



Motor Lead Connections

3M provides a convenient kit with everything needed to quickly make lugged motor lead connections to feeder cables. Each kit makes three splices and is designed exclusively for the abrasion, moisture, grime and temperature extremes of the industrial environment.

3M™ motor lead connectors meet requirements for CSA certification and NRTL certification.*



Single Conductor Cable

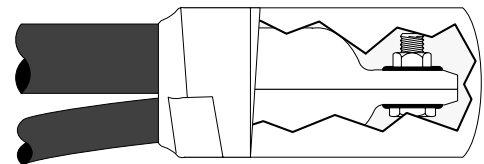


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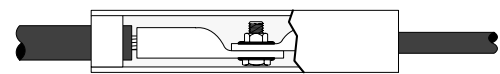
3M Nonshielded Cable Motor Lead Connections—Pigtail and Inline for 1 kV

3M motor lead pigtail connections (**5300 through 5304, copper 1 hole lugs only**) and inline splices (**5311 through 5314**) are designed to splice **1000V** or less, nonshielded feeder and motor lead cable. The splices are made with a slip-on lug cover made of EPDM rubber. **Each kit makes three splices.**

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



5300 Pigtail



5311 Inline

Specifications and Ordering Information for 1 kV 3M Motor Lead Connections

Product Number	5300	5301	5302	5303	5304	5311	5312	5313	5314
Cable Type	Single Conductor Cable. See above for cable type illustration. Each kit makes three splices								
	Pigtail					Inline			
Kit contents:									
Pigtail-Lug Covers	•	•	•	•	•	—	—	—	—
Inline-Splice Covers	—	—	—	—	—	•	•	•	•
Locking Pins	—	—	•	•	•	—	—	—	—
Mastic Sealing Strips	•	•	•	•	•	—	—	—	—
Silicone Grease Lubricant	•	•	•	•	•	•	•	•	•
Adapter Sleeves	—	—	—	—	—	•	•	•	•
Instructions	•	•	•	•	•	•	•	•	•
Specifications:									
Suggested Lug	Copper 1-hole	Copper 1-hole	Copper 1-hole	Copper 1-hole	Copper 1-hole	Copper 1-hole	Copper 1-hole	Copper 1-hole	Copper 1-hole
Feeder	14-10 AWG (2.5-4 mm ²)	10-4AWG (6-16 mm ²)	2-1/0 AWG (35-50 mm ²)	1/0 AWG- 250 kcmil (60-120 mm ²)	250-500 kcmil (150-240 mm ²)	10-4 AWG (6-16 mm ²)	2-1/0 AWG (35-50 mm ²)	1/0 AWG- 250 kcmil (60-120 mm ²)	250-500 kcmil (150-240 mm ²)
Motor Lead	16-12 AWG (1.5-2.5 mm ²)	12-4 AWG (4-16 mm ²)	4-1/0 AWG (25-50 mm ²)	2 AWG- 250 kcmil (35-120 mm ²)	4/0 AWG- 500 kcmil (120-240 mm ²)	12-4 AW (4-16 mm ²)	4-1/0 AWG (25-50 mm ²)	2 AWG- 250 kcmil (35-120 mm ²)	4/0 AWG- 500 kcmil (120-240 mm ²)
Lug Cover* ID	.45" (11 mm)	.70" (18 mm)	.95" (24 mm)	1.2" (30 mm)	1.7" (43 mm)				
CSA File #LR 77372-2									
Ordering Information	5300	5301	5302	5303	5304	5311	5312	5313	5314
UPC (054007-)	08317	12263	12264	12265	12266	12267	12268	12269	12270
Case Qty. (3 splices/kit)	1 kit	1 kit	1 kit	1 kit	1 kit	1 kit	1 kit	1 kit	1 kit

Note: Lugs not included in kits.

*Lug Cover ID: use when calculating kit sizing for a connection of more than two conductors (e.g. 3-way, 4-way, etc. Use of one-hole stacking lugs is recommended.)

3M™ Motor Lead Connections—
Pigtail for Nonshielded 5 and 8 kV Cable



Single Conductor Cable



Nonshielded Dry Cable



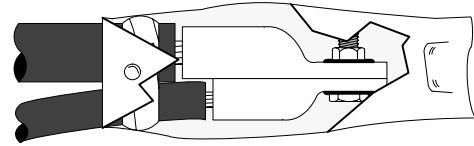
Nonshielded Wet or Dry Cable

3M motor lead pigtail connections (5316 through 5319) are designed to splice up to **5 to 8 kV** nonshielded feeder and motor lead cables. The splices are made with a slip-on lug cover made of EPDM rubber. Use with 1- or 2-hole copper lugs. **Each kit makes three splices.**



Suggested 3M Lugs

Motor Lead Kit	Suggested Lug Type	Page
5300-5304	Copper 1 hole lugs only	pg. 297
5311-5314	Copper 1 hole lugs only	pg. 297
5316-5319	Copper 1 or 2 hole lugs	pg. 298
5321-5324	1 or 2 hole lugs	pg. 299
5331-5334	1 or 2 hole lugs	pg. 300



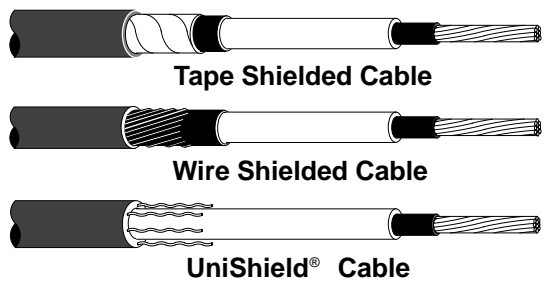
Pigtail Nonshielded

Specification and Ordering Information for Nonshielded 5 and 8 kV 3M Motor Lead Connections

Product Number	5316	5317	5318	5319
Cable Type	Single Conductor Cable, Nonshielded Dry Cable, Nonshielded Wet or Dry Cable See above for cable type illustration.			
	Each kit makes three splices			
	Nonshielded Cable			
Kit contents:				
Pigtail-Lug Covers	•	•	•	•
Locking Pins	•	•	•	•
Mastic Sealing Strips	•	•	•	•
Solvent Cleaning Cloths	•	•	•	•
Silicone Grease Lubricant	•	•	•	•
Cold Shrink Sleeves	—	—	—	—
Scotch® 2220 Stress Control Tape	—	—	—	—
Rubber Tape	•	•	•	•
Adapter Sleeves	—	—	—	—
Instructions	•	•	•	•
Specifications:				
Suggested Lug	Copper 1 or 2 hole	Copper 1 or 2 hole	Copper 1 or 2 hole	Copper 1 or 2 hole
Feeder	8 - 4 AWG (10 - 16 mm ²)	2 - 1/0 AWG (35 - 50 mm ²)	1/0 AWG - 250 kcmil (60 - 120 mm ²)	250 - 500 kcmil (150 - 240 mm ²)
Motor Lead	10 - 4 AWG (6 - 16 mm ²)	4 - 1/0 AWG (25 - 50 mm ²)	2 AWG - 250 kcmil (35 - 120 mm ²)	4/0 AWG - 500 kcmil (120 - 240 mm ²)
CSA File #LR 77372-2				
Ordering Information	5316	5317	5318	5319
UPC (054007-)	08313	08314	08315	08316
Case Qty. (3 splices/kit)	1 kit	1 kit	1 kit	1 kit

Note: Lugs not included in kits.
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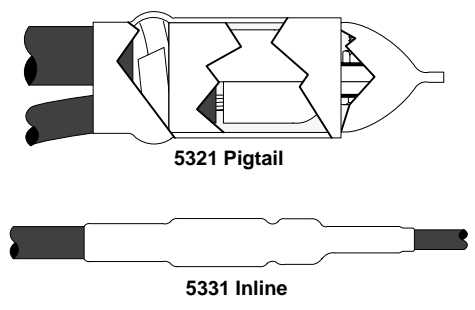
3M™ Shielded Cable Motor Lead Connections—Pigtail and Inline for 5 and 8 kV



Product Referral Generator

Taping	
– Scotch® Super 33+pg. 3
– Scotch® Super 88pg. 3
Connectingpg. 22
Insulating	
– Cold Shrinkpg. 285
– 2200, 2210 Mastic Stripspg. 10

3M motor lead pigtail connections (**5321 through 5324 copper lugs only**) and inline splices (**5331 through 5334**) are designed to splice **5 to 8 kV** shielded (Tape or Wire Shielded and UniShield®) and nonshielded feeder cable. The splices are made with a cold shrink lug cover of EPDM rubber. Use with 1 or 2 hole lugs. **Each kit makes three splices.**



Specifications and Ordering Information for Shielded 5 and 8 kV 3M Motor Lead Connections (continued)





Product Number	5321	5322	5323	5324
Cable Type	Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable See above for cable type illustration.			
	Each kit makes three splices			
	Shielded Cable			
Kit contents:				
Pigtail-Lug Covers	•	•	•	•
Mastic Sealing Strips	•	•	•	•
Solvent Cleaning Cloths	•	•	•	•
Silicone Grease Lubricant	•	•	•	•
Cold Shrink Sleeves	•	•	•	•
Scotch® 2220 Stress Control Tape	•	•	•	•
Rubber Tape	•	•	•	•
Instructions	•	•	•	•
Specifications:				
Suggested Lug	1 or 2 hole	1 or 2 hole	1 or 2 hole	1 or 2 hole
Feeder	8 - 4 AWG (10 - 16 mm ²)	2 - 1/0 AWG (35 - 50 mm ²)	1/0 AWG - 250 kcmil (60 - 120 mm ²)	250 - 500 kcmil (150 - 240 mm ²)
Motor Lead	10 - 4 AWG (6 - 16 mm ²)	4 - 1/0 AWG (25 - 50 mm ²)	2 AWG - 250 kcmil (35 - 120 mm ²)	4/0 AWG - 500 kcmil (120 - 240 mm ²)
CSA File #LR 77372-2				
Ordering Information	5321	5322	5323	5324
UPC (054007-)	12271	12272	12273	12274
Case Qty. (3 splices/kit)	1 kit	1 kit	1 kit	1 kit

continued on next page

Note: Lugs not included in kits. For replacement parts, see next page.

UniShield® is a registered trademark of BICC.

Specifications and Ordering Information for Shielded 5 and 8 kV 3M™ Motor Lead Connections

Product Number	5331	5332	5333	5334
Cable Type	Tape Shielded Cable, Wire Shielded Cable, UniShield® Cable See page 299 for cable type illustration.			
	Each kit makes three splices			
Shielded Cable				
Kit contents:				
Solvent Cleaning Cloths	•	•	•	•
Silicone Grease Lubricant	•	•	•	•
Cold Shrink Sleeves	•	•	•	•
Scotch® 2220 Stress Control Tape	•	•	•	•
Rubber Tape	•	•	•	•
Adapter Sleeves	•	•	•	•
Instructions	•	•	•	•
Specifications:				
Suggested Lug	1 or 2 hole	1 or 2 hole	1 or 2 hole	1 or 2 hole
Feeder	8 - 4 AWG (10 - 16 mm ²)	2 - 1/0 AWG (35 - 50 mm ²)	1/0 AWG - 250 kcmil (60 - 120 mm ²)	250 - 500 kcmil (150 - 240 mm ²)
Motor Lead	10 - 4 AWG (6 - 16 mm ²)	4 - 1/0 AWG (25 - 50 mm ²)	2 AWG - 250 kcmil (35 - 120 mm ²)	4/0 AWG - 500 kcmil (120 - 240 mm ²)
CSA File #LR 77372-2				
Ordering Information	5331	5332	5333	5334
UPC (054007-)	12275	12276	12277	12278
Case Qty. (3 splices/kit)	1 kit	1 kit	1 kit	1 kit

Note: Lugs not included in kits.

Motor lead replacement tubes are designed to allow for re-use of 3M™ pigtail splicing kits 5320 series. Each kit contains:

- A cold shrink tube
- Mastic strips
- Rubber tape
- Silicone grease, which permits the reinstallation of the pigtail boots

Ordering Information for Motor Lead Replacement Kits

Product Number	UPC (054007-)	Replacement Tube
5321	44174	MLRT-21
5322	44175	MLRT-22
5323	44176	MLRT-23
5324	44177	MLRT-24