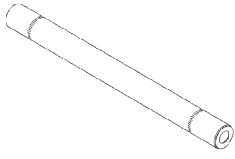
\* Kit includes the connector specified

\*\* 8428-12 is used with the SJ kits only.

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

† To order Splice Jackets see page 301.

### Specifications and Ordering Information on CIR Series Repair Connectors for 3M Rubber Splices 5411R and 5412R Series



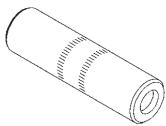
Product Number	UPC (054007-)	Conductor Size Cu or Al		Connector O.D.	Splice Body	Case Qty.
		Stranded	Solid			
CIR-1/0	09358	1/0 AWG	—	0.63" (16 mm)	5411R	10
CIR-21	09357	2 - 1 AWG	1 - 1/0 AWG	0.63" (16 mm)	5411R	10
CIR-22	09356	4 AWG (220 mil only)	2 AWG	0.63" (16 mm)	5411R	10
CIR-2/0	41964	2/0 AWG (220 mil only)	—	0.91" (23 mm)	5412R	10
CIR-3/0	41965	3/0 AWG	—	0.91" (23 mm)	5412R	10
CIR-4/0	50228	4/0 AWG	—	0.91" (23 mm)	5412R	10

### Product Referral Generator

Splice Jacketing

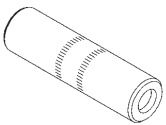
- SJ Series ..... pg. 301
- HSJ Series ..... pg. 301

## Specifications and Ordering Information on 3M™ Connectors CI Series for 3M™ Rubber Splices 5400 and 5500 Series



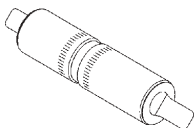
Product Number	UPC (054007-)	Conductor Size Cu or Al	Connector O.D.	Case Qty.
CI-2/0	11875	2/0 AWG	0.91" (23 mm)	10
CI-3/0	11883	3/0 AWG	0.90" (22 mm)	10
CI-4/0	11891	4/0 AWG	0.90" (22 mm)	10
CI-250	11909	250 kcmil	1.11" (28 mm)	10
CI-350	11925	350 kcmil	1.11" (28 mm)	10
CI-450	11933	500 kcmil Compact	1.3" (33 mm)	10
CI-500	25644	500 kcmil	1.3" (33 mm)	10
CI-650	11941	750 kcmil Compact	1.7" (43 mm)	10
CI-750	25651	750 kcmil	1.57" (40 mm)	10

## Specifications and Ordering Information on Connectors for 3M Rubber Splices 5411, 5412 and 5500 Series



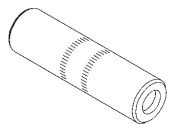
Product Number	UPC (054007-)	Conductor Size Cu or Al		Connector O.D.	Case Qty.
		Stranded	Solid		
20006	13285	2/0 AWG	—	0.687" (17 mm)	10
20009	13319	250 kcmil	—	0.906" (23 mm)	3
CI-1/0	11867	1/0 AWG	—	0.63" (16 mm)	10
CI-2	11651	2 AWG	1 AWG	0.63" (16 mm)	10
CI-2/0	11875	2/0 AWG	—	0.91" (23 mm)	10
CI-21	11856	2, 1 AWG	1, 1/0 AWG	0.63" (16 mm)	10
CI-22	25636	4 AWG	2 AWG	0.63" (16 mm)	10
CI-3/0	11883	3/0 AWG	—	0.90" (22 mm)	10
CI-4/0	11891	4/0 AWG	—	0.90" (22 mm)	10

## Specifications and Ordering Information on CI-T Series Transition Connectors for 3M Rubber Splices 5411 and 5500 Series



Product Number	UPC (054007-)	Conductor Size Cu or Al (AWG)				Connector O.D.	Case Qty.
		From Cable A Str.	Solid	to Cable B Str.	Solid		
CI-T-1	11958	4	2	1	1/0	0.63" (16 mm)	10
CI-T-2	11966	2	1	1	1/0	0.63" (16 mm)	10
CI-T-3	11974	4	2	1/0	—	0.63" (16 mm)	10
CI-T-4	11982	2	1	1/0	—	0.63" (16 mm)	10
CI-T-5	11990	2	1	4	2	0.63" (16 mm)	10
CI-T-9	44533	1	1/0	1/0	—	0.63" (16 mm)	10

Specifications and Ordering Information on Connectors for 3M™ Rubber Splices 5411A Series



Number	Product (054007-)	UPC	Conductor Size Cu or Al	Connector	Case Qty.
		Stranded	Solid	O.D.	
CI-1/0	11867	1/0 AWG	—	0.63" (16 mm)	10
CI-1	25628	2, 1 AWG	1, 1/0 AWG	0.63" (16 mm)	10
20006	13285	2/0 AWG	—	0.687" (17 mm)	10

# 1/C, 15 kV, JCN/CN Cold Shrink Splices

3M™ QS-III Cold Shrink Inline Cable Splices  
5415A, 5416A, 5417A and 5418A



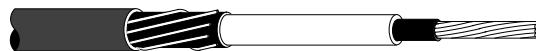
128

The QS-III Cold Shrink cable splices 5415A, 5416A, 5417A and 5418A are inline splices for joining Jacketed Concentric Neutral (JCN) or Concentric Neutral (CN) cables. It is a

cold shrink design sized to fit UL Type MV-90 cables which are commonly used for feeder circuits, with copper or aluminum conductor sizes ranging from 350 to 1500 kcmil. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of EPDM rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability. Kits can be ordered with connectors packed in the kit or the kit and connector can be ordered as separate items. See page 131 to order 3M connectors. **Each kit makes one splice.** Additional transition connectors are available from cable accessory suppliers. **Meets requirements of IEEE 404.**



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable

✓ **Features — Benefits**

### 3M Cold Shrink QS-III Splices

Silicone body provides excellent electrical performance and superior low temperature handling	No heat, flames or special installation tools required. Fast recovery in cold temperatures
One piece splice body design	Minimal training required
Wide cable range	Allow transitioning of different size cables
Field proven technology	Easy, straightforward installation
Splice bodies are 100% factory tested	Field reliability



## Product Referral Generator

Connecting ..... pg.133



## 3M™ QS-III Cold Shrink Splices Series 5415A, 5416A, 5417A and 5418A Selection

Product Series	UPC (054007-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable See page 274 for cable type illustrations.					
<b>15kV CN and JCN cables</b>					
5415A	53470	0.64 - 1.01" (16,3 - 25,7 mm)	2 - 4/0 AWG (35 - 95 mm <sup>2</sup> )	None	1
5415A-2-AL	53471	0.64 - 1.01" (16,3 - 25,7 mm)	2 AWG	20003	1
5415A-2-CU	53472	0.64 - 1.01" (16,3 - 25,7 mm)	2 AWG	10003	1
5415A-1-AL	53473	0.64 - 1.01" (16,3 - 25,7 mm)	1 AWG	20004	1
5415A-1-CU	53474	0.64 - 1.01" (16,3 - 25,7 mm)	1 AWG	10004	1
5415A-1/0-AL	53475	0.64 - 1.01" (16,3 - 25,7 mm)	1/0 AWG	20005	1
5415A-1/0-CU	53476	0.64 - 1.01" (16,3 - 25,7 mm)	1/0 AWG	10005	1
5415A-2/0-AL	53477	0.64 - 1.01" (16,3 - 25,7 mm)	2/0 AWG	20006	1
5415A-2/0-CU	53478	0.64 - 1.01" (16,3 - 25,7 mm)	2/0 AWG	10006	1
5415A-3/0-AL	53747	0.64 - 1.01" (16,3 - 25,7 mm)	3/0 AWG	20007	1
5415A-3/0-CU	53748	0.64 - 1.01" (16,3 - 25,7 mm)	3/0 AWG	10007	1
5415A-4/0-AL	53749	0.64 - 1.01" (16,3 - 25,7 mm)	4/0 AWG	20008	1
5415A-4/0-CU	53750	0.64 - 1.01" (16,3 - 25,7 mm)	4/0 AWG	10008	1
5416A	44092*	0.84 - 1.38" (21,3 - 35,1 mm)	4/0 AWG - 350 kcmil (95 - 185 mm <sup>2</sup> )	None	1
5416A-4/0-AL	44093*	0.84 - 1.38" (21,3 - 35,1 mm)	4/0 AWG	20008	1
5416A-4/0-CU	44094*	0.84 - 1.38" (21,3 - 35,1 mm)	4/0 AWG	10008	1
5416A-250-AL	44096*	0.84 - 1.38" (21,3 - 35,1 mm)	250 kcmil	20009	1
5416A-250-CU	44097*	0.84 - 1.38" (21,3 - 35,1 mm)	250 kcmil	10009	1
5416A-350-AL	44098*	0.84 - 1.38" (21,3 - 35,1 mm)	350 kcmil	20011	1
5416A-350-CU	44099*	0.84 - 1.38" (21,3 - 35,1 mm)	350 kcmil	10011	1
5417A	42124*	1.04 - 1.70" (26,4 - 43,2 mm)	350 - 750 kcmil (185 - 325 mm <sup>2</sup> )	None	1
5417A-350-AL	42125*	1.04 - 1.70" (26,4 - 43,2 mm)	350 kcmil	20011	1
5417A-350-CU	44234*	1.04 - 1.70" (26,4 - 43,2 mm)	350 kcmil	10011	1
5417A-500-AL	42126*	1.04 - 1.70" (26,4 - 43,2 mm)	500 kcmil	20014	1
5417A-500-CU	44235*	1.04 - 1.70" (26,4 - 43,2 mm)	500 kcmil	10014	1
5417A-750-AL	04587*	1.04 - 1.70" (26,4 - 43,2 mm)	750 kcmil	20019	1
5417A-750-CU	04588*	1.04 - 1.70" (26,4 - 43,2 mm)	750 kcmil	10019	1
5417A-WG	44090*	1.04 - 1.70" (26,4 - 43,2 mm)	350 - 750 kcmil (185 - 325 mm <sup>2</sup> )	None	1
5418A	42128*	1.08 - 1.70" (27,4 - 43,2 mm)	500 - 1000 kcmil (240 - 500 mm <sup>2</sup> )	None	1
5418A-500-AL	44403*	1.08 - 1.70" (27,4 - 43,2 mm)	500 kcmil	20014	1
5418A-500-CU	44404*	1.08 - 1.70" (27,4 - 43,2 mm)	500 kcmil	10014	1
5418A-750-AL	42129*	1.08 - 1.70" (27,4 - 43,2 mm)	750 kcmil	20019	1
5418A-750-CU	44236*	1.08 - 1.70" (27,4 - 43,2 mm)	750 kcmil	10019	1
5418A-1000-AL	42130*	1.08 - 1.70" (27,4 - 43,2 mm)	1000 kcmil	20024	1
5418A-1000-CU	44237*	1.08 - 1.70" (27,4 - 43,2 mm)	1000 kcmil	10024	1
5418A-WG	44091*	1.08 - 1.70" (27,4 - 43,2 mm)	500 - 1000 kcmil (240 - 500 mm <sup>2</sup> )	None	1

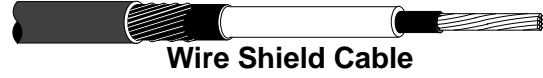
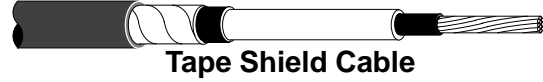
\*UPC prefix 051128

# 1/C, 15 kV, Shielded-Tape, Wire, UniShield® Molded Rubber Splices

## 3M™ Molded Rubber Cable Splices 5500 Series

The 3M QS-II kits 5500 series are inline splices designed for use on 15 kV copper or aluminum Tape Shielded, Wire Shielded and UniShield® cable from 2 AWG to 750 kcmil. The continuous current rating of each splice is equal to the current rating of the cable it is sized to accommodate. Meets requirements of IEEE Standard 404. **Each kit makes one splice.**

A special 3M connector is necessary to complete the splice. Order the connector separately or as part of the kit. **See pages 283-284 for reference to CI connectors.**



## 3M QS-II Rubber Splices 5500 Series Selection

Product Series	UPC (054007-)	Conductor Size Cu or Al		Primary Insulation O.D. Range	Specified Connector	Case Qty.
		Stranded	Solid			
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable See above for cable type illustrations.						
5501	12293	4 - 1/0 AWG 2/0 (175 mil)	2 - 1/0 AWG	0.637 - 0.900" (16 - 23 mm)	CI-Series	1
5501-CI-21*	09628	2 - 1 AWG	1 - 1/0 AWG	0.637 - 0.900" (16 - 23 mm)	CI-21	1
5501-CI-1/0*	09629	1/0 AWG	—	0.637 - 0.900" (16 - 23 mm)	CI-1/0	1
5501-20006*	09630	2/0 AWG (175 mil)	—	0.637 - 0.900" (16-23 mm)	20006	1
5502	12294	2/0 AWG (220 mil) 3/0 - 4/0 AWG 250 kcmil (175 mil)	4/0 AWG	0.840 - 1.050" (21 - 27 mm)	CI Series or 20009	1
5502-CI-2/0*	09631	2/0 AWG (220 mil)	—	0.840 - 1.050" (21 - 27 mm)	CI-2/0	1
5502-CI-3/0*	09632	3/0 AWG	4/0 AWG	0.840 - 1.050" (21 - 27 mm)	CI-3/0	1
5502-CI-4/0*	09633	4/0 AWG	—	0.840 - 1.050" (21 - 27 mm)	CI-4/0	1
5502-20009*	09634	250 kcmil (175 mil)	—	0.840 - 1.050" (21 - 27 mm)	20009	1
5503	12295	250 kcmil (220 mil) 350 kcmil	—	1.060 - 1.210" (27 - 31 mm)	CI Series	1
5503-CI-250*	09635	250 kcmil (220 mil)	—	1.060 - 1.210" (27 - 31 mm)	CI-250	1
5503-CI-350*	09636	350 kcmil	—	1.060 - 1.210" (27 - 31 mm)	CI-350	1
5504	12296	500 kcmil	—	1.120 - 1.320" (28 - 34 mm)	CI Series	1
5504-CI-500*	09637	500 kcmil	—	1.120 - 1.320" (28 - 34 mm)	CI-500	1
5505	12297	750 kcmil	—	1.320 - 1.520" (34 - 39 mm)	CI Series	1
5505-CI-750*	09638	750 kcmil	—	1.320 - 1.520" (34 - 39 mm)	CI-750	1

\*Kit includes the connector specified

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

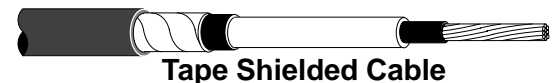
# 1/C, 15 kV, Shielded-Tape, Wire, UniShield®, LC Cold Shrink Splices

3M™ QS-III Cold Shrink Cable Splices  
5513A, 5514A, 5515A and 5516A



The QS-III Cold Shrink series splicing kits 5513A, 5514A, 5515A and 5516A are inline splices for joining 15 kV Tape, Wire, LC and UniShield® power

cables. It is a cold shrink design. Kits can be ordered with connectors packed in the kit or the kit and connector can be ordered as separate items. See page 131 to order 3M connectors. **Each kit makes one splice.** Additional transition connectors are available from cable accessory suppliers. **Meets requirements of IEEE 404.**



Tape Shielded Cable



Wire Shielded Cable



UniShield® Cable



Longitudinally Corrugated (LC) Shielded Cable

## 3M QS-III Cold Shrink Splices 5513A, 5514A, 5515A and 5516A Series Selection

Product Series	UPC (054007-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable, Longitudinally Corrugated (LC) Shielded Cable See above for cable type illustrations.					
<b>15kV LC, Wire, Tape and UniShield® cables</b>					
5513A	53480	0.64 - 1.01" (16,3 - 25,7 mm)	2 - 4/0 AWG (35 - 95 mm <sup>2</sup> )	None	1
5513A-2-AL	53481	0.64 - 1.01" (16,3 - 25,7 mm)	2 AWG	20003	1
5513A-2-CU	53482	0.64 - 1.01" (16,3 - 25,7 mm)	2 AWG	10003	1
5513A-1-AL	53483	0.64 - 1.01" (16,3 - 25,7 mm)	1 AWG	20004	1
5513A-1-CU	53484	0.64 - 1.01" (16,3 - 25,7 mm)	1 AWG	10004	1
5513A-1/0-AL	53485	0.64 - 1.01" (16,3 - 25,7 mm)	1/0 AWG	20005	1
5513A-1/0-CU	53486	0.64 - 1.01" (16,3 - 25,7 mm)	1/0 AWG	10005	1
5513A-2/0-AL	53487	0.64 - 1.01" (16,3 - 25,7 mm)	2/0 AWG	20006	1
5513A-2/0-CU	53488	0.64 - 1.01" (16,3 - 25,7 mm)	2/0 AWG	10006	1
5513A-3/0-AL	53489	0.64 - 1.01" (16,3 - 25,7 mm)	3/0 AWG	20007	1
5513A-3/0-CU	53490	0.64 - 1.01" (16,3 - 25,7 mm)	3/0 AWG	10007	1
5513A-4/0-AL	53491	0.64 - 1.01" (16,3 - 25,7 mm)	4/0 AWG	20008	1
5513A-4/0-CU	53492	0.64 - 1.01" (16,3 - 25,7 mm)	4/0 AWG	10008	1
5514A	44101*	0.84 - 1.38" (21,3 - 35,1 mm)	4/0 AWG - 500 kcmil (95 - 240 mm <sup>2</sup> )	None	1
5514A-4/0-AL	44102*	0.84 - 1.38" (21,3 - 35,1 mm)	4/0 AWG	20008	1
5514A-4/0-CU	44103*	0.84 - 1.38" (21,3 - 35,1 mm)	4/0 AWG	10008	1
5514A-250-AL	44104*	0.84 - 1.38" (21,3 - 35,1 mm)	250 kcmil	20009	1
5514A-250-CU	44105*	0.84 - 1.38" (21,3 - 35,1 mm)	250 kcmil	10009	1
5514A-350-AL	44106*	0.84 - 1.38" (21,3 - 35,1 mm)	350 kcmil	20011	1
5514A-350-CU	44107*	0.84 - 1.38" (21,3 - 35,1 mm)	350 kcmil	10011	1
5514A-500-AL	44407*	0.84 - 1.38" (21,3 - 35,1 mm)	500 kcmil	20014	1
5514A-500-CU	44408*	0.84 - 1.38" (21,3 - 35,1 mm)	500 kcmil	10014	1
5515A	42134*	1.04 - 1.70" (26,4 - 43,2 mm)	350 - 750 kcmil (185 - 325 mm <sup>2</sup> )	None	1
5515A-350-AL	42135*	1.04 - 1.70" (26,4 - 43,2 mm)	350 kcmil	20011	1
5515A-350-CU	42898*	1.04 - 1.70" (26,4 - 43,2 mm)	350 kcmil	10011	1
5515A-500-AL	42899*	1.04 - 1.70" (26,4 - 43,2 mm)	500 kcmil	20014	1
5515A-500-CU	42136*	1.04 - 1.70" (26,4 - 43,2 mm)	500 kcmil	10014	1
5515A-750-AL	42900*	1.04 - 1.70" (26,4 - 43,2 mm)	750 kcmil	20019	1
5515A-750-CU	42137*	1.04 - 1.70" (26,4 - 43,2 mm)	750 kcmil	10019	1

\*UPC begins with 051128

Continued on next page

### 3M QS-III Cold Shrink Splices 5513, 5514, 5515 and 5516 Series Selection (continued)

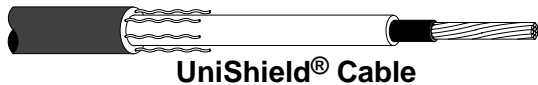
Product Series	UPC (054007-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable, Longitudinally Corrugated (LC) Shielded Cable See page 277 for cable type illustrations.					
<b>15kV LC, Wire, Tape and UniShield® cables (continued)</b>					
5516A	42139 +	1.08 - 1.70" (27,4 - 43,2 mm)	500 - 1000 kcmil (240 - 500 mm <sup>2</sup> )	None	1
5516A-500-AL	44405 +	1.08 - 1.70" (27,4 - 43,2 mm)	500 kcmil	20014	1
5516A-500-CU	44406 +	1.08 - 1.70" (27,4 - 43,2 mm)	500 kcmil	10014	1
5516A-750-AL	43254 +	1.08 - 1.70" (27,4 - 43,2 mm)	750 kcmil	20019	1
5516A-750-CU	43255 +	1.08 - 1.70" (27,4 - 43,2 mm)	750 kcmil	10019	1
5516A-1000-AL	42901 +	1.08 - 1.70" (27,4 - 43,2 mm)	1000 kcmil	20024	1
5516A-1000-CU	42106 +	1.08 - 1.70" (27,4 - 43,2 mm)	1000 kcmil	10024	1

+UPC begins with 51128

## 1/C, 5 - 15 kV, Shielded-Tape, Wire, UniShield® Tape Splices

### Scotch® Tape Splice Kits 5700 Series

Scotch® brand tape kits handle inline and tee splices on Tape Shielded, Wire Shielded or UniShield® cables with Cu or Al conductors. Kits are rated 5 through 15 kV, and each kit makes three splices. Use the selector chart to determine the proper kit needed. See "Lugs & Connectors" section, page 131, for ordering information. 3M does not offer tee connectors.



130

### Scotch® Tape Splice Kits 5700 Series Selection

Product Number	UPC (054007-)	Inline Splices						Tee Splices*						Case Qty.
		5 and 8 kV		15 kV 100% 175mil		15 kV 133% 220 mil		5 and 8 kV		15 kV 100% 175 mil		15 kV 133% 220 mil		
		Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	Cu	Al	
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable See above for cable type illustrations.														
5717	12030	4-250 (22-125)	4-4/0 (2-100)	4-2 (22-30)	—	4	—	—	—	—	—	—	—	1
5718	12048	300-500 (180-250)	250 (150)	1-4/0 (50-100)	4-2/0 (22-60)	2-1/0 (35-60)	—	4-2/0 (22-60)	4-1/0 (22-50)	—	—	—	—	1
5719	12055	550-1000 (300-500)	300-500 (180-250)	250-500 (180-250)	3/0-250 (95-125)	2/0-350 (70-180)	4-3/0 (22-80)	3/0-350 (95-180)	2/0-4/0 (70-100)	4-1 (22-38)	—	—	—	1
5720	12063	—	500-1000 (300-500)	550-1000 (300-500)	300-750 (180-325)	400-750 (240-325)	4/0-500 (120-250)	400-750 (240-325)	250-500 (125-250)	1/0-350 (60-180)	4-4/0 (22-100)	4-250 (22-125)	4-3/0 (22-80)	1

\*3M does not offer tee splice connectors.

**Note:** Larger-numbered kits may be used in place of smaller-numbered kits (with excess materials left over).

# 3/C, 15 kV, Shielded Armored or Non-Armored Cold Shrink Splices

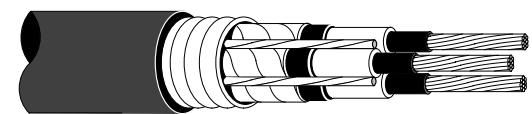
3M™ QSIII Cold Shrink Cable Splices  
5760 and 5777-MT



5760 Series

131

Designed for splicing shielded (Tape or Wire Shielded and UniShield®) armored or non-armored cables, 15 kV. The completed splices are designed for use in cable tray, as well as weather-exposed and direct burial locations. The 5760 Series splices use resin and Cold Shrink technology, while the



Three-Conductor Armored, Shielded Cable



Three-Conductor Non-Armored, Shielded Cable

5700-MT is a cold shrink only splice kit. Connectors not included, order separately. See page 131 for ordering connectors. **Each kit makes one 3/C splice.** Additional transition connectors are available from cable accessory suppliers. **Meets requirements of IEEE 404.**

## 3M Cold Shrink Splices 5760 Selection–15 kv

Product Series	UPC (054007-)	Insulation O.D. Range	Conductor Size		Maximum Connector O.D.	Maximum Connector Length	Typical Splice Length	Case Qty.
			Copper	Aluminum				
Three Conductor Armored, Shielded Cable, Three Conductor Non-Armored, Shielded Cable, See above for cable type illustrations.								
5761	12260	0.65 - 1.00" (17 - 25 mm)	2 - 3/0 AWG (35 - 80 mm <sup>2</sup> )	2 - 3/0 AWG (35 - 80 mm <sup>2</sup> )	0.90" (23 mm)	2.75" (70 mm)	29" (737 mm)	1
5762	12262	0.93 - 1.94" (24 - 49 mm)	4/0 AWG - 750 kcmil (120 - 325 mm <sup>2</sup> )	4/0 AWG - 500 kcmil (120 - 250 mm <sup>2</sup> )	1.40" (36 mm)	5.00" (127 mm)	44" (1118 mm)	1

## 3M Splice Kit 5700A-MT Series Selection

Product Series	UPC (054007-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Three Conductor Armored, Shielded Cable, Three Conductor Non-Armored, Shielded Cable, See above for cable type illustrations.					
15kV 3-Core cables					
5775A-MT	53493	0.64 - 1.01" (16,3 - 25,7 mm)	2 - 4/0 AWG (35 - 95 mm <sup>2</sup> )	None	1
5776A-MT	44112*	0.84 - 1.38" (21,3 - 35,1 mm)	4/0 AWG - 500 kcmil (95 - 240 mm <sup>2</sup> )	None	1
5777A-MT	44289*	1.04 - 1.70" (26,4 - 43,2 mm)	350 - 750 kcmil (185 - 325 mm <sup>2</sup> )	None	1

\*UPC prefix 051128

# 25/28 kV Splices

## 1/C, 25/28 kV, JCN/CN Molded Rubber Splices

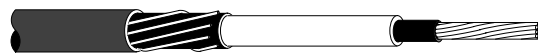
### 3M™ Cable Splices 5420 and 5450

3M QS kits 5420 series are inline splices designed for use on 25 kV CN or JCN cable. The 3M QS kits 5451 and 5452 are one-piece inline splices designed for use on 25 kV CN and JCN Cable. The 3M QS-II kit 5451A is a one-piece inline splice for use on 25/28 kV CN and JCN Cable.

The continuous current rating of each splice is equal to the current rating of the cable it is sized to accommodate. Meets requirements of IEEE Standard 404 for cable joints. Jacketing kit is needed for JCN Cable. See pages 283-284 to order CI, CI-840, CI-A series connectors. See next page for 5450 series selection. **Each kit makes one splice.**



**Concentric Neutral (CN) Cable**



**Jacketed Concentric Neutral (JCN) Cable**

### 3M Rubber Splices 5420 Series Selection

Product Series	UPC (054007-)	Insulation O.D. Range	Conductor Size* Cu or Al	Specified Connector	Case Qty.
<b>Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable</b> See above for cable type illustrations.					
5420	15819	0.795 - 0.940" (20 - 24 mm)	2 - 1/0 AWG (35 - 50 mm <sup>2</sup> )	CI and CI-A Series	1
5420-CI-22A	15820	0.795 - 0.940" (20 - 24 mm)	2 AWG Solid	CI-22A	1
5421	15827	0.920 - 1.080" (23 - 27 mm)	1/0 - 3/0 AWG (60 - 80 mm <sup>2</sup> )	CI and CI-A Series	1
5422	15835	1.060 - 1.210" (27 - 31 mm)	3/0 - 4/0 AWG (95 - 100 mm <sup>2</sup> )	CI and CI-A Series	1
5423	15843	1.120 - 1.320" (28 - 34 mm)	250 - 350 kcmil (125 - 180 mm <sup>2</sup> )	CI and CI-A Series	1
5423-CI-350	08384	1.120 - 1.320" (28 - 34 mm)	350 kcmil	CI-350	1
5424	15850	1.320 - 1.520" (34 - 39 mm)	500 kcmil	CI and CI-A Series	1
5425	09240	1.390 - 1.590" (35 - 40 mm)	750 kcmil Compact	CI and CI-A Series	1
5426	09239	1.550 - 1.710" (39 - 43 mm)	750 kcmil Compressed & Concentric	CI and CI-A Series	1
5426-CI-750	09177	1.550 - 1.710" (39 - 43 mm)	750 kcmil	CI-750	1

\*Use the primary insulation O.D. range for final ordering criteria.

**Note:** If connector is desired packed with any of the kits shown above, add the connector number after the splice number (example: 5420-CI-22A). See pages 283-284 for ordering information. Jacketing kit is needed for JCN Cable.

# 1/C, 25/28 kV, JCN/CN Molded Rubber Splices

## 3M™ 5450 Series Selection

Product Series	UPC (054007-)	Insulation O.D. Range	Conductor Size* Cu or Al	Specified Connector	Case Qty.
<b>Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable</b> See page 280 for cable type illustrations.					
5451	09127	0.83 - 1.04" (21 - 26 mm)	2 - 2/0 AWG (60 mm <sup>2</sup> )	CI, CI-840, and CI-A Series	1
5451-CI-1/0-840	09155	0.83 - 1.04" (21 - 26 mm)	1/0 AWG	CI-1/0-840	1
5451-CI-1/0A	09153	0.83 - 1.04" (21 - 26 mm)	1/0 AWG	CI-1/0A	1
5451-CI-1A	09935	0.83 - 1.04" (21 - 26 mm)	1 AWG	CI-1A	1
5451-CI-2A	09152	0.83 - 1.04" (21 - 26 mm)	2 AWG	CI-2A	1
5451-CI-21-840	09154	0.83 - 1.04" (21 - 26 mm)	2 or 1 AWG	CI-21-840	1
5452	09128	1.00 - 1.15" (25 - 29 mm)	3/0 - 4/0 AWG (95 mm <sup>2</sup> )	CI, CI-840, and CI-A Series	1

\* Use the primary insulation O.D. range for final ordering criteria.

**Note:** If connector is desired packed with any of the kits shown above, add the connector number after the splice number (example: 5450-CI-22A). See page 248 for ordering information. Jacketing kit is needed for JCN Cable.

## 3M 5451A Series Selection

Product Series	UPC (054007-)	Insulation O.D. Range	Conductor Stranded	Conductor Solid	Cable Insulation Thickness	Specified Connector	Case Qty.
<b>Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable</b> See page 280 for cable type illustrations.							
5451A	49527	0.905 - 1.055" (23,0 - 26,8 mm)	2 AWG	1 AWG	295 mils	CI-2A or CI-21-840	1
			1 AWG	1/0 AWG	280 mils 295 mils	CI-1A or CI-21-840	1
			1/0 AWG	—	260 mils 280 mils 295 mils	CI-1/0A or CI-1/0-840	1
			2/0 AWG	—	260 mils 280 mils	CI-2/0	1
5451A-CI-1/0A	49530	0.905 - 1.055" (23,0 - 26,8 mm)	1/0 AWG	—	260 mils 280 mils 295 mils	CI-1/0A	1
5451A-CI-1A	49529	0.905 - 1.055" (23,0 - 26,8 mm)	1 AWG	1/0 AWG	280 mils 295 mils	CI-1A	1
5451A-CI-1/0-840	49528	0.905 - 1.055" (23,0 - 26,8 mm)	1/0 AWG	—	260 mils 280 mils 295 mils	CI-1/0-840	1
5451A-CI-2/0	49531	0.905 - 1.055" (23,0 - 26,8 mm)	2/0 AWG	—	260 mils 280 mils	CI-2/0	1
5451A-CI-21-840	49532	0.905 - 1.055" (23,0 - 26,8 mm)	2 or 1 AWG	1 or 1/0 AWG	295 mils	CI-21-840	1

Jacketing kit is needed for JCN Cable.

**Note:** CI-A and CIR-A series connectors are sized for 5/8 crimping die; CI-2/0, CI-840 and CIR-840 series connectors are sized for 840 crimping die. Final determining factor is cable insulation diameter.

### Product Referral Generator

Connecting

- CI Series Connectors . . . . . pg. 283-284
- CI-840 . . . . . pg. 283-284
- CI-A Series Connectors . . . . . pg. 283-284

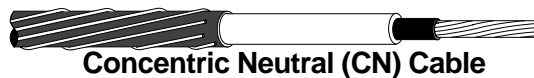
For more information on Connecting see pg. 131

# 1/C, 25/28 kV, JCN/CN Molded Rubber Splices

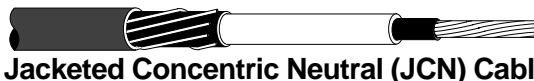
## 3M™ QS-II Cable Repair Splices 5451R

3M QS-II cable repair kit 5451R is a specially elongated molded rubber splice designed to repair damaged cable. It can be used on 25/28 kV copper or aluminum, CN or JCN cables. It is designed to replace up to 6" (152 mm) of damaged cable, eliminating the need to splice in a new section of cable with two separate splices.

Meets rating requirements of IEEE Standard 404.  
Jacketing kit is needed for JCN Cable. **Each kit makes one splice repair.**



**Concentric Neutral (CN) Cable**



**Jacketed Concentric Neutral (JCN) Cable**



## 3M Cable Repair Splice 5451R Selection

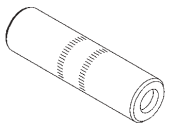
Product Series	UPC (054007-)	Cable Insulation O.D. Range	Conductor		Cable Insulation Thickness	3M Connector Product Number	Case Qty.
			Stranded	Solid			
<b>Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable</b> See above for cable type illustrations.							
5451R-CIR-1/0A	49476	0.870 - 1.055" (22,1 - 26,8 mm)	1/0 AWG	—	260 mils 280 mils 295 mils	CIR-1/0A	1
5451R-CIR-1/0-840	49477	0.870 - 1.055" (22,1 - 26,8 mm)	1/0 AWG	—	260 mils 280 mils 295 mils	CIR-1/0-840	1
5451R-CIR-21A	49479	0.870 - 1.055" (22,1 - 26,8 mm)	2 or 1 AWG	1 or 1/0 AWG	260 mils 280 mils 295 mils	CIR-21A	1
5451R-CIR-21-840	49478	0.870 - 1.055" (22,1 - 26,8 mm)	2 or 1 AWG	1 or 1/0 AWG	260 mils 280 mils 295 mils	CIR-21-840	1

Jacketing kit is needed for JCN Cable.

**Note:** CI-A and CIR-A series connectors are sized for 5/8 crimping die; CI-2/0, CI-840 and CIR-840 series connectors are sized for 840 crimping die. Final determining factor is cable insulation diameter.

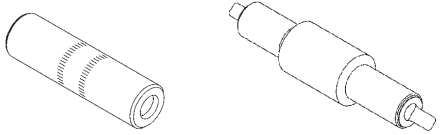


Specifications and Ordering Information on 3M™ CI and CI-A Series Connectors for 5420 Series



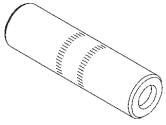
Product Number	UPC (054007-)	Conductor Size Cu or Al		Connector O.D.	Case Qty.
		Stranded	Solid		
CI-1/0A	14176	1/0 AWG	—	0.91" (23 mm)	10
CI-1A	00722	2 - 1 AWG	1 - 1/0 AWG	0.91" (23 mm)	10
CI-2/0	11875	2/0 AWG	—	0.91" (23 mm)	10
CI-2A	00721	2 AWG	1 AWG	0.91" (23 mm)	10
CI-22A	15868	—	2 AWG	0.91" (23 mm)	10
CI-3/0	11883	3/0 AWG	—	0.90" (22 mm)	10
CI-4/0	11891	4/0 AWG	—	0.90" (22 mm)	10
CI-250	11909	250 kcmil	—	1.11" (28 mm)	10
CI-350	11925	350 kcmil	—	1.11" (28 mm)	10
CI-450	11933	500 kcmil Compact	—	1.3" (33 mm)	10
CI-500	25644	500 kcmil	—	1.3" (33 mm)	10
CI-650	11941	750 kcmil Compact	—	1.7" (43 mm)	10
CI-750	25651	750 kcmil Compressed & Concentric	—	1.57" (40 mm)	10

Specifications and Ordering Information on 3M CI Series Connectors 5450 Series



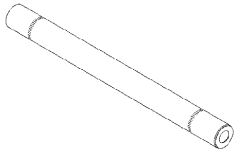
Product Number	UPC (054007-)	Conductor Size Cu or Al		Connector O.D.	Case Qty.
		Stranded	Solid		
CI-1/0-840	09137	1/0 AWG	—	0.90" (22 mm)	10
CI-2/0	11875	2/0 AWG	—	0.91" (23 mm)	10
CI-21-840	09136	2 - 1 AWG	1 - 1/0 AWG	0.90" (22 mm)	10
CI-3/0	11883	3/0 AWG	—	0.90" (22 mm)	10
CI-4/0	11891	4/0 AWG	—	0.90" (22 mm)	10
CI-1/0A	14176	1/0 AWG	—	0.91" (23 mm)	10
CI-1A	00722	2 - 1 AWG	1 - 1/0 AWG	0.91" (23 mm)	10
CI-2A	00721	2 AWG	1 AWG	0.91" (23 mm)	10
CI-22A	15868	—	2 AWG	0.91" (23 mm)	10

## Specifications and Ordering Information on 3M™ CI Series Connectors for 5451A Series



Product Number	UPC (054007-)	Conductor Size Stranded	Cu or Al Solid	Connector O.D.	Splice Body	Case Qty.
CI-1/0A	14176	1/0 AWG	—	0.91" (23 mm)	5451A	10
CI-1A	00722	1 AWG	1/0 AWG	0.91" (23 mm)	5451A	10
CI-1/0-840	09137	1/0 AWG	—	0.91" (23 mm)	5451A	10
CI-2/0	11875	2/0 AWG	—	0.91" (23 mm)	5451A	10
CI-21-840	09136	2 - 1 AWG	1 - 1/0 AWG	0.91" (23 mm)	5451A	10

## Specifications and Ordering Information on 3M CIR Series Repair Connectors for 5451R Series



Product Number	UPC (054007-)	Conductor Size Stranded	Cu or Al Solid	Connector O.D.	Splice Body	Case Qty.
CIR-1/0A	50226	1/0 AWG	—	0.63" (16 mm)	5451R	10
CIR-21A	50227	2 - 1 AWG	1 - 1/0 AWG	0.63" (16 mm)	5451R	10

# 1/C, 25/28 kV, JCN/CN Cold Shrink Splices

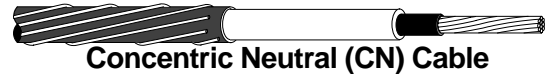
3M™ QS-III Cold Shrink Cable Splices  
5456A, 5457A and 5458A



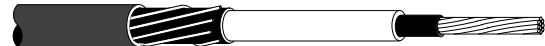
3M QS-III Cold Shrink series splicing kits 5456A, 5457A and 5458A are inline splices for joining 25/28 kV Jacketed Concentric Neutral (JCN) or Concentric Neutral (CN) power

cables. It is a cold shrink design. The cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of rubber for its special physical properties. Each splice is high-voltage

production tested to ensure reliability. Kits can be ordered with connectors packed in the kit or the kit and connector can be ordered as separate items. See page 131 to order 3M connectors. **Each kit makes one splice.** Additional transition connectors are available from cable accessory suppliers. **Meets requirements of IEEE 404.**



**Concentric Neutral (CN) Cable**



**Jacketed Concentric Neutral (JCN) Cable**

## 3M QS-III Cold Shrink 5456A, 5457A and 5458A Series Selection

Product Series	UPC (054007-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable See above for cable type illustrations.					
<b>25/28kV CN and JCN cables</b>					
5456A	53793	0.84 - 1.36" (21,3 - 34,5 mm)	1 AWG - 250 kcmil (50 - 120 mm <sup>2</sup> )	None	1
5456A-1-AL	53794	0.84 - 1.36" (21,3 - 34,5 mm)	1 AWG	20004	1
5456A-1-CU	53795	0.84 - 1.36" (21,3 - 34,5 mm)	1 AWG	10004	1
5456A-1/0-AL	53796	0.84 - 1.36" (21,3 - 34,5 mm)	1/0 AWG	20005	1
5456A-1/0-CU	53797	0.84 - 1.36" (21,3 - 34,5 mm)	1/0 AWG	10005	1
5456A-2/0-AL	53798	0.84 - 1.36" (21,3 - 34,5 mm)	2/0 AWG	20006	1
5456A-2/0-CU	53799	0.84 - 1.36" (21,3 - 34,5 mm)	2/0 AWG	10006	1
5456A-3/0-AL	53800	0.84 - 1.36" (21,3 - 34,5 mm)	3/0 AWG	20007	1
5456A-3/0-CU	53801	0.84 - 1.36" (21,3 - 34,5 mm)	3/0 AWG	10007	1
5456A-4/0-AL	53802	0.84 - 1.36" (21,3 - 34,5 mm)	4/0 AWG	20008	1
5456A-4/0-CU	53803	0.84 - 1.36" (21,3 - 34,5 mm)	4/0 AWG	10008	1
5456A-250-AL	53935	0.84 - 1.36" (21,3 - 34,5 mm)	250 kcmil	20009	1
5456A-250-CU	53936	0.84 - 1.36" (21,3 - 34,5 mm)	250 kcmil	10009	1
5456A-WG	53804	0.84 - 1.36" (21,3 - 34,5 mm)	1 AWG - 250 kcmil (50 - 120 mm <sup>2</sup> )	None	1
5457A	42149*	1.07 - 1.70" (27,2 - 43,2 mm)	250 - 500 kcmil (120 - 240 mm <sup>2</sup> )	None	1
5457A-250-AL	53836	1.07 - 1.70" (27,2 - 43,2 mm)	250 kcmil	20009	1
5457A-250-CU	53837	1.07 - 1.70" (27,2 - 43,2 mm)	250 kcmil	10009	1
5457A-350-AL	42132*	1.07 - 1.70" (27,2 - 43,2 mm)	350 kcmil	20011	1
5457A-350-CU	44238*	1.07 - 1.70" (27,2 - 43,2 mm)	350 kcmil	10011	1
5457A-500-AL	42133*	1.07 - 1.70" (27,2 - 43,2 mm)	500 kcmil	20014	1
5457A-500-CU	44239*	1.07 - 1.70" (27,2 - 43,2 mm)	500 kcmil	10014	1
5457A-WG	43416*	1.07 - 1.70" (27,2 - 43,2 mm)	250 - 500 kcmil (120 - 240 mm <sup>2</sup> )	None	1
5458A	42908*	1.24 - 2.07" (31,5 - 52,6 mm)	500 - 1000 kcmil (240 - 500 mm <sup>2</sup> )	None	1
5458A-500-AL	04593*	1.24 - 2.07" (31,5 - 52,6 mm)	500 kcmil	20014	1
5458A-500-CU	04594*	1.24 - 2.07" (31,5 - 52,6 mm)	500 kcmil	10014	1
5458A-750-AL	42909*	1.24 - 2.07" (31,5 - 52,6 mm)	750 kcmil	20019	1
5458A-750-CU	44240*	1.24 - 2.07" (31,5 - 52,6 mm)	750 kcmil	10019	1
5458A-1000-AL	42910*	1.24 - 2.07" (31,5 - 52,6 mm)	1000 kcmil	20024	1
5458A-1000-CU	44241*	1.24 - 2.07" (31,5 - 52,6 mm)	1000 kcmil	10024	1
5458A-WG	43417*	1.24 - 2.07" (31,5 - 52,6 mm)	500 - 1000 kcmil (240 - 500 mm <sup>2</sup> )	None	1

\*UPC prefix 051128

# 1/C, 25/28 kV, Shielded-Tape, Wire, UniShield®, LC Cold Shrink Splices

3M™ QS-III 5524A, Cold Shrink Series Cable Splices 5525A and 5526A



133

3M QS-III 5524A, Cold Shrink series splicing kits 5525A and 5526A are inline splices for joining 25/28 kV Tape, Wire, LC, and UniShield® power cables. It is a cold shrink design. The

cold shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability. Kits can be ordered with connectors packed in the kit or the kit and connector can be ordered as separate items. See page 131 to order 3M connectors. **Each kit makes one splice.** Additional transition connectors are available from cable accessory suppliers. **Meets requirements of IEEE 404.**



Tape Shielded Cable



Wire Shielded Cable



UniShield® Cable



Longitudinally Corrugated (LC) Shielded Cable

## 3M QS-III Cold Shrink Series 5524A, 5525A and 5526A Selection

Product Series	UPC (054007-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable, Longitudinally Corrugated (LC) Shielded Cable See above for cable type illustrations.					
<b>25/28kV LC, Wire, Tape and UniShield® cables</b>					
5524A	53922	0.84 - 1.36" (21,3 - 34,5 mm)	1 AWG - 250 kcmil (50 - 120 mm <sup>2</sup> )	None	1
5524A-1-AL	53923	0.84 - 1.36" (21,3 - 34,5 mm)	1 AWG	20004	1
5524A-1-CU	53924	0.84 - 1.36" (21,3 - 34,5 mm)	1 AWG	10004	1
5524A-1/0-AL	53925	0.84 - 1.36" (21,3 - 34,5 mm)	1/0 AWG	20005	1
5524A-1/0-CU	53926	0.84 - 1.36" (21,3 - 34,5 mm)	1/0 AWG	10005	1
5524A-2/0-AL	53927	0.84 - 1.36" (21,3 - 34,5 mm)	2/0 AWG	20006	1
5524A-2/0-CU	53928	0.84 - 1.36" (21,3 - 34,5 mm)	2/0 AWG	10006	1
5524A-3/0-AL	53929	0.84 - 1.36" (21,3 - 34,5 mm)	3/0 AWG	20007	1
5524A-3/0-CU	53930	0.84 - 1.36" (21,3 - 34,5 mm)	3/0 AWG	10007	1
5524A-4/0-AL	53931	0.84 - 1.36" (21,3 - 34,5 mm)	4/0 AWG	20008	1
5524A-4/0-CU	53932	0.84 - 1.36" (21,3 - 34,5 mm)	4/0 AWG	10008	1
5524A-250-AL	53933	0.84 - 1.36" (21,3 - 34,5 mm)	250 kcmil	20009	1
5524A-250-CU	53934	0.84 - 1.36" (21,3 - 34,5 mm)	250 kcmil	10009	1
5525A	42138*	1.07 - 1.70" (27,2 - 43,2 mm)	250 - 750 kcmil (120 - 325 mm <sup>2</sup> )	None	1
5525A-250-AL	53845	1.07 - 1.70" (27,2 - 43,2 mm)	250 kcmil	20009	1
5525A-250-CU	53846	1.07 - 1.70" (27,2 - 43,2 mm)	250 kcmil	10009	1
5525A-350-AL	42140*	1.07 - 1.70" (27,2 - 43,2 mm)	350 kcmil	20011	1
5525A-350-CU	42902*	1.07 - 1.70" (27,2 - 43,2 mm)	350 kcmil	10011	1
5525A-500-AL	42141*	1.07 - 1.70" (27,2 - 43,2 mm)	500 kcmil	20014	1
5525A-500-CU	42903*	1.07 - 1.70" (27,2 - 43,2 mm)	500 kcmil	10014	1
5525A-750-AL	42904*	1.07 - 1.70" (27,2 - 43,2 mm)	750 kcmil	20019	1
5525A-750-CU	42127*	1.07 - 1.70" (27,2 - 43,2 mm)	750 kcmil	10019	1
5526A	42905*	1.24 - 2.07" (31,5 - 52,6 mm)	500 - 1000 kcmil (240 - 500 mm <sup>2</sup> )	None	1
5526A-500-AL	04597*	1.24 - 2.07" (31,5 - 52,6 mm)	500 kcmil	20014	1
5526A-500-CU	04598*	1.24 - 2.07" (31,5 - 52,6 mm)	500 kcmil	10014	1
5526A-750-AL	04595*	1.24 - 2.07" (31,5 - 52,6 mm)	750 kcmil	20019	1
5526A-750-CU	04596*	1.24 - 2.07" (31,5 - 52,6 mm)	750 kcmil	10019	1
5526A-1000-AL	42906*	1.24 - 2.07" (31,5 - 52,6 mm)	1000 kcmil	20024	1
5526A-1000-CU	42907*	1.24 - 2.07" (31,5 - 52,6 mm)	1000 kcmil	10024	1

\* UPC prefix 051128

# 3/C, 25/28 kV Shielded Armored or Non-Armored Cold Shrink Splices

## 3M™ QS-III Splice Kit 5700A-MT Series Selection

Product Series	UPC (054007-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable, Longitudinally Corrugated (LC) Shielded Cable See page 286 for cable type illustrations.					
<b>25/28kV 3-Core Cables</b>					
5786A-MT	53937	0.84 - 1.36" (21,3 - 34,5 mm)	1 AWG - 250 kcmil (50 - 120 mm <sup>2</sup> )	None	1
5787A-MT	43421*	1.07 - 1.70" (27,2 - 43,2 mm)	250 - 750 kcmil (120 - 325 mm <sup>2</sup> )	None	1
5788A-MT	43422*	1.24 - 2.07" (31,5 - 52,6 mm)	500 - 1000 kcmil (240 - 500 mm <sup>2</sup> )	None	1

\*UPC prefix 051128

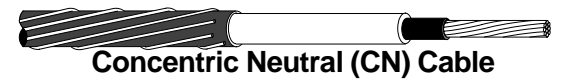
# 35 kV Splices

## 1/C, 35 kV, JCN/CN Molded Rubber Splices

### 3M Cable Splices 5432 and 5461

3M QS kits 5432, 5433 and 5461 are inline splices designed for use on 35 kV CN or JCN cable. Meets requirements of IEEE Standard 404. The continuous current rating of each splice is equal to the current rating of the cable it is sized to accommodate.

For copper or aluminum conductor cable, select the correct splice with connector, from the table below. To order connector separately see page 288. **Each kit makes one splice.**



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable

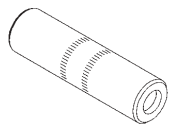
### 3M Splices Series 5430 and 5461 Selection

Product Series	UPC (054007-)	Primary Insulation O.D. Range	Conductor Size* Cu or Al	Case Qty.
Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable See above for cable type illustrations.				
5432	02338	1.060 - 1.210" (27 - 31 mm)	2 Str.-1/0 Str. AWG	1
5432-CI-1A	08357	1.060 - 1.210" (27 - 31 mm)	2 Str.-1/0 Sol. AWG	1
5432-CI-1/0A	31222	1.060 - 1.210" (27 - 31 mm)	1/0 Str. AWG	1
5433	02339	1.120 - 1.320" (28 - 34 mm)	3/0-4/0 AWG	1
5433-CI-3/0B	49485	1.120 - 1.320" (28 - 34 mm)	3/0 AWG	1
5433-CI-4/0B	49486	1.120 - 1.320" (28 - 34 mm)	4/0 AWG	1
5461	09129	1.00 - 1.15" (25 - 29 mm)	1-1/0 AWG	1
5461-CI-1/0-840	09157	1.00 - 1.15" (25 - 29 mm)	1/0 AWG	1
5461-CI-1/0A	09156	1.00 - 1.15" (25 - 29 mm)	1/0 AWG	1

Jacketing kit is needed for JCN Cable.

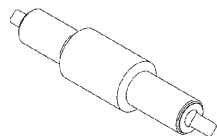
\*Important: On all QS kits use the primary insulation O.D. range for final ordering criteria.

## Specifications and Ordering Information on 3M™ CI and CI-A Series Connectors for 5432 and 5433 Series



Case Number	Product	UPC			Conductor Size Cu or Al		Connector
		(054007-)	Stranded	Solid	Cu	Al	
CI-1/0A	14176		1/0 AWG	—	0.91" (23 mm)		10
CI-1A	00722		2 - 1 AWG	1 - 1/0 AWG	0.91" (23 mm)		10
CI-3/0B	—		3/0 AWG	3/0 AWG	—		10
CI-4/0B	—		4/0 AWG	4/0 AWG	—		10

## Specifications and Ordering Information on 3M CI-A and CI-840 Series Connectors for 5461 Series



Product Number	UPC (054007-)	Conductor Size Cu or Al		Case Qty.
		Stranded	Solid	
CI-1/0A	14176	1/0 AWG	—	10
CI-1/0-840	09137	1/0 AWG	—	10
CI-1A	00722	2 - 1 AWG	1 - 1/0 AWG	10
CI-2A	00721	2 AWG	1 AWG	10

## 1/C, 35 kV, JCN/CN Cold Shrink Splices

### 3M™ QS-III Cold Shrink Cable Splices 5467A and 5468A

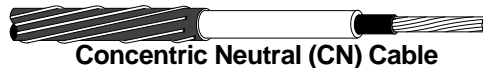


134

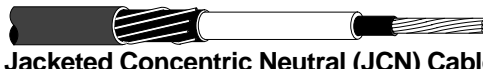
3M QS-III Cold Shrink series splicing kits 5467A and 5468A are inline splices for joining 35 kV Jacketed Concentric Neutral (JCN) or Concentric Neutral (CN) power cables.

It is a cold shrink design. The cold shrink splice body is a one-piece molded design made of specially formulated

silicone rubbers, while the jacketing is made of rubber for its special physical properties. Each splice is high-voltage production tested to ensure reliability. Kits can be ordered with connectors packed in the kit or the kit and connector can be ordered as separate items. See page 131 to order 3M connectors. **Each kit makes one splice.** Additional transition connectors are available from cable accessory suppliers. **Meets requirements of IEEE 404.**



Concentric Neutral (CN) Cable



Jacketed Concentric Neutral (JCN) Cable

# 3M™ QS-III Cold Shrink Series 5467 and 5468 Selection

Product Series	UPC (051128-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable See previous page for cable type illustrations.					
<b>35kV CN and JCN cables</b>					
5467A	43051	1.07 - 1.70" (27,2 - 43,2 mm)	1/0 AWG - 350 kcmil (60 - 185 mm2)	None	1
5467A-1/0-AL	43052	1.07 - 1.70" (27,2 - 43,2 mm)	1/0 AWG	20005	1
5467A-1/0-CU	43057	1.07 - 1.70" (27,2 - 43,2 mm)	1/0 AWG	10005	1
5467A-2/0-AL	43053	1.07 - 1.70" (27,2 - 43,2 mm)	2/0 AWG	20006	1
5467A-2/0-CU	43058	1.07 - 1.70" (27,2 - 43,2 mm)	2/0 AWG	10006	1
5467A-3/0-AL	43054	1.07 - 1.70" (27,2 - 43,2 mm)	3/0 AWG	20007	1
5467A-3/0-CU	43059	1.07 - 1.70" (27,2 - 43,2 mm)	3/0 AWG	10007	1
5467A-4/0-AL	43055	1.07 - 1.70" (27,2 - 43,2 mm)	4/0 AWG	20008	1
5467A-4/0-CU	43060	1.07 - 1.70" (27,2 - 43,2 mm)	4/0 AWG	10008	1
5467A-250-AL	43056	1.07 - 1.70" (27,2 - 43,2 mm)	250 kcmil	20009	1
5467A-250-CU	43061	1.07 - 1.70" (27,2 - 43,2 mm)	250 kcmil	10009	1
5467A-350-AL	04589	1.07 - 1.70" (27,2 - 43,2 mm)	350 kcmil	20011	1
5467A-350-CU	04590	1.07 - 1.70" (27,2 - 43,2 mm)	350 kcmil	10011	1
5467A-WG	53883*	1.07 - 1.70" (27,2 - 43,2 mm)	1/0 AWG - 350 kcmil (60 - 185 mm2)	None	1
5468A	43062	1.24 - 2.07" (31,5 - 52,6 mm)	350 - 1000 kcmil (185 - 500 mm2)	None	1
5468A-350-AL	43063	1.24 - 2.07" (31,5 - 52,6 mm)	350 kcmil	20011	1
5468A-350-CU	43067	1.24 - 2.07" (31,5 - 52,6 mm)	350 kcmil	10011	1
5468A-500-AL	43064	1.24 - 2.07" (31,5 - 52,6 mm)	500 kcmil	20014	1
5468A-500-CU	43068	1.24 - 2.07" (31,5 - 52,6 mm)	500 kcmil	10014	1
5468A-750-AL	43065	1.24 - 2.07" (31,5 - 52,6 mm)	750 kcmil	20019	1
5468A-750-CU	43069	1.24 - 2.07" (31,5 - 52,6 mm)	750 kcmil	10019	1
5468A-1000-AL	43066	1.24 - 2.07" (31,5 - 52,6 mm)	1000 kcmil	20024	1
5468A-1000-CU	43070	1.24 - 2.07" (31,5 - 52,6 mm)	1000 kcmil	10024	1
5468A-WG	53909*	1.24 - 2.07" (31,5 - 52,6 mm)	350 - 1000 kcmil (185 - 500 mm2)	None	1

\* UPC prefix 054007

## 1/C, 35 kV, Shielded-Tape, Wire, UniShield®, LC Cold Shrink Splices

3M™ QS-III Cold Shrink Cable Splices  
5535A and 5536A

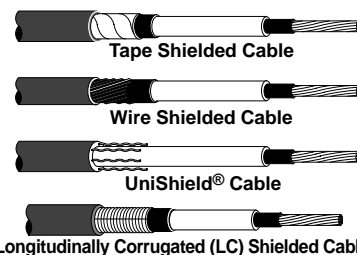


135

3M QS-III Cold Shrink series splicing kits 5535A and 5536A are inline splices for joining 35 kV Tape, Wire, LC, and UniShield® power cables. The cold

shrink splice body is a one-piece molded design made of specially formulated silicone rubbers, while the jacketing is made of rubber for its special physical properties. Each

splice is high-voltage production tested to ensure reliability. Kits can be ordered with connectors packed in the kit or the kit and connector can be ordered as separate items. See page 131 to order 3M connectors. **Each kit makes one splice.** Additional transition connectors are available from cable accessory suppliers. **Meets requirements of IEEE 404.**



## 3M™ QS-III Cold Shrink Splices 5535A and 5536A Series Selection

Product Series	UPC (051128-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable, Longitudinally Corrugated (LC) Shielded Cable See previous page for cable type illustrations.					
<b>35kV LC, wire, tape and UniShield® cables</b>					
5535A	43071	1.07 - 1.70" (27,2 - 43,2 mm)	1/0 AWG - 350 kcmil (60 - 185 mm <sup>2</sup> )	None	1
5535A-1/0-AL	43072	1.07 - 1.70" (27,2 - 43,2 mm)	1/0 AWG	20005	1
5535A-1/0-CU	43077	1.07 - 1.70" (27,2 - 43,2 mm)	1/0 AWG	10005	1
5535A-2/0-AL	43073	1.07 - 1.70" (27,2 - 43,2 mm)	2/0 AWG	20006	1
5535A-2/0-CU	43078	1.07 - 1.70" (27,2 - 43,2 mm)	2/0 AWG	10006	1
5535A-3/0-AL	43074	1.07 - 1.70" (27,2 - 43,2 mm)	3/0 AWG	20007	1
5535A-3/0-CU	43079	1.07 - 1.70" (27,2 - 43,2 mm)	3/0 AWG	10007	1
5535A-4/0-AL	43075	1.07 - 1.70" (27,2 - 43,2 mm)	4/0 AWG	20008	1
5535A-4/0-CU	43080	1.07 - 1.70" (27,2 - 43,2 mm)	4/0 AWG	10008	1
5535A-250-AL	43076	1.07 - 1.70" (27,2 - 43,2 mm)	250 kcmil	20009	1
5535A-250-CU	43081	1.07 - 1.70" (27,2 - 43,2 mm)	250 kcmil	10009	1
5535A-350-AL	04591	1.07 - 1.70" (27,2 - 43,2 mm)	350 kcmil	20011	1
5535A-350-CU	04592	1.07 - 1.70" (27,2 - 43,2 mm)	350 kcmil	10011	1
5536A	43082	1.24 - 2.07" (31,5 - 52,6 mm)	350 - 1000 kcmil (185 - 500 mm <sup>2</sup> )	None	1
5536A-350-AL	43083	1.24 - 2.07" (31,5 - 52,6 mm)	350 kcmil	20011	1
5536A-350-CU	43087	1.24 - 2.07" (31,5 - 52,6 mm)	350 kcmil	10011	1
5536A-500-AL	43084	1.24 - 2.07" (31,5 - 52,6 mm)	500 kcmil	20014	1
5536A-500-CU	43088	1.24 - 2.07" (31,5 - 52,6 mm)	500 kcmil	10014	1
5536A-750-AL	43085	1.24 - 2.07" (31,5 - 52,6 mm)	750 kcmil	20019	1
5536A-750-CU	43089	1.24 - 2.07" (31,5 - 52,6 mm)	750 kcmil	10019	1
5536A-1000-AL	43086	1.24 - 2.07" (31,5 - 52,6 mm)	1000 kcmil	20024	1
5536A-1000-CU	43090	1.24 - 2.07" (31,5 - 52,6 mm)	1000 kcmil	10024	1

## 3/C, 35 kV, Shielded Armored or Non-Armored Cold Shrink Splices

### 3M Splice Kit 5700A-MT Series Selection

Product Series	UPC (051128-)	Primary Insulation O.D. Range	Conductor Size	Connector	Case Qty.
Three Conductor Armored, Shielded Cable, Three Conductor Non-Armored, Shielded Cable, See page 289 for cable type illustrations.					
<b>35kV 3-Core Cables</b>					
5797A-MT	43419	1.07 - 1.70" (27,2 - 43,2 mm)	1/0 AWG - 350 kcmil (60 - 185 mm <sup>2</sup> )	None	1
5798A-MT	43420	1.24 - 2.07" (31,5 - 52,6 mm)	350 - 1000 kcmil (185 - 500 mm <sup>2</sup> )	None	1



# PILC Splices and Accessories

## 1/C Low Voltage Splices 0-600V (1000V rated)

### 3M™ 1000V Cable Splices CS500Pb Series

Cold Shrink CS500Pb series splice kits are a series of kits rated 1000 volts for splicing Paper Insulated Lead Covered (PILC) cable. The splice kits can be used to connect PILC to PILC or used to connect PILC to Poly/EPR cables. The splice kits also meet the requirement of ANSI Standard C119.1. 3M Scotchlok™ 2000T series copper connectors are provided with these kits. **Each kit makes one splice.**



**Single Conductor PILC Cable**

Features — Benefits	
<b>CS500Pb Series</b>	
Simple safe installation	No tools or special training needed
Water Resistant	Meets the water seal requirements of ANSI C119.1
No torches or heat required	Quick installation using tube on removable core technology
Connectors are provided	Copper oil stop connectors meet requirements of ANSI C119.4
Proven oil stop performance	Withstand internal oil pressures exceeding 100 PSI and vacuum to 18 inches Mercury

### 3M Cold Shrink Splice Kits Selection CS500Pb Series

Product Series	UPC (054007-)	Secondary Cable Conductor Size	PILC Cable Lead O.D. Range	Poly/EPR Cable Insulation O.D. Range	Case Qty.
<b>Single Conductor PILC Cable</b> See above for cable type illustration.					
CS501Pb-4	44154	4 AWG	0.57 - 0.80" (14,5 - 20,3 mm)	0.31 - 0.80" (7,9 - 20,3 mm)	1
CS502Pb-1	44156	1 AWG	0.63 - 0.80" (16,0 - 20,3 mm)	0.31 - 0.80" (7,9 - 20,3 mm)	1
CS502Pb-2	44155	2 AWG	0.63 - 0.80" (16,0 - 20,3 mm)	0.31 - 0.80" (7,9 - 20,3 mm)	1
CS503Pb-1/0	44157	1/0 AWG	0.63 - 1.03" (16,0 - 26,1 mm)	0.34 - 1.03" (8,6 - 26,1 mm)	1
CS504Pb-2/0	44158	2/0 AWG	0.67 - 1.03" (17,0 - 26,1 mm)	0.34 - 1.03" (8,6 - 26,1 mm)	1
CS505Pb-3/0	44159	3/0 AWG	0.72 - 1.18" (18,3 - 30,0 mm)	0.45 - 1.18" (11,4 - 30,0 mm)	1
CS505Pb-4/0	44160	4/0 AWG	0.72 - 1.18" (18,3 - 30,0 mm)	0.45 - 1.18" (11,4 - 30,0 mm)	1
CS506Pb-250	44161	250 kcmil	0.92 - 1.40" (23,3 - 35,5 mm)	0.56 - 1.40" (14,2 - 35,5 mm)	1
CS506Pb-300	44162	300 kcmil	0.92 - 1.40" (23,3 - 35,5 mm)	0.56 - 1.40" (14,2 - 35,5 mm)	1
CS506Pb-350	44163	350 kcmil	0.92 - 1.40" (23,3 - 35,5 mm)	0.56 - 1.40" (14,2 - 35,5 mm)	1
CS507Pb-400	44164	400 kcmil	1.00 - 1.40" (25,4 - 35,5mm)	0.56 - 1.40" (14,2 - 35,5 mm)	1
CS508Pb-500	44169	500 kcmil	1.00 - 1.62" (25,4 - 41,1 mm)	0.73 - 1.73" (18,5 - 43,9 mm)	1
CS508Pb-600	44165	600 kcmil	1.00 - 1.62" (25,4 - 41,1 mm)	0.73 - 1.73" (18,5 - 43,9 mm)	1
CS508Pb-750	44166	750 kcmil	1.00 - 1.62" (25,4 - 41,1 mm)	0.73 - 1.73" (18,5 - 43,9 mm)	1
CS508Pb-800	44167	800 kcmil	1.00 - 1.62" (25,4 - 41,1 mm)	0.73 - 1.73" (18,5 - 43,9 mm)	1
CS508Pb-1000	44168	1000 kcmil	1.00 - 1.62" (25,4 - 41,1 mm)	0.73 - 1.73" (18,5 - 43,9 mm)	1

# 1/C to 1/C, 15 kV Cold Shrink Splices

3M™ QS-2000T 1/C PILC to 1/C Poly/EPR or 1/C PILC to 1/C PILC Cable Splices

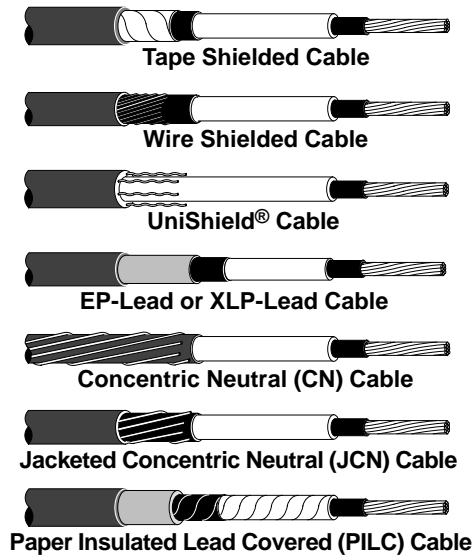


136

The 3M QS2000T kit allows you to splice either single-conductor PILC cable to single-conductor PILC cable, or single-conductor PILC cable to single-conductor Poly/EPR cable. Because of the design of the splice, size transitions can also be accommodated rather easily. The 3M QS-2000T kits meet the requirements of

IEEE 404. Use 3M™ Scotchlok™ Connectors 2000T Series with these splice kits. See page 296 to order connectors.

Each kit makes one single conductor splice.



## 3M Cold Shrink Splices QS-2000T Series Selection

Product Series	UPC (054007-)	PILC Cable Insulation O.D. Range	PILC Cable Size	Poly/EPR Cable Size	Poly/EPR Insulation O.D. Range	Connector Requirements		
						O.D. Maximum	Connector Length Aluminum	Connector Length Copper
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable, EP-Lead or XLP-Lead Cable, Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable, Paper Insulated Lead Covered (PILC) Cable See above for cable type illustrations.								
QS-2011T	50546	0.56 - 0.88" (14,2 - 22,4 mm)	4 - 3/0 AWG (25 - 70 mm²)	1 - 4/0 AWG (50 - 95 mm²)	0.70 - 1.07" (17,8 - 27,2 mm)	0.70 - 1.07" (17,8 - 27,2 mm)	5.0" (127 mm)	5.5" (140 mm)
QS-2012T	50547	0.74 - 1.17" (18,8 - 29,7 mm)	3/0 AWG - 350 kcmil (95 - 185 mm²)	4/0 AWG - 500 kcmil (120 - 240 mm²)	0.88 - 1.36" (22,0 - 34,6 mm)	0.88 - 1.36" (22,0 - 34,6 mm)	5.2" (132 mm)	5.5" (140 mm)
QS-2013T	50555	0.98 - 1.56" (24,9 - 39,6 mm)	400 - 1000 kcmil (200 - 500 mm²)	500 - 1000 kcmil (240 - 500 mm²)	1.12 - 1.70" (28,4 - 43,2 mm)	1.12 - 1.70" (28,4 - 43,2 mm)	6.5" (165 mm)	7.5" (190 mm)

### QS-2000T Ordering Examples

**Example 1:** You need a 15kV – #3 PILC Cu spliced to a 15kV – 1/0 Al extruded dielectric.

**Order:** QS-2000T - #3 – 1/0.

**Example 2:** You need a 15kV – 500 kcmil PILC Cu spliced to a 15kV – 500 kcmil Cu extruded insulation.

**Order:** QS-2000T – 500.

# 3/C to 1/C, 15 kV Cold Shrink Splices

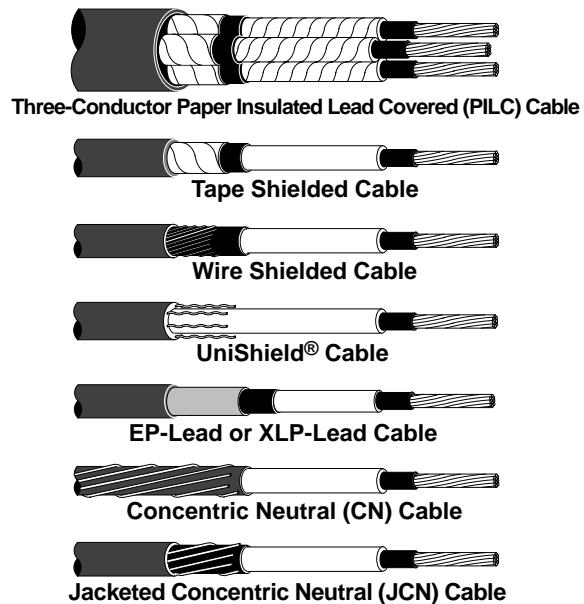
3M™ QS-2000-3T and QS-2000-3T-WS 3/C PILC to 1/C Poly/EPR Cable Trifurcating Splices



137

3M Cold Shrink QS-2000-3T and QS-2000-3T-WS Trifurcating Transition Splice Kits are rated 15 kV. They are specially designed splice kits for connecting three conductor Paper Insulated Lead Covered (PILC) cable to three single conductor Poly/EPR insulated cables.

Splices meet the requirements of IEEE Standard 404. Use Scotchlok 2000T series connectors with these kits. See page 296. Each kit makes one three conductor to three single conductor splice.



## 3M Cold Shrink Splices QS-2000-3T and QS-2000-3T-WS Series Selection

Product Series	UPC (054007-)	PILC Cable Size	Poly/EPR Cable Size	Poly/EPR Insulation O.D. Range	Connector Requirements		
					O.D.	Maximum Connector Length	Aluminum / Copper
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable, EP-Lead or XLP-Lead Cable, Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable See above for cable type illustrations.							
QS-2011-3T	42021	4 - 3/0 AWG (25 - 70 mm <sup>2</sup> )	1 - 4/0 AWG (50 - 95 mm <sup>2</sup> )	0.70 - 1.07" (17,8 - 27,2 mm)	0.70 - 1.07" (17,8 - 27,2 mm)	5.0" (127 mm)	5.5" (140 mm)
QS-2012-3T	42022	3/0 AWG - 250 kcmil (95 - 120 mm <sup>2</sup> )	4/0 AWG - 500 kcmil (120 - 240 mm <sup>2</sup> )	0.88 - 1.36" (22,0 - 34,6 mm)	0.88 - 1.36" (22,0 - 34,6 mm)	5.2" (132 mm)	5.5" (140 mm)
QS-2012/13-3T	44202	350-500 kcmil (195-240 mm <sup>2</sup> )	250 - 500 kcmil (120 - 240 mm <sup>2</sup> )	0.91 - 1.36" (23,0 - 34,6 mm)	0.91 - 1.36" (28,0 - 42,0 mm)	5.2" (132 mm)	5.5" (140 mm)
QS-2013-3T	42023	400 - 800 kcmil (200 - 400 mm <sup>2</sup> )	500 - 1000 kcmil (240 - 500 mm <sup>2</sup> )	1.12 - 1.70" (28,4 - 43,2 mm)	1.12 - 1.70" (28,4 - 43,2 mm)	6.5" (165 mm)	7.5" (190 mm)
QS-2011-3T-WS*	43248	4 - 3/0 AWG (25 - 95 mm <sup>2</sup> )	1 - 4/0 AWG (35 - 95 mm <sup>2</sup> )	0.70 - 1.07" (17,8 - 27,2 mm)	0.70 - 1.07" (17,8 - 27,2 mm)	5.0" (127 mm)	5.5" (140 mm)
QS-2012-3T-WS*	04211	3/0 AWG - 250 kcmil (95 - 120 mm <sup>2</sup> )	4/0 AWG - 500 kcmil (120 - 240 mm <sup>2</sup> )	0.88 - 1.36" (22,0 - 34,6 mm)	0.88 - 1.36" (22,0 - 34,6 mm)	5.2" (132 mm)	5.5" (140 mm)
QS-2012/13-3T-WS*	04644	350 - 500 kcmil (195 - 240 mm <sup>2</sup> )	250 - 500 kcmil (120 - 240 mm <sup>2</sup> )	0.91 - 1.36" (23,0 - 34,6 mm)	0.91 - 1.36" (23,0 - 34,6 mm)	5.2" (132 mm)	5.5" (140 mm)
QS-2013-3T-WS*	04212	400 - 800 kcmil (200 - 400 mm <sup>2</sup> )	500 - 1000 kcmil (240 - 500 mm <sup>2</sup> )	1.12 - 1.70" (28,4 - 43,2 mm)	1.12 - 1.70" (28,4 - 43,2 mm)	6.5" (165 mm)	7.5" (190 mm)

\*QS-2000-3T-WS uses heat shrink wrap around.

# 3/C to 3/C, 15 kV Cold Shrink Splices

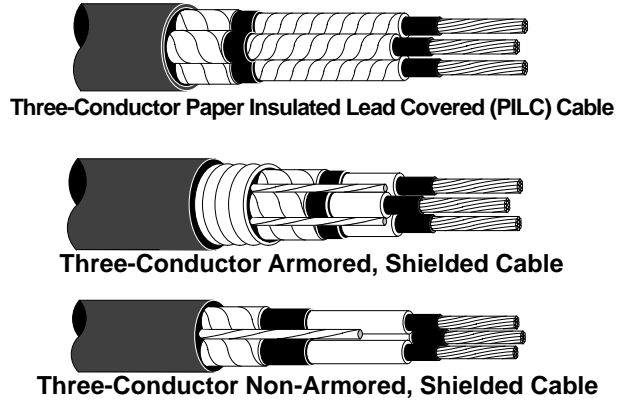
## 3M™ QS-2013-3T-3C 3/C PILC to 3/C Poly/EPR Cable Splice



138

The Cold Shrink QS-2013-3T-3C splice kit is rated 15 kV. It is specially designed for connecting three conductor shielded or belted Paper Insulated Lead Covered (PILC) cable to three conductor shielded Poly/EPR insulated cables. The splice meets the requirements of IEEE

Standard 404. Use Scotchlok 2000T series connectors with this kit. See page 296. Each kit makes one three conductor to three conductor splice.



## 3M™ Cold Shrink Splice QS-2013-3T-3C Series

Product Series	UPC (054007-)	PILC Cable Size	Poly/EPR Cable Size	Poly/EPR Insulation O.D. Range	Connector Requirements		
					O.D.	Maximum Connector Length Aluminum	Maximum Connector Length Copper
Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable, EP-Lead or XLP-Lead Cable, Concentric Neutral (CN) Cable, Jacketed Concentric Neutral (JCN) Cable See above for cable type illustrations.							
QS-2013-3T-3C	43247	400 - 800 kcmil (200 - 400 mm²)	500 - 750 kcmil (240 - 325 mm²)	1.12 - 1.70" (28,4 - 43,2 mm)	1.12 - 1.70" (28,4 - 43,2 mm)	6.5" (165 mm)	7.5" (190 mm)

### 5110-OS Series 15 - 25/28 kV Cable Accessory Oil Stops

3M™ Cold Shrink 5110-OS series kits are designed for use on PILC (Paper Insulated Lead Covered) cable with 200 Amp elbows and 600 Amp modular and disconnectable splice components that meet the requirements of IEEE Standard 386. There are four kits in the series that seal the oil inside the PILC cable, provide an accessory ground lead and environmentally seal the accessory end and cable jacket. These kits can be used on PILC cables sized #4 AWG to 1000 kcmil rated 15 kV and #2 AWG to 800 kcmil rated 25/28 kV.

#### Kit contents:

- Each kit contains sufficient quantities of the following materials to seal and ground one cable end.
- Cold Shrink Oil Stop Tube
  - Cold Shrink Jacket Tube
  - White Restricting Tape
  - Scotch® 130C Rubber Tape
  - Scotch® 13 Semi-Conducting Tape
  - Ground Lead with Accessory Bleed Wire
  - Mastic Seal Strips
  - Instruction for 200 Amp Accessory
  - Instruction for 600 Amp Accessory

### 5110-OS Series Selection

Kit Number	UPC (054007-)	Minimum Insulation Diameter* in. (mm)	Maximum Lead Diameter in. (mm)	Conductor Size Range	
				15 kV	25/28 kV
5110-OS	43404	0.58 (14,7)	1.10 (27,9)	#4 - 3/0 AWG	—
5111-OS	43405	0.72 (18,3)	1.30 (33,0)	4/0 AWG - 300 kcmil	#2 - 1/0 AWG
5112-OS	43406	0.92 (23,4)	1.60 (40,6)	350 - 600 kcmil	2/0 AWG - 300 kcmil
5113-OS	43407	1.10 (27,9)	2 (50,8)	750 - 1000 kcmil	350 - 800 kcmil

\*Over paper.

# Connectors

## 3M™ Scotchlok™ Reducer Series Connectors 2000T CU/AL

Scotchlok Reducer Series Connectors 2000T are aluminum inline sleeves that are applicable for both aluminum and copper conductors. When used with sector shaped conductors, a rounding die is recommended to round-out the sector shape. The reducer series connectors 2000T, like all series connectors 2000T is designed for use with 3M™ splice kits, CS500 series, Scotchlok 2000T series, Scotchlok 2000-3T series and 5700 series splice kits. These connectors have a solid center oil stop and meet ANSI Standard C-119.4.



139

Product Referral Generator

Splicing

- CS 500Pb Series .....pg. 291
- QS 2000T Series .....pg. 292
- QS 2000-3T Series .....pg. 293

### Scotchlok Reducer Series 2000T CU/AL Selection

Product Number	UPC (054007-)	O.D. (in.)	Length (in.)	Case Qty.
2000T 4 - 1/0 CU/AL	42223	0.640	4.740	9 connectors
2000T 2 - 1/0 CU/AL	42226	0.640	4.740	9 connectors
2000T 1/0 - 2/0 CU/AL	42228	0.910	4.700	3 connectors
2000T 2/0 - 4/0 CU/AL	42229	0.910	4.700	3 connectors
2000T 4/0 - 350 CU/AL	42231	1.125	4.700	3 connectors
2000T 250 - 350 CU/AL	42232	1.125	4.690	3 connectors
2000T 350 - 500 CU/AL	42234	1.320	4.700	3 connectors
2000T 400 - 500 CU/AL	42235	1.320	6.250	3 connectors
2000T 500 - 750 CU/AL	42236	1.600	6.250	3 connectors
2000T 500 - 1000 CU/AL	42238	1.625	6.250	3 connectors
2000T 600 - 750 CU/AL	42239	1.600	6.250	3 connectors
2000T 750 - 1000 CU/AL	42243	1.625	6.250	3 connectors

### 3M™ Scotchlok™ Connectors 2000T CU

Scotchlok Connectors 2000T series are copper inline sleeves for use with copper conductor cables of the same size. They can be used to connect copper cable only. They are designed with a solid center oil stop for use with CS500 series splice kits, Scotchlok 2000T series, Scotchlok 2000-3T series and 5700 series splice kits. They can be used on concentric, compressed and compact stranded conductors. When used with sector shaped conductors, a rounding die is recommended to round-out the sector shape. These connectors meet ANSI Standard C-119.4.



140

### Scotchlok 2000T CU Series Selection

Product Number	UPC (054007-)	O.D (in.)	Length (in.)	Case Qty.
2000T - 2 CU	42247	0.700	5.320	9 connectors
2000T - 1/0 CU	42249	0.700	5.320	3 connectors
2000T - 2/0 CU	42250	0.700	5.320	3 connectors
2000T - 4/0 CU	42252	0.880	5.250	3 connectors
2000T - 250 CU	42253	0.880	5.250	3 connectors
2000T - 350 CU	42255	0.875	5.250	3 connectors
2000T - 400 CU	42256	1.125	6.900	3 connectors
2000T - 500 CU	42258	1.125	6.900	3 connectors
2000T - 600 CU	42260	1.188	6.900	3 connectors
2000T - 650 CU	42261	1.219	6.900	3 connectors
2000T - 750 CU	42263	1.299	6.900	3 connectors
2000T - 1000 CU	42265	1.500	6.900	3 connectors