## нстр мент и принадлежности дл электрики

Технические характеристики

## По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89

Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-23-67 Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81

Россия +7(495)268-04-70

Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Саранск (8342)22-96-24 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35

Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

Киргизия +996(312)96-26-47

эл.почта: tam@nt-rt.ru || сайт: https://3m.nt-rt.ru/

Казахстан +7(7172)727-132



3M<sup>™</sup> Heat Shrink Thin-Wall Flexible Polyolefin Tubing FP-301

3M™ Cold Shrink Insulator WF103

3M™ Cold Shrink Insulator WF101





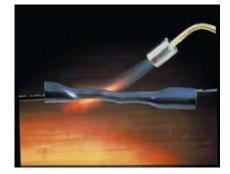


3M™ Cold Shrink Insulator WF100

3M<sup>™</sup> Cold Shrink Connector Insulator WF104 3M™ Cold Shrink Insulator WF102







3M<sup>™</sup> Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT

3M<sup>™</sup> Heat Shrink Cable Breakout Boot

3M<sup>™</sup> Heat Shrink Tubing HDT



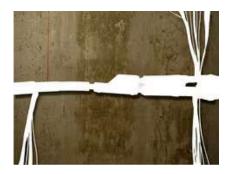




3M<sup>™</sup> Cold Shrink Quick Insulators QI Series

3M<sup>™</sup> Steel Barb Cable Ties

3M™ Heat Shrink Tubing EPS-400







3M<sup>™</sup> Cold Shrink Branch Splice Adapter Kits 3M™ Cold Shrink End Caps EC Series 3M<sup>™</sup> Cold Shrink Connector Insulators 8420 and 8430 Series







3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7600-T-3W Series for 5-35 kV

3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Brazed Seam Locking Forks

3M™ Cold Shrink QS4s Integrated Short Splice Kit 25SP Series







3M<sup>™</sup> Standard Nylon Cable Ties

3M™ Cold Shrink QS4 Integrated Splice Kits 15-SP Series 3M™ Cold Shrink QS4 Integrated Splice Kits 35-TS Series







3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 6020K Series



3M<sup>™</sup> Copper Compression Connectors









3M<sup>™</sup> Scotchlok<sup>™</sup> IDC Connector 903

3M™ Cold Shrink Splice Kit 5551-3C-AC





3M<sup>™</sup> Deadbreak Component

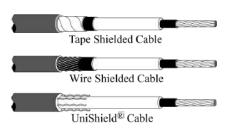
3M™ Modified Polyvinylidene Flouride Heat Shrink Tubing MFP 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated with Insulation Grip Interlock Barrel Female... Disconnects







3M™ Cold Shrink QS4 Integrated Splice Kits 15-TS Series 3M<sup>™</sup> Cold Shrink QS-III Inline CN/JCN Splice Kits 5415A, 5416A, 5417A and 5418A Series 3M<sup>™</sup> Cold Shrink QT-III Termination Kit with Jumper Wire Top Insulator 7640-S & 7650-... Series







3M<sup>™</sup> Molded Rubber QS-II Cable Splice Kits 5500 Series 3M<sup>™</sup> Scotchlok<sup>™</sup> Connectors 2000T-CU 3M<sup>™</sup> Motor Lead Inline Splice Kits 5311–5314







3M™ Cold Shrink QS4s Integrated Short Splice Kit 15SP Series 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Multi-Stud Ring Tongues 3M<sup>™</sup> Scotchlok<sup>™</sup> IDC Connector 905







3M<sup>™</sup> Elbow Surge Arrester

3M<sup>™</sup> ScotchCode<sup>™</sup> Wire Marker Write-On Dispensers 3M<sup>™</sup> Cold Shrink Cable Breakout Boots 8560 Series







3M™ Scotchcast™ Flexible Power Cable Splicing Kits 82-F Series 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Standard Forks 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Locking Forks







3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Interlock Barrel Female Disconnects

3M<sup>™</sup> GS Series Ground Strap Assembly Kits

3M<sup>™</sup> Cold Shrink Mine and Portable Splice Kit 8043-1, Max. Cable O.D. 1.80 in, 1/Case



3M<sup>™</sup> Splice Kit UF



Cold Shrink QS 2000-3T Trifurcating Transition Splice Kits 15 kV

3M™ Scotchcast™ Mine and<br/>Portable Cable Splicing Kits3M™ Trifurcating Transition<br/>Splice Kits





8096 Series



3M<sup>™</sup> Scotchlok<sup>™</sup> Closed-End Connectors 3M™ CXS Series Cold Shrink Coax Sealing Kits Scotch® Tape Shielded Cable Splice Kit 5700 Series





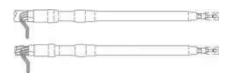


3M<sup>™</sup> Wye Resin Splice Kits

3M™ Scotchlok™ Vinyl Insulated Butted Seam Piggy-Back Disconnects 3M<sup>™</sup> Scotchlok<sup>™</sup> Fork Non-Insulated, 100/bottle, M14-10FX, wider-tongue design for use o… free-standing studs, 500/Case



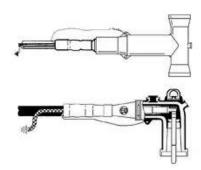




3M<sup>™</sup> Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5467A and 5468A Series 3M<sup>™</sup> Cold Shrink QT-III High Fault Current Termination Kit 7650-S-HSG & 7660-HSG... Series 3M<sup>™</sup> Cold Shrink QT-III Termination 7640-T-HSG & 7650-T-HSG Series for 5-35 kV







3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5690K Series 3M™ Scotchlok™ Nylon Insulated with Insulation Grip Ring Tongues 3M<sup>™</sup> Shield Adapter Kits







3M<sup>™</sup> Mechanical Shearbolt Two-Hole Lug QL2 Series

3M<sup>™</sup> Constant Force Springs

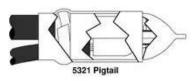
3M™ Heatshrink Cable End Cap SKE



3M™ Highland™ Wire Connectors



3M<sup>™</sup> Scotchcast<sup>™</sup> Cold Shrink Inline Splice Kits 5760 Series



3M™ Motor Lead Pigtail Splice Kits 5321-5324



3M<sup>™</sup> Heat Shrink Cable Breakout Boot







3M<sup>™</sup> Connector CIR Series

3M<sup>™</sup> Parallel Clamp CP-1, up to 35 kV, 6 AWG







3M<sup>™</sup> Motor Lead Inline Splice Kits, Non-Shielded and Shielded Cables, 5331- 5334 3M<sup>™</sup> Scotchlok<sup>™</sup> Female Disconnect Vinyl Insulated, 100/bottle, MVG24-110/32DF… 500/Case 3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Ring Tongues







3M<sup>™</sup> CI-T Splice Connectors

3M<sup>™</sup> ScotchCode<sup>™</sup> Pre-Printed Wire Marker Book SPB 3M<sup>™</sup> Heat Shrink Tubing MDT



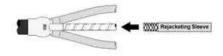




3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Standard Forks 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Brazed Seam Block Forks 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Butt Connectors







3M<sup>™</sup> Mechanical Shearbolt Connectors QCI 3M<sup>™</sup> ACCR High-Capacity Transmission Conductor 3M™ Rejacketing Sleeves RJS Series







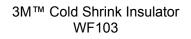
3M<sup>™</sup> Cold Shrink Shielded Splice Kits 5550 Series 3M<sup>™</sup> Screw-Mount Ties

3M<sup>™</sup> Grounding and Sealing Accessories





Scotch® Grounding Braid 25, 1/2 in x 15 ft, 1 Roll/Case



3M™ Cold Shrink Insulator WF101





3M™ Cold Shrink Insulator WF100 3M<sup>™</sup> Cold Shrink Connector Insulator WF104 3M<sup>™</sup> SC Stem Connectors







3M<sup>™</sup> Cold Shrink 3-Conductor Breakout Kits 3C-BOK Series 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Bullet-Style Male Disconnects Shearbolt One-Hole Lug QLS Series







3M<sup>™</sup> Heat Shrink Tubing HDCW

3M<sup>™</sup> SJ Cold Shrink Foldback Splice Jacket Kits 3M™ Cold Shrink QS4s Integrated Short Splice Kit 35SP Series







3M™ Deadbreak Equipment Connection Kit 3M™ Cold Shrink Insulator WF102 Scotch™ Bundling Straps RF3710, 0.5 in x 8 in, (12,7 mm x 20,3 cm) Black







3M<sup>™</sup> Cold Shrink QT-III Termination Kits 7673 S Series 3M<sup>™</sup> Cold Shrink QS-III Inline Shielded Cable Splice Kits 5513A, 5514A, 5515A and... 5516A Series 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7600-T-3-RJS Series for 5-35 kV







3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Brazed Seam Ring Tongues 3M<sup>™</sup> LBC Series Industrial Loadbreak Elbow Connectors 3M<sup>™</sup> Cold Shrink QS-III Inline Shielded Cable Splice Kits 5524A, 5525A and 5526A







3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7600-T-3W Series for 5-35 kV

3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5600 & 5680 Series 3M<sup>™</sup> Cold Shrink QS-III Inline Shielded Cable Splice Kits 5535A and 5536A







3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7600-T-3G Series for 5-35 kV 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5640 & 5650 Series

3M<sup>™</sup> Cold Shrink Connector Insulators 8420 and 8430 Series



3M<sup>™</sup> Cold Shrink Splice Jacket Kits





3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Nylon Fully Insulated Butted Seam Male Disconnects 3M<sup>™</sup> Scotchlok<sup>™</sup> IDC Connector 562







3M<sup>™</sup> Scotchlok<sup>™</sup> Copper One Hole Long Barrel Lug 31000 Series

3M<sup>™</sup> Heat Shrink Multiple-Wall

3M<sup>™</sup> Heat Shrink Flexible Polyolefin Tubing EPS-200







3M™ Scotchcast™ M-Series Cable Repair Kits 3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Nylon Fully Insulated Female Disconnects

3M<sup>™</sup> Scotchlok<sup>™</sup> Electrical IDC 564-BULK, Double Run, White, 18-14 AWG, 500 per carton,... 5000/case







3M<sup>™</sup> Scotchlok<sup>™</sup> Aluminum One Hole Lug 40000 Series

3M<sup>™</sup> Cold Shrink End Caps EC Series 3M™ Industrial Loadbreak Bushing Inserts





3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated 3M<sup>™</sup> Heat Shrink Tubing PSTH Seamless Compression Butt Connectors

3M<sup>™</sup> Cross-Arm Mounting Brackets







3M<sup>™</sup> Connector Drivers

3M<sup>™</sup> Performance Plus<sup>™</sup> Wire Connectors

3M<sup>™</sup> Industrial Loadbreak Protective Caps







3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated with Insulation Grip Male Disconnects

3M<sup>™</sup> Cold Shrink Quick Insulators QI Series

3M<sup>™</sup> Aluminum Connectors CI Series









Scotch® Tape Termination Kit 5700 Series

3M<sup>™</sup> Scotchlok<sup>™</sup> IDC Connector 557 Scotch™ Bundling Strap RF3730, .5 in x 8 in (12,7 mm x 20.3 cm) Multi-Color







3M<sup>™</sup> Heat Shrink Thin-Wall Flexible Polyolefin Tubing FP-301

3M<sup>™</sup> Spacer Web 7820, 15 kV,

1 /Case

3M<sup>™</sup> Wireless Weatherproofing Kits







3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Block Forks

3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Brazed Seam Locking Forks 3M<sup>™</sup> Cable Grounding Kits







3M™ Scotchcast™ Sheath Seal Kits 3M<sup>™</sup> Scotchlok<sup>™</sup> Electrical IDC 316IR, Pigtail, Irrigation Applications, Black/White, 22-... AWG, 30 per carton, 300 /Case

3M<sup>™</sup> Stacked Sleeve Splice Jacket Kits







3M<sup>™</sup> Cold Shrink Quick Splice Kits QSLV-M Series 3M<sup>™</sup> Cold Shrink Splice Kit QS-III Series 5545A, Longitudinally Corrugated, 46kV, 4/0-1000... kcmil (120-500 mm²), 1/case 3M<sup>™</sup> Cold Shrink QS4 Integrated Splice Kits 25-JCN Series







3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5660 Series

3M<sup>™</sup> Secure Grip Wire Connectors

3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Brazed Seam Butt Connectors







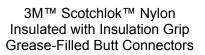
3M™ Scotchlok™ IDC Connector 567 3M<sup>™</sup> Scotchlok<sup>™</sup> Aluminum Lugs Two Hole 40100 Series Scotch™ Bundling Wrap, RF3740, 0.75 in x 12 ft (19,0 mm x 3,6 m) Black







3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Female Disconnects



3M™ PanelSafe™ Lockout Systems



3M<sup>™</sup> Heat Shrink Tubing IMCSN



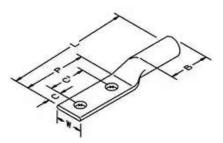


3M<sup>™</sup> Cable Preparation Kits

3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Interlock Barrel Female Disconnects

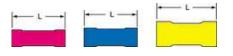






3M<sup>™</sup> Flanged Block Fork Nylon Insulated, 100/bottle, MNG14-6FFB/SX, suitable fo… use in a terminal block, 500/Case 3M<sup>™</sup> Copper Oil Seal Lugs

3M<sup>™</sup> Scotchlok<sup>™</sup> Copper Two Hole Long Barrel Lug 31100 Series







3M™ Scotchlok™ Nylon Insulated Brazed Seam Ring Tongues 3M<sup>™</sup> Scotchlok<sup>™</sup> Aluminum Connectors 20000 Series 3M<sup>™</sup> GSK Series Termination Grounding Kits







3M<sup>™</sup> QT-II PILC Cable Silicone Rubber Termination Kit 5804-Pb-250, 15 kV, Cable Ins. O… 1.20-1.90 in, 1/kit 3M<sup>™</sup> Cold Shrink Inline Splice Kits 5730 Series 3M<sup>™</sup> Highland<sup>™</sup> Terminal Kit, HTK-1, 180 pieces, refillable kit is compact, portable and… durable, 4 Kits/Case







3M<sup>™</sup> Heat Shrink Heavy-Wall Cable Sleeves ITCSN 3M<sup>™</sup> PS Cold Shrink Insertion Seals 3M<sup>™</sup> Motor Lead Pigtail Splice Kits, 1-Hole Lug Connections 5300-5304 Series







3M<sup>™</sup> Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5450 Series

3M <sup>™</sup> Scotchlok <sup>™</sup> Non-Insulated
Butted Seam Male Disconnects

3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Locking Forks







3M™ Scotchlok™ Copper One Hole Lug Series 30000 3M<sup>™</sup> PILC Splice Kits

3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Bullet-Style Female Disconnects





3M<sup>™</sup> Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A... MT & 5777A-MT for 5/8 kV 3M™ Cold Shrink QS4 Integrated Splice Kits 25-SP Series 3M<sup>™</sup> Cold Shrink QT-III Inverted Termination Kit 7620-S & 7690-S Series







3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5670 Series 3M<sup>™</sup> Cross-Arm Mounting Brackets MB and MBS Series 3M<sup>™</sup> Sheath Seal Kits 5831 and 5832



CCI Series Conductor Covers



3M™ Overhead Conductor Animal Guard Cover 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Flag Female Disconnects 3M™ Scotchlok™ IDC Connector 801

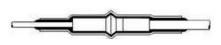


Scotch™ Bundling Wrap RF3750, 1.5 in x 30 ft (38,1 mm x 9,1 m) Black





3M<sup>™</sup> Scotchlok<sup>™</sup> IDC Connector 314 3M<sup>™</sup> Heat Shrink Tubing NST







3M<sup>™</sup> Airport Lighting Connector Sealing Kit IAL-3, 1 kV, 30/case

3M<sup>™</sup> Deadbreak AL Compression Lug

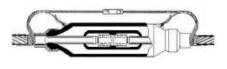
Scotch™ Bundling Straps RF3760, 30 count, .25 in x 8 in (6,3 mm x 20,3 cm) Black







3M<sup>™</sup> Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT 3M™ Cold Shrink QS4 Integrated Splice Kits 35-JCN Series 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7620-S-3RJS, 7680-S-3RJS & 7690-S-3RJ… Series







3M<sup>™</sup> Molded Rubber QS-II Cable Splice Kits 5430 Series 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5610 A Series 3M<sup>™</sup> Aluminum Connectors CI-A Series







3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Copper Seamless Compression Lug Ring Tongues 3M<sup>™</sup> Scotchlok<sup>™</sup> IDC Connector 901 3M<sup>™</sup> ScotchCode<sup>™</sup> Wire Marker Tape Dispenser STD





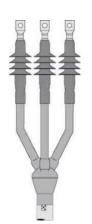


3M™ PILC Accessory Oil Stop Kits

3M™ Thin-Wall Heat Shrink Tubing EPS-300

3M™ Cold Shrink QS4 Integrated Splice Kits 15-JCN Series







3M™ Cold Shrink QS4 Integrated Splice Kits 35-SP Series 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7620-S-3W, 7680-S-3W & 7690-S-3W Series 3M<sup>™</sup> Molded Rubber QS-II Cable Splice Kits 5450 R Series







3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5630K Series 3M<sup>™</sup> Aluminum Transition Connectors CI-T Series

3M<sup>™</sup> Scotchlok<sup>™</sup> Electrical IDC 902, 50 per pouch, 500/Case







3M<sup>™</sup> ScotchCode<sup>™</sup> Write-On Wire Marker Book SWB

3M<sup>™</sup> Heat Shrink Tubing ITCSF

3M™ Cold Shrink Inline Splice Kits 5740 Series







3M<sup>™</sup> Cable Stackers

3M<sup>™</sup> Heat Shrink Tubing VTN-200 3M<sup>™</sup> Heat Shrink Tubing SMS







3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Ring Tongues

3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Female Disconnects

3M<sup>™</sup> Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5786A-MT, 5787A... MT & 5788A-MT







3M™ Cold Shrink QS4 Integrated Splice Kits 25-TS Series 3M™ Cold Shrink QT-III Termination Kit 7620-S-3G, 7680-S-3G & 7690-S-3G Series 3M™ Molded Rubber QS-II Cable Splice Kits 5411R/5412R Series







3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 4604 & 4605 Series 3M<sup>™</sup> Cable Repair Space Web SW-40, 1-1/2 in x 40 in, 50 strips /Case 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Ring Tongues







3M<sup>™</sup> Scotchlok<sup>™</sup> IDC Connector 804 3M<sup>™</sup> Highland<sup>™</sup> Vinyl Insulated Female Disconnect Terminal FDV10-250Q, AWG 12-10,... 25/bag, 10 Bags/Case

3M™ Cold Shrink Cable Accessory Sealing Kits 8450 Series







3M<sup>™</sup> Heat Shrink Tubing FP-301VW 3M<sup>™</sup> Heat Shrink Tubing TMW

3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Female Disconnects





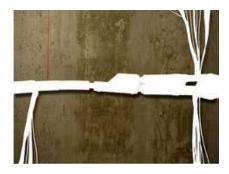


3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Flanged Block Forks

3M<sup>™</sup> Molded Rubber QS-II Cable Splice Kits 5411/5412 Series 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Standard Forks







3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Butt Connectors 3M<sup>™</sup> Scotchlok<sup>™</sup> Moisture Guard Connectors 3M<sup>™</sup> Cold Shrink Branch Splice Adapter Kits



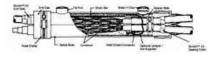
3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Seamless Butt Connectors

3M<sup>™</sup> Direct Bury Splice Kits

3M<sup>™</sup> ScotchCode<sup>™</sup> Wire Marker Tape Refill Roll







3M<sup>™</sup> Cold Shrink Coax Sealing Kit 98-KC 8 3M<sup>™</sup> Motor Lead Pigtail Splice Kits 5380 Series 3M<sup>™</sup> Scotchcast<sup>™</sup> Re-Enterable Signal and Control Cable Splicing Kits 78-R Series







3M<sup>™</sup> Scotchcast<sup>™</sup> Inline Resin Power Cable Splice Kits 82-AN Series

3M™	Scotchlok™	Non-Insulated
Bu	tted Seam P	in Terminals

3M<sup>™</sup> Modular Tap Splice Kits







3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated Interlock Barrel Female Disconnects 3M<sup>™</sup> Cold Shrink Corrosion Protection Kits CPT Series 3M<sup>™</sup> QS Molded Rubber Splice 5408, CN and JCN Cable, 15 kV, 1/case



Scotchcast 3M P-3 Spacer Tape Naka224 3trenuk32m



3M<sup>™</sup> Scotchcast<sup>™</sup> Flexible Splice 82-BF1 (2131), 10 Kits/Case

3M™ Scotchcast™ Spacer Tape P-3, 1-1/2 in X 27 ft (38,1 mm x 8,23 m), 50 rolls/case

3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Bullet-Style Male Disconnects



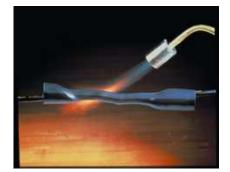




3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Multi-Stud Ring Tongues

3M™ Modular Splicing Kits

3M<sup>™</sup> Heat Shrinkable Splice Jacket Kit HSJ



3M<sup>™</sup> Heat Shrink Tubing HDT





3M™ Electrostatic Animal Guards 3M<sup>™</sup> Mining Cable Splice Kit 3100 Series



3M<sup>™</sup> Scotchcast<sup>™</sup> Cold Shrink Inline Splice Kits 5750 Series

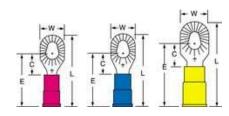




3M<sup>™</sup> Scotchcast<sup>™</sup> Inline Splice Kits 72-N Series 3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Male Disconnects







3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Standard Forks 3M<sup>™</sup> Scotchlok<sup>™</sup> IDC Connector 972-A 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Interlock Barrel Female… Disconnects







3M<sup>™</sup> Cold Shrink Splice Transition Kits 3M<sup>™</sup> Deadbreak Adapter

3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7640-S, 7650-S & 7660-S Series







3M™ Scotchlok™ Nylon Insulated Seamless Butt Connectors 3M<sup>™</sup> Cold Shrink Splice QS2000B 3M™ Scotchlok™ Nylon Fully Insulated Butted Seam Male Disconnects







3M<sup>™</sup> Scotchlok<sup>™</sup> Copper Connectors 10000 Series 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7620-T & 7690-T Series for 5-35 kV 3M<sup>™</sup> Highland<sup>™</sup> Vinyl Insulated Butted Seam Male Disconnects







3M<sup>™</sup> Scotchlok<sup>™</sup> 534 Electrical IDC, 100 per pouch 3M™ Cold Shrink QS-III Splice Kits 3M<sup>™</sup> Scotchlok<sup>™</sup> IDC Connector 560 & 560B







3M<sup>™</sup> ScotchCode<sup>™</sup> Wire Marker Write-On Dispenser SLW 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Locking Forks 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Butt Connectors







3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Block Forks

- 3M<sup>™</sup> Scotchlok<sup>™</sup> Block Flanged Fork, Non-Insulated Brazed Seam M10-10FFBK, 12-10... AWG, 500/Case
- 3M<sup>™</sup> Industrial Loadbreak Elbows 5810 Series







3M™ Highland™ Nylon Fully Insulated Male Disconnects

3M™ Highland™ Vinyl Insulated Butted Seam Block Forks

3M<sup>™</sup> Scotchlok<sup>™</sup> Closed End Connectors







3M<sup>™</sup> Cold Shrink Silicone Insulators 8440 Series 3M<sup>™</sup> Scotchlok<sup>™</sup> Electrical IDC 560N-BULK, Brown, 18–16 AWG (solid/stranded), 14 AW... (stranded), 500 per carton, 5000/case 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated with Insulation Grip Female Disconnects







3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Male Disconnects

3M™ Rachet Spring Cutter Tool

3M<sup>™</sup> Cold Shrink Portable Cable Splice Kit 2237A Series







3M™ Scotchlok™ Nylon Insulated with Insulation Grip Male Disconnects 3M<sup>™</sup> Scotchlok<sup>™</sup> Block Fork Vinyl Insulated, 100/bottle, MVU14-10FBX, suitable for u… in a terminal block, 500/Case 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Butt Connectors







5477A Splice Body

3M<sup>™</sup> Molded Rubber QS-II Cable Splice Kits 5420 Series 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Female Disconnects







3M<sup>™</sup> Scotchflex<sup>™</sup> Cable Tie Base 3M<sup>™</sup> Scotchlok<sup>™</sup> Carbon Steel Scissors 3M<sup>™</sup> Cold Shrink QT-III Tubular Termination Kits







3M<sup>™</sup> Deadbreak Shearbolt Lug

3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7620-S, 7680-S & 7690-S Series 3M<sup>™</sup> Flat Cable Cutter 3382







3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Parallel Connectors 3M<sup>™</sup> Discrete Wire Hand Tool, 3430-1000 Series 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Locking Forks







3M<sup>™</sup> Scotchlok<sup>™</sup> Hardened Steel Ratchet Tool 3M<sup>™</sup> Cold Shrink QS4 Integrated Splice QS4-35SP-350-1000-BCA 3M™ Pin (Stem) Mechanical Shearbolt Lug QP







3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Block Forks 3M™ Highland™ Vinyl Insulated Butted Seam Butt Splices 3M™ Highland™ Nylon Fully Insulated Butted Seam Male Disconnects







3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Double Male-Female Adapters 3M™ Scotchlok™ Nylon Insulated with Insulation Grip Pin Terminals

3M<sup>™</sup> Scotchlok<sup>™</sup> Terminal Kits







3M™ Deadbreak T-Body w/Test point 635T, 35kV, 600A,1/Box

3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Seamless Butt Connectors 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Ring Tongues







3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated Butted Seam Female Disconnects 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Pin Terminals 3M™ Scotchlok™ Terminal Boxes







Scotch® Lead-Sheath-Repair-Kit, 35 kV, 1 kit/Case 3M™ Scotchlok™ Nylon Insulated with Insulation Grip Piggy-Back Disconnects

3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Brazed Seam Locking Forks







3M™ Hi-Amp Accessory Grounding Kits 3M<sup>™</sup> Cold Shrink Transition Splice Kit QS2012-3T-WS, Tape, Wire, UniShield®, EP-Lead o... XLP-Lead, 1/case 3M™ Highland™ Vinyl Insulated Butted Seam Standard Forks







3M™ Highland™ Nylon Fully Insulated Butted Seam Female Disconnects 3M™ Scotchlok™ Vinyl Insulated Brazed Seam Block Forks

3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Brazed Seam Ring Tongues







3M™ Scotchlok™ Butted Seam Flag High-Temperature Female Disconnects

- 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Standard Forks 3M<sup>™</sup> Highland<sup>™</sup> Vinyl Insulated Butted Seam Ring Tongues







3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Flanged Block Forks

- 3M™ Highland™ Vinyl Insulated Butted Seam Locking Forks
- 3M™ Equipment Connection Splicing Kits

# 3M<sup>™</sup> Equipment Connection Splicing Kits

3M ID B00014759

## Details

Provides fully shielded, deadfront cable connections Permits connection to standard non-loadbreak Shielded connection for transformers, oil switches and transformer switches Splices both aluminum and copper conductors ANSI/IEEE Approved

## **Typical properties**

Brands: 3M<sup>™</sup> Current Rating: 600.0 A Product Series: 5815 Product Type: Splice Separable Connector Type: Dead Break Elbows Splice Type: Modular eClass 14 Classification Group: 27440308

# 3M<sup>™</sup> Highland<sup>™</sup> Vinyl Insulated Butted Seam Locking Forks

## Details

Vinyl-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Spring-like tongue firmly fits around the stud

## **Typical properties**

Fork Type: Locking Insulation Material: Vinyl Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Minimum Conductor Size (Imperial): 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup> Terminal Style: Locking eClass 14 Classification Group: 27400204

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Flanged Block Forks

#### Details

Non-insulated, butted-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Suitable for use in a terminal block Accommodates wire sizes 16 to 14 AWG Electrolytic copper construction offers good conductivity 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.09 Inch,0.07 Inch,0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.25 Inch,0.29 Inch Dimension E: 0.54 Inch, 0.5 Inch Fork Type: Block Flanged Fork, Flanged Block Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Solution for: Wireless Network: Infrastructure Accessories Stud Size: #6,#8 Terminal Style: Flanged Block Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.65 in, 0.73 in Overall Width (Imperial): 0.3 in, 0.32 in

# 3M<sup>™</sup> Highland<sup>™</sup> Vinyl Insulated Butted Seam Ring Tongues

## Details

Vinyl-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Standard-style ring tongue fits around the stud

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant 25/bag

## **Typical properties**

Barrel Inside Diameter: 0.09 Inch,0.07 Inch,0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Length (Metric): 6.35 mm Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.22 Inch, 0.29 Inch, 0.33 Inch, 0.4 Inch, 0.44 Inch Connection Type: Crimp Dimension E: 0.67 Inch,0.85 Inch,0.99 Inch,0.84 Inch,0.74 Inch,0.78 Inch Dimension E (Metric): 17.02, 18.8, 19.81, 21.34, 21.59, 25.15 Insulation Material: Vinvl Material: Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 0.823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.138 in, 0.164 in, 0.19 in, 0.25 in, 0.313 in Minimum Stud Diameter (Metric): 3.5 mm, 4 mm, 5 mm, 6.35 mm, 7.95 mm Ring Type: Standard Stud Size: #10,#6,1/4 Inch,5/16 Inch,#8,3/8 Inch Stud Size (Metric): 635, 3505, 4166, 4826, 7938, 9525 Stud Sizes: #10, 1/4 Inch, 3/8 Inch, 5/16 inch **Terminal Style: Standard** Terminal Type: Ring UL File Number: E23438 Units per Case: 10.0 Units per bag: 25

## **Dimensions and Classifications**

Overall Length (Imperial): 0.8 in, 0.9 in, 0.93 in, 1.03 in, 1.08 in, 1.26 in Overall Length (Metric): 20.32 mm, 22.86 mm, 23.622 mm, 26.162 mm, 27.432 mm, 32 mm, 32.004 mm

Overall Width (Imperial): 0.25 in, 0.31 in, 0.33 in, 0.38 in, 0.47 in, 0.53 in, 0.54 in Overall Width (Metric): 6.35 mm, 7.874 mm, 8.382 mm, 9.652 mm, 11.938 mm, 13.462 mm, 13.716 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Standard Forks

## Details

Non-insulated, butted-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Wider-tongue design for use on free-standing studs

## **Typical properties**

Barrel Inside Diameter: 0.07 Inch,0.09 Inch,0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.29 Inch Dimension E: 0.54 Inch Fork Type: Standard Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Solution for: Wireless Network: Infrastructure Accessories Stud Size: #10,#6 **Terminal Style: Standard** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.7 in, 0.73 in Overall Width (Imperial): 0.34 in, 0.38 in

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam Flag High-Temperature Female Disconnects

#### Details

Allows for quick and easy disconnect of wires

Made of durable brass for good conductivity and has corrosion-resistant tin plating

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.095 Inch Barrel Length (Imperial): 0.26 Inch Barrel Style: Butted Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm **Disconnect Type: Female** Fastener Orientation: Female Fork Type: Block Fork Insulation Material: Non-insulated Mates with Female Width: 0.25 Inch Mates with Male Tab Width (W'): 0.25 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.25 in Solution for: Wireless Network: Infrastructure Accessories Terminal Style: High Temp Terminal Type: Disconnect Units per Case: 1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.51 in

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Brazed Seam Ring Tongues

## Details

Nylon-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, seamless brass sleeve offers easy insertion of wires Standard-style ring tongue fits around the stud

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Brazed CSA File Number: LR22190 Clearance (C): 0.29 Inch Connection Type: Crimp Connection Width (Imperial): 0.112 in, 0.138 in, 0.164 in, 0.19 in, 0.25 in, 0.315 in. 0.375 in. 0.5 in Connection Width (Metric): 2.845 mm, 3.5 mm, 4.166 mm, 4.826 mm, 6.35 mm, 8 mm, 9.525 mm, 12.7 mm Dimension E: 0.54 Inch Insulation Material: Non-insulated, Vinyl Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG, 4 AWG, 6 AWG, 8 AWG Maximum Conductor Size (Metric): 0.205 mm<sup>2</sup>, 0.823 mm<sup>2</sup>, 13.3 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 21.2 mm<sup>2</sup>, 5.26 mm<sup>2</sup>, 8.37 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C, 175 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG, 4 AWG, 6 AWG, 8 AWG Minimum Conductor Size (Metric): 0.14 mm<sup>2</sup>, 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 13.3 mm<sup>2</sup>, 21.2 mm<sup>2</sup>, 3.31 mm<sup>2</sup>, 8.37 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.138 in, 0.164 in, 0.19 in, 0.25 in, 0.313 in, 0.375 in, 0.5 in Minimum Stud Diameter (Metric): 3.5 mm, 4 mm, 5 mm, 6.35 mm, 7.95 mm, 9.525 mm, 12.7 mm Product Color: Metal Ring Type: Standard Stud Size: 0.138 in,0.164 in,#10,0.313 in,0.5 in,0.25 in,0.19 in,0.375 in Stud Sizes: #10 Terminal Style: Standard Terminal Type: Ring UL File Number: E23438 Units per Case: 500.0

## **Dimensions and Classifications**

Overall Length (Imperial): 0.6 in, 0.68 in, 0.7 in, 0.73 in, 0.74 in, 0.89 in, 0.95 in, 0.96 in, 1.06 in, 1.14 in, 1.19 in, 1.22 in, 1.34 in, 1.41 in, 1.42 in

Overall Length (Metric): 18.54 mm, 18.796 mm

Overall Width (Imperial): 0.25 in, 0.28 in, 0.31 in, 0.33 in, 0.38 in, 0.47 in, 0.54 in, 0.59 in, 0.63 in, 0.68 in, 0.75 in, 0.81 in

Overall Width (Metric): 7.874 mm, 9.65 mm, 11.93 mm, 11.938 mm, 14.986 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Block Forks

## Details

Vinyl-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Suitable for use in a terminal block

## **Typical properties**

Barrel Inside Diameter: 0.070 Inch,0.090 Inch,0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Brazed CSA File Number: LR22190 Clearance (C): 0.25 Inch,0.29 Inch Dimension E: 0.70 Inch,0.7 Inch,0.84 Inch Fork Type: Block Insulation Material: Vinyl Material: ETP Copper, Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 18 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 0.823 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Product Color: Blue, Red, Yellow Solution for: Wireless Network: Infrastructure Accessories Stud Diameter (Imperial): 0.138 in, 0.164 in, 0.19 in Stud Diameter (Metric): 3.505 mm, 4.166 mm, 4.826 mm Stud Size: #10.#6.#8 **Terminal Style: Block** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.85 in, 1.03 in Overall Length (Metric): 21.59 mm, 26.162 mm Overall Width (Imperial): 0.25 in, 0.3 in, 0.32 in Overall Width (Metric): 7.62 mm, 8.128 mm

# 3M<sup>™</sup> Highland<sup>™</sup> Nylon Fully Insulated Butted Seam Female Disconnects

3M ID B00014837

## Details

Nylon-insulated, butted-seam barrel offers easy insertion of wires Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires

## **Typical properties**

eClass 14 Classification Group: 27400204

# 3M<sup>™</sup> Highland<sup>™</sup> Vinyl Insulated Butted Seam Standard Forks

## Details

Vinyl-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Wider-tongue design for use on free-standing studs

## **Typical properties**

Barrel Inside Diameter: 0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.29 Inch Dimension E: 0.84 Inch Fork Type: Standard Insulation Material: Vinyl Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.25 in Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Stud Size: #10 Terminal Style: Standard Terminal Type: Fork UL File Number: E23438 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 1.03 in Overall Width (Imperial): 0.38 in

# 3M<sup>™</sup> Cold Shrink Transition Splice Kit QS2012-3T-WS, Tape, Wire, UniShield®, EP-Lead or XLP-Lead, 1/case

3M ID 7100164637 UPC 00054007042112

## **Typical properties**

Cable Shielding: PILC Case Quantity: 1 Connector O.D. Range: 0.70 - 1.02 Inch Connector O.D. Range (Metric): 17.8 - 25.8 mm Maximum Connector Length: 5.2 inch (Al), 5.5 inch (Cu) Maximum Connector Length (Metric): 132 mm (Al), 140 mm (Cu) Number of Conductors: 3 PILC Cable Conductor Sizes: 250 kcmil, 3/0 AWG, 4/0 AWG PILC Cable Conductor Sizes (Metric): 95 - 120 mm<sup>2</sup> Poly/EPR Cable Conductor Sizes: 250 kcmil, 350 kcmil, 4/0 AWG, 500 kcmil Poly/EPR Cable Conductor Sizes (Metric): 120 - 240 mm<sup>2</sup> Poly/EPR Cable Insulation O.D. Range: 0.70 - 1.07 Inch Poly/EPR Cable Insulation O.D. Range (Metric): 17.8 - 27.2 mm Product Series: QS-2000-3T & QS-2000-3T-WS Series Splice Type: PILC Trifurcating Voltage: 15 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Hi-Amp Accessory Grounding Kits

## Details

Offers grounding and sealing for 1 accessory or termination Specially designed to accommodate the shielding and grounding of inline splices Rated for 15 to 35 kV applications

## **Typical properties**

Brands: 3M<sup>™</sup> Cable Accessory Products: Sealing and Grounding Kits Cable Outside Diameter Range: 1.25 - 2.25 in Cable Outside Diameter Range (Metric): 31.8 - 57.2 mm Circular Mil Area: 61,000 Maximum Operating Voltage: 35 Kilovolt Product Type: Grounding Accessory Kit Units per Case: 10.0

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Brazed Seam Locking Forks

## Details

Non-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Spring-like tongue firmly fits around the stud Electrolytic copper construction offers good conductivity Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.070 Inch,0.09 Inch,0.07 Inch,0.135 Inch,0.090 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Brazed CSA File Number: LR22190 Clearance (C): 0.25 Inch, 0.28 Inch, 0.44 Inch Dimension E: 0.50 Inch,0.53 Inch,0.69 Inch,0.5 Inch Fork Type: Locking Fork, Locking Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Lock Width: 0.27 Inch,0.35 Inch,0.48 Inch,0.36 Inch Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Stud Diameter (Imperial): 0.138 in, 0.25 in Stud Diameter (Metric): 3.505 mm, 6.35 mm Stud Size: #10,#6,1/4 Inch,#8 **Terminal Style: Locking** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.68 in, 0.73 in, 0.94 in Overall Width (Imperial): 0.25 in, 0.32 in, 0.43 in

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Piggy-Back Disconnects

## Details

Nylon-insulated, butted-seam barrel with a funnel-designed, seamless brass sleeve offers easy insertion of wires The tongue portion with fingers grip a male quick-slide and a tongue extension grips a female quick-slide Connects a male or female counterpart Mates with 0.25-in wide male and female tab Accommodates wire sizes 16 to 14 AWG Made of durable brass for good conductivity and has corrosion-resistant tin plating Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 300V for building wire RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.09 Inch Barrel Length (Imperial): 0.23 Inch Barrel Style: Insulation Grip Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Disconnect Type: Female|Male,Male Fastener Orientation: Male-Female Insulation Color: Red Insulation Material: Nylon, Nylon with Insulation Grip Mates with Female Width: 0.25 Inch, 0.250 Inch Mates with Male Tab Width (W'): 0.25 Inch, 0.250 Inch Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.15 in, 0.19 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 820 V Minimum Conductor Size (Imperial): 16 AWG Minimum Conductor Size (Metric): 1.5 mm<sup>2</sup> Pad Width: 0.25 in Tab Width: 0.250 Terminal Style: Piggy-back Terminal Type: Disconnect Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.91 in

# Scotch® Lead-Sheath-Repair-Kit, 35 kV, 1 kit/Case

3M ID 7100164598 UPC 00054007442462

## Details

Specifically designed for sealing oil leaks on paper insulated lead covered cable PILC Lead Repair Kit

## **Typical properties**

Brands: Scotch™ Cable Accessory Products: Splice Repair Kit Units per Case: 1.0 eClass 14 Classification Group: 20420490

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Terminal Boxes

## Details

The terminal box is divided into 13 compartments, including one large compartment Keeps tools and accessories organized

## **Typical properties**

Color Code: Clear Kit Material: Plastic, Steel Terminal Type: Terminal Kits

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Pin Terminals

## Details

Vinyl-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Provides quick connection for set screws or clamps that are used to make electrical contact

Made of copper for good conductivity and has tin plating for corrosion resistance Withstands a maximum temperature of 167 degrees F (75 degrees C)

## **Typical properties**

Barrel Inside Diameter: 0.070 Inch,0.090 Inch,0.135 Inch Barrel Style: Butted Connection Width (Imperial): 0.075 in, 0.11 in, 0.47 in Connection Width (Metric): 1.905 mm, 2.794 mm, 11.938 mm Diameter (D): Pin Diameter 0.110 inch (2.79 mm), Pin Diameter 0.075 inch (1.91 mm) Dimension E: Pin Length 0.47 inch (11.94 mm), Pin Length 0.55 inch (13.97 mm) Insulation Material: Vinyl Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.15 in, 0.17 in, 0.25 in Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pin Length (PL): 0.47 Inch,0.55 Inch Product Color: Blue, Red, Yellow Solution for: Wireless Network: Infrastructure Accessories Terminal Type: Pin Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.9 in, 1.06 in Overall Length (Metric): 22.86 mm, 26.924 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated Butted Seam Female Disconnects

## Details

Nylon-insulated, butted-seam barrel offers easy insertion of wires Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires

Made of durable brass for good conductivity and has corrosion-resistant tin plating

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.080 Inch,0.085 Inch,0.128 Inch,0.08 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.23 Inch,0.99 Inch **Disconnect Type: Female** Fastener Orientation: Female Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Blue, Red Insulation Material: Nylon Interrupt Free Shifting: No Male Tab Width (W'): 0.187 Inch, 0.25 Inch Material: ETP Copper, Plastic Mates with Female Width: 0.187 Inch, 0.250 Inch Mates with Male Tab Width (W'): 0.187 Inch, 0.25 Inch, 0.250 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.187 in. 0.25 in Product Color: Blue, Red Product Type: Disconnect

Tab Width: 0.250,0.187 Terminal Style: Fully Insulated Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in, 0.99 in Overall Diameter (Metric): 0.64 cm, 5.8 mm Overall Length (Imperial): 0.81 in, 0.87 in Overall Length (Metric): 20.57 mm, 22.09 mm Overall Width (Imperial): 0.3 in, 0.37 in Overall Width (Metric): 9.4 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Ring Tongues

## Details

Vinyl-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Standard-style ring tongue fits around the stud

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Connection Width (Imperial): 0.112 in, 0.138 in, 0.164 in, 0.19 in, 0.25 in, 0.315 in, 0.375 in Connection Width (Metric): 2.845 mm, 3.5 mm, 4.166 mm, 4.826 mm, 6.35 mm, 8 mm, 9.525 mm Insulation Material: Vinyl Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 0.823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Minimum Stud Diameter (Metric): 5 mm Product Color: Blue, Red Stud Sizes: #10

Terminal Type: Ring

## **Dimensions and Classifications**

Overall Length (Imperial): 0.8 in, 0.9 in, 0.93 in, 0.98 in, 1.03 in, 1.08 in, 1.13 in, 1.26 in Overall Length (Metric): 22.86 mm Overall Width (Imperial): 0.25 in, 0.28 in, 0.31 in, 0.33 in, 0.38 in, 0.47 in, 0.53 in, 0.54 in, 0.56 in Overall Width (Metric): 7.874 mm, 8.38 mm, 9.652 mm

## **Typical properties**

Barrel Inside Diameter: 0.062 Inch Barrel Length (Imperial): 0.28 Inch Barrel Style: Seamless Body Material: Copper Alloy CSA File Number: LR22190 Conductor Sizes (Imperial): 22 - 18 AWG Connection Type: Butt Connector Type: Butt **Disconnect Type: Female** Insulation Material: Non-insulated Material: ETP Copper Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C, 175 °C Maximum Operating Temperature (Fahrenheit): 221 °F, 347 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.19 in Minimum Stud Diameter (Metric): 5 mm Product Color: Blue, Metal Product Type: Connector **Terminal Style: Standard Terminal Type: Butt Connectors** UL File Number: E23438 Units per Case: 500.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.63 in, 0.66 in, 0.81 in Overall Length (Metric): 16 mm, 16.76 mm, 20.574 mm

# 3M<sup>™</sup> Deadbreak T-Body w/Test point 635T, 35kV, 600A,1/Box

3M ID 7100248492 UPC 00051144062690

## Details

Meets IEEE Strandard 386 and IEEE Standard 592 Capacitive test-point Fully shielded, deadfront connection Interchangeability per IEEE standard 386

## **Typical properties**

Brands: 3M™ Current Rating: 600.0 A Maximum Operating Voltage: 35 kV eClass 14 Classification Group: 27440308

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Terminal Kits

#### Details

Made of durable metal with a rugged frame Includes an assortment of 650 insulated terminals (rings, forks, butt connectors and disconnects), 200 3M Cable Ties, a 3M Scotchlok Crimp Tool TH-440, and a 3M ScotchCode<sup>™</sup> Tape Dispenser STD-0-9 Terminals are RoHS 2011/65/EU Compliant

## **Typical properties**

Color Code: Clear, Red Kit Material: Metal, Plastic Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Product Color: Red Product Type: Connector Terminal Type: Terminal Kits Terminal quantity: 120 , 660 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Metric): 363.2 mm Overall Width (Imperial): 10.5 in

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Pin Terminals

## Details

Nylon-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, seamless brass sleeve offers easy insertion of wires Provides quick connection for set screws or clamps that are used to make electrical contact

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C)

## **Typical properties**

Barrel Inside Diameter: 0.080 in Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Seam, Insulation Grip CSA File Number: LR22190 Connection Width (Imperial): 0.075 in, 0.11 in Connection Width (Metric): 1.905 mm, 2.794 mm Insulated: Yes Insulation Color: Blue, Yellow Insulation Material: Nylon, Nylon with Insulation Grip Material: Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.2 in, 0.27 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG Minimum Conductor Size (Metric): 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Operating Temperature Range (Celsius): -40 °C to 105 °C Operating Temperature Range (Fahrenheit): -40 °F to 221 °F Pin Length (PL): 0.47 Inch,0.55 Inch Product Color: Blue, Yellow Ring Type: Standard Terminal Material: Tin-Plated Electrolytic Copper Terminal Type: Pin UL File Number: E23438, E70512 Units per Case: 500.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.9 in, 1.06 in Overall Length (Metric): 22.86 mm, 26.92 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Double Male-Female Adapters

## Details

Interconnects two connectors that are already attached to wires Features a non-insulated, butted-seam barrel Perfect for various wire tapping and splicing applications Mates with 0.25-in wide female and male tab Made of durable brass for good conductivity and tin-plated for corrosion resistance Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Style: Butted CSA File Number: LR22190 Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Disconnect Type: Female|Male Fastener Orientation: Double Male-Female Insulation Material: Non-insulated Material: Plastic Mates with Female & Male Tab Width (W'): 0.25 Inch, 0.250 Inch Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 250 °C Maximum Operating Temperature (Fahrenheit): 482 °F Maximum Recommended Voltage Rating: 606 V Maximum Voltage Rating: 600 to 1000 V Pad Width: 0.25 in Product Type: Connector Terminal Style: Adapter **Terminal Type: Disconnect** UL File Number: E70512 Units per Case: 500.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.7 in, 0.76 in

# 3M<sup>™</sup> Highland<sup>™</sup> Nylon Fully Insulated Butted Seam Male Disconnects

#### Details

Nylon-insulated, butted-seam barrel allows for easy insertion of wires This male disconnect terminal offers excellent holding force Allows for quick and easy disconnect of wires

#### **Typical properties**

Barrel Inside Diameter: 0.085 Inch Barrel Length (Imperial): 0.25 Inch Barrel Length (Metric): 6.35 mm Barrel Style: Butted CSA File Number: LR22190 Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm Diameter (D): 0.3 Inch Disconnect Type: Male Fastener Orientation: Male Insulation Material: Nylon Material: Plastic Mates with Female Width: 0.25 Inch Mates with Male Tab Width (W'): 0.25 Inch Max. Number of Cores: 423 Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.17 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 16 AWG Minimum Conductor Size (Metric): 1.5 mm<sup>2</sup> Pad Width: 0.187 in, 0.25 in Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250,0.187 Terminal Style: Fully Insulated Terminal Type: Disconnect UL File Number: E70512 Units per Case: 10.0 Units per bag: 25 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.3 in Overall Diameter (Metric): 7.62 mm Overall Length (Imperial): 0.95 in Overall Length (Metric): 24.13 mm Overall Width (Imperial): 0.44 in

## **Typical properties**

Barrel Inside Diameter: 0.25 Inch.0.145 Inch.0.17 Inch Barrel Length (Imperial): 0.25 Inch Barrel Length (Metric): 6.35 mm Barrel Style: Butted, Butted Seam Body Material: Copper Alloy CSA File Number: LR22190 Conductor Sizes (Imperial): 12 - 10 AWG, 16 - 14 AWG, 22 - 18 AWG Connector Type: Butt Insulated: Yes Insulation Color: Red Insulation Material: Vinyl Material: Plastic Max. Number of Cores: 409, 410, 411 Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Operating Temperature Range (Celsius): -40 °C to 105 °C Operating Temperature Range (Fahrenheit): -40 °F to 221 °F Terminal Material: Tin-Plated Electrolytic Copper **Terminal Style: Standard Terminal Type: Butt Connectors** UL File Number: E23438 Units per Case: 10.0 Units per bag: 25 eClass 14 Classification Group: 27400212

## **Dimensions and Classifications**

Overall Length (Imperial): 1 in, 1.02 in Overall Length (Metric): 25.4 mm, 25.908 mm

## **Typical properties**

Barrel Inside Diameter: 0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.29 Inch Dimension E: 0.54 Inch Fork Type: Block Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.112 in, 0.138 in, 0.164 in, 0.19 in Minimum Stud Diameter (Metric): 2.5 mm, 3.5 mm, 4 mm, 5 mm Solution for: Wireless Network: Infrastructure Accessories Stud Diameter (Imperial): 0.19 in Stud Diameter (Metric): 4.826 mm Stud Size: #10 Terminal Style: Block Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.65 in, 0.73 in Overall Width (Imperial): 0.25 in, 0.3 in, 0.32 in

# 3M<sup>™</sup> Pin (Stem) Mechanical Shearbolt Lug QP

3M ID B5005184000

## Details

Designed to use with cold shrink QT-III terminations Stepless shearbolt offers excellent performance American Wire Guage conductors For use on copper or aluminum conductors Accommodates wire range of 7 to 4/0 AWG Aluminum alloy with tin plating for corrosion resistance Includes centering rings, foil tape, cold shrink sealing tube Meets ANSI C119.1 requirements

## **Typical properties**

Product Type: Lug

# 3M<sup>™</sup> Cold Shrink QS4 Integrated Splice QS4-35SP-350-1000-BCA

3M ID 7100036324 UPC 00051128605806

## **Typical properties**

Brands: 3M™ Cable Shielding: Flat Strap Neutral, Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Shield Case Quantity: 1 Conductor Sizes (Imperial): 1000 kcmil Conductor Sizes (Metric): 500 mm<sup>2</sup> Connector Included: No Insulation O.D. Range: 1.24 - 2.07 Inch Insulation O.D. Range (Metric): 31.5 - 52.6 mm Insulation Outer Diameter (Imperial): 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Insulation Outer Diameter (Metric): 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm. 52.324 mm. 52.578 mm Insulation Outside Diameter Range (Metric): 31.5 - 52.6 mm Minimum Conductor Size (Imperial): 350 kcmil Minimum Conductor Size (Metric): 185 mm<sup>2</sup> Number of Conductors: 1 Product Series: QS4 Splice Type: Inline Voltage: 35 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Hardened Steel Ratchet Tool

## Details

Simultaneously crimps the barrel and insulation grip on insulated terminals and connectors

Features a terminal locator for proper insertion of the conductor

Crimps nylon, vinyl-insulated, butted- or brazed-seam terminals and connectors

## **Typical properties**

Material: Steel Terminal Type: Terminal Tools eClass 14 Classification Group: 21049090

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Locking Forks

### Details

Vinyl-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Spring-like tongue firmly fits around the stud

Electrolytic copper construction offers good conductivity

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

### **Typical properties**

Barrel Inside Diameter: 0.070 Inch,0.09 Inch,0.07 Inch,0.135 Inch,0.090 Inch Barrel Length (Imperial): 0.25 Inch **Barrel Style: Brazed** CSA File Number: LR22190 Clearance (C): 0.25 Inch, 0.28 Inch, 0.44 Inch, 0.40 Inch Dimension E: 0.85 Inch,0.70 Inch,0.99 Inch,0.83 Inch,0.7 Inch Fork Type: Locking Insulation Material: Vinyl Material: Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Lock Width: 0.34 Inch, 0.35 Inch, 0.27 Inch, 0.3 Inch, 0.30 Inch, 0.48 Inch.0.36 Inch Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 18 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 0.823 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Product Color: Blue, Red, Yellow Solution for: Wireless Network: Infrastructure Accessories Stud Diameter (Imperial): 0.138 in, 0.164 in, 0.19 in, 0.19685 in, 0.25 in Stud Diameter (Metric): 3.505 mm, 4.166 mm, 4.826 mm, 5 mm, 6.35 mm Stud Size: #4,#10,#6,1/4 Inch,#8 Stud Sizes: #10 **Terminal Style: Locking** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

### **Dimensions and Classifications**

Overall Length (Imperial): 0.88 in, 1.03 in, 1.1 in, 1.24 in

Overall Length (Metric): 22.35 mm, 31.49 mm Overall Width (Imperial): 0.25 in, 0.28 in, 0.3 in, 0.32 in, 0.43 in Overall Width (Metric): 6.09 mm, 8.12 mm, 10.92 mm

### 3M<sup>™</sup> Discrete Wire Hand Tool, 3430-1000 Series

3M ID 7000057719 UPC 00054007304524

### **Typical properties**

Brands: 3M<sup>™</sup> Factory ISO Certification: No ISO Certification information available Product Type: Tool Tech Sheet Number: FA-0004 eClass 14 Classification Group: 17100404

### **Typical properties**

Barrel Inside Diameter: 0.090 in Barrel Length (Imperial): 0.30 Inch Barrel Style: Butted Seam Body Material: Copper Alloy Connector Type: Butt Cu Stranded Wire Combinations: 1 #18 to 1 #18, 16, 14,1 #16 to 1 #16,1 #22 to 1 #22, 20, 18, 16, 14,1 #20 to 1 #20, 18, 16, 14 Insulated: Yes **Insulation Color: Blue** Insulation Material: Vinyl Maximum Conductor Size (Imperial): 10 AWG, 16 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.17 in Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG, 14 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.19 in Minimum Stud Diameter (Metric): 5 mm Operating Temperature Range (Celsius): -40 °C to 105 °C Operating Temperature Range (Fahrenheit): -40 °F to 221 °F Solution for: Wireless Network: Infrastructure Accessories Terminal Material: Tin-Plated Electrolytic Copper Terminal Type: Parallel Connector Units per Case: 1000.0 eClass 14 Classification Group: 27400212

### **Dimensions and Classifications**

Overall Length (Imperial): 0.67 in, 0.87 in

### 3M<sup>™</sup> Flat Cable Cutter 3382

3M ID 7000063040 UPC 04001895143717

### **Typical properties**

Factory ISO Certification: No ISO Certification information available Tech Sheet Number: FA-0002

## 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7620-S, 7680-S & 7690-S Series

### Details

Provides a void-free seal to tape shield, wire shield and UniShield® power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications

Silicone rubber insulation offers durability and reduces leakage currents in damp conditions

#### **Typical properties**

BIL: 110 kV, 150 kV, 200 kV, 95 kV

Brands: 3M™

Breakout Boot: No

Cable Insulation Outside Diameter Range: 0.32-0.59 in, 0.44-0.89 in, 0.64-1.08 in, 0.72-1.29 in, 0.83-1.53 in, 1.05-1.80 in, 1.53-2.32 in, 0.69-1.22 in

Cable Insulation Outside Diameter Range (Metric): 11.2-22.6 mm, 16.3 - 27.4 mm, 18.3-32.8 mm, 21.1 - 38.9 mm, 26.7 - 45.7 mm, 38.9 - 58.9 mm, 8.1-15.0 mm, 17,5-31,0 mm

Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield

Case Quantity: 1

Compatible Lug: QL2-A-4/0-600,QL2-A-2-250,QL2-A-500-1000,QL2-A-350-750,QL2-A-1/0-350,QL2-A-1000-1250

Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil

Indoor/Outdoor: Outdoor Skirted

Insulation Level: 100%, 133%

Insulation Outer Diameter (Imperial): 0.32 in, 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in,

2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in

Insulation Outer Diameter (Metric): 8.128 mm, 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm Insulation Rejacketing: No Lug/Stem Connector Included in Kit: No Maximum Installed Length: 10.50 in, 12.25 in, 13.25 in, 20.50 in, 21.50 in, 9.80 in Number of Conductors: 1 Number of Skirts: 2, 4, 8

Product Series: 7620-S, 7620-S-2, 7680-S, 7690-S

Product Type: Termination Kit

Splice Type: Cold Shrink

Units per Case: 3.0

Voltage: 15 kV, 25 kV, 25/28 kV, 35 kV, 46 kV, 5 kV, 8 kV

Voltage Application: Medium Voltage

eClass 14 Classification Group: 27400102

### 3M<sup>™</sup> Deadbreak Shearbolt Lug

### Details

Meets IEEE Standard 386 and ANSI C119.4 Shearbolt design eliminates dies and press Range taking For use on aluminum or copper conductor

### **Typical properties**

Conductor Sizes (Imperial): 1250 kcmil, 250 kcmil, 500 kcmil, 750 kcmil Conductor Sizes (Metric): 120 mm², 240 mm², 400 mm², 633 mm² Lug Type: Shearbolt Lugs Product Type: Lug

### **Typical properties**

BIL: 150 kV, 200 kV, 95 kV Breakout Boot: No, Yes Cable Insulation Outside Diameter Range: 0.70-0.92 in, 0.92-1.18 in, 1.15-1.90 in, 1.15-1.98 in, 1.53-1.81 in, 1.53-2.32 in Cable Insulation Outside Diameter Range (Metric): 17.8-23.4 mm, 23.4-30.0 mm, 29,2-48,3 mm, 29,2-50,3 mm, 38.8-46.0mm, 38.9 - 58.9 mm Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Tape Shield, UniShield®, Wire Shield Case Quantity: 1 Compatible Lug: QL2-A-4/0-600, QL2-A-500-1000, QL2-A-350-750, QL2-A-1000-1250 Conductor Sizes (Imperial): 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Indoor/Outdoor: Indoor Non-skirted, Outdoor Skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.701 in, 0.92 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in Insulation Outer Diameter (Metric): 17.8 mm Insulation Rejacketing: No, Yes Jacket Outside Diameter Range: 1.84-2.80 Inch Jacket Outside Diameter Range (Metric): 46.8-71.1 mm Lug/Stem Connector Included in Kit: No Maximum Cable Outside Diameter: 5.40 in Maximum Cable Outside Diameter (Metric): 137.2 mm Maximum Installed Length: 13.25 in, 16.00 in, 8.50 in, Termination only (not including RJS sleeving or Break-out boot: 21.5") Maximum Installed Length (Metric): Termination only (not including RJS sleeving or Break-out boot: 546mm) Number of Conductors: 1, 3 Number of Skirts: 4,8

Product Series: 3-RJS, 3G, 7600-3-W, 7640-S-TI, 7650-S-TI Series, 7650-T-150, 7690-S Voltage: 15 kV, 25 kV, 25/28 kV, 35 kV, 5 kV, 8 kV eClass 14 Classification Group: 27400102

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Carbon Steel Scissors

3M ID B5005319013

### Details

Features crimp stations for closed-end connectors, as well as insulated and noninsulated terminals Includes wire-stripping stations for circumferential, effortless cutting Features crimp stations for 26 to 6 AWG connectors

### **Typical properties**

eClass 14 Classification Group: 21049090

### Details

Makes mounting wires and cables quick, easy and secure Features a self-adhesive stick for lightweight applications or a screw mount for heavyweight applications Available in neutral or black RoHS 2011/65/EU Compliant

### **Typical properties**

Cable Management Products: Cable Tie Bases Cable Tie Base Height: 0.28 Inch, 0.23 Inch, 0.22 Inch, 0.38 Inch Cable Tie Base Height (Metric): 5.6 mm, 7 mm, 10 mm Cable Tie Base Length: 0.6 in, 0.74 in, 0.87 in, 1 in, 3 in Cable Tie Base Length (Metric): 15 mm, 19 mm, 22 mm, 25 mm Cable Tie Base Width: 0.62 Inch,0.99 Inch,0.74 Inch,0.41 Inch Cable Tie Base Width (Metric): 10 mm, 16 mm, 19 mm, 25 mm Cable Tie Type: Base For Use With: Miniature, Intermediate, & Standard Cable Ties, Miniature, Intermediate, Standard, & Heavy Duty Cable Ties Halogen Free: Yes MIL Approval: No Material: Nylon Max. Number of Cores: 189 Maximum Operating Temperature: 85 Degree Celsius Maximum Operating Temperature (Celsius): 85 °C Maximum Operating Temperature (Fahrenheit): 185 °F Mount Type: Adhesive, Screw Mounting Option: 2-Way Screw Mount, 4-Way Adhesive Mount Product Color: UV Resistant Black Product Type: Cable Ties Slot Height (Imperial): 0.06 in, 0.1 in Slot Height (Metric): 1.5 mm, 2.5 mm Slot Width (Imperial): 0.21 in, 0.35 in Slot Width (Metric): 5.334 mm, 8.89 mm Slot Width (mm): 5.1 mm Solution for: Long-haul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul UL Approval: Yes UV Resistant: Yes Units per Case: 500.0 Units per bag: 100 VG Approval: No eClass 14 Classification Group: 15090300

### **Dimensions and Classifications**

Overall Length (Imperial): 0.6 in, 0.75 in, 0.87 in, 1 in Overall Length (Metric): 15 mm, 19.05 mm, 22 mm, 25.4 mm Overall Width (Imperial): 0.41 in, 0.62 in, 0.75 in, 1 in Overall Width (Metric): 10.41 mm, 15.75 mm, 19 mm, 25.4 mm

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Female Disconnects

### Details

Vinyl-insulated, butted-seam barrel with a funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires

Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires

### **Typical properties**

Barrel Inside Diameter: 0.175 Inch,0.080 Inch,0.085 Inch,0.8 Inch,0.08 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Bullet Diameter: 0.180 CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.11 in, 0.187 in, 0.25 in, 0.375 in Connection Width (Metric): 2.794 mm, 4.75 mm, 6.35 mm, 9.525 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.23 Inch **Disconnect Type: Female** Fastener Orientation: Female Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Blue, Red Insulation Material: Vinyl Interrupt Free Shifting: No Male Tab Width (W'): 0.187 Inch Material: ETP Copper Mates with Female Width: 0.110 Inch, 0.187 Inch, 0.25 Inch, 0.250 Inch, 0.375 Inch Mates with Male Tab Width (W'): 0.110 Inch, 0.187 Inch, 0.25 Inch, 0.375 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 16 AWG, 18 AWG, 22 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.18 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 14 AWG, 16 AWG, 18 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.187 in, 0.25 in, 0.375 in Product Color: Blue, Red Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250,0.187

Terminal Style: Standard Terminal Type: Disconnect, Standard UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in Overall Length (Imperial): 0.73 in, 0.78 in, 0.87 in, 1.23 in Overall Length (Metric): 19.812 mm, 22.09 mm Overall Width (Imperial): 0.37 in

### 3M<sup>™</sup> Molded Rubber QS-II Cable Splice Kits 5420 Series

3M ID B00050107

### Details

3-piece inline splice to use on jacketed concentric neutral (JCN) or concentric neutral (CN) cables Excellent electrical stress distribution Designed for direct burial, aerial and submersible applications Molded from specially formulated, peroxide-cured EPDM rubbers Rated for 25/28 kV cables Production-tested to offer reliability

### 5477A Splice Body

3M ID B00013990

### **Typical properties**

Conductor Material: Aluminum, Copper eClass 14 Classification Group: 27400107

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Butt Connectors

### Details

Vinyl-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Built-in wire stop for correct positioning

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C)

### **Typical properties**

Fork Type: Standard Insulation Material: Vinyl Maximum Conductor Size (Imperial): 4 AWG, 6 AWG, 8 AWG Maximum Conductor Size (Metric): 10 mm<sup>2</sup>, 16 mm<sup>2</sup>, 25 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 4 AWG, 6 AWG, 8 AWG Minimum Conductor Size (Metric): 10 mm<sup>2</sup>, 16 mm<sup>2</sup>, 25 mm<sup>2</sup> Product Color: Red Terminal Style: Standard eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 1.5 in, 1.71 in, 2.17 in

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Block Fork Vinyl Insulated, 100/bottle, MVU14-10FBX,

### suitable for use in a terminal block, 500/Case

3M ID 7010398239 UPC 00051128590348

### **Typical properties**

Barrel Inside Diameter: 0.090 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Brands: Scotchlok™ CSA File Number: LR22190 Clearance (C): 0.25 Inch Dimension E: 0.7 Inch Fork Type: Block Insulation Material: Vinyl Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.08 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.17 in Minimum Conductor Size (Imperial): 16 AWG Minimum Conductor Size (Metric): 1.31 mm<sup>2</sup> Solution for: Wireless Network: Infrastructure Accessories Stud Diameter (Imperial): 0.19 in Stud Diameter (Metric): 4.826 mm Stud Size: #10 Terminal Style: Block Terminal Type: Fork UL File Number: E70512 Units per Case: 500.0 eClass 14 Classification Group: 27400204

### **Dimensions and Classifications**

Overall Length (Imperial): 0.85 in Overall Width (Imperial): 0.3 in

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Male Disconnects

### Details

Non-insulated, butted-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Wider tongue design for use on free-standing studs Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

### **Typical properties**

Barrel Inside Diameter: 0.080 Inch,0.085 Inch,0.065 Inch,0.15 Inch,0.08 Inch.0.150 Inch Barrel Length (Imperial): 0.25 Inch, 0.24 Inch Barrel Style: Insulation Grip Bullet Diameter: 0.180,0.156 CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm Diameter (D): 0.39 Inch Disconnect Type: Male Fastener Orientation: Male Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Blue, Red, Yellow Insulation Material: Nylon Male Tab Width (W'): 0.187 Inch, 0.25 Inch, 0.250 Inch Material: Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.187 in, 0.25 in Product Color: Blue, Red, Yellow Tab Width: 0.250.0.187 **Terminal Style: Standard Terminal Type: Disconnect** 

UL File Number: E70512 Units per Case: 500.0,1000.0 Voltage Application: Low Voltage eClass 14 Classification Group: 27400204

### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in, 0.39 in Overall Length (Imperial): 0.84 in, 0.92 in, 0.94 in, 1.05 in Overall Length (Metric): 23.3 mm, 23.8 mm, 26.67 mm

### 3M<sup>™</sup> Cold Shrink Portable Cable Splice Kit 2237A Series

3M ID B10513199

### **Typical properties**

Conductor Material: Aluminum, Copper eClass 14 Classification Group: 27400107

### 3M<sup>™</sup> Rachet Spring Cutter Tool

3M ID B10163463

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Male Disconnects

### Details

Vinyl-insulated, butted-seam barrel with a funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires This male disconnect terminal offers excellent holding force Allows for quick and easy disconnect of wires Made of electrolytic copper for good conductivity and has corrosion-resistant tin plating Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.080 Inch,0.085 Inch,0.065 Inch,0.15 Inch,0.08 Inch.0.150 Inch Barrel Length (Imperial): 0.25 Inch, 0.24 Inch Barrel Style: Butted CSA File Number: LR22190 Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm Diameter (D): 0.39 Inch Disconnect Type: Male Fastener Orientation: Male Insulation Color: Blue, Red, Yellow Insulation Material: Vinyl Male Tab Width (W'): 0.187 Inch, 0.25 Inch, 0.250 Inch Material: Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.187 in, 0.25 in Product Color: Blue, Red, Yellow Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250,0.187,0.375 **Terminal Style: Standard** Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 Voltage Application: Low Voltage eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.39 in Overall Length (Imperial): 0.85 in, 0.93 in, 1.05 in Overall Length (Metric): 21.59 mm, 23.6 mm, 26.67 mm

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated with Insulation Grip Female Disconnects

#### Details

Nylon-insulated, butted-seam barrel with a funnel-designed, seamless brass sleeve offers easy insertion of wires

Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires

Made of durable brass for good conductivity and has corrosion-resistant tin plating

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

### **Typical properties**

Barrel Inside Diameter: 0.080 Inch,0.085 Inch,0.08 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Bullet Diameter: 0.180,0.156 CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.23 Inch Dimension E: 0.37 Inch **Disconnect Type: Female** Fastener Orientation: Female Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Blue, Red Insulation Material: Nylon with Insulation Grip Interrupt Free Shifting: No Male Tab Width (W'): 0.187 Inch Material: ETP Copper, Plastic Mates with Female Width: 0.187 Inch, 0.25 Inch, 0.250 Inch Mates with Male Tab Width (W'): 0.187 Inch, 0.25 Inch Maximum Conductor Size (Imperial): 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>

Pad Width: 0.187 in, 0.25 in Product Color: Blue, Red Tab Width: 0.250,0.187 Terminal Style: Fully Insulated Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in Overall Diameter (Metric): 5.8 mm Overall Length (Imperial): 0.81 in, 0.87 in Overall Length (Metric): 20.57 mm, 22.09 mm Overall Width (Imperial): 0.3 in, 0.37 in Overall Width (Metric): 9.4 mm

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Electrical IDC 560N-BULK, Brown, 18–16 AWG (solid/stranded), 14 AWG (stranded), 500 per carton, 5000/case

3M ID 7000132405 UPC 10054007095139

#### Details

Brown polypropylene-insulated connector for parallel splicing Brass element construction for good conductivity and tin plating for corrosion resistance Accommodates 12 AWG solid/stranded, 10 AWG stranded UL Listed and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok™ Case Quantity: 5000 Conductor Sizes (Imperial): 14 AWG (Stranded), 16 AWG, 18 AWG Conductor Sizes (Metric): 1 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Connection Type: Double Run or Tap **Connector Style: Insulation Displacement** Flame Retardant: Yes Grease Filling Against Corrosion: No Insulation Color: Brown Insulation Outer Diameter (Imperial): 0.145 in Interrupt Free Shifting: No Material: Plastic Max. Number of Cores: 2 Maximum Conductor Size (Imperial): 14 AWG (Stranded), 16 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 18 AWG Minimum Conductor Size (Metric): 1 mm<sup>2</sup> Moisture Resistant: No Product Color: Brown Product Type: Connector Recommended Crimping Tool: E-9BM or 9 in. Linemans Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.145 in Run Maximum Insulation Outer Diameter (Metric): 3.7 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.145 in Tap Maximum Insulation Outer Diameter (Metric): 3.7 mm Units per Case: 1000.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

### **Typical properties**

Application: Insulation, mechanical protection, repair Brands: 3M™ Cable Shielding: Tape Shield, UniShield®, Wire Shield Cable Type: Cable with plastic and rubber insulation, Power Cable, Solid **Dielectric Cables** Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 2 AWG, 2/0 AWG, 3/0 AWG, 4 AWG, 6 AWG Conductor Sizes (Metric): 16 mm<sup>2</sup>, 35 mm<sup>2</sup>, 95 mm<sup>2</sup> Halogen Free: No Inner Diameter After Shrink (Imperial): 0.299 in, 0.37 in, 0.488 in Inner Diameter After Shrink (Metric): 7.6 mm, 9.4 mm, 12.4 mm Inner Diameter Before Shrink (Imperial): 0.559 in, 0.72 in, 0.949 in Inner Diameter Before Shrink (Metric): 14.2 mm, 18.3 mm, 24.1 mm Material: Silicone Maximum Conductor Size (Imperial): 1000 kcmil, 157 kcmil, 59 kcmil Maximum Conductor Size (Metric): 30 mm<sup>2</sup>, 50 mm<sup>2</sup>, 95 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 260 °C Maximum Operating Temperature (Fahrenheit): 500 °F Minimum Conductor Size (Imperial): 118 kcmil, 2 AWG, 27 kcmil Minimum Conductor Size (Metric): 14 mm<sup>2</sup>, 35 mm<sup>2</sup>, 50 mm<sup>2</sup> Minimum Operating Temperature (Celsius): -55 °C Minimum Operating Temperature (Fahrenheit): -67 °F Model: Cold-shrink Number of Conductors: 1 Operating Temperature (Celsius): -55 up to +260°C Product Color: Gray Product Type: Cold Shrink, Splice Relaxed Tube Length: 2 in, 2.5 in, 3.2 in, 6.5 in, 7.5 in, 8 in Relaxed Tube Length (Metric): 0.051 m, 0.081 m, 0.165 m, 0.19 m, 63.5 mm, 203.2 mm Shrink Ratio: 2:1 Splice Type: Cold Shrink UL Approval: No Units per Case: 12.0 Voltage: 1 kV Voltage Application: Low Voltage Wall Thickness after Shrinking: 2.8 mm With Inner Glue: No eClass 14 Classification Group: 27400105

### **Dimensions and Classifications**

Overall Diameter (Metric): 14.2 mm, 14.3 mm, 18.3 mm, 24.1 mm

Overall Length (Imperial): 2.5 in, 6.5 in, 8 in Overall Length (Metric): 51 mm, 63.5 mm, 81 mm, 165 mm, 190 mm, 203.2 mm

### Details

Nylon-insulated barrel ensures a secure fit and offers reliable performance A smooth, flared end provides quick wire insertion Built-in wire stop for correct positioning

### **Typical properties**

Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Maximum Conductor Size (Imperial): 10 AWG, 16 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 18 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1 mm<sup>2</sup> Terminal Type: Closed End Connector eClass 14 Classification Group: 27400204

### **Dimensions and Classifications**

Overall Length (Imperial): 0.83 in, 1 in

### 3M<sup>™</sup> Highland<sup>™</sup> Vinyl Insulated Butted Seam Block Forks

#### Details

Vinyl-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Suitable for use in a terminal block

### **Typical properties**

Connection Width (Imperial): 0.138 in, 0.164 in, 0.19 in Connection Width (Metric): 3.5 mm, 4.166 mm, 4.826 mm Insulation Material: Vinyl Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Terminal Style: Block Terminal Type: Fork eClass 14 Classification Group: 27400204

### **Dimensions and Classifications**

Overall Length (Imperial): 0.85 in, 1.03 in Overall Length (Metric): 21.59 mm, 26.16 mm Overall Width (Imperial): 0.25 in, 0.3 in, 0.32 in Overall Width (Metric): 6.35 mm, 7.62 mm, 8.128 mm

### Details

Nlon-insulated, butted-seam barrel offers allows for insertion of wires This male disconnect terminal offers excellent holding force Allows for quick and easy disconnect of wires

### **Typical properties**

Barrel Inside Diameter: 0.065 Inch,0.15 Inch Barrel Length (Imperial): 0.25 Inch Barrel Length (Metric): 6.35 mm Barrel Style: Butted CSA File Number: LR22190 Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm Diameter (D): 0.39 Inch, 0.3 Inch Disconnect Type: Male Fastener Orientation: Male Insulation Material: Nylon Material: Plastic Mates with Female Width: 0.25 Inch Mates with Male Tab Width (W'): 0.25 Inch Max. Number of Cores: 422, 424 Maximum Conductor Size (Imperial): 10 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.187 in, 0.25 in Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250,0.187 Terminal Style: Fully Insulated Terminal Type: Disconnect UL File Number: E70512 Units per Case: 10.0 Units per bag: 25 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.3 in, 0.39 in Overall Diameter (Metric): 7.62 mm, 9.9 mm Overall Length (Imperial): 0.95 in, 1.05 in Overall Length (Metric): 24.13 mm, 26.67 mm Overall Width (Imperial): 0.44 in, 0.47 in

### 3M<sup>™</sup> Industrial Loadbreak Elbows 5810 Series

### Details

Ideal for connecting underground cable to transformers, switchgear and junctions that come with loadbreak bushings Cold shrink tube seals from the bottom of the elbow to the cable jacket Specially designed for use on tape shield, wire shield, UniShield® and jacketed concentric neutral types of cables High-quality, peroxide-cured EPDM provides better insulation Meets ANSI/IEEE Standard 386

### **Typical properties**

Brands: 3M<sup>™</sup> Cable Type: Compact/Solid, Stranded Cable Voltage Rating: 15 kV, 5 kV, 8 kV Component Type: Elbow Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 4/0 AWG Current Rating: 200.0 A **Includes Compression Connector: Yes** Insulation Diameter Range: 0.495-0.585 in, 0.575-0.685 in, 0.630-0.820 in, 0.700-0.910 in, 0.850-1.100 in Insulation Diameter Range (Metric): 12.6-14.9 mm, 14.6-17.4 mm, 16.0-20.8 mm, 17.8-23.1 mm, 21.6-27.9 mm Insulation Level: 100%, 133% Insulation Outside Diameter Range: 0.495 to 0.585 in, 0.575 to 0.685 in, 0.63 to 0.82 in, 0.7 to 0.91 in, 0.85 to 1.1 in Maximum Insulation Outer Diameter (Imperial): 0.585 in, 0.685 in, 0.82 in, 0.91 in, 1.1 in Maximum Insulation Outer Diameter (Metric): 15 mm, 17 mm, 21 mm, 23 mm, 28 mm Maximum Operating Voltage: 15 kV, 5 kV, 8 kV Product Series: 5810 Product Type: Accessory Separable Connector Type: Load Break Elbows Units per Case: 1.0 eClass 14 Classification Group: 27440308

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Block Flanged Fork, Non-Insulated Brazed Seam M10-10FFBK, 12-10 AWG, 500/Case

3M ID 7100164121 UPC 00054007020288

#### Details

Non-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Suitable for use in a terminal block Stud size #10 Electrolytic copper construction offers good conductivity Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Brazed Brands: Scotchlok™ CSA File Number: LR22190 Clearance (C): 0.29 Inch Dimension E: 0.54 Inch Fork Type: Flanged Block Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG Maximum Conductor Size (Metric): 5.26 mm<sup>2</sup> Minimum Conductor Size (Imperial): 12 AWG Minimum Conductor Size (Metric): 3.31 mm<sup>2</sup> Stud Size: #10 **Terminal Style: Flanged Block** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.73 in Overall Width (Imperial): 0.32 in

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Block Forks

### Details

Non-insulated, butted-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Suitable for use in a terminal block

### **Typical properties**

Barrel Inside Diameter: 0.09 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.25 Inch Dimension E: 0.5 Inch Fork Type: Block Insulation Material: Non-insulated, None Material: Copper Maximum Conductor Size (Imperial): 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.08 mm<sup>2</sup> Minimum Conductor Size (Imperial): 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.138 in Minimum Stud Diameter (Metric): 3.5 mm Solution for: Wireless Network: Infrastructure Accessories Stud Size: #6 **Terminal Style: Block** Terminal Type: Fork, High Temperature Units per Case: 1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.65 in Overall Width (Imperial): 0.3 in

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Butt Connectors

# Details

Vinyl-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Built-in wire stop for correct positioning

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Barrel Inside Diameter: 0.090 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Body Material: Copper Alloy CSA File Number: LR22190 Conductor Sizes (Imperial): 16 - 14 AWG Connection Type: Butt Connector Type: Butt Disconnect Type: Female Insulation Color: Blue Insulation Material: Vinyl Material: ETP Copper Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.17 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Diameter (Metric): 1.209 mm Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Operating Temperature Range (Celsius): -40 °C to 105 °C Product Color: Blue, Red Product Type: Connector Solution for: Wireless Network: Infrastructure Accessories Terminal Style: Standard Terminal Type: Butt Connectors UL File Number: E23438 Units per Case: 500.0 eClass 14 Classification Group: 27400204

# **Dimensions and Classifications**

Overall Length (Imperial): 1 in, 1.02 in

# **Typical properties**

Barrel Inside Diameter: 0.09 Inch,0.07 Inch,0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.25 Inch,0.28 Inch,0.44 Inch,0.4 Inch Dimension E: 0.69 Inch,0.53 Inch,0.5 Inch,0.65 Inch Fork Type: Locking Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Lock Width: 0.34 Inch,0.35 Inch,0.27 Inch,0.48 Inch,0.36 Inch Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Solution for: Wireless Network: Infrastructure Accessories Stud Diameter (Imperial): 0.112 in, 0.138 in, 0.164 in, 0.19 in, 0.25 in Stud Diameter (Metric): 2.845 mm, 3.505 mm, 4.166 mm, 4.826 mm, 6.35 mm Stud Size: #4,#10,#6,1/4 Inch,#8 **Terminal Style: Locking** Terminal Type: Fork UL File Number: E23438, E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

# **Dimensions and Classifications**

Overall Length (Imperial): 0.68 in, 0.73 in, 0.9 in, 0.94 in Overall Width (Imperial): 0.25 in, 0.3 in, 0.32 in, 0.43 in

# 3M<sup>™</sup> ScotchCode<sup>™</sup> Wire Marker Write-On Dispenser SLW

3M ID B00021402

# Details

Blue, polypropylene-insulated connector is suitable for tap or parallel splicing Helps provide a moisture-resistant seal Accommodates 22 to 14 AWG solid/stranded UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Brands: Scotchlok™ CSA File Number: LR15503 Case Quantity: 1000 Conductor Sizes (Imperial): 14 AWG (Stranded), 16 AWG, 18 AWG Conductor Sizes (Metric): 1 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Connection Type: Double Run or Tap Connector / Connector Tool: 3M Crimping Tool E-9BM and/or 9" Lineman's Pliers **Connector Style: Insulation Displacement** Flame Retardant: Yes Grease Filling Against Corrosion: No Insulation Color: Blue Insulation Material: Polypropylene Insulation Outer Diameter (Imperial): 0.145 in Interrupt Free Shifting: No Material: Insulator: FR Polypropylene, U-contact: Tin-plated Brass, Plastic Max. Number of Cores: 2 Maximum Conductor Size (Imperial): 14 AWG (Stranded), 16 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 18 AWG Minimum Conductor Size (Metric): 1 mm<sup>2</sup> Moisture Resistant: No Package Quantity: 1000 Product Color: Blue, Light Blue Product Type: Connector Recommended Crimping Tool: E-9BM or 9 in. Linemans Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.145 in Run Maximum Insulation Outer Diameter (Metric): 3.7 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.145 in Tap Maximum Insulation Outer Diameter (Metric): 3.7 mm UL File Number: E23438 Units per Case: 1000.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

# **Typical properties**

Application: Cable Connection Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield Case Quantity: 1 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 2/0 AWG, 500 kcmil Conductor Sizes (Metric): 240 mm<sup>2</sup>, 70 mm<sup>2</sup> Connector Included: 10006, 10014 Insulation O.D. Range: 1.07 - 1.70 Inch Insulation O.D. Range (Metric): 27.2 - 43.2 mm Insulation Outside Diameter Range: 1.07 - 1.70 Inch Insulation Outside Diameter Range (Metric): 27.2 - 43.2 mm Maximum Conductor Size (Imperial): 500 kcmil Maximum Conductor Size (Metric): 240 mm<sup>2</sup> Number of Conductors: 1 Product Series: 5524A, 5525A & 5526A Series, 5535A & 5536A Series Splice Type: Inline Voltage: 25/28 kV, 35 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Scotchlok<sup>™</sup> 534 Electrical IDC, 100 per pouch

3M ID 7100179355 UPC 10054007505119

# Details

intended for use with common thermoplastic insulated wire such as: T, TF, TFF, TFN, TFFN, AWM, TEW, SAE GPT with a maximum insulation diameter of 3,5 mm Suitable for control circuit wiring, fixture wiring, appliance wiring, signal and PA systems and automotive/boat/RV wiring

Accommodates 22 to 16 AWG solid/stranded

UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Backing Material: 15 Mil Cardstock Brands: Scotchlok™ Conductor Sizes (Imperial): 16 AWG, 22 AWG Conductor Sizes (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup> Connection Type: Double Run or Tap **Connector Style: Insulation Piercing** Grease Filling Against Corrosion: No Insulation Color: Brown Insulation Material: Polypropylene Interrupt Free Shifting: No Material: Insulator: FR Polypropylene, U-contact: Tin-plated Brass Max. Number of Cores: 2 Maximum Conductor Size (Imperial): 16 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Minimum Conductor Size (Imperial): 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup> Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Moisture Resistant: No Package Quantity: 100 Product Color: Brown Product Type: Connector Voltage Application: Low Voltage eClass 14 Classification Group: 27400215

# 3M<sup>™</sup> Highland<sup>™</sup> Vinyl Insulated Butted Seam Male Disconnects

# Details

Vinyl-insulated, butted-seam barrel with a funnel-designed, polyvinyl chloride sleeve allows for easy insertion of wires This male disconnect terminal offers excellent holding force Allows for quick and easy disconnect of wires

# **Typical properties**

Barrel Inside Diameter: 0.085 Inch,0.065 Inch,0.15 Inch,0.08 Inch Barrel Length (Imperial): 0.25 Inch,0.24 Inch Barrel Length (Metric): 6.35 mm Barrel Style: Butted CSA File Number: LR22190 Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm Disconnect Type: Male Fastener Orientation: Male Insulation Material: Vinyl Material: Plastic Mates with Female Width: 0.187 Inch, 0.25 Inch Mates with Male Tab Width (W'): 0.187 Inch, 0.25 Inch Max. Number of Cores: 425 Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.187 in, 0.25 in Product Color: Blue Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250,0.110,0.187 **Terminal Style: Standard** Terminal Type: Disconnect UL File Number: E70512 Units per Case: 10.0 Units per bag: 25 eClass 14 Classification Group: 27400204

# **Dimensions and Classifications**

Overall Length (Imperial): 0.85 in, 0.93 in, 1.05 in Overall Length (Metric): 23.622 mm Overall Width (Imperial): 0.25 in Overall Width (Metric): 6.35 mm

# 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7620-T & 7690-T Series for 5-35 kV

# Details

Provides a void-free seal to tape shield, wire shield and UniShield® power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for indoor applications

Non-tracking, molded, silicone rubber insulation offers durability Includes 3 non-skirted, 1-piece, 3-phase, cold shrink terminations

# **Typical properties**

Application: Cable Termination BIL: 110 kV, 150 kV, 95 kV Brands: 3M™ Breakout Boot: No Cable Insulation Outside Diameter Range: 0.32-0.59 in, 0.44-0.89 in, 0.64-1.08 in, 0.72-1.29 in, 0.83-1.53 in, 1.05-1.80 in, 1.15-1.90 in, 1.15-1.98 in, 1.53-2.32 in, 0.69-1.22 in Cable Insulation Outside Diameter Range (Metric): 11.2-22.6 mm, 16.3 - 27.4 mm, 18.3-32.8 mm, 21.1 - 38.9 mm, 26.7 - 45.7 mm, 29,2-50,3 mm, 29,9-48,3 mm, 38.9 - 58.9 mm, 8.1-15.0 mm, 17,5-31,0 mm Cable Shielding: Tape Over Wire, Tape Shield, UniShield®, Wire Shield, Wire-**Over-Tape Shield** Case Quantity: 1 Compatible Lug: QL2-A-4/0-600, QL2-A-500-1000, QL2-A-2-250, QL2-A-350-750,QL2-A-1/0-350,QL2-A-1000-1250 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 450 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Indoor/Outdoor: Indoor, Indoor Non-skirted Insulation Level: 100%, 133% Insulation O.D. Range: 0.72 - 1.29 in Insulation O.D. Range (Metric): 18.3-32.8 mm Insulation Outer Diameter (Imperial): 0.32 in, 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in,

1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in

Insulation Outer Diameter (Metric): 8.128 mm, 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm. 16.002 mm. 16.256 mm. 16.51 mm. 16.764 mm. 17.018 mm. 17.272 mm. 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm. 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm Insulation Rejacketing: No

Lug/Stem Connector Included in Kit: No

Material: Silicone Rubber

Maximum Installed Length: 12.00 in, 16.00 in, 8.50 in

Number of Conductors: 1

Number of Skirts: 0

Product Color: Gray

Product Series: 7620-T, 7690-T, 7690-T-150

Units per Case: 3.0

Voltage: 15 kV, 25 kV, 25/28 kV, 35 kV, 5 kV, 8 kV, 8.7 kV

Voltage Application: Medium Voltage

eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Copper Connectors 10000 Series

# Details

Standard barrel ensures reliable performance Built-in solid center oil stop Made of aluminum for good conductivity and has corrosion-resistant tin plating

# **Typical properties**

Barrel Style: Long Barrel Body Material: Copper Case Quantity: 3,10 Color Code: Black, Brown, Orange, Purple, Red, White, Yellow Connector Base Metal: Copper Connector O.D. Range: 0.90 - 1.30 Inch Connector O.D. Range (Metric): 22.9-33.0 mm Connector Type: Compression Connectors Electrical Connector Type: Compression Connectors For Use With: Copper Conductor Only Indoor/Outdoor: Both Inside Diameter (Imperial): 0.44 in, 0.49 in, 0.55 in, 0.6 in, 0.65 in, 0.7 in, 0.84 in, 1.03 in, 1.17 in Inside Diameter (Metric): 29.8 mm,11.2 mm,16.5 mm,26.2 mm,21.3 mm,15.1 mm,13.9 mm,12.4 mm,17.8 mm Maximum Conductor Size (Imperial): 1000 kcmil (Stranded), 2/0 AWG (Stranded), 250 kcmil (Stranded), 3/0 AWG (Stranded), 300 kcmil (Stranded), 350 kcmil (Stranded), 4/0 AWG (Stranded), 500 kcmil (Stranded), 750 kcmil (Stranded) Maximum Conductor Size (Metric): 120 mm<sup>2</sup> (Stranded), 150 mm<sup>2</sup> (Stranded), 185 mm<sup>2</sup> (Stranded), 240 mm<sup>2</sup> (Stranded), 400 mm<sup>2</sup> (Stranded), 500 mm<sup>2</sup> (Stranded), 70 mm<sup>2</sup> (Stranded), 95 mm<sup>2</sup> (Stranded) Maximum Connector Length: 5.2 inch (AI), 5.5 inch (Cu) Maximum Connector Length (Metric): 132 mm (AI), 140 mm (Cu) Maximum Operating Voltage: 35 Kilovolt Minimum Conductor Size (Imperial): 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 500 kcmil, 750 kcmil Minimum Conductor Size (Metric): 120 mm<sup>2</sup>, 150 mm<sup>2</sup>, 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 400 mm<sup>2</sup>, 500 mm<sup>2</sup>, 70 mm<sup>2</sup>, 95 mm<sup>2</sup> Outer Diameter (Imperial): 0.56 in, 0.62 in, 0.69 in, 0.75 in, 0.81 in, 0.88 in, 1.06 in, 1.3 in, 1.5 in Poly/EPR Cable Insulation O.D. Range (Metric): 22.0 - 34.6 mm Product Color: Black, Brown, Orange, Purple, Red, White, Yellow Product Series: 11000 eClass 14 Classification Group: 27400212

# **Dimensions and Classifications**

Overall Length (Imperial): 3.13 in, 3.38 in, 4.13 in, 4.63 in, 5.88 in, 6.13 in Overall Length (Metric): 79.4 mm, 85.8 mm, 104.8 mm, 117.5 mm, 149.3 mm, 155.6 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated Butted Seam Male Disconnects

# Details

Nylon-insulated, butted-seam barrel offers easy insertion of wires This male disconnect terminal offers excellent holding force Allows for quick and easy disconnect of wires Made of electrolytic copper for good conductivity and has corrosion-resistant tin plating Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Barrel Inside Diameter: 0.080 Inch,0.085 Inch,0.065 Inch,0.15 Inch,0.08 Inch.0.150 Inch Barrel Length (Imperial): 0.25 Inch, 0.24 Inch Barrel Style: Butted CSA File Number: LR22190 Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm Diameter (D): 0.39 Inch,0.3 Inch,0.30 Inch Disconnect Type: Male Fastener Orientation: Male Grease Filling Against Corrosion: No Insulation Color: Blue, Red, Yellow Insulation Material: Nylon Interrupt Free Shifting: No Male Tab Width (W'): 0.187 Inch, 0.25 Inch, 0.250 Inch Material: ETP Copper, Plastic Max. Number of Cores: 1 Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Operating Temperature Range (Celsius): -40 °C to 105 °C Pad Width: 0.187 in, 0.25 in Product Color: Blue, Red, Yellow Tab Width: 0.250.0.187,0.110 **Terminal Style: Fully Insulated** Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 Voltage Application: Low Voltage

eClass 14 Classification Group: 27400204

# **Dimensions and Classifications**

Overall Diameter (Imperial): 0.3 in, 0.39 in Overall Diameter (Metric): 9.9 mm Overall Length (Imperial): 0.87 in, 0.95 in, 1.05 in Overall Length (Metric): 22 mm, 22.098 mm, 24.13 mm, 26.67 mm Overall Width (Imperial): 0.37 in, 0.44 in, 0.47 in Overall Width (Metric): 9.39 mm, 9.398 mm, 11.17 mm, 11.93 mm

# 3M<sup>™</sup> Cold Shrink Splice QS2000B

3M ID B10493431

# **Typical properties**

eClass 14 Classification Group: 27400107

# **Typical properties**

Body Material: Copper Alloy Connector Type: Butt Insulation Material: Nylon Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Product Color: Red, Yellow eClass 14 Classification Group: 27400204

# **Dimensions and Classifications**

Overall Length (Imperial): 1.02 in, 1.2 in Overall Length (Metric): 25.9 mm, 30.48 mm

# 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7640-S, 7650-S & 7660-S Series

# Details

Provides a void-free seal to jacketed concentric neutral and concentric neutral power cables

High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications

Silicone rubber insulation offers durability and reduces leakage currents in damp conditions

# **Typical properties**

**Application: Cable Termination** BIL: 110 kV, 150 kV, 200 kV Brands: 3M™ Breakout Boot: No Cable Insulation Outside Diameter Range: 0.64-1.08 in, 0.72-1.29 in, 0.83-1.53 in, 1.05-1.80 in, 1.15-1.98 in, 1.53-2.32 in, 0.69-1.22 in Cable Insulation Outside Diameter Range (Metric): 16.3 - 27.4 mm, 18.3-32.8 mm, 21.1 - 38.9 mm, 26.7 - 45.7 mm, 29,2-50,3 mm, 38.9 - 58.9 mm, 17,5-31,0 mm Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Shield Cable Type: Compact/Solid, Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Power Cable, Stranded Case Quantity: 1 Compatible Lug: QL2-A-4/0-600,QL2-A-500-1000,QL2-A-2-250,QL2-A-350-750,QL2-A-1/0-350,QL2-A-1000-1250 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Connector O.D. Range: 0.90 - 1.30 Inch Connector O.D. Range (Metric): 22.9-33.0 mm Indoor/Outdoor: Indoor Non-skirted, Indoor Skirted, Outdoor, Outdoor Skirted Insulation Level: 100%, 133% Insulation Material: Silicone Rubber Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in,

1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in

Insulation Outer Diameter (Metric): 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm. 23.876 mm. 24.13 mm. 24.384 mm. 24.638 mm. 24.892 mm. 25.146 mm. 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm Insulation Rejacketing: No, Yes Lug/Stem Connector Included in Kit: No Material: Silicone Rubber Maximum Connector Length: 5.2 inch (Al), 5.5 inch (Cu) Maximum Connector Length (Metric): 132 mm (Al), 140 mm (Cu) Maximum Installed Length: 12.25 in, 13.25 in, 20.50 in, 21.50 in, 9.80 in Maximum Installed Length (Metric): 24.89 cm, 31.11 cm, 52.07 cm Number of Conductors: 1, 3 Number of Skirts: 1, 2, 3, 4, 8 PILC Cable Insulation O.D. Range: 0.74 - 1.17 Inch PILC Cable Insulation O.D. Range (Metric): 18.8 - 29.7 mm Poly/EPR Cable Insulation O.D. Range: 0.88 - 1.36 Inch Poly/EPR Cable Insulation O.D. Range (Metric): 22.0 - 34.6 mm Product Color: Black, Gray Product Series: 7640-S, 7650-S, 7660-S Product Type: PILC Splice, Termination Kit

Splice Type: Cold Shrink, Inline PILC Transition

Termination Type: Single Termination

Units per Case: 1.0

Voltage: 15 kV, 25 kV, 25/28 kV, 25/5 kV, 28 kV, 35 kV, 5 kV, 5/8 kV, 8 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Deadbreak Adapter

# Details

Meets IEEE Standard 386 Molded EPDM cable adapter provides stress relief for terminated cable Interchangeability per IEEE standard 386

# **Typical properties**

Brands: 3M™ Maximum Operating Voltage: 35 kV eClass 14 Classification Group: 27440308

# Details

Compatible to use with cold shrink QS-III splicing Series 5700A-MT Rated up to 5/8 kV

# **Typical properties**

Cable Type: N/A Case Quantity: 1 Compatible With: 5775A-MT, 5776A-MT & 5777A-MT, 5786A-MT, 5787A-MT & 5788A-MT, 5797A-MT & 5798A-MT Conductor Sizes (Imperial): 2/0 AWG, 350 kcmil Conductor Sizes (Metric): 185 mm<sup>2</sup>, 70 mm<sup>2</sup> Insulation Outer Diameter (Imperial): 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in Insulation Outer Diameter (Metric): 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm Product Series: 5700A-MT Series Single Conductor Jacket O.D. Range: 0.62 - 1.13 in, 1.13 - 1.80 in Single Conductor Jacket O.D. Range (Metric): 15.7 - 28.7 mm, 28.7 - 45.7 mm Voltage: 15 kV, 25/28 kV, 35 kV, 5 kV, 8 kV

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Interlock Barrel Female Disconnects

# Details

Non-insulated, butted-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires For use in ovens, motors, light fixtures and other applications Made of durable steel for high-temperature applications and has nickel plating for corrosion resistance Withstands a maximum temperature of 900 degrees F (482 degrees C)

# **Typical properties**

Barrel Inside Diameter: 0.076 Inch,0.128 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Insulation Grip with Interlocking Barrel, Interlocking Barrel CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.23 Inch **Disconnect Type: Female** Fastener Orientation: Female Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Yellow Insulation Material: Nylon with Insulation Grip Interrupt Free Shifting: No Material: ETP Copper Mates with Female Width: 0.25 Inch, 0.250 Inch Mates with Male Tab Width (W'): 0.25 Inch, 0.250 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.25 in Product Color: Yellow Tab Width: 0.250 **Terminal Style: Standard** Terminal Type: Disconnect UL File Number: E70512

Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

# **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in Overall Length (Imperial): 0.83 in, 0.94 in Overall Length (Metric): 23.87 mm Overall Width (Imperial): 0.37 in

# Details

Color-coded for quick and easy identification of the wire size Brass element construction for good conductivity and tin plating for corrosion resistance Withstands temperatures of 221 °F (105 °C) Made of insulated and self-stripping polypropylene

# **Typical properties**

Brands: Scotchlok™ Conductor Sizes (Imperial): 14 AWG, 18 AWG Conductor Sizes (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Connection Type: Wire Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.23 Inch Fastener Orientation: Female Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Blue Insulation Material: Polypropylene Interrupt Free Shifting: No Material: Plastic Max. Number of Cores: 1 Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 18 AWG Moisture Resistant: No Package Quantity: 25, 1000 Pad Width: 0.25 in Product Type: Connector Run Maximum Insulation Outer Diameter (Imperial): 0.145 in Run Maximum Insulation Outer Diameter (Metric): 3.7 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.145 in Tap Maximum Insulation Outer Diameter (Metric): 3.7 mm Terminal Type: Fuse Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

# **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in Overall Width (Imperial): 0.37 in

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Standard Forks

#### Details

Vinyl-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Wider-tongue design for use on free-standing studs

Electrolytic copper construction offers good conductivity

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Barrel Inside Diameter: 0.070 Inch,0.07 Inch,0.09 Inch,0.135 Inch,0.090 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Brazed CSA File Number: LR22190 Clearance (C): 0.29 Inch Dimension E: 0.84 Inch.0.74 Inch Fork Type: Standard Fork, Standard Insulation Material: Vinyl Material: ETP Copper Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 32 V, 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 18 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 0.823 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Operating Temperature Range (Celsius): -40 °C to 105 °C Product Color: Blue, Yellow Solution for: Wireless Network: Infrastructure Accessories Stud Size: #10,#6,#8 **Terminal Style: Standard** Terminal Type: Fork UL File Number: E23438, E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

# **Dimensions and Classifications**

Overall Length (Imperial): 0.9 in, 1.03 in Overall Length (Metric): 22.86 mm, 26.16 mm Overall Width (Imperial): 0.34 in, 0.38 in Overall Width (Metric): 8.6 mm, 9.6 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Male Disconnects

#### Details

Non-insulated, butted-seam barrel with a beveled mouth offers easy insertion of wires

This high-temperature male disconnect terminal offers excellent holding force Allows for quick and easy disconnect of wires

Made of durable steel for high-temperature applications and has corrosionresistant nickel plating

Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.09 Inch.0.090 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Disconnect Type: Male Fastener Orientation: Male Fork Type: Standard Fork Insulated: No Insulation Material: Non-insulated Male Tab Width (W'): 0.25 Inch, 0.250 Inch Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup> Minimum Conductor Size (Imperial): 16 AWG Minimum Conductor Size (Metric): 1.5 mm<sup>2</sup> Pad Width: 0.25 in Solution for: Wireless Network: Infrastructure Accessories Terminal Style: High Temp **Terminal Type: Disconnect** Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.73 in

# Details

Rigid body splice for joining signal and control cables Fits unshielded construction of plastic or rubber-jacketed cables Designed for inline splicing of underground systems, joining of cable reel ends, direct burial applications and repair of cable failures Rated for 1 kV applications The polypropylene mold has a built-in spacer web that automatically offers cable centering and compound coverage RoHS 2011/65/EU Compliant

# **Typical properties**

Brands: Scotchcast™ Cable Shielding: Non-shielded, Shielded Cable Type: Non-Shielded Signal/Control Cable, Shielded Signal/Control Cable Conductor Sizes (Imperial): 10 AWG, 12 AWG, 14 AWG, 16 AWG, 18 AWG, 20 AWG, 22 AWG Insulation O.D. Range: 0.25 - 0.625 Inch, 0.50 - 1.00 Inch, 0.625 - 1.50 Inch, 1.00 - 2.00 Inch, 1.25 - 2.25 Inch, 1.25 - 3.25 Inch Insulation Outside Diameter Range: 0.25 - 0.625 Inch, 0.50 - 1.00 Inch, 0.625 -1.50 Inch, 1.00 - 2.00 Inch, 1.25 - 2.25 Inch, 1.25 - 3.25 Inch Insulation Outside Diameter Range (Metric): 12.7-25.4 mm, 15.9-38.1 mm, 25.4-50.8 mm, 31.8-57.2 mm, 31.8-82.6 mm, 6.4-15.9 mm Maximum Conductor Size (Imperial): 10 AWG Maximum Conductor Size (Metric): 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.25 in, 1 in, 1.5 in, 2.25 in, 3.25 in Maximum Insulation Outer Diameter (Metric): 6.4 mm, 25.4 mm, 38.1 mm, 57.2 mm. 82.6 mm Minimum Conductor Size (Imperial): 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup> Minimum Insulation Outer Diameter (Imperial): 0.25 in, 0.5 in, 0.625 in, 1.25 in Minimum Insulation Outer Diameter (Metric): 6.4 mm, 12.7 mm, 15.9 mm, 31.8 mm Molded Body Length: 7.125 in, 10.438 in, 15.438 in, 15.625 in, 20.312 in, 25 in Molded Body Length (Metric): 392.1 mm, 396.9 mm, 181.0 mm, 635.0 mm, 268.3 mm,515.9 mm Product Type: Resin Splice Splice Type: Resin Voltage: 1 kV eClass 14 Classification Group: 27400107

# Details

Flame-retardant resin 2131 is used as an insulating material for cable splices Perfect for use with non-shielded, solid dielectric cables and indoor/outdoor applications

1 kV-rated for multiple and 5 kV-rated for single-cable applications MSHA Approved and RoHS 2011/65/EU Compliant

Includes Scotch® electrical grounding braid 25, constant force springs, Scotch Super 33+™ vinyl electrical tape, Scotch electrical shielding tape 24 and more MSHA Approved and RoHS 2011/65/EU Compliant

# **Typical properties**

Cable Shielding: Non-shielded Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 300 kcmil, 500 kcmil Conductor Sizes (Metric): 150 mm<sup>2</sup>, 240 mm<sup>2</sup>, 50 mm<sup>2</sup> Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in Insulation Outer Diameter (Metric): 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm Number of Conductors: 3 Splice Type: Resin Voltage: 5 kV eClass 14 Classification Group: 27400107

# Details

Specially designed to splice flexible power cables MSHA Approved and RoHS 2011/65/EU Compliant

# **Typical properties**

Adhesive Material: Mastic Application: Electrical Maintenance, For Splicing Flexible Power Cable Rated from 600V to 15 kV, for In-Line Splicing, for Power Feeder Circuits, for Repair and Splicing of Mine Conduit, for Use with Standard In-Line Crimp or Parallel (Crow's Foot) Connectors Application/Industry: Irrigation, Mining, Solar Cable Type: Multiple Conductor Sizes (Imperial): 6 to 1 AWG (14 to 38 mm<sup>2</sup>) Can Accommodate Up to 500 kcmil with Additional Tape Dielectric Strength (V/mil): 379 V/mil Kit Includes: Instruction Booklet Lug/Stem Connector Included in Kit: No Material: Mastic Maximum Conductor Size (Imperial): 16 AWG, 6 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup>, 16 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Operating Voltage: 15 kV, 2 kV Minimum Conductor Size (Imperial): 16 AWG, 6 AWG Minimum Conductor Size (Metric): 14 mm<sup>2</sup> Minimum Operating Voltage: 2 kV, 5 kV, 110 V, 600 V Product Type: Mining Tapes Recovered Wall Thickness: 0.114 in Round Size (Diameter): 8 kV Splice Type: Inline Tape Type: Mining Units per Case: 10.0,40.0 Voltage: 110 V - 15 kV, 2 kV, 5 kV - 15 kV, 600 V - 2 kV eClass 14 Classification Group: 20420490

# 3M<sup>™</sup> Electrostatic Animal Guards

#### Details

Good outage protection from animals Does not interrupt power service Works with insulators/bushings rated up to 35 kV Rugged plastic construction with metal spokes radiating outward Causes no injury to animals RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Accessory Products: Outage Protection Products Insulated Neck Diameter Range: 0.75 - 2.5 in, 1.5 - 2.5 in, 2.5 - 4.5 in, 4.5 - 6.5 in Insulated Neck Diameter Range (Metric): 114.7 - 165.7 mm, 19.1 - 63.7 mm, 38.2 - 63.7 mm, 63.7 - 114.7 mm Material: Plastic Maximum Cable Diameter (Imperial): 2.5 in, 4.5 in, 6.5 in Maximum Cable Diameter (Metric): 63.7 mm, 114.7 mm, 165.7 mm Minimum Cable Diameter (Imperial): 0.75 in, 1.5 in, 2.5 in, 4.5 in Minimum Cable Diameter (Metric): 19.1 mm, 38.2 mm, 63.7 mm, 114.7 mm Units per Case: 100.0 Voltage Rating: 18/30 kV

# Details

Designed for use with JCN cable splices Rated for 15 to 35 kV applications RoHS 2011/65/EU Compliant

# **Typical properties**

Brands: 3M<sup>™</sup> Inner Diameter After Shrink (Imperial): 0.85 in, 1 in, 1.5 in Inner Diameter After Shrink (Metric): 22 mm, 25.4 mm, 38.1 mm Inner Diameter Before Shrink (Imperial): 2.5 in, 3 in, 4.3 in Inner Diameter Before Shrink (Metric): 64 mm, 76.2 mm, 109.2 mm eClass 14 Classification Group: 27400105

# 3M<sup>™</sup> Modular Splicing Kits

# Details

Splices tape shield, wire shield, UniShield® and JCN cables Suitable for use with a splicing kit, tap splicing kit, equipment kit and dead-end kit ANSI Certified and IEEE Approved

# **Typical properties**

Cable Shielding: Jacketed Concentric Neutral (JCN), Tape Shield, UniShield®, Wire Shield Cable Voltage Rating: 15 kV, 25 kV Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 250 kcmil, 3/0 AWG, 4/0 AWG Current Rating: 600.0 A Insulation Diameter Range: 0.640-0.760 in, 0.785-0.970 in, 0.910-1.065 in, 0.980-1.140 in, 1.080-1.280 in, 1.220-1.420 in, 1.640-1.840 in Insulation Diameter Range (Metric): 16.3-19.3 mm, 19.9-24.6 mm, 24.9-29.0 mm, 27.4-32.5 mm, 31.0-36.1 mm, 41.7-46.7 mm Insulation Level: 100%, 133% Maximum Insulation Outer Diameter (Imperial): 0.76 in, 0.97 in, 1.14 in, 1.28 in, 1.42 in, 1.965 in Maximum Insulation Outer Diameter (Metric): 19 mm, 25 mm, 29 mm, 33 mm, 36 mm, 50 mm Maximum Operating Voltage: 15 kV, 25 kV Metallic Shield Diameter Range: 1.28-1.62 in **Operating Temperature (Celsius): 90** Operating Temperature (Fahrenheit): 194 Product Color: Black Product Series: 5815 Product Type: Splice Separable Connector Type: Dead Break Elbows Splice Type: Modular Units per Case: 1.0 eClass 14 Classification Group: 27440308

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Multi-Stud Ring Tongues

# Details

Vinyl-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Multi-stud style ring tongue fits around multiple stud sizes

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Insulation Material: Vinyl Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 0.823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Product Color: Blue, Yellow Terminal Type: Ring

# **Dimensions and Classifications**

Overall Length (Imperial): 1.01 in, 1.19 in Overall Length (Metric): 25.65 mm Overall Width (Imperial): 0.34 in, 0.39 in Overall Width (Metric): 8.63 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Bullet-Style Male Disconnects

# Details

Non-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Suitable for use in a terminal block Electrolytic copper construction offers good conductivity Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Barrel Inside Diameter: 0.07 Inch Barrel Length (Imperial): 0.19 Inch Barrel Style: Insulation Grip CSA File Number: LR22190 Connection Width (Imperial): 0.156 in, 0.18 in Connection Width (Metric): 3.962 mm, 4.572 mm Diameter (D): 0.39 Inch Disconnect Type: Male Fastener Orientation: Male Insulation Color: Blue Insulation Material: Nylon Material: Plastic Mating Snap Diameter (S): 0.18 Inch,0.156 Inch Maximum Conductor Size (Imperial): 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.15 in, 0.19 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup> Pad Width: 0.156 in, 0.18 in **Product Color: Blue** Tab Width: 0.250 Terminal Style: Bullet Snap Plug Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 Voltage Application: Low Voltage eClass 14 Classification Group: 27400204

# **Dimensions and Classifications**

Overall Diameter (Imperial): 0.39 in Overall Length (Imperial): 0.87 in Overall Length (Metric): 22 mm

# 3M<sup>™</sup> Scotchcast<sup>™</sup> Spacer Tape P-3, 1-1/2 in X 27 ft (38,1 mm x 8,23 m), 50 rolls/case

3M ID 7100017387 UPC 00054007257356

# Details

Engineered to build up voids in odd shaped splices Assures full resin coverage and forms a liquid tight mold RoHS 2011/65/EC Compliant

# **Typical properties**

Brands: Scotchcast™ Product Type: Accessory eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Scotchcast<sup>™</sup> Flexible Splice 82-BF1 (2131), 10 Kits/Case

3M ID 7100011582 UPC 00051128591758

#### Details

The self-curing resin forms a splice or repair that resists abrasion Designed to splice or re-jacket non-shielded portable power cable and portable cord Suitable for use with compression C-tap connectors Rated for up to 1 kV applications MSHA Approved and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchcast™ **Cable Accessory Products: Electrical Resins** Cable Type: multi core, non shielded, rubber insulated reeling cables Conductor Amount: Multiple, Single Conductor Sizes (Imperial): 1/0 AWG Dielectric Strength (V/mil): 343 V/mil Flame Retardant: Resin only Gel Time: 17 min 73 °F (23 °C) Hardness: 82 Shore A Indoor/Outdoor: Both Insulation Outside Diameter Range: 0.25 - 0.80 Inch Insulation Outside Diameter Range (Metric): 6.0 - 20.0 mm Maximum Conductor Size (Imperial): 1/0 AWG Maximum Conductor Size (Metric): 50 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.8 in Maximum Insulation Outer Diameter (Metric): 20 mm Maximum Operating Voltage: 5 Kilovolt Minimum Conductor Size (Imperial): 6 AWG Minimum Conductor Size (Metric): 16 mm<sup>2</sup> Minimum Insulation Outer Diameter (Imperial): 0.25 in Minimum Insulation Outer Diameter (Metric): 6.4 mm Mining Sector Approval: Yes Model: Cast Resin Product Color: Black Product Series: 82-B Series Product Type: Resin Splice Resin Type: SC 2131 Shelf Life: 36 Month Splice Type: Parallel Branch Voltage: 5 kV Voltage Rating: 0.6/1 kV With Screw Connectors: No eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> QS Molded Rubber Splice 5408, CN and JCN Cable, 15 kV, 1/case

3M ID 7100165664 UPC 00054007256106

# Details

Inline splice to use on jacketed concentric neutral (JCN) or concentric neutral (CN) cables Rated for 15 kV cables Meets the requirements of IEEE 404 standards for cable joints

# **Typical properties**

Brands: 3M<sup>™</sup> Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Case Quantity: 1 Conductor Material: Aluminum, Copper Connector Included: None Insulation O.D. Range: 1.320 - 1.520 Inch Insulation Outer Diameter (Imperial): 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in Insulation Outer Diameter (Metric): 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm Insulation Outside Diameter Range: 1.320 - 1.520 Inch Insulation Outside Diameter Range (Metric): 33.5 - 38.6 mm Maximum Conductor Size (Imperial): 750 kcmil (Stranded) Maximum Conductor Size (Metric): 400 mm<sup>2</sup> (Stranded) Number of Conductors: 1 Operating Voltage: 15 kV Product Series: 5400 Series Product Type: Inline Splice Type: Inline

# 3M<sup>™</sup> Cold Shrink Corrosion Protection Kits CPT Series

## Details

Designed to provide protection for bulkhead termination connectors Offers protection from wet and salt-fog installation environments Ideal for use in standard and hazardous locations

Insulator is formulated with EPDM rubber which contains no chlorides or sulfur Provides tight sealing between NPT fitting threads and the enclosure using mastic strips

Includes an insulator assembly, mastic seal strip pack and instruction sheet

## **Typical properties**

Brands: 3M™

Cable Accessory Products: Cold Shrink Corrosion Protection Kits Cable Minimum Outside Diameter: 0.50 in, 0.66 in, 1.22 in, 1.40 in, 1.68 in, 1.97 in, 2.60 in, 2.90 in Cable Minimum Outside Diameter (Metric): 12.7 mm, 16.8 mm, 31.0 mm, 35.6 mm, 42.7 mm, 50.0 mm, 66.0 mm, 73.7 mm Connector Maximum Installed Length: 10.50 in, 13.00 in, 13.50 in, 4.50 in, 4.80 in, 5.50 in, 6.50 in, 8.50 in Connector Maximum Installed Length (Metric): 114 mm, 122 mm, 140 mm, 165 mm, 215 mm, 266 mm, 330 mm, 343 mm Connector Maximum Outside Diameter: 1.60 in, 1.90 in, 2.20 in, 2.65 in, 3.00 in, 3.60 in, 4.30 in, 5.40 in, 6.00 in Connector Maximum Outside Diameter (Metric): 109.2 mm, 137.2 mm, 152.4 mm, 40.6 mm, 48.3 mm, 55.9 mm, 67.3 mm, 76.2 mm, 91.4 mm

Material: EPDM Rubber

Maximum Cable Diameter (Imperial): 1.598 in, 1.902 in, 2.2 in, 2.65 in, 3 in, 3.6 in, 4.3 in, 5.4 in, 6 in

Maximum Cable Diameter (Metric): 40.6 mm, 48.3 mm, 55.9 mm, 67.3 mm, 76.2 mm, 91.4 mm, 109.2 mm, 137.2 mm, 152.4 mm

Maximum Cable Outside Diameter (Metric): 12,7 mm, 16,8 mm, 31,0 mm, 35,6 mm, 42,7 mm, 50,0 mm, 66,0 mm, 73,7 mm

Minimum Cable Diameter (Imperial): 0.5 in, 0.66 in, 1.22 in, 1.402 in, 1.68 in, 1.97 in, 2.6 in, 2.9 in, 2.902 in

Minimum Cable Diameter (Metric): 12.7 mm, 16.8 mm, 31 mm, 35.6 mm, 42.7 mm, 50 mm, 66 mm, 73.7 mm

Units per Case: 10.0,5.0

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated Interlock Barrel Female Disconnects

## Details

Nylon-insulated, butted seam with an interlocking barrel offers easy insertion of wires

Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires

Mates with 0.25-in wide male tab

Made of durable brass for good conductivity and has corrosion-resistant tin plating

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Barrel Inside Diameter: 0.076 Inch.0.128 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Interlocking Barrel CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.23 Inch **Disconnect Type: Female** Fastener Orientation: Female Flame Retardant: No Fork Type: Standard Fork Grease Filling Against Corrosion: No Insulation Color: Yellow Insulation Material: Nylon Interrupt Free Shifting: No Male Tab Width (W'): 0.250 Inch Material: ETP Copper Mates with Female Width: 0.25 Inch Mates with Male Tab Width (W'): 0.25 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup>

Pad Width: 0.25 in Product Color: Yellow Tab Width: 0.250 Terminal Style: Fully Insulated Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

# **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in Overall Length (Imperial): 0.91 in, 0.99 in Overall Length (Metric): 25.14 mm Overall Width (Imperial): 0.37 in

# 3M<sup>™</sup> Modular Tap Splice Kits

3M ID B00014761

## Details

Splices tape shield, wire shield, UniShield® and JCN cables Designed for connecting parallel feeds by combining with 5815-E equipment Tap into an existing dead-end or to combine with a 5815-S splice for a 3-way installation Meets ANSI/IEEE Standard 386

# **Typical properties**

Brands: 3M<sup>™</sup> Current Rating: 600.0 A Product Series: 5815 Product Type: Splice Separable Connector Type: Dead Break Elbows Splice Type: Modular eClass 14 Classification Group: 27440308

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Pin Terminals

# Details

Non-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Beveled mouth offers easy insertion of wires

Provides quick connection for set screws or clamps that are used to make electrical contact

Made of copper for good conductivity and has tin plating for corrosion resistance Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals

600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Barrel Inside Diameter: 0.07 Inch,0.09 Inch,0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Connection Width (Imperial): 0.08 in, 0.11 in Connection Width (Metric): 2.032 mm, 2.794 mm Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pin Length (PL): 0.47 Inch,0.55 Inch Solution for: Wireless Network: Infrastructure Accessories Terminal Type: Pin Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.73 in, 0.81 in

# 3M<sup>™</sup> Scotchcast<sup>™</sup> Re-Enterable Signal and Control Cable Splicing Kits 78-R Series

3M ID B00015021

#### Details

Specially designed to splice shielded or non-shielded, plastic and rubberjacketed, signal and control cables

Modular system approach allows for subsequent re-entry into the splice Suitable for inline, wye, X or butt splicing, direct burial applications, indoor or underground systems, joining cable reel ends, cable failures and dig ins Rated for 1 kV cables

#### **Typical properties**

Conductor Amount: Multiple, Single Conductor Sizes (Imperial): 10 AWG, 12 AWG, 14 AWG, 16 AWG, 18 AWG, 20 AWG, 22 AWG Maximum Conductor Size (Imperial): 10 AWG Maximum Conductor Size (Metric): 6 mm<sup>2</sup> Minimum Conductor Size (Imperial): 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup> Product Type: Resin Splice Splice Type: Resin Voltage: 1 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Motor Lead Pigtail Splice Kits 5380 Series

## Details

Designed for use with 30000 Series copper compression lugs or other UL Listed copper lugs

Perfect for use with shielded and non-shielded cables

Rated for 5/8 kV applications

The lug or splice cover is made of EPDM rubber to resist punctures and abrasion damage

Includes 6 tubes of silicone grease, 3 cold shrink jacket tubes, 3 cable ties, 3 ground straps and 1 instruction sheet

Withstands a temperature range of 194 to 266 degrees F (90 to 130 degrees C)

# **Typical properties**

Application: Cable Connection Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Non-shielded, Ribbon Shield, UniShield®, Wire Shield Cable Type: Cable with XLPE insulation, Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 350 kcmil, 4/0 AWG, 500 kcmil, 750 kcmil Connection Type: Pigtail (Non-shielded), Pigtail (Shielded) Connector Included: No, None Inner Diameter of Boot to Size of Cables: 0.90 in, 1.16 in, 1.60 in, 2.06 in Inner Diameter of Boot to Size of Cables (Metric): 22.9 mm, 29.5 mm, 40.6 mm, 52.3 mm Insulation Outside Diameter: 0.53-0.88 Inch, 0.30-0.51 Inch, 0.43-0.65 Inch, 0.75-1.12 Inch Insulation Outside Diameter Range: 0.30-0.51 in, 0.43-0.65 in, 0.53-0.88 in, 0.75-1.12 in Insulation Outside Diameter Range (Metric): 10.9 - 16.5 mm, 13.5-22.4 mm, 19.1-28.4 mm, 7.6-13.0 mm Maximum Bolt Length: 1-1/2 in, 1-1/4 in, 3/4 in, 5/8 in Maximum Bolt Length (Metric): 15.9 mm, 19.1 mm, 31.8 mm, 38.1 mm Maximum Conductor Size (Imperial): 1000 kcmil, 250 kcmil, 400 kcmil, 500 kcmil Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 500 mm<sup>2</sup> Maximum Feeder Lead Size: 1/0 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Lug Length: 2-3/4 in,2-1/2 in,5-1/2 in,4 in Maximum Lug Length (Metric): 101.6 mm, 139.7 mm, 63.5 mm, 69.9 mm Maximum Motor Lead Size: 1/0 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Operating Voltage: 8 kV Minimum Conductor Size (Imperial): 1/0 AWG, 118 kcmil, 250 kcmil, 500 kcmil Minimum Conductor Size (Metric): 120 mm<sup>2</sup>, 240 mm<sup>2</sup>, 50 mm<sup>2</sup>, 60 mm<sup>2</sup> Number of Conductors: 1, 3 Product Type: Cold Shrink, Splice Range Feeder Cable (AWG & kcmil): 1/0-250, 2-0, 250-500, 8-4 Splice Type: Pigtail or V-stub Typical Splice Length: 30 in, 33 in, 35 in

Typical Splice Length (Metric): 762 mm, 838 mm, 889 mm Units per Case: 3.0 Voltage: 5 kV - 8 kV Voltage Application: Medium Voltage

# 3M<sup>™</sup> Cold Shrink Coax Sealing Kit 98-KC 8

3M ID 7100028690

## Details

Reliable sealing - Easy to remove Made of silicone rubber for a tighter shrink UV resistant Fits easily between tight connections No foam build-up required prior to installation Does not require use of butyl or threaded adapter on fully threaded connectors

## **Typical properties**

Application: DIN-716 or 4.3/10 Connection on 1/2" Coax and DC Power Connection on Remote Radio Unit (RRU) Application Temperature Range (Celsius): -20°C up to +50°C Brands: 3M<sup>™</sup> Cable Range: 11 mm (.43") to 41 mm (1.61") Diameter Cable Shielding: Non-shielded Halogen Free: No Insulation Outer Diameter (Imperial): 1.61 in Insulation Outer Diameter (Metric): 41 mm Material: Silicone Model: Cold Shrink Number of Conductors: 1 Operating Temperature (Celsius): -55 up to +260°C Product Color: Black Shrink Ratio: 2:1 Sleeve Length (Metric): Pre-Install 130mm +/- 10mm. Post-Install 140mm approx. Sleeve Length Post-Install: 140 mm approx. or 5.51 in Sleeve Length Pre-Install: 130 mm +/- 10 mm or 5.12 in +/-.39 in Solution for: Wireless Network: Weatherproofing Splice Type: Cold Shrink UL Approval: No Wall Thickness after Shrinking: 2.8 mm With Inner Glue: No eClass 14 Classification Group: 27400107

## **Dimensions and Classifications**

Overall Diameter (Metric): 43.7 mm Overall Length (Metric): 170 mm

# Details

High tack, acrylic adhesive that resists solvents, oil and water and adheres firmly to insulation surfaces

Available in ten NEMA colors, individual numbers and consecutive numbers, letters and symbols

Can be used for applications with operating temperatures between -40°F (-40°C) to 250°F (121°C)

# **Typical properties**

Adhesive Material: Acrylic Application: Marking Wire and Cable Dispenser/Marker Type: Tape Roll Refill Legend: "+", "-", 0, 1, 10 - 19, 2, 20 - 29, 3, 30 - 39, 30 Alarm System Legend, 4, 40 - 49, 5, 6, 7, 8, 9, A, B, C, D, E, F, G, H, I, J, K, L, L1, L2, L3, M, N, O, P, Q, R, S, T, T1, T2, T3, U, V, W, X, Y, Z Legend Color: Assorted, Black, Blue, Brown, Gray, Green, Orange, Red, Violet, White, Yellow Marker ID Style: Pre-printed Marker Size: Cut Length to Suit Marker Type: Dispenser Material: Plastic Max. Number of Cores: 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45, 46, 47, 48, 49, 50, 51, 52, 53, 54, 55, 56, 57, 107, 108, 109 Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 80 °C, 121 °C Maximum Operating Temperature (Fahrenheit): 176 °F, 250 °F Maximum Recommended Voltage Rating: 600 V Mounting Method: Adhesive Tape Operating Temperature Range (Celsius): -40 °C to 121 °C Printed Text Type: Alphanumeric, Color - BK, Color - BL, Color - BN, Color - GN, Color - GY, Color - OR, Color - RD, Color - VL, Color - WH, Color - YL, Letter - A, Letter - B, Letter - C, Letter - D, Letter - E, Letter - F, Letter - G, Letter - H, Letter - I, Letter - J, Letter - K, Letter - L, Letter - M, Letter - N, Letter - O, Letter - P, Letter - Q, Letter - R, Letter - S, Letter - T, Letter - U, Letter - V, Letter - W, Letter - X, Letter - Y, Letter - Z, Number - 0, Number - 1, Number - 2, Number - 3, Number - 4, Number - 5, Number - 6, Number - 7, Number - 8, Number - 9, Numbers - 0-9, Numbers - 10-19, Numbers - 20-29, Numbers - 30-39, Numbers -40-49, Symbol - (MINUS) -, Symbol - (PLUS) +, Symbol - L1, Symbol - L2, Symbol - L3, Symbol - T3 Product Color: White Product Type: Identification, Write-on Refill Roll Refill: Tape Roll Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul Tape Color: Black, Blue, Brown, Gray, Green, Orange, Red, Violet, White, Yellow

Tensile Strength (Imperial): 17 lb/in UV Resistant: No Units per Case: 50.0 Voltage Application: Low Voltage Wire Marker Products: Wire Marker Tape Dispenser and Refill Rolls With Label Space: No

# **Dimensions and Classifications**

Overall Length (Metric): 2.4 m, 2.43 m Overall Width (Metric): 5.46 mm, 19 mm, 53.975 mm

# 3M<sup>™</sup> Direct Bury Splice Kits

#### Details

Twist-on type for quick connection Used for appliances and fixtures, automotive and marine, commercial construction, industrial construction and residential construction Delivers uniform holding power Withstands temperatures up to 221 °F (105 °C)

## **Typical properties**

Application Temperature Range (Celsius): 0 - 49 Degrees Celsius Application Temperature Range (Fahrenheit): 32 - 120 Degrees Fahrenheit Brands: 3M<sup>™</sup> Closure Length (Imperial): 3.66 in Closure Length (Metric): 93 mm Closure Width (Imperial): 1 in Closure Width (Metric): 2.54 cm Conductor Sizes (Imperial): 10 AWG, 18 - 10 AWG, 18 AWG, 18 - 10 AWG Connection Type: Wire Connector Style: Direct Bury Encapsulation Method: Moisture sealed spring connector Flame Retardant: UL-94 V-2, Yes Grease Filling Against Corrosion: Yes Insulation Color: Orange/Blue Insulation Material: Tube is UV Resistant Polypropylene Interrupt Free Shifting: No Maximum Conductor Size (Imperial): 10 AWG Maximum Conductor Size (Metric): 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 V Minimum Conductor Size (Imperial): 18 AWG Minimum Conductor Size (Metric): 0.75 mm<sup>2</sup>, 1 mm<sup>2</sup> Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Operating Temperature (Celsius): -40 °C to 105 °C Operating Temperature (Fahrenheit): -40 °F to 221 °F Operating Temperature Range (Celsius): -40 °C to 105 °C Operating Temperature Range (Fahrenheit): -40 °F to 221 °F Product Color: Blue, Orange, Red, Yellow Product Type: Connector Voltage Rating: 600 V,0 NP Wire Connector: O/B+, R/Y+ Wire Connector Type: Direct Bury Splice Kit eClass 14 Classification Group: 27400215

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Seamless Butt Connectors

#### Details

Built-in wire stop for correct positioning Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance Withstands a maximum temperature of 221 degrees F (105 degrees C)

#### **Typical properties**

Barrel Inside Diameter: 0.142 inch,0.062 inch,0.095 inch Body Material: Copper Alloy Connector Type: Butt Disconnect Type: Female Insulation Material: Heat Shrink Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Product Color: Red, Yellow Terminal Type: Butt Connectors eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 1.2 in, 1.3 in, 1.5 in Overall Length (Metric): 30.48 mm, 33.02 mm, 38.1 mm

# Details

Grease protects against moisture Suitable for applications requiring moisture and UV protection Accommodates 16 to 14 AWG solid/stranded, 12 AWG stranded (outer ports) and 18 AWG solid/stranded, 20 AWG stranded (inner port) C UL Listed and RoHS 2011/65/EU Compliant

# **Typical properties**

Brands: Scotchlok™ Conductor Sizes (Imperial): 12 AWG (Stranded), 14 AWG, 18 AWG Conductor Sizes (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 4 mm<sup>2</sup> (Stranded) Connection Type: Moisture Guard **Connector Style: Insulation Displacement** Flame Retardant: No, UL-94 V-2 Grease Filling Against Corrosion: No Insulation Material: Polycarbonate Interrupt Free Shifting: No Material: Flame Retardant Polycarbonate Maximum Conductor Size (Imperial): 12 AWG (Stranded), 14 AWG Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup>, 4 mm<sup>2</sup> (Stranded) Maximum Insulation Diameter (Inside Port): 0.15 in Maximum Insulation Diameter (Inside Port) (Metric): 3.8 mm Maximum Insulation Diameter (Outside Port): 0.21 in Maximum Insulation Diameter (Outside Port) (Metric): 5.3 mm Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Voltage Rating: 600 V, 600 V (1000 V in signs, lighting fixtures and luminaries) Minimum Conductor Size (Imperial): 14 AWG, 18 AWG Minimum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Moisture Resistant: Yes Package Quantity: 30 Product Type: Connector UL File Number: E23438 Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Butt Connectors

#### Details

Built-in wire stop for correct positioning Made of nickel-plated, annealed steel Maximum Temperature Range of 900 degrees F (482 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Body Material: Copper Alloy, Stainless Steel Connector Type: Butt Insulation Material: Non-insulated, Nylon, Vinyl Maximum Conductor Size (Imperial): 10 AWG, 12 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 4 mm<sup>2</sup>, 6 mm<sup>2</sup> Minimum Conductor Size (Imperial): 10 AWG, 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup>, 6 mm<sup>2</sup> Solution for: Wireless Network: Infrastructure Accessories Terminal Style: High Temp Units per Case: 500.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.056 in, 0.56 in

# **Typical properties**

Barrel Inside Diameter: 0.07 Inch.0.09 Inch.0.135 Inch.0.090 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.29 Inch Dimension E: 0.84 Inch,0.74 Inch Fork Type: Block Fork, Block, Standard Insulation Material: Vinyl Material: ETP Copper Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm, 4.31 mm, 6.35 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Product Color: Blue Solution for: Wireless Network: Infrastructure Accessories Stud Diameter (Imperial): 0.138 in, 0.164 in, 0.19 in Stud Diameter (Metric): 3.505 mm, 4.166 mm, 4.826 mm Stud Size: #10,#6,#8 **Terminal Style: Standard** Terminal Type: Fork UL File Number: E23438, E70512 Units per Case: 500.0.1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.9 in, 1.03 in Overall Width (Imperial): 0.34 in, 0.38 in

# 3M<sup>™</sup> Molded Rubber QS-II Cable Splice Kits 5411/5412 Series

## Details

1-piece inline splice to use on jacketed concentric neutral (JCN) or concentric neutral (CN) cables

Provides an electrical connection for the outer conducting jacket to the cable semi-conductive jacket

Designed to use on cables that can withstand a maximum temperature of 194 °F (90 °C)

The cold shrink jacket is made of peroxide-cured EPDM rubber which provides moisture resistance and durability

Rated for 15 kV cables

Factory-tested to offer reliability

# **Typical properties**

Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Case Quantity: 1

Conductor Material: Aluminum, Copper

Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 2 AWG, 2/0 AWG, 3/0 AWG, 4 AWG, 4/0 AWG

Connector Included: 20006, CI-1/0, CI-1/0 and two 10002, CI-2, CI-2/0, CI-21, CI-22, CI-3/0, CI-4/0, CI-T1, CI-T3, CI-T4, None

Insulation Level: 100%, 133%

Insulation O.D. Range: 0.637 - 0.900 Inch, 0.775 - 0.90 Inch, 0.840 - 1.050 Inch Insulation Outer Diameter (Imperial): 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm

Insulation Outer Diameter (Metric): 16 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm Insulation Outside Diameter Range: 0.637 - 0.900 Inch, 0.775 - 0.90 Inch, 0.840 - 1.050 Inch

Insulation Outside Diameter Range (Metric): 16.2 - 22.9 mm, 19.7 - 22.9 mm, 21.3 - 26.7 mm

Maximum Conductor Size (Imperial): 1 AWG (Stranded), 1/0 AWG (Stranded), 2 AWG (Stranded), 2/0 AWG (Stranded), 250 kcmil (Stranded), 3/0 AWG (Stranded), 4 AWG (Stranded), 4/0 AWG (Stranded)

Maximum Conductor Size (Metric): 120 mm² (Stranded), 25 mm² (Stranded), 35 mm² (Stranded), 50 mm² (Solid), 50 mm² (Stranded), 70 mm² (Stranded), 95 mm² (Stranded)

Number of Conductors: 1

Operating Voltage: 15 kV Product Series: 5411, 5411A & 5412 Series Product Type: Inline Splice Type: Inline Voltage: 15 kV, 25/28 kV

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Flanged Block Forks

#### Details

Vinyl-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Suitable for use in a terminal block

Electrolytic copper construction offers good conductivity

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.29 Inch Connection Width (Imperial): 0.138 in, 0.164 in, 0.19 in Connection Width (Metric): 3.5 mm, 4.166 mm, 4.826 mm Dimension E: 0.84 Inch Fork Type: Flanged Block Insulation Material: Vinyl Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.25 in Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Solution for: Wireless Network: Infrastructure Accessories Stud Size: #10 **Terminal Style: Flanged Block** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.85 in, 1.03 in Overall Width (Imperial): 0.3 in, 0.32 in

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Female Disconnects

## Details

Non-insulated, butted-seam barrel with a beveled mouth offers easy insertion of wires

Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires

Made of durable brass for good conductivity and has corrosion-resistant tin plating

Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals

Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Barrel Inside Diameter: 0.040 Inch,0.115 Inch,0.080 Inch,0.085 Inch,0.08 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Brazed, Butted CSA File Number: LR22190 Connection Width (Imperial): 0.11 in, 0.187 in, 0.25 in Connection Width (Metric): 2.794 mm, 4.75 mm, 6.35 mm Disconnect Type: Female Fastener Orientation: Female Insulation Material: Non-insulated Mates with Female Width: 0.110 Inch, 0.187 Inch, 0.25 Inch, 0.250 Inch Mates with Male Tab Width (W'): 0.110 Inch, 0.187 Inch, 0.25 Inch, 0.250 Inch Maximum Conductor Size (Imperial): 14 AWG, 18 AWG, 20 AWG Maximum Conductor Size (Metric): .5 mm<sup>2</sup>, 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Minimum Conductor Size (Imperial): 16 AWG, 22 AWG, 26 AWG Minimum Conductor Size (Metric): .14 mm<sup>2</sup>, .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup> Pad Width: 0.11 in, 0.187 in, 0.25 in Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250,0.187 Terminal Style: Standard Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.48 in, 0.54 in, 0.58 in, 0.66 in

# 3M<sup>™</sup> Heat Shrink Tubing TMW

# Details

Ideal for manufacturing heat shrink butt connectors, disconnects, ring terminals and fork terminals

Color-coded for quick and easy identification of the wire

Suitable for use with mechanical assemblies, braided-shield pigtails, electronic components, electrical wire splices, breakouts, solder joints, delicate wire terminations and end-sealing of electrical cables

Made of red semi-rigid polyolefin

Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C) Rated for 600V applications

# **Typical properties**

Agency Approvals: UL Recognized Elongation: 400 % Flame Retardant: No Inner Diameter After Shrink (Imperial): 0.061 in, 0.073 in, 0.085 in, 0.11 in Inner Diameter After Shrink (Metric): 1.55 mm, 1.85 mm, 2.16 mm, 2.79 mm Inner Diameter Before Shrink (Imperial): 0.183 in, 0.22 in, 0.255 in, 0.33 in Inner Diameter Before Shrink (Metric): 4.65 mm, 5.59 mm, 6.48 mm, 8.38 mm Maximum Operating Temperature (Celsius): 110 °C Maximum Operating Temperature (Fahrenheit): 230 °F Minimum Expanded Tubing I. D.: 0.183 in, 0.22 in, 0.255 in, 0.33 in Operating Temperature (Celsius): -55 to 135 Degrees Celsius Product Color: Blue, Pink, Red, Yellow Shrink Ratio: 2:1, 3:1 Tubing Type: Dual Wall (Adhesive) eClass 14 Classification Group: 27400105

## **Dimensions and Classifications**

Overall Length (Imperial): 0.75 in, 0.875 in, 1 in, 1.5 in, 1.7 in, 1.85 in

# 3M<sup>™</sup> Heat Shrink Tubing FP-301VW

# Details

Balances electrical, physical and chemical properties for various industrial and military applications Suitable for flame-retardant applications requiring UL VW-1 and CSA OFT, fireresistant wiring Made of black flexible polyolefin Withstands temperatures of -67 to 275 degrees F (-55 to 135 degrees C) Rated for 600V applications Rated for 600V applications

# **Typical properties**

Agency Approvals: CSA, UL Recognized Elongation: 400 Decibel, 400 % Expanded Inner Diameter: 0.375 in, 0.5 in, 1 in, 1.5 in, 2 in, 3 in, 4 in Expanded Inner Diameter (Metric): 12.70 mm, 76.2 mm, 9.5 mm Flame Retardant: Yes Flammability Rating: UL 224 VW-1 / CSA Oft Heat Shrink Type: Single-Wall Polyolefin Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.031 in, 0.046 in, 0.062 in, 0.093 in, 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 1.5 in, 2 in Inner Diameter After Shrink (Metric): 0.79 mm, 1.17 mm, 1.57 mm, 2.36 mm, 3.18 mm, 4.75 mm, 6.35 mm, 9.53 mm, 12.7 mm, 19.05 mm, 25.4 mm, 38.1 mm, 50.8 mm Inner Diameter Before Shrink (Imperial): 0.063 in, 0.093 in, 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 1.5 in, 2 in, 3 in, 4 in Inner Diameter Before Shrink (Metric): 1.6 mm, 2.36 mm, 3.18 mm, 4.75 mm, 6.35 mm, 9.53 mm, 12.7 mm, 19.05 mm, 25.4 mm, 38.1 mm, 50.8 mm, 76.2 mm, 101.6 mm Material: Highly Flame-retardant, Flexible Polyolefin, Polyolefin Maximum Operating Temperature (Celsius): 135 °C Maximum Operating Temperature (Fahrenheit): 275 °F Mil Spec: AMS-DTL-23053/5, Class 3 Minimum Expanded Tubing I. D.: 1 in, 2 in, 3 in, 4 in Minimum Shrink Temperature (Celsius): 100 °C Non-Corrosive: Yes Operating Temperature (Celsius): -55 to 135 Degrees Celsius Operating Temperature Range (Celsius): -55 °C to +135 °C Operating Temperature Range (Fahrenheit): -67 °F to 275 °F Product Color: Black Product Form: Tube Recovered Inner Diameter: 0.05 in, 0.187 in, 0.25 in, 1 in, 1.5 in, 2 in, 3 in Recovered Inner Diameter (Metric): 4.7498 mm, 6.35 mm, 38.1 mm Shrink Ratio: 2:1 Solution for: Wireless Network: Infrastructure Accessories Tensile Strength (Imperial): 2400 Pound-Force Per Square Inch Tubing Type: Single (Thin) Wall, Single Wall (Thin) UL Approval: Yes

UL File Number: E-39100 eClass 14 Classification Group: 27400105

# **Dimensions and Classifications**

Overall Length (Imperial): 50 ft, 100 ft, 200 ft, 250 ft, 500 ft, 1000 ft

# Details

Suitable for use with commonly used power cable jacketing and semi-conductive materials

Specially designed to seal between the cable jacket end and a cable accessory RoHS 2011/65/EU Compliant

# Typical properties

Brands: 3M™

Cable Accessory Products: Sealing and Grounding Kits Cable Shielding: Jacketed Concentric Neutral (JCN) Cable Size by Voltage: (15 kV) 2-4/0 AWG (35-100 mm<sup>2</sup>), (15 kV) 2/0 AWG-1000 kcmil (70-500 mm<sup>2</sup>), (15 kV) 750-1500 kcmil (380-725 mm<sup>2</sup>), (15 kV) 750-1500 kcmil (380-725 mm<sup>2</sup>), (25 kV) 600-1250 kcmil (325-625 mm<sup>2</sup>), (35 kV) 350-1000 kcmil (180-500 mm<sup>2</sup>), (25 kV) 1/0 AWG-750 kcmil (60-380 mm<sup>2</sup>), (25 kV) 2-2/0 AWG (35-50 mm<sup>2</sup>), (25 kV) 600-1250 kcmil (325-625 mm<sup>2</sup>), (35 kV) 1/0 AWG (60 mm<sup>2</sup>), (35 kV) 1/0 AWG-500 kcmil (60-250 mm<sup>2</sup>), (35 kV) 350-1000 kcmil (180-500 mm<sup>2</sup>) Cable Voltage Rating: 15 kV, 25 kV, 35 kV Cold Shrink Sealing Tube: 1, 1 (1/2 Inch Longer) Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 450 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Expanded Tube Diameter: 2.12 in, 2.85 in, 3.87 in Expanded Tube Diameter (Metric): 53.8 mm, 72.4 mm, 98 mm, 98.3 mm Expanded Tube Length: 4.50 in, 5.00 in, 6.50 in, 7.50 in Expanded Tube Length (Metric): 11.43 cm, 12.7 cm, 16.51 cm, 19 mm Material: EPDM Rubber Maximum Cable Diameter (Imperial): 1.94 in, 2.67 in, 3.5 in Maximum Cable Diameter (Metric): 49 mm, 68 mm, 88.9 mm Maximum Installed Diameter: 1.94 in, 2.67 in, 3.5 in Maximum Installed Diameter (Metric): 49.3 mm, 67.8 mm, 88.9 mm, 89 mm Maximum Operating Voltage: 35 kV Minimum Cable Diameter (Imperial): 0.95 in, 1.28 in, 1.6 in Minimum Cable Diameter (Metric): 24 mm, 33 mm, 41 mm Minimum Seal Diameter: 0.95 in, 1.28 in, 1.6 in Minimum Seal Diameter (Metric): 24.1 mm, 32.5 mm, 40.6 mm, 41 mm Number of Mastic Sealing Strips: 3 Strips, 4 Strips, 6 strips Product Type: Accessory Relaxed Tube Length: 6 in, 6.5 in, 8 in, 9 in Relaxed Tube Length (Metric): 15.24 cm, 16.51 cm, 20.32 cm, 22.5 cm, 22.86 cm Separable Connector Type: Load Break Elbows Typical Splice Length: 44.0 in Units per Case: 10.0 eClass 14 Classification Group: 27440308

# 3M<sup>™</sup> Highland<sup>™</sup> Vinyl Insulated Female Disconnect Terminal FDV10-250Q, AWG 12-10, 25/bag, 10 Bags/Case

Part Number FDV10-250Q 3M ID 7000133661 UPC 00051128600047

#### Details

Vinyl-insulated, butted-seam barrel with a funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Dents and rolled edges of this female disconnect terminal offer excellent holding

Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires

## **Typical properties**

Barrel Inside Diameter: 0.128 Inch Barrel Length (Imperial): 0.25 Inch Barrel Length (Metric): 6.35 mm Barrel Style: Butted Brands: Scotchlok™ CSA File Number: LR22190 Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm **Disconnect Type: Female** Fastener Orientation: Female Insulation Material: Vinyl Material: Plastic Mates with Female Width: 0.25 Inch Mates with Male Tab Width (W'): 0.25 Inch Max. Number of Cores: 416 Maximum Conductor Size (Imperial): 10 AWG Maximum Conductor Size (Metric): 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG Minimum Conductor Size (Metric): 4 mm<sup>2</sup> Pad Width: 0.25 in Tab Width: 0.250 **Terminal Style: Standard** Terminal Type: Disconnect UL File Number: E70512 Units per Case: 10.0 Units per bag: 25 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.95 in Overall Length (Metric): 24.13 mm

# Details

Blue, polypropylene-insulated connector electrically taps into a wire in mid-span without cutting Suitable for control circuit wiring, fixture wiring, appliance wiring, signal and PA systems and automotive/boat/RV wiring Accommodates 18 to 14 AWG solid/stranded RoHS 2011/65/EU Compliant

# **Typical properties**

Brands: Scotchlok™ Case Quantity: 1000,250 Conductor Sizes (Imperial): 14 AWG (Stranded), 16 AWG, 18 AWG Conductor Sizes (Metric): 1 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Connection Type: Run & Tap Connector / Connector Tool: 3M Crimping Tool E-9BM and/or 9" Lineman's Pliers **Connector Style: Insulation Displacement** Flame Retardant: No, UL-94 V-2, Yes Grease Filling Against Corrosion: No, Yes Insulation Color: Black, Blue Insulation Material: Nylon Insulation Outer Diameter (Imperial): 0.145 in Material: Plastic Max. Number of Cores: 1, 2 Maximum Conductor Size (Imperial): 14 AWG (Stranded), 16 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Maximum Operating Temperature (Celsius): 75 °C, 90 °C Maximum Operating Temperature (Fahrenheit): 167 °F, 194 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 18 AWG Minimum Conductor Size (Metric): 1 mm<sup>2</sup> Moisture Resistant: Yes Operating Temperature (Celsius): 90 °C Operating Temperature (Fahrenheit): 194 °F Operating Temperature Range (Celsius): 90 °C Operating Temperature Range (Fahrenheit): 194 °F Package Quantity: 25 Product Color: Blue Product Type: Connector Recommended Crimping Tool: E-9BM or 9 in. Linemans Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.145 in Run Maximum Insulation Outer Diameter (Metric): 3.7 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.145 in Tap Maximum Insulation Outer Diameter (Metric): 3.7 mm Units per Case: 250.0.500.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Ring Tongues

## Details

Non-insulated, butted-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Standard-style ring tongue fits around the stud Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

# **Typical properties**

Barrel Inside Diameter: 0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.29 Inch Connection Width (Imperial): 0.112 in, 0.138 in, 0.164 in, 0.19 in, 0.25 in Connection Width (Metric): 2.845 mm, 3.5 mm, 4.166 mm, 4.826 mm, 6.35 mm Dimension E: 0.54 Inch Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 0.823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.164 in Minimum Stud Diameter (Metric): 4 mm Ring Type: Standard Solution for: Wireless Network: Infrastructure Accessories Stud Size: #8 **Terminal Style: Standard** Terminal Type: Ring UL File Number: E23438 Units per Case: 500.0

## **Dimensions and Classifications**

Overall Length (Imperial): 0.6 in, 0.68 in, 0.7 in, 0.73 in, 0.74 in, 0.89 in, 0.93 in, 0.96 in Overall Width (Imperial): 0.25 in, 0.28 in, 0.31 in, 0.33 in, 0.38 in, 0.47 in, 0.53 in, 0.56 in

# 3M<sup>™</sup> Cable Repair Space Web SW-40, 1-1/2 in x 40 in, 50 strips /Case

3M ID 7000057765 UPC 00054007316060

#### Details

Used in sealing and encapsulating electrical splices Used with resin filled - closed sealing pouchs RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: 3M<sup>™</sup> Compatible With: Loadbreak Elbow Kit Series 5810

#### **Dimensions and Classifications**

Overall Length (Imperial): 40 ft Overall Length (Metric): 1.016 m Overall Width (Imperial): 1.5 in Overall Width (Metric): 38.1 mm

# 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 4604 & 4605 Series

#### Details

For tape shield, wire shield and longitudinally corrugated power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor, weather exposed applications Silicone rubber insulation is track-resistance and hydrophobic Silicone cold shrink application provides constant radial pressure, "living seal" Withstands voltages up to 46kV and is 250kV BIL-rated Meets IEEE Standard 48, Class 1 for outdoor, weather-exposed applications

#### **Typical properties**

Arcing Distance: 30 in Arcing Distance (Metric): 76.2 cm BIL: 250 kV Brands: 3M<sup>™</sup> Breakout Boot: No Cable Insulation Outside Diameter Range: 1.31-2.10 in, 1.80-2.60 in Cable Insulation Outside Diameter Range (Metric): 33.2-53.4 mm, 45.7-66.1 mm Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, Wire Shield Case Quantity: 1 Conductor Sizes (Imperial): 1000 kcmil, 1250 kcmil, 1500 kcmil, 250 kcmil, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Creepage Distance: 46 in Creepage Distance (Metric): 1.17 m Indoor/Outdoor: Outdoor Skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.69 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in, 2.33 in, 2.34 in, 2.35 in, 2.36 in, 2.37 in, 2.38 in, 2.39 in, 2.4 in, 2.41 in, 2.42 in, 2.43 in, 2.44 in, 2.45 in, 2.46 in, 2.47 in, 2.48 in, 2.49 in, 2.5 in, 2.51 in, 2.52 in, 2.53 in, 2.54 in, 2.55 in, 2.56 in, 2.57 in, 2.58 in, 2.59 in, 2.6 in Insulation Outer Diameter (Metric): 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942

mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm, 59.182 mm, 59.436 mm, 59.69 mm, 59.944 mm, 60.198 mm, 60.452 mm, 60.706 mm, 60.96 mm, 61.214 mm, 61.468 mm, 61.722 mm, 61.976 mm, 62.23 mm, 62.484 mm, 62.738 mm, 62.992 mm, 63.246 mm, 63.5 mm, 63.754 mm, 64.008 mm, 64.262 mm, 64.516 mm, 64.77 mm, 65.024 mm, 65.278 mm, 65.532 mm, 65.786 mm, 66.04 mm Insulation Rejacketing: No Maximum Conductor Size (Imperial): 1500 kcmil, 600 kcmil Maximum Conductor Size (Metric): 300 mm<sup>2</sup>, 760 mm<sup>2</sup> Maximum Installed Length: 28.0 in Minimum Conductor Size (Imperial): 4/0 AWG, 600 kcmil Minimum Conductor Size (Metric): 120 mm<sup>2</sup>, 300 mm<sup>2</sup> Number of Conductors: 1 Number of Skirts: 12 Product Series: 4600 Voltage: 46 kV eClass 14 Classification Group: 27400102

# Details

1-piece inline splice is perfect to repair damaged JCN or CN cables up to 6 inches Excellent electrical stress distribution Molded from specially formulated, peroxide-cured EPDM rubbers Rated for 15 kV cables Factory-tested to offer reliability Meets the requirements of IEEE 404 standards

# **Typical properties**

Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Case Quantity: 1

Connector Included: CIR-1/0, CIR-1/0 and two 10002, CIR-2, CIR-2/0, CIR-21, CIR-22, CIR-3/0, CIR-4/0, None

Insulation O.D. Range: 0.637 - 0.900 Inch, 0.870 -1.055 Inch Insulation Outer Diameter (Imperial): 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in Insulation Outer Diameter (Metric): 16 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm

Insulation Outside Diameter Range: 0.637 - 0.900 Inch, 0.870 - 1.055 Inch Insulation Outside Diameter Range (Metric): 16.3 - 22.9 mm, 22.1 - 26.9 mm Maximum Conductor Size (Imperial): 1/0 AWG (Stranded), 2 AWG (Stranded), 2/0 AWG (Stranded), 3/0 AWG (Stranded), 4 AWG (Stranded), 4/0 AWG (Stranded)

Maximum Conductor Size (Metric): 120 mm<sup>2</sup> (Stranded), 25 mm<sup>2</sup> (Stranded), 35 mm<sup>2</sup> (Stranded), 50 mm<sup>2</sup> (Solid), 50 mm<sup>2</sup> (Stranded), 70 mm<sup>2</sup> (Stranded), 95 mm<sup>2</sup> (Stranded)

Number of Conductors: 1

Operating Voltage: 15 kV

Product Series: 5411R & 5412R Series

Product Type: Inline Repair

Splice Type: Inline Repair

Voltage: 25/28 kV

# 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7620-S-3G, 7680-S-3G & 7690-S-3G Series

## Details

Provides a void-free seal to tape shield, wire shield and UniShield® power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications

Integrated design allows for easier installation, while sealing compounds provide constant radial pressure

#### **Typical properties**

Application: Cable Connection, Cable Termination Application/Industry: Industrial Construction BIL: 110 kV, 150 kV, 200 kV, 95 kV Brands: 3M™ Breakout Boot: Yes Cable Insulation Outside Diameter Range: 0.33-0.50 in, 0.50-0.70 in, 0.70-0.92 in, 0.92-1.18 in, 1.18-1.52 in, 1.53-1.81 in Cable Insulation Outside Diameter Range (Metric): 12.7-17.8 mm, 17.8-23.4 mm, 23.4-30.0 mm, 30.0-38.6 mm, 38.8-46.0mm, 8.4-12.7 mm Cable Shielding: Armored Tape Shield, Tape Shield, Unarmored Tape Shield, UniShield<sup>®</sup>, Wire Shield Cable Type: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), MV-105, MV-90 Case Quantity: 1 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Connector Included: None Indoor/Outdoor: Outdoor Skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in

Insulation Outer Diameter (Metric): 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm. 26.162 mm. 26.416 mm. 26.67 mm. 26.924 mm. 27.178 mm. 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm

Insulation Outside Diameter Range: 0.64 - 1.01 Inch, 0.84 - 1.38 Inch, 1.07 - 1.70 Inch

Insulation Outside Diameter Range (Metric): 16.3 - 25.7 mm, 21.3 - 35.1 mm, 27.2 - 43.2 mm

Insulation Rejacketing: Yes

Lug/Stem Connector Included in Kit: No

Maximum Cable Outside Diameter: 4.50 Inch,3.90 Inch,3.30 Inch,2.20 Inch,2.80 Inch,5.40 in

Maximum Cable Outside Diameter (Metric): 114.3 mm, 137.2 mm, 55.9 mm, 71.1 mm, 83.8 mm, 99.1 mm

Maximum Conductor Size (Imperial): 3/0 AWG, 400 kcmil, 641 kcmil

Maximum Conductor Size (Metric): 185 mm<sup>2</sup>, 325 mm<sup>2</sup>, 95 mm<sup>2</sup>

Maximum Installed Length: 10.50 in, 12.25 in, 20.50 in, 21.50 in, 9.80 in

Maximum Installed Length (Metric): 311 mm, Termination only (not including RJS sleeving or Break-out boot: 546mm)

Minimum Conductor Size (Imperial): 2 AWG, 250 kcmil, 3/0 AWG Minimum Conductor Size (Metric): 120 mm<sup>2</sup>, 35 mm<sup>2</sup>, 95 mm<sup>2</sup>

Number of Conductors: 3

Number of Skirts: 2, 4, 8

Product Color: Gray

Product Series: 3G, 7600-3G, 7600-S-3G

Product Type: Splice

Splice Type: Inline

Type: Cold Shrink QT-III

Typical Splice Length: 28 in, 29 in, 33 in

Typical Splice Length (Metric): 711 mm, 736 mm, 838 mm

Units per Case: 1.0

Voltage: 15 kV, 25 kV, 35 kV, 5 kV, 8 kV

Voltage Application: Medium Voltage eClass 14 Classification Group: 27400102

# Details

Inline splice for joining tape shield, wire shield, UniShield® and LC power cables Special-electrode design reduces electrical stress at critical cable and splice interface

Designed for feeder and distribution circuits, size transition splicing, direct-burial installations and submerged locations

Rated for 25/28 kV applications

Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

# **Typical properties**

Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield

Conductor Material: Aluminum, Copper

Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil

Insulation Level: 1.33, 100%, 133%

Insulation Outer Diameter (Imperial): 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Insulation Outside Diameter Range: 0.84 - 1.36 Inch, 1.07 - 1.70 Inch Insulation Outside Diameter Range (Metric): 21.3 - 34.5 mm, 27.4 - 43.2 mm Number of Conductors: 1 Product Series: QS4 Splice Type: Cold Shrink Voltage: 25/28 kV eClass 14 Classification Group: 27400107

#### 3M<sup>™</sup> Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5786A-MT, 5787A-MT & 5788A-MT

#### Details

Splices shielded cables Silicon rubber-splice body provides good high- or low-temperature performance and Armorcast™ jacket offers mechanical protection Suitable for use with 10000 and 20000 Series connectors or other UL Listed inline compression connectors Solderless ground braid offers constant force spring connection Rated for 25/28 kV applications

#### **Typical properties**

Cable Shielding: Non-Armored Shielded, Shielded Armored Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in. 1.8 in. 1.81 in. 1.82 in. 1.83 in. 1.84 in. 1.85 in. 1.86 in. 1.87 in. 1.88 in. 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Number of Conductors: 3 Splice Type: Cold Shrink Voltage: 25/28 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Female Disconnects

#### Details

Allows for quick and easy disconnect of wires

Made of durable brass for good conductivity and has corrosion-resistant tin plating

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.175 Inch.0.080 Inch.0.085 Inch.0.08 Inch Barrel Length (Imperial): 0.25 Inch,0.19 Inch Barrel Style: Butted Bullet Diameter: 0.156 CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.11 in, 0.187 in, 0.25 in, 0.375 in Connection Width (Metric): 2.794 mm, 4.75 mm, 6.35 mm, 9.525 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.25 Inch,0.23 Inch **Disconnect Type: Female Fastener Orientation: Female** Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Blue, Red Insulation Material: Nylon with Insulation Grip Interrupt Free Shifting: No Material: ETP Copper Mates with Female Width: 0.110 Inch, 0.187 Inch, 0.25 Inch, 0.250 Inch, 0.375 Inch Mates with Male Tab Width (W'): 0.110 Inch, 0.187 Inch, 0.25 Inch, 0.375 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.16 in, 0.2 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Operating Temperature Range (Celsius): -40 °C to 105 °C Pad Width: 0.187 in, 0.25 in, 0.375 in Product Color: Blue, Red Product Type: Disconnect Tab Width: 0.250,0.187

Terminal Style: Disconnect, Standard Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in, 0.25 in Overall Diameter (Metric): 0.64 cm Overall Length (Imperial): 0.77 in, 0.86 in, 1.23 in Overall Length (Metric): 21.84 mm Overall Width (Imperial): 0.37 in

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Brazed Seam Ring Tongues

#### Details

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Standard-style ring tongue fits around the stud

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Brazed CSA File Number: LR22190 Clearance (C): 0.29 Inch Connection Width (Imperial): 0.112 in, 0.138 in, 0.164 in, 0.19 in, 0.25 in, 0.315 in, 0.375 in, 0.5 in Connection Width (Metric): 2.845 mm, 3.5 mm, 4.166 mm, 4.826 mm, 6.35 mm, 8 mm, 9.525 mm, 12.7 mm Dimension E: 0.84 Inch Insulation Material: Vinyl Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG, 8 AWG Maximum Conductor Size (Metric): 0.823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup>, 8.37 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.25 in Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG, 8 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup>, 8.37 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.19 in Minimum Stud Diameter (Metric): 5 mm Product Color: Blue, Red, Yellow Ring Type: Standard Solution for: Wireless Network: Infrastructure Accessories Stud Size: #10 **Terminal Style: Standard** Terminal Type: Ring UL File Number: E23438 Units per Case: 500.0

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.8 in, 0.93 in, 1.03 in, 1.08 in, 1.13 in, 1.26 in, 1.5 in Overall Length (Metric): 20.32 mm, 23.62 mm, 23.622 mm, 26.16 mm, 27.43 mm, 28.7 mm, 32 mm, 32.004 mm Overall Width (Imperial): 0.25 in, 0.31 in, 0.38 in, 0.47 in, 0.53 in, 0.54 in, 0.56 in, 0.75 in Overall Width (Metric): 6.35 mm, 7.87 mm, 7.874 mm, 9.65 mm, 11.93 mm, 13.46 mm, 13.462 mm, 13.71 mm, 14.22 mm

# 3M<sup>™</sup> Heat Shrink Tubing SMS

#### Details

Specially designed for automotive wire harnesses Flame-retardant Suitable for insulation of RV, truck, tractor, heavy equipment and marine wire splices, in-line components, fusible links and terminals Made of semi-rigid polyolefin with colored squares Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C) RoHS 2011/65/EU Compliant

#### **Typical properties**

Applicable SAE-AMS-DTL-23053 Specifications: 23053/4 class 3 Color Coded: Green, Orange, Red, White, Yellow Elongation: 350 % Expanded Inner Diameter: 0.22 in, 0.3 in, 0.35 in, 0.45 in, 0.7 in Flammability Rating: Self-Extinguishing Heat Shrink Type: Adhesive-Lined Polyolefin Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.045 in, 0.06 in, 0.08 in, 0.105 in, 0.175 in Inner Diameter After Shrink (Metric): 1.14 mm, 1.53 mm, 2.03 mm, 2.67 mm, 4.44 mm Inner Diameter Before Shrink (Imperial): 0.22 in, 0.3 in, 0.35 in, 0.45 in, 0.7 in Inner Diameter Before Shrink (Metric): 5.59 mm, 7.62 mm, 8.89 mm, 11.43 mm, 17.78 mm Material: Adhesive-lined, Semi-rigid Polyolefin Maximum Operating Temperature (Celsius): 110 °C Maximum Operating Temperature (Fahrenheit): 230 °F Mil Spec: AMS-DTL-23053/4, Class 3 Non-Corrosive: Yes Operating Temperature Range (Celsius): -55 °C to +135 °C Product Color: Green, Orange, Red, White, Yellow Recovered Inner Diameter: 0.045 in, 0.06 in, 0.08 in, 0.105 in, 0.175 in Shrink Ratio: 4:1 Tensile Strength (Imperial): 1900 Pound-Force Per Square Inch Tubing Type: Adhesive-Lined, Environmental Protection Sleeve-Semi Rigid eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 48 in

# 3M<sup>™</sup> Heat Shrink Tubing VTN-200

#### Details

Highly resistant to cut-through and abrasion Designed to withstand various fuels, lubricants, acids and highly corrosive fluids Suitable for synthetic fuel and hydraulic oil-resistant applications and hightemperature coverings Made of black flexible fluoroelastomer Withstands temperatures of -67 to 392 degrees F (-55 to 200 degrees C) Flame-retardant

#### **Typical properties**

Agency Approvals: AMS-R46846 Type 3 class 1,CSA Certified Applicable SAE-AMS-DTL-23053 Specifications: 23053/13 Dielectric Strength: 500 V/mil Elongation: 450 % Expanded Inner Diameter: 0.125 in, 0.187 in, 0.25 in, 0.5 in, 0.75 in, 1 in, 1.25 in, 1.5 in. 2 in Expanded Inner Diameter (Metric): 12.70 mm, 19.05 mm, 25.40 mm, 3.18 mm, 31.75 mm, 38.1 mm, 4.75 mm, 50.8 mm, 6.35 mm Flammability Rating: Self-Extinguishing Heat Shrink Type: Specialty Polymer Tubing Inner Diameter After Shrink (Imperial): 0.062 in, 0.093 in, 0.125 in, 0.25 in, 0.375 in, 0.42 in, 0.438 in, 0.5 in, 0.75 in, 1 in, 2.5 in Inner Diameter After Shrink (Metric): 1.57 mm, 2.36 mm, 3.18 mm, 4.75 mm, 6.35 cm<sup>2</sup>, 6.35 mm, 9.53 mm, 10.58 mm, 11.11 mm, 12.7 mm, 19.05 mm, 25.4 mm Inner Diameter Before Shrink (Imperial): 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 0.875 in, 1 in, 1.25 in, 1.5 in, 2 in, 5 in Inner Diameter Before Shrink (Metric): 3.18 mm, 4.75 mm, 6.35 mm, 9.53 mm, 12.7 cm<sup>2</sup>, 12.7 mm, 19.05 mm, 22.23 mm, 25.4 mm, 31.75 mm, 38.1 mm, 50.8 mm Material: Fluoroelastomer Maximum Operating Temperature (Celsius): 200 °C Maximum Operating Temperature (Fahrenheit): 392 °F Mil Spec: AMS-DTL-23053/13 Minimum Expanded Tubing I. D.: 1 in, 1.25 in, 1.5 in, 2 in, 3 in, 5 in, 7 in Non-Corrosive: Yes Operating Temperature Range (Celsius): -55 °C to +200 °C Operating Temperature Range (Fahrenheit): -67 °F to 392 °F Product Color: Black Recovered Inner Diameter: 0.44 in, 0.625 in, 1 in, 3 in, 5 in Recovered Inner Diameter (Metric): 15.88 mm Recovered Wall Thickness: 0.055 in Shrink Ratio: 2:1 Tensile Strength (Imperial): 2400 Pound-Force Per Square Inch Tubing Type: Special Purpose, Fluoroelastomer UL File Number: E-39100 eClass 14 Classification Group: 27400105

# **Dimensions and Classifications**

Overall Length (Imperial): 50 ft, 100 ft, 200 ft

### 3M<sup>™</sup> Cable Stackers

#### Details

Centers multiple cables on framing members Offers convenient space management and aids in identification Features durable plastic construction RoHS 2011/65/EU Compliant

#### **Typical properties**

Cable Management Products: Cable Stackers Cable Tie Type: Stacker Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 90 °C Package Quantity: 25 Units per Case: 250.0 eClass 14 Classification Group: 15090300

#### **Dimensions and Classifications**

Overall Length (Imperial): 3.84 in Overall Length (Metric): 97.5 mm Overall Width (Imperial): 1.19 in Overall Width (Metric): 30.2 mm

Designed for use with 10000, 11000 and 20000 Series inline compression connectors

The rubber mastic filler removes time-consuming penciling of cable insulation Perfect for splicing non-shielded, wet/dry solid dielectric power cables Rated for 5/8 kV applications RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Shielding: Non-shielded Case Quantity: 1 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1000 kcmil, 300 kcmil, 4 AWG Conductor Sizes (Metric): 150 mm<sup>2</sup>, 25 mm<sup>2</sup>, 500 mm<sup>2</sup> Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in Insulation Outer Diameter (Metric): 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm,

35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm

Insulation/Jacket O.D. Range: 0.38 - 0.70 in, 0.63 - 1.20 in, 0.90 - 2.10 in Insulation/Jacket O.D. Range (Metric): 16.0 - 30.5 mm, 22.9 - 53.3 mm, 9.7 - 17.8 mm

Maximum Conductor Size (Imperial): 1000 kcmil (Copper), 300 kcmil, 4 AWG, 750 kcmil (Aluminum)

Maximum Conductor Size (Metric): 240 mm<sup>2</sup>, 25 mm<sup>2</sup>, 400 mm<sup>2</sup> (Aluminum), 500 mm<sup>2</sup> (Copper)

Maximum Connector Length: 2.5 inch, 4.25 inch, 6.25 inch

Maximum Connector Length (Cu or Al): 2.5 in, 4.25 in, 6.25 in

Maximum Connector Length (Cu or Al) (Metric): 108.0 mm, 158.8 mm, 63.5 mm Maximum Connector Length (Metric): 108.0 mm, 158.8 mm, 63.5 mm

Minimum Conductor Size (Imperial): 2 AWG, 350 kcmil (Aluminum), 350 kcmil (Copper), 8 AWG

Minimum Conductor Size (Metric): 10 mm<sup>2</sup>, 185 mm<sup>2</sup> (Aluminum), 185 mm<sup>2</sup> (Copper), 35 mm<sup>2</sup>

Number of Conductors: 1

Product Series: 5740 Series

Splice Type: Inline

Typical Splice Length: 10 in, 12 in, 15 in

Typical Splice Length (Metric): 254 mm, 305 mm, 381 mm

Voltage: 5 kV, 5/8 kV, 8 kV

eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Heat Shrink Tubing ITCSF

#### Details

Provides better mechanical protection Offers shrink-fit electrical insulation Suitable for insulating electrical splices, connections and terminations Made of black cross-linked polyolefin Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C) Flame-retardant

#### **Typical properties**

Adhesive Lined: Yes Agency Approvals: UL 486D Cable Size Range: 12-6 AWG, 2-4/0 AWG, 250-750 kcmil, 8-1/0 AWG Expanded Inner Diameter: 1.1 in, 2 in Expanded Inner Diameter (Metric): 10.2 mm, 20.3 mm, 27.9 mm, 50.8 mm Flame Retardant: No, Yes Heat Shrink Type: Adhesive-Lined Polyolefin Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.15 in, 0.2 in, 0.37 in, 0.65 in Inner Diameter After Shrink (Metric): 3.8 mm, 5.1 mm, 9.4 mm, 16.5 mm Inner Diameter Before Shrink (Imperial): 0.4 in, 0.8 in, 1.1 in, 2 in Inner Diameter Before Shrink (Metric): 10.2 mm, 20.3 mm, 27.9 mm, 50.8 mm Material: Polyolefin Maximum Operating Temperature (Celsius): 100 °C, 110 °C Maximum Operating Temperature (Fahrenheit): 230 °F Minimum Expanded Tubing I. D.: 0.4 in, 0.8 in, 1.1 in, 2 in Operating Temperature (Celsius): -55 to 100 Degrees Celsius Operating Temperature (Fahrenheit): -67 °F to 230 °F Operating Temperature Range (Celsius): -55 °C to 110 °C Operating Temperature Range (Fahrenheit): -67 °F to 230 °F Product Color: Black Recovered Inner Diameter: 0.15 in, 0.2 in, 0.37 in, 0.65 in Recovered Inner Diameter (Metric): 3.8 mm, 5.1 mm, 9.4 mm, 16.5 mm Shrink Ratio: 3:1 Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: Outdoor, Wireless Network: Backhaul Tubing Type: Heavy Wall Units per Case: 10.0,20.0,100.0 Voltage: 600 V Voltage Rating: UL Rated to 600 V (Shall not exceed 1 kV) eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 48 in Overall Length (Metric): 1219 mm

## 3M<sup>™</sup> ScotchCode<sup>™</sup> Write-On Wire Marker Book SWB

#### Details

Self-laminating, write-on markers Designed for small volume applications involving special or complex legends that are hand written at the job site Available in four different size options

#### **Typical properties**

Adhesive Material: Acrylic Application: Marking Wire and Cable Cable Diameter Range: 8,1 - 39,4 mm Cable Outside Diameter Range: 0.16 - 0.31 inch, 0.24 - 0.31 inch, 0.32 - 0.58 inch, 0.32 - 1.55 inch Cable Outside Diameter Range (Metric): 4-8 mm,8-15 mm,8-39 mm,6-8 mm Dispenser/Marker Type: Write-On Book Legend: Blank Legend Color: White Marker ID Style: Write-on Marker Size: 0.5 inch x 1.5 inch, 0.75 inch x 1.75 inch, 1.0 inch x 2.85 inch, 1.0 inch x 5.0 inch Marker Type: Books Material: Plastic Maximum Cable Diameter (Imperial): 0.31 in, 0.58 in, 1.55 in Maximum Cable Diameter (Metric): 7.8 mm, 8 mm, 14.7 mm, 39.3 mm Maximum Cable Outside Diameter: 0.16 - 0.31 Inch, 0.32 - 1.55 Inch, 0.24 - 0.31 Inch,0.32 - 0.58 Inch Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 49 °C Maximum Operating Temperature (Fahrenheit): 120 °F Maximum Outside Diameter: 0.58 in (14.7 mm),0.31 in (7.8 mm),1.55 in (39.3 mm) Maximum Recommended Voltage Rating: 600 V Minimum Cable Diameter (Imperial): 0.16 in, 0.24 in, 0.32 in Minimum Cable Diameter (Metric): 4 mm, 6 mm, 8 mm Operating Temperature Range (Celsius): -40 °C to 121 °C Printed Text Type: Write-on Product Color: White Product Type: Identification Refill: Tape Roll Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul Tape Color: White UV Resistant: No Units per Case: 5.0 Wire Marker Products: Wire Marker Books With Label Space: Yes

Write-on Area Size (Imperial): 0.50 inch x 0.50 inch, 0.75 inch x 0.75 inch, 1.0 inch x 1.0 inch

#### **Dimensions and Classifications**

Overall Length (Metric): 2.43 m Overall Width (Metric): 5.46 mm, 25 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Electrical IDC 902, 50 per pouch, 500/Case

3M ID 7100177012 UPC 00054007061199

#### Details

Brown polypropylene-insulated connector Brass element construction for good conductivity and tin plating for corrosion resistance Accommodates 12 AWG solid/stranded, 10 AWG stranded UL Listed and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok<sup>™</sup> Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Moisture Resistant: No Product Type: Connector eClass 14 Classification Group: 27400215

Transition connector used with 3M 5411 and 3M 5501 splice kits 10/case

#### **Typical properties**

Body Material: Aluminum Case Quantity: 10 Compatible With: 3M<sup>™</sup> Molded Rubber QS-II Cable Splice 5411 and 3M<sup>™</sup> Molded Rubber QS-II Cable Splice 5501 Connector Base Metal: Aluminum Connector Type: Transition Compression Connectors Electrical Connector Type: Compression Connectors For Use With: Aluminum or Copper Conductors Maximum Conductor Size (Imperial): 1 AWG, 1/0 AWG, 2 AWG, 4/0 AWG Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 35 mm<sup>2</sup>, 50 mm<sup>2</sup> Maximum Operating Voltage: 35 Kilovolt Minimum Conductor Size (Imperial): 1 AWG, 2 AWG, 3/0 AWG, 4 AWG Minimum Conductor Size (Metric): 25 mm<sup>2</sup>, 35 mm<sup>2</sup>, 50 mm<sup>2</sup>, 95 mm<sup>2</sup> Outer Diameter (Imperial): 0.64 in, 0.91 in eClass 14 Classification Group: 27400212

# 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5630K Series

#### Details

One-piece cold shrink termination High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor, weather exposed applications Silicone rubber insulation is track-resistance and hydrophobic Silicone cold shrink application provides constant radial pressure, "living seal" Withstands voltages of 5 to 15kV and is 110 kV BIL-rated Includes three 4-skirt, 1-piece, cold shrink terminations Meets IEEE Standard 48, Class 1 for outdoor, weather-exposed applications

#### **Typical properties**

**Application: Cable Termination** BIL: 110 kV Brands: 3M<sup>™</sup> Breakout Boot: No Cable Insulation Outside Diameter Range: 0.33-0.69 in, 0.64-0.90 in, 0.84-1.33 in, 1.10-1.65 in, 1.30-1.95 in Cable Insulation Outside Diameter Range (Metric): 16.3-22.9 mm, 21.3-33.8 mm, 27.9-41.9 mm, 33.0-49.5 mm, 8.4-17.5 mm Cable Shielding: Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield Case Quantity: 1 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Indoor/Outdoor: Outdoor Skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in Insulation Outer Diameter (Metric): 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm,

12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm Insulation Rejacketing: No Lug/Stem Connector Included in Kit: No Maximum Installed Length: 12.00 in, 13.25 in, 13.50 in, 13.75 in Number of Conductors: 1 Number of Skirts: 4 Product Color: Gray Product Series: 5630K Voltage: 15 kV, 5 kV, 8 kV eClass 14 Classification Group: 27400102

1-piece, splice for joining JCN and CN distribution class power cables Designed for use with the special inline compression connector for connecting either aluminum or copper conductors Suitable for direct-burial, aerial installations and submerged locations Rated for 25/28 kV applications Includes 1 each of CIR-1/0A connector, molded rubber-splice body, connector,

template, instruction sheet and 2 packets of silicone grease

Withstands a temperature range of 194 to 266 °F (90 to 130 °C)

#### **Typical properties**

Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Case Quantity: 1 Connector Included: CIR-1/0-840, CIR-1/0A, CIR-21-840, CIR-21A Insulation O.D. Range: 0.870 - 1.055 Inch Insulation O.D. Range (Metric): 22.1 - 26.8 mm Insulation Outer Diameter (Imperial): 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in Insulation Outer Diameter (Metric): 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm. 26.416 mm. 26.67 mm Insulation Outside Diameter Range: 0.870 - 1.055 Inch Insulation Outside Diameter Range (Metric): 22.1 - 26.8 mm Maximum Conductor Size (Imperial): 1 AWG (Stranded), 1/0 AWG (Stranded) Maximum Conductor Size (Metric): 50 mm<sup>2</sup> (Solid), 50 mm<sup>2</sup> (Stranded) Minimum Conductor Size (Imperial): 2 AWG (Stranded) Minimum Conductor Size (Metric): 35 mm<sup>2</sup> (Stranded) Number of Conductors: 1 Operating Voltage: 25 kV, 28 kV Product Series: 5451R Series Product Type: Inline Repair Splice Type: Inline Repair Voltage: 25/28 kV

# 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7620-S-3W, 7680-S-3W & 7690-S-3W Series

#### Details

Provides a void-free seal to tape shield, wire shield and UniShield® power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications

Integrated design allows for easier installation in limited spaces, while sealing compounds provide constant radial pressure

#### **Typical properties**

BIL: 110 kV, 150 kV, 200 kV, 95 kV Barrel Style: Standard Barrel Breakout Boot: Yes Cable Insulation Outside Diameter Range: 0.33-0.50 in, 0.50-0.70 in, 0.70-0.92 in, 0.92-1.18 in, 1.18-1.52 in Cable Insulation Outside Diameter Range (Metric): 12.7-17.8 mm, 17.8-23.4 mm, 23.4-30.0 mm, 30.0-38.6 mm, 8.4-12.7 mm Cable Shielding: Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield Case Quantity: 1 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil **Connector Base Metal: Copper** For Use With: Copper Conductor Only Indoor/Outdoor: Outdoor Skirted Inside Diameter (Imperial): 0.2 in Inside Diameter (Metric): 5.1 mm Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in Insulation Outer Diameter (Metric): 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm,

19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm. 37.592 mm. 37.846 mm. 38.1 mm. 38.354 mm. 38.608 mm Insulation Rejacketing: Yes Lug/Stem Connector Included in Kit: No Maximum Conductor Size (Imperial): 6 AWG (Stranded) Maximum Conductor Size (Metric): 16 mm<sup>2</sup> (Stranded) Maximum Installed Length: 10.50 in, 12.25 in, 20.50 in, 9.80 in Maximum Operating Voltage: 35 Kilovolt Number of Conductors: 3 Number of Skirts: 2, 4, 8 Outer Diameter (Imperial): 0.29 in Product Color: Blue Product Series: 7600-3-W. 7600-S-3W Voltage: 15 kV, 25 kV, 35 kV, 5 kV, 8 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400102

#### **Dimensions and Classifications**

Overall Length (Imperial): 1.75 in Overall Length (Metric): 44.4 mm

# 3M<sup>™</sup> Cold Shrink QS4 Integrated Splice Kits 35-SP Series

#### Details

Inline splice for joining JCN, flat strap neutral, tape shield and LC cables Special-electrode design reduces electrical stress at critical cable and splice interface

Designed for feeder and distribution circuits, size transition splicing, direct-burial installations and submerged locations

Rated for 35 kV cables

Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

#### **Typical properties**

Cable Shielding: Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Shield Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Number of Conductors: 1 Splice Type: Cold Shrink Voltage: 35 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Cold Shrink QS4 Integrated Splice Kits 15-JCN Series

#### Details

Inline splice for joining JCN and flat strap neutral power cables Special-electrode design reduces electrical stress at critical cable and splice interface

Designed for feeder and distribution circuits, size transition splicing, direct-burial installations and submerged locations

Standard joint includes braid for easy connection to ground Rated for 15 kV applications

Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

#### **Typical properties**

**Application: Cable Connection** Cable Shielding: Flat Strap Neutral, Jacketed Concentric Neutral (JCN) Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in Number of Conductors: 1 Product Color: Black Splice Type: Cold Shrink Voltage: 15 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Thin-Wall Heat Shrink Tubing EPS-300

#### Details

Dual-wall construction provides abrasion resistance and moisture-seal protection Offers the advantage of integral, adhesive-lined construction

Offers protection for automotive, truck, electronic components, wire splices, wire bundles and harness breakouts

Made of black flexible polyolefin

Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C) Flame-retardant tubing is rated for 600V applications

#### **Typical properties**

Adhesion Strength (Imperial): 40 Ounce Adhesion to Steel oz/in (N/100 mm): 40 (44) Adhesive Material: Silicone Agency Approvals: CSA, CSA, UL Recognized, UL Recognized, CSA Certified **Application Specifications: ABS** Dielectric Strength (V/mil): 500 V/mil Electrolytic Corrosion Factor: 0.9 Elongation: 450 %, 450 Decibel Expanded Inner Diameter: 0.125 in, 0.187 in, 0.25 in, 0.3 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 1.5 in Expanded Inner Diameter (Metric): 12.70 mm, 19.1 mm, 25.40 mm, 3.2 mm, 38.1 mm, 38.10 mm, 4.8 mm, 6.4 mm, 7.62 mm, 9.5 mm Flame Retardant: Yes Flammability Rating: UL 224 All Tubing Flame Test, UL 224 All Tubing Flame Test [jacket] Heat Shrink Type: Adhesive-Lined Polyolefin Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.04 in, 0.062 in, 0.063 in, 0.12 in, 0.125 in, 0.15 in, 0.16 in, 0.25 in, 0.32 in, 0.5 in, 0.51 in Inner Diameter After Shrink (Metric): 1.02 mm, 1.57 mm, 1.6 mm, 3.05 mm, 3.18 mm, 3.81 mm, 4.06 mm, 6.35 mm, 8.13 mm, 12.7 mm, 12.95 mm Inner Diameter Before Shrink (Imperial): 0.125 in, 0.187 in, 0.25 in, 0.3 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 1.5 in Inner Diameter Before Shrink (Metric): 3.18 mm, 4.75 mm, 4.8 mm, 6.35 mm, 7.62 mm, 9.53 mm, 12.7 mm, 19.05 mm, 25.4 mm, 38.1 mm Lubricant Type: Gel Material: Polyolefin Maximum Operating Temperature (Celsius): 110 °C, 150 °C, 200 °C Maximum Operating Temperature (Fahrenheit): 230 °F, 300 °F, 392 °F Mil Spec: AMS-DTL-23053/5, Class 3 Minimum Expanded Tubing I. D.: 0.125 in, 0.187 in, 0.25 in, 0.3 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 1.5 in Non-Corrosive: Yes Operating Temperature (Celsius): -55 °C to 110 °C Operating Temperature (Fahrenheit): -67 °F to 230 °F Operating Temperature Range (Celsius): -55 °C to +175 °C, -55 °C to 110 °C Operating Temperature Range (Fahrenheit): -67 °F to 230 °F, -67 °F to 347 °F Product Color: Black, Red, Transparent

Recovered Inner Diameter: 0.04 in, 0.063 in, 0.08 in, 0.12 in, 0.15 in, 0.16 in, 0.25 in, 0.32 in, 0.4 in, 0.5 in Recovered Inner Diameter (Metric): 1 mm, 1.02 mm, 1.6 mm, 2 mm, 3.1 mm, 3.81 mm, 4.1 mm, 6.4 mm, 8.1 mm, 13 mm Shrink Ratio: 3:1 Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Long-haul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul, Wireless Network: Infrastructure Accessories Tensile Strength (Imperial): 2100 Pound-Force Per Square Inch Tubing Type: Dual Wall (Adhesive Lined) UL File Number: E-157227 Units per Box: 10 Units per Case: 25.0,24.0,200.0,12.0,3.0,250.0,10.0,5.0,42.0,75.0,45.0,125.0 eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 4 ft, 6 in, 48 in Overall Length (Metric): 152 mm, 1219 mm

Seals the oil inside the paper-insulated, lead-covered cable Environmentally seals the accessory end, as well as the cable jacket IEEE Approved

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Shielding: Paper Insulated Lead Covered (PILC) Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Maximum Insulation Diameter (Over Paper): 0.58 in, 0.72 in, 0.92 in, 1.10 in Maximum Insulation Diameter (Over Paper) (Metric): 14.7 mm, 18.3 mm, 23.4 mm, 27.9 mm Maximum Lead Diameter: 1.1 in, 1.3 in, 1.6 in, 2 in Maximum Lead Diameter (Metric): 27.9 mm, 33.0 mm, 40.6 mm, 50.8 mm Maximum Operating Voltage: 15 kV, 25/28 kV Product Series: 5110-OS Series Product Type: Accessory Units per Case: 1.0 Voltage: 15 kV, 25/28 kV eClass 14 Classification Group: 27440308

Compact design that hangs from a tool belt Refillable compartments for SDR tape with high tack, acrylic adhesive that resists solvents, oil and water and adheres firmly to insulation surfaces Can be custom filled to meet specific project requirements Dispenses only the desired length

#### **Typical properties**

Adhesive Material: Acrylic Application: Marking Wire and Cable Dispenser Type: Dispenser ONLY, Dispenser with Tape Dispenser/Marker Type: Tape Roll Dispenser Only, Tape Roll Dispenser with Tape Kit Includes: Dispenser filled with all ten colors, Dispenser filled with numbers 0 thru 9, Dispenser only - holds 10 rolls Legend: "0" through "9" Legend Color: Assorted, White Marker ID Style: Pre-printed Marker Type: Dispenser Material: Plastic Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 121 °C Maximum Operating Temperature (Fahrenheit): 250 °F Printed Text Type: Color - Multiple, Numbers - 0-9 Product Color: Red, Transparent Product Type: Tape Dispenser Refill: Tape Roll Refillable: Yes Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul Tape Color: White UV Resistant: No Units per Case: 25.0,10.0 Voltage Application: Low Voltage Wire Marker Products: Wire Marker Tape Dispenser and Refill Rolls

#### **Dimensions and Classifications**

Overall Length (Metric): 2.4 m Overall Width (Metric): 5.46 mm

Black, polypropylene-insulated connector electrically taps into a wire in mid-span without cutting Suitable for control circuit wiring, fixture wiring, appliance wiring, signal and PA systems and automotive/boat/RV wiring Accommodates 18 to 14 AWG solid/stranded (tap) and 12 to 10 AWG

solid/stranded (run)

UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok™ Case Quantity: 5000,500 Conductor Sizes (Imperial): 14 AWG, 14 AWG (Stranded), 16 AWG, 18 AWG Conductor Sizes (Metric): 1 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Connection Type: Run & Tap Connector / Connector Tool: 3M Crimping Tool E-9BM and/or Mechanics (slip joint) Pliers **Connector Style: Insulation Displacement** Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Black Insulation Material: Polypropylene Insulation Outer Diameter (Imperial): 0.145 in Material: Insulator: Polypropylene, U-contact: Tin-plated Copper Alloy Max. Number of Cores: 1 Maximum Conductor Size (Imperial): 14 AWG, 14 AWG (Stranded), 16 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Recommended Voltage Rating: 32 V Minimum Conductor Size (Imperial): 18 AWG Minimum Conductor Size (Metric): 1 mm<sup>2</sup> Moisture Resistant: No, Yes Product Color: Black Product Type: Run & Tap Recommended Crimping Tool: E-9BM and/or Mechanics (slip joint) Pliers, E-9BM or 9 in. Linemans Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.145 in Run Maximum Insulation Outer Diameter (Metric): 3.7 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.145 in Tap Maximum Insulation Outer Diameter (Metric): 3.7 mm Units per Case: 5000.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Copper Seamless Compression Lug Ring Tongues

3M ID B5005048035

#### Details

Non-insulated, seamless barrel ensures a secure fit and offers reliable performance Offers electrical connection to a pre-stripped end of a stranded wire Made of copper for good conductivity and has tin plating for corrosion resistance 600V-rated for building wire UL Listed and RoHS 2011/65/EU Compliant

Transition connector used with 3M 5420 and 3M 5450 splice kits 10/case

#### **Typical properties**

Barrel Style: Standard Barrel Body Material: Aluminum Case Quantity: 10 Compatible With: 5420, 5450 & 5451A, 5432 and 5433, 5451R, 5461 **Connector Base Metal: Aluminum Connector Type: Compression Connectors** Electrical Connector Type: Compression Connectors For Use With: Aluminum or Copper Conductors Maximum Conductor Size (Imperial): 1 AWG (Stranded), 1/0 AWG (Stranded), 4 AWG (Stranded) Maximum Conductor Size (Metric): 25 mm<sup>2</sup> (Stranded), 50 mm<sup>2</sup> (Stranded) Maximum Operating Voltage: 35 Kilovolt Minimum Conductor Size (Imperial): 1 AWG, 1/0 AWG Minimum Conductor Size (Metric): 50 mm<sup>2</sup> Outer Diameter (Imperial): 0.91 in Product Series: CI Series, CI-A Series Voltage: 1 kV, 15 kV, 25/28 kV, 35 kV, 8 kV eClass 14 Classification Group: 27400212

#### **Dimensions and Classifications**

Overall Length (Imperial): 2 in Overall Length (Metric): 50.8 mm

# 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5610 A Series

#### Details

Provides a seal between the connecting lug and unshielded power cables Suitable for indoor and outdoor applications

Silicone rubber insulation offers durability and reduces leakage currents in damp conditions

Withstands voltages of 5kV to 8 kV

Includes 3 non-skirted, single-conductor, cold shrink terminations

#### **Typical properties**

**Application: Cable Termination** Brands: 3M™ Breakout Boot: No Cable Insulation Outside Diameter Range: 0.31-0.72 in, 0.44-0.95 in, 0.56-1.18 in, 0.95-1.94 in Cable Insulation Outside Diameter Range (Metric): 11.2-24.1 mm, 14.2-30.0 mm, 24.1-49.3 mm, 7.9-18.3 mm Cable Shielding: Non-shielded Case Quantity: 1 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Indoor/Outdoor: Indoor Non-skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.31 in, 0.32 in, 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in Insulation Outer Diameter (Metric): 7.874 mm, 8.128 mm, 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796

mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm

Insulation Rejacketing: No

Lug/Stem Connector Included in Kit: No

Material: Silicone Rubber

Maximum Conductor Size (Imperial): 1000 kcmil, 2/0 AWG, 300 kcmil, 4 AWG Maximum Conductor Size (Metric): 150 mm<sup>2</sup>, 25 mm<sup>2</sup>, 500 mm<sup>2</sup>, 70 mm<sup>2</sup> Maximum Installed Length: 7.50 in, 8.00 in

Minimum Conductor Size (Imperial): 2 AWG, 3/0 AWG, 350 kcmil, 8 AWG Minimum Conductor Size (Metric): 10 mm<sup>2</sup>, 185 mm<sup>2</sup>, 35 mm<sup>2</sup>, 95 mm<sup>2</sup> Number of Conductors: 1

Product Series: 5610A

Voltage: 5 kV, 8 kV

eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Molded Rubber QS-II Cable Splice Kits 5430 Series

3M ID B5005113050

#### Details

Inline splice for use on jacketed concentric neutral (JCN) and concentric neutral (CN) cables Jacketing kit is required for JCN cable Rated for 35 kV cables Meets the requirements of IEEE 404 standards

# 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7620-S-3RJS, 7680-S-3RJS & 7690-S-3RJS Series

#### Details

Provides a void-free seal to tape shield, wire shield and UniShield® power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications and cabinet-mount installations Integrated design allows for easier installation, while sealing compounds provide constant radial pressure

#### **Typical properties**

BIL: 110 kV, 150 kV, 200 kV, 95 kV Brands: 3M™ Breakout Boot: No Cable Insulation Outside Diameter Range: 0.33-0.50 in, 0.50-0.70 in, 0.70-0.92 in, 0.92-1.18 in, 1.18-1.52 in Cable Insulation Outside Diameter Range (Metric): 12.7-17.8 mm, 17.8-23.4 mm, 23.4-30.0 mm, 30.0-38.6 mm, 8.4-12.7 mm Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield Case Quantity: 1 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Indoor/Outdoor: Outdoor Skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in Insulation Outer Diameter (Metric): 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13

mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm Insulation Rejacketing: Yes Lug/Stem Connector Included in Kit: No Maximum Installed Length: 10.50 in, 12.25 in, 20.50 in, 9.80 in Number of Conductors: 3 Number of Skirts: 2, 4, 8 Product Series: 7600 RJS, 7600-S-RJS Voltage: 15 kV, 25 kV, 25/28 kV, 35 kV, 5 kV, 8 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400102

## 3M<sup>™</sup> Cold Shrink QS4 Integrated Splice Kits 35-JCN Series

#### Details

Inline splice for joining JCN and flat strap neutral power cables Special-electrode design reduces electrical stress at critical cable and splice interface Designed for feeder and distribution circuits, size transition splicing, direct-burial installations and submerged locations Rated for 35 kV cables Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

#### **Typical properties**

Cable Shielding: Jacketed Concentric Neutral (JCN) Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Number of Conductors: 1 Splice Type: Cold Shrink Voltage: 35 kV eClass 14 Classification Group: 27400107

# Scotch™ Bundling Straps RF3760, 30 count, .25 in x 8 in (6,3 mm x 20,3 cm) Black

3M ID 70006911583 UPC 00051141380575

#### Details

Use for household, garden and garage organization Great for securing and holding bulky items Ideal for organizing like items together Self-fastening, adjustable design for a versatile hold Holds bulky items together Reuse again and again Quick, convenient organization Intended for indoor use Size: 1/4 in. x 8 in Color: Black

#### **Typical properties**

Brands: Scotch<sup>™</sup> Factory ISO Certification: No ISO Certification information available Good For Outdoors: No Indoor/Outdoor: Indoor Package Contents: 30 straps Product Color: Black Weight Capacity: N/A eClass 14 Classification Group: 27140702

#### **Dimensions and Classifications**

Overall Length (Imperial): 8 in Overall Length (Metric): 20.3 cm Overall Width (Imperial): 0.25 in

# 3M<sup>™</sup> Deadbreak AL Compression Lug

## Details

Meets IEEE Standard 386 and ANSI C119.4 Connector can be used on aluminum or copper conductor Crimp type connection Unthreaded

## **Typical properties**

Brands: 3M<sup>™</sup> Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 450 kcmil, 500 kcmil, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Maximum Operating Voltage: 35 kV Product Type: Dead Break eClass 14 Classification Group: 27440308

# 3M<sup>™</sup> Airport Lighting Connector Sealing Kit IAL-3, 1 kV, 30/case

3M ID 7000057989 UPC 00054007088622

## Details

Specially designed to meet the requirements on airport lighting connections Includes heat shrinkable sleeve and cleaning pad Includes heat shrinkable sleeve, cleaning pad and instructions FAA Specified and RoHS 2011/65/EU Compliant

## **Typical properties**

Brands: 3M<sup>™</sup> Expanded Inner Diameter: 1.38 in Expanded Inner Diameter (Metric): 35.1 mm Maximum Cable Diameter (Imperial): 1.38 in Maximum Cable Diameter (Metric): 35.1 mm Minimum Cable Diameter (Imperial): 0.38 in Minimum Cable Diameter (Metric): 9.7 mm Product Type: Airport Lighting Tube Recovered Inner Diameter: 0.38 in Recovered Inner Diameter: 0.38 in Sleeve Length: 16 in Sleeve Length (Metric): 406.4 mm Splice Type: Heat Shrink Voltage: 1 kV

# 3M<sup>™</sup> Heat Shrink Tubing NST

## Details

Highly resistant to cut-through and abrasion Ideal for use in jacketing cable harnesses with its superior mechanical properties and wide operating temperature range Suitable for applications requiring a tough, highly flexible covering Made of black flexible modified chlorinated polyolefin Withstands temperatures of -94 to 250 degrees F (-70 to 121 degrees C) Flame-retardant tubing is rated for 600V applications

## **Typical properties**

Agency Approvals: AMS-R46846 and AMS 3623, UL Recognized Applicable SAE-AMS-DTL-23053 Specifications: 23053/1 class 1,2 Dielectric Strength: 800 V/mil Elongation: 500 %, 500 Decibel Expanded Inner Diameter: 1.25 in Flammability Rating: Self-Extinguishing Heat Shrink Type: Specialty Polymer Tubing Inner Diameter After Shrink (Imperial): 0.05 in, 0.062 in, 0.083 in, 0.093 in, 0.187 in, 0.25 in, 0.312 in, 0.375 in, 0.438 in, 0.625 in, 1 in, 1.5 in Inner Diameter After Shrink (Metric): 0.093 mm, 0.25 mm, 1.57 mm, 2.12 mm, 4.75 mm, 7.92 mm, 9.53 mm, 11.11 mm, 12.7 mm, 15.54 mm, 25.4 mm, 38.1 mm Inner Diameter Before Shrink (Imperial): 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.625 in, 0.75 in, 0.875 in, 1 in, 1.25 in, 2 in, 3 in Inner Diameter Before Shrink (Metric): 3.18 mm, 4.75 mm, 6.35 mm, 9.53 mm, 12.7 mm, 15.87 mm, 19.05 mm, 22.23 mm, 25.4 mm, 31.75 mm, 50.8 mm, 76.2 mm Material: Modified Neoprene Maximum Operating Temperature (Celsius): 121 °C Maximum Operating Temperature (Fahrenheit): 249.8 °F, 250 °F Mil Spec: AMS-DTL-23053/1, Class 1 and 2 Minimum Expanded Tubing I. D.: 1 in, 1.25 in, 1.5 in, 1.75 in, 2 in, 3 in, 5 in, 7 in Non-Corrosive: Yes Operating Temperature Range (Celsius): -70 °C to +121 °C Operating Temperature Range (Fahrenheit): -94 °F to 250 °F Product Color: Black Recovered Inner Diameter: 0.625 in, 0.87 in, 1 in, 1.5 in, 3 in, 5 in, 7 in Recovered Inner Diameter (Metric): 15.54 mm Recovered Wall Thickness: 0.087 in Shrink Ratio: 2:1 Tensile Strength (Imperial): 2100 Pound-Force Per Square Inch Tubing Type: Special Purpose, Modified Neoprene UL File Number: E-39100 eClass 14 Classification Group: 27400105

## **Dimensions and Classifications**

Overall Length (Imperial): 50 ft, 100 ft, 200 ft Overall Length (Metric): 30.5 m

## Details

Blue cap and white body nylon-insulated connector is suitable to connect 2 or 3 wires

Brass element construction for good conductivity and tin plating for corrosion resistance

Accommodates 22 to 14 AWG solid/stranded

UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Brands: Scotchlok™ CSA File Number: LR15503 Conductor Sizes (Imperial): 14 AWG, 22 AWG Conductor Sizes (Metric): .34 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Connection Type: Pigtail **Connector Style: Insulation Displacement** Flame Retardant: Yes Grease Filling Against Corrosion: Yes Insulation Color: cap blue, body white Insulation Material: Nylon Insulation Outer Diameter (Imperial): 0.15 in Interrupt Free Shifting: No Material: Flame Retardant Nylon Max. Number of Cores: 3 Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup> Moisture Resistant: Yes Package Quantity: 50, 1000 Product Color: Blue Product Type: Connector Recommended Crimping Tool: E-9BM and/or Mechanics (slip joint) Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.155 in Run Maximum Insulation Outer Diameter (Metric): 3.9 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.155 in Tap Maximum Insulation Outer Diameter (Metric): 3.9 mm UL File Number: E23438 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

# Scotch<sup>™</sup> Bundling Wrap RF3750, 1.5 in x 30 ft (38,1 mm x 9,1 m) Black

3M ID 70006911575 UPC 00051141380568

#### Details

Use for household, garden and garage organization Great for securing and holding bulky items Ideal for organizing like items together Self-fastening, adjustable design for a versatile hold Holds bulky items together Reuse again and again Quick, convenient organization Intended for indoor use Size: 1/5 in. x 30 ft Color: Black

## **Typical properties**

Brands: Scotch<sup>™</sup> Factory ISO Certification: No ISO Certification information available Good For Outdoors: No Indoor/Outdoor: Indoor Package Contents: 1 Roll/Pack Product Color: Black Tensile Strength (Imperial): 50 lbs Tensile Strength (Metric): 22.68 kg Weight Capacity: N/A eClass 14 Classification Group: 27140702

#### **Dimensions and Classifications**

Overall Length (Imperial): 30 ft Overall Length (Metric): 9.1 m Overall Width (Imperial): 1.5 in

## Details

Blue, polypropylene-insulated connector is suitable for tap or parallel splicing Suitable for control circuit wiring, fixture wiring, appliance wiring, signal and PA systems and automotive/boat/RV wiring Accommodates 18 to 16 AWG solid/stranded or 14 AWG stranded UL Listed and RoHS 2011/65/EU Compliant

## **Typical properties**

Brands: Scotchlok™ Conductor Sizes (Imperial): 14 AWG (Stranded), 16 AWG, 18 AWG Conductor Sizes (Metric): 1 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Connection Type: Double Run or Tap Connector / Connector Tool: 3M Crimping Tool E-9BM and/or 9" Lineman's Pliers **Connector Style: Insulation Displacement** Flame Retardant: Yes Grease Filling Against Corrosion: No Insulation Color: Blue Insulation Material: Polypropylene Material: Insulator: FR Polypropylene, U-contact: Tin-plated Brass, Plastic Maximum Conductor Size (Imperial): 14 AWG (Stranded), 16 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> (Stranded) Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 18 AWG Minimum Conductor Size (Metric): 1 mm<sup>2</sup> Moisture Resistant: No Package Quantity: 50 Product Color: Blue Product Type: Connector Recommended Crimping Tool: E-9BM or 9 in. Linemans Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.145 in Run Maximum Insulation Outer Diameter (Metric): 3.7 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.145 in Tap Maximum Insulation Outer Diameter (Metric): 3.7 mm UL File Number: E23438 Units per Case: 1000.0 Voltage Application: Low Voltage eClass 14 Classification Group: 27400215

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Flag Female Disconnects

## Details

Non-insulated, butted-seam barrel with a beveled mouth offers easy insertion of wires

Dents and rolled edges of this female disconnect flag terminal offer excellent holding force

Allows for quick and easy disconnect of wires

Made of durable brass for good conductivity and has corrosion-resistant tin plating

Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals

Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: >0 Inch,0.075 Inch,0.095 Inch (2.41 mm),0.095 Inch Barrel Length (Imperial): 0.25 Inch,0.26 Inch,>=0 Inch,0.20 Inch Barrel Style: Butted Bullet Diameter: 0.156 CSA File Number: LR22190 Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm **Disconnect Type: Female** Fastener Orientation: Female Insulation Color: Blue Insulation Material: Non-insulated Material: Plastic Mates with Female Width: 0.187 Inch, 0.250 Inch, >0 Inch Mates with Male Tab Width (W'): 0.187 Inch, 0.250 Inch, >0 Inch Maximum Conductor Size (Imperial): 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 175 °C Maximum Operating Temperature (Fahrenheit): 347 °F Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup> Pad Width: 0.187 in, 0.25 in Product Color: Blue Product Type: Connector Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250.0.187.0.110 **Terminal Style: Flag Terminal Type: Disconnect** 

UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.46 in, 0.47 in, 0.5 in, 0.51 in Overall Length (Metric): 11.93 mm

# 3M<sup>™</sup> Overhead Conductor Animal Guard Cover

3M ID B5005047065

## Details

Offers good dielectric strength, conformability and cold weather installation Suitable for field installation over bare conductors to insulate them from adjacent phases, grounded equipment and animal contact Comes in munsel gray color Offers excellent UV, arc and ozone resistance Bias cut enables easy field installation without any special tools

## **Typical properties**

Brands: 3M™ Material: Silicone Rubber Product Color: Gray

## 3M<sup>™</sup> Sheath Seal Kits 5831 and 5832

#### Details

Seals the sheath area for multi-conductor cables Offers a single seal Seals copper or aluminum cables Flame-retardant compound 2131 replaces the cable jacket when splicing RoHS 2011/65/EU Compliant

## **Typical properties**

Cable Accessory Products: Electrical Resins Cable Outside Diameter Range: 0.25-0.80 inch Conductor Sizes (Imperial): 2-3/0 AWG, 4/0 AWG-500 kcmil Inner Diameter Before Shrink (Imperial): 2.6 in, 3.75 in Inner Diameter Before Shrink (Metric): 66 mm, 95.3 mm Maximum Conductor Size (Imperial): 3/0 AWG, 500 kcmil Maximum Conductor Size (Metric): 240 mm<sup>2</sup>, 95 mm<sup>2</sup> Maximum Jacket Or Armor Outside Diameter: 2.6 in, 3.75 in Minimum Conductor Size (Imperial): 2 AWG, 4/0 AWG Minimum Conductor Size (Metric): 120 mm<sup>2</sup>, 35 mm<sup>2</sup> Units per Case: 1.0 eClass 14 Classification Group: 27400108

# 3M<sup>™</sup> Cross-Arm Mounting Brackets MB and MBS Series

#### Details

Single clamp offers firm holding Can be used in contaminated environments Designed to mount molded rubber terminations Tongue for external attachment Made of corrosion-resistant galvanized steel RoHS 2011/65/EU Compliant

#### **Typical properties**

Cable Accessory Products: Mounting Brackets Cable Outside Diameter Range: 0.80 - 1.25 inch, 1.10 - 1.50 inch, 1.45 - 1.95 inch, 1.80 - 2.40 inch Cable Outside Diameter Range (Metric): 20,3–31,8 mm,36,8–49,5 mm,27,9–38,1 mm,27,9–43,2 mm,45,7–61,0 mm Compatible With: 3M<sup>™</sup> Mounting Brackets MB and MBS Series Material: Galvanized Steel, Stainless Steel Mount Type: Screw Product Type: Mounting Units per Case: 10.0 eClass 14 Classification Group: 15090300

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.8 in, 1.1 in, 1.45 in, 1.8 in Overall Length (Metric): 20.3 mm, 27.9 mm, 36.8 mm, 45.7 mm Overall Width (Imperial): 1.25 in, 1.5 in, 1.7 in, 1.95 in, 2.4 in Overall Width (Metric): 31.8 mm, 38.1 mm, 43.2 mm, 49.5 mm, 61 mm

# 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5670 Series

#### Details

One-piece cold shrink termination High dielectric-constant material regulates the distribution of electric field stress Suitable for indoor applications Non-tracking, silicone rubber insulation offers durability Withstands voltages up to 15kV and is 110 kV BIL-rated Includes a non-skirted, 1-piece termination Meets IEEE Standard 48 Class 3 for indoor, weather-protected applications

#### **Typical properties**

**Application: Cable Termination** BIL: 110 kV Brands: 3M<sup>™</sup> Breakout Boot: No Cable Insulation Outside Diameter Range: 0.64 to 1.12 in, 0.94-1.81 in Cable Insulation Outside Diameter Range (Metric): 16.2-28.4 mm, 23.8-46.0 mm Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Cable Type: Polymeric insulated, copper wire screened, unarmored cable Case Quantity: 10 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 450 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Indoor/Outdoor: Indoor Non-skirted Insulation Level: 100%, 133% Insulation O.D. Range (Metric): 16.2-28.4 mm Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in Insulation Outer Diameter (Metric): 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm,

28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226

mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm Insulation Rejacketing: No Lug/Stem Connector Included in Kit: No Material: Silicone Rubber Maximum Conductor Size (Imperial): 500 kcmil Maximum Conductor Size (Metric): 240 mm<sup>2</sup> Maximum Installed Length: 6.25 in, 6.50 in Minimum Conductor Size (Imperial): 2/0 AWG Minimum Conductor Size (Metric): 70 mm<sup>2</sup> Number of Conductors: 1 Product Color: Grav Product Series: 5670 Voltage: 15 kV Voltage Rating: 6/10 kV eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Cold Shrink QT-III Inverted Termination Kit 7620-S & 7690-S Series

## Details

Provides a void-free seal to tape shield, wire shield and UniShield® power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications

Integrated design allows for easier installation in limited spaces, while sealing compounds provide constant radial pressure

#### **Typical properties**

Application: Cable Termination BIL: 110 kV, 200 kV Brands: 3M<sup>™</sup> Breakout Boot: No, Yes Cable Insulation Outside Diameter Range: 0.64-1.08 in, 0.72-1.29 in, 0.92-1.18 in, 1.05-1.80 in, 1.18-1.52 in, 1.53-2.32 in Cable Insulation Outside Diameter Range (Metric): 16.3 - 27.4 mm, 18.3-32.8 mm, 23.4-30.0 mm, 26.7 - 45.7 mm, 30.0-38.4 mm, 30.0-38.6 mm, 38.9 - 58.9 mm Cable Outside Diameter (Imperial): 3.9 in, 4.5 in Cable Outside Diameter (Metric): 99.1 mm, 114.3 mm Cable Shielding: Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield Case Quantity: 1 Compatible Lug: QL2-A-4/0-600, QL2-A-500-1000, QL2-A-2-250, QL2-A-350-750,QL2-A-1000-1250 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Indoor/Outdoor: Outdoor Skirted, Outdoor Skirted Inverted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.6 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in,

2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in

Insulation Outer Diameter (Metric): 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm Insulation Rejacketing: No, Yes Lug/Stem Connector Included in Kit: No Material: Silicone Rubber Maximum Cable Outside Diameter: 4.50 in, 3.90 in Maximum Cable Outside Diameter (Metric): 114.3 mm, 99.1 mm Maximum Installed Length: 12.00 in, 16.00 in Number of Conductors: 1, 3 Number of Skirts: 2, 4 Product Color: Gray Product Series: 7600-S-INV, 7600-S-INV-3G, 7600-S-INV-3RJS, 7600-S-INV-3W Voltage: 15 kV, 25 kV, 35 kV, 5 kV, 8 kV Voltage Application: Medium Voltage

eClass 14 Classification Group: 27400102

## Details

Inline splice for joining JCN, flat strap neutral, tape shield and LC cables Special-electrode design reduces electrical stress at critical cable and splice interface

Designed for feeder and distribution circuits, size transition splicing, direct-burial installations and submerged locations

Rated for 25/28 kV applications

Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

## **Typical properties**

Cable Shielding: Flat Strap Neutral, Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Shield Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Number of Conductors: 1 Splice Type: Cold Shrink Voltage: 25/28 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Cold Shrink QS-III 3/C Armored or Non-Armored Cable Splice Kits 5775A-MT, 5776A-MT & 5777A-MT for 5/8 kV

## Details

Splices shielded cables Silicon rubber-splice body provides good high- or low-temperature performance and Armorcast<sup>™</sup> jacket offers mechanical protection Suitable for use with 10000 and 20000 Series connectors or other UL Listed inline compression connectors Solderless ground braid offers constant force spring connection Rated for 5/8 to 15 kV applications

## **Typical properties**

Application: Cable Connection Cable Shielding: Non-Armored Shielded, Shielded Armored Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 750 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in Insulation Outside Diameter Range: 0.64 - 1.01 Inch, 0.84 - 1.38 Inch Insulation Outside Diameter Range (Metric): 16.3 - 25.7 mm, 21.3 - 35.1 mm Number of Conductors: 3 Product Color: Black Product Series: 5700, 5775A-MT Splice Type: Cold Shrink Voltage: 15 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Bullet-Style Female Disconnects

## Details

Red nylon-insulated, butted-seam barrel with a funnel-designed, seamless brass sleeve offers easy insertion of wires

Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires

Mates with 0.156-in wide male tab

Accommodates wire sizes 22 to 18 AWG

Made of durable brass for good conductivity and has corrosion-resistant tin plating

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant 1000/case

## **Typical properties**

Barrel Inside Diameter: 0.115 Inch,0.145 Inch,0.095 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Bullet Diameter: 0.180,0.156 Connection Type: Wire Connection Width (Imperial): 0.156 in, 0.18 in Connection Width (Metric): 3.962 mm, 4.572 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.23 Inch **Disconnect Type: Female** Fastener Orientation: Female Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Blue, Red Insulation Material: Nylon with Insulation Grip Interrupt Free Shifting: No Material: ETP Copper, Plastic Mating Snap Diameter (S): 0.18 Inch,0.156 Inch,0.180 Inch Maximum Conductor Size (Imperial): 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.15 in, 0.17 in, 0.19 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup> Pad Width: 0.156 in, 0.18 in

Product Color: Blue, Red Tab Width: 0.250,0.187 Terminal Style: Bullet Snap Plug Terminal Type: Disconnect Units per Case: 500.0,1000.0 Voltage Application: Low Voltage eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in Overall Length (Imperial): 0.99 in, 1 in, 1.02 in Overall Length (Metric): 25.14 mm Overall Width (Imperial): 0.37 in

## 3M<sup>™</sup> PILC Splice Kits

#### Details

Oil stop tubes provide rejacketing and moisture-seal protection to the splice Resists water and eliminate the need of sweat lead Designed for PILC transition to the poly/EPR cable Rated for 15 kV applications Maintains resiliency and pressure even after years of aging and exposure

## **Typical properties**

Barrel Style: Standard Barrel Cable Shielding: PILC Case Quantity: 1 Connector Base Metal: Aluminum Connector O.D. Range: 0.70 - 1.02 Inch, 0.90 - 1.30 Inch, 1.10 - 1.66 Inch Connector O.D. Range (Metric): 17.8 - 25.8 mm, 23 - 51 mm, 28 - 42 mm For Use With: Aluminum or Copper Conductors Indoor/Outdoor: Both Inside Diameter (Imperial): 0.2 in Inside Diameter (Metric): 5.1 mm Insulation Outer Diameter (Imperial): 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in Insulation Outer Diameter (Metric): 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm Maximum Conductor Size (Imperial): 6 AWG Maximum Conductor Size (Metric): 16 mm<sup>2</sup>

Maximum Connector Length: 5.0 inch (Al), 5.2 inch (Al), 5.5 inch (Cu), 6.5 inch (AI), 7.5 inch (Cu) Maximum Connector Length (Metric): 127 mm (Al), 132 mm (Al), 140 mm (Cu), 165 mm (AI), 190 mm (Cu) Maximum Operating Voltage: 35 Kilovolt Number of Conductors: 1 Outer Diameter (Imperial): 0.34 in PILC Cable Conductor Sizes: 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 AWG, 3/0 AWG, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil PILC Cable Conductor Sizes (Metric): 200 - 500 mm<sup>2</sup>, 25 - 70 mm<sup>2</sup> PILC Cable Insulation O.D. Range: 0.56 - 0.88 Inch, 0.74 - 1.17 Inch, 0.98 - 1.56 Inch PILC Cable Insulation O.D. Range (Metric): 14.2 - 22.4 mm, 18.8 - 29.7 mm, 24.9 - 39.6 mm Poly/EPR Cable Conductor Sizes: 1 AWG, 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 350 kcmi, 4/0 AWG, 500 kcmil, 750 kcmil Poly/EPR Cable Conductor Sizes (Metric): 240 - 500 mm<sup>2</sup>, 50 - 95 mm<sup>2</sup> Poly/EPR Cable Insulation O.D. Range: 0.70 - 1.07 Inch, 0.88 - 1.36 Inch, 1.12 -1.70 Inch Poly/EPR Cable Insulation O.D. Range (Metric): 17.8 - 27.2 mm, 22.0 - 34.6 mm, 28.4 - 43.2 mm Product Color: Black, Grav Product Series: 20000, QS2000T, QS2000T Series Splice Type: PILC Transition Voltage: 15 kV, 25/28 kV, 35 kV, 5 kV, 8 kV eClass 14 Classification Group: 27400107

## **Dimensions and Classifications**

Overall Length (Imperial): 1.62 in Overall Length (Metric): 41.1 mm

## Details

Standard barrel ensures a secure fit and offers reliable performance Barrel has colored stripes that help to indicate the wire range Suitable for indoor and outdoor applications Made of copper for good conductivity and tin plating for corrosion resistance Rated up to 35 kV UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Length (Imperial): 0.75 in,0.87 in,0.86 in,0.94 in,0.81 in,0.97 in Barrel Length (Metric): 19.1 mm, 20.7 mm, 21.8 mm, 22.1 mm, 23.8 mm, 24.6 mm Barrel Style: Standard Barrel Case Quantity: 25,50,10 Center of Hole to Center of Hole: 0.531 Inch,0.375 Inch Center of Hole to End of Pad: 0.37 Inch,0.53 Inch Center of Hole to End of Pad (Metric): 13.4 mm, 9.5 mm Compatible Conductor Size (Imperial): 1 AWG, 1/0 AWG, 2 AWG, 2/0 AWG, 3/0 AWG, 4 AWG, 4/0 AWG, 6 AWG Compatible Conductor Size (Metric): 120 mm<sup>2</sup>, 16 mm<sup>2</sup>, 25 mm<sup>2</sup>, 35 mm<sup>2</sup>, 50 mm<sup>2</sup>, 70 mm<sup>2</sup>, 95 mm<sup>2</sup> **Connector Description: One Hole** For Use With: Copper Conductor Only Inside Diameter (Imperial): 0.19 in, 0.24 in, 0.3 in, 0.35 in, 0.39 in, 0.43 in, 0.49 in, 0.54 in Inside Diameter (Metric): 11.2 mm,7.8 mm,6.2 mm,5.0 mm,10.0 mm,9.1 mm,13.9 mm,12.4 mm Lug Type: Compression Lugs Material: Copper Maximum Conductor Size (Imperial): 1 AWG, 1/0 AWG, 2 AWG, 2/0 AWG, 3/0 AWG, 4 AWG, 4/0 AWG, 6 AWG Maximum Installed Length: 16.00 in Maximum Operating Voltage: 35 Kilovolt Number of Stud Holes: 1 Outer Diameter (Imperial): 0.29 in, 0.34 in, 0.42 in, 0.46 in, 0.51 in, 0.56 in, 0.62 in, 0.68 in Pad Length (Imperial): 0.75 in, 0.89 in, 1.11 in Pad Length (Metric): 19.1 mm, 22.6 mm, 28.2 mm Pad Width: 0.43 in, 0.48 in, 0.5 in, 0.59 in, 0.63 in, 0.69 in, 0.75 in, 0.81 in, 0.91 in, 1 in Pad Width (Metric): 11.0 mm, 12.3 mm, 12.7 mm, 15.1 mm, 15.9 mm, 17.5 mm, 19.1 mm, 20.7 mm, 23.1 mm, 25.4 mm Product Color: Black, Blue, Brown, Gray, Green, Orange, Pink, Purple Product Series: 30000 Stud Sizes: #10, 1/2 Inch, 1/4 Inch, 3/8 Inch, 5/16 inch eClass 14 Classification Group: 15090900

# **Dimensions and Classifications**

Overall Length (Imperial): 1.78 in, 1.94 in, 1.97 in, 2.16 in, 2.37 in, 2.6 in, 2.63 in Overall Length (Metric): 45.2 mm, 49.3 mm, 50 mm, 54.9 mm, 60.2 mm, 65.9 mm, 66.8 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Locking Forks

## Details

Vinyl-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Spring-like tongue firmly fits around the stud

Electrolytic copper construction offers good conductivity

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V-rated for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.09 Inch.0.07 Inch.0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.25 Inch,0.28 Inch,0.44 Inch,0.4 Inch Dimension E: 0.85 Inch, 0.99 Inch, 0.83 Inch, 0.7 Inch Fork Type: Locking Insulation Material: Vinyl Material: Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Lock Width: 0.34 Inch, 0.35 Inch, 0.27 Inch, 0.3 Inch, 0.48 Inch, 0.36 Inch Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Operating Temperature Range (Celsius): -40 °C to 105 °C Operating Temperature Range (Fahrenheit): -40 °F to 221 °F Product Color: Red. Yellow Solution for: Wireless Network: Infrastructure Accessories Stud Diameter (Imperial): 0.112 in, 0.138 in, 0.164 in, 0.19 in, 0.25 in Stud Diameter (Metric): 2.845 mm, 3.505 mm, 4.166 mm, 4.826 mm, 6.35 mm Stud Size: #4,#10,#6,1/4 Inch,#8 **Terminal Style: Locking** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.88 in, 1.03 in, 1.1 in, 1.24 in Overall Length (Metric): 26.16 mm Overall Width (Imperial): 0.25 in, 0.28 in, 0.3 in, 0.32 in, 0.43 in Overall Width (Metric): 8.12 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Butted Seam Male Disconnects

## Details

Non-insulated, butted-seam barrel with a beveled mouth offers easy insertion of wires

This male disconnect terminal offers excellent holding force Allows for quick and easy disconnect of wires Accommodates wire sizes 16 to 14 AWG Made of electrolytic copper for good conductivity and has corrosion-resistant tin plating

## **Typical properties**

Barrel Inside Diameter: 0.09 Inch,0.085 Inch,0.065 Inch,0.15 Inch,0.150 Inch.0.08 Inch Barrel Length (Imperial): 0.25 Inch,0.19 Inch,0.24 Inch Barrel Style: Butted, Insulation Grip Bullet Diameter: 0.180,0.156 CSA File Number: LR22190 Connection Width (Imperial): 0.156 in, 0.187 in, 0.25 in Connection Width (Metric): 3.962 mm, 4.75 mm, 6.35 mm Disconnect Type: Male Fastener Orientation: Male Insulation Material: Non-insulated, Nylon Male Tab Width (W'): 0.187 Inch, 0.25 Inch, 0.250 Inch Mating Snap Diameter (S): 0.156 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.19 in Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.156 in, 0.187 in, 0.25 in Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250,0.187 Terminal Style: Bullet Snap Plug, Standard Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.064 in, 0.64 in, 0.73 in, 0.75 in, 0.87 in

# 3M<sup>™</sup> Molded Rubber QS-II Inline CN/JCN Cable Splice Kits 5450 Series

## Details

Jacketing kit is required for JCN cable

Meets the requirements of IEEE 404 standards for cable joints

Computer design ensures a compact size and optimal distribution of the electrical field

Designed for direct burial installations, aerial installations and submerged locations

Peroxide-cured EPDM rubber construction offers long term elastic memory

## **Typical properties**

Application: Aerial Installations, Direct-Burial Installations, For Inline Splicing, Submerged Locations

Application/Industry: Utility

Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Case Quantity: 1

Conductor Material: Aluminum, Copper

Conductor Sizes (Imperial): 1 AWG, 1 AWG (Solid), 1 AWG (Stranded), 1/0 AWG, 1/0 AWG (Solid), 1/0 AWG (Stranded), 2 AWG, 2 AWG (Stranded), 2 to 2/0 AWG, 2/0 AWG (Stranded), 3/0 AWG, 4/0 AWG

Conductor Sizes (Metric): 35 mm<sup>2</sup> (Stranded), 50 mm<sup>2</sup> (Solid), 50 mm<sup>2</sup> (Stranded), 70 mm<sup>2</sup> (Stranded)

Connector Included: 20006, CI-1/0-840, CI-1/0A, CI-1A, CI-2/0, CI-21-840, CI-2A, None

Insulation Level: 100%, 133%

Insulation O.D. Range: 0.775 - 0.90 Inch, 0.83 - 1.04 Inch, 0.905 - 1.055 Inch, 1.00 - 1.15 Inch

Insulation Outer Diameter (Imperial): 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in

Insulation Outer Diameter (Metric): 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm

Insulation Outside Diameter Range: 0.775 - 0.90 Inch, 0.83 - 1.04 Inch, 0.83 to 1.04 in, 0.905 - 1.055 Inch, 1.00 - 1.15 Inch

Insulation Outside Diameter Range (Metric): 19.7 - 22.9 mm, 21.1 - 26.4 mm, 21.1 to 26.4 mm, 23.0 - 26.8 mm, 25.4 - 29.2 mm

Kit Includes: (1) Instruction Sheet

Maximum Conductor Size (Imperial): 1 AWG, 1/0 AWG, 2 AWG, 2/0 AWG, 2/0 AWG (Stranded), 4/0 AWG

Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 35 mm<sup>2</sup>, 50 mm<sup>2</sup>, 70 mm<sup>2</sup>, 70 mm<sup>2</sup> (Stranded)

Minimum Conductor Size (Imperial): 2 AWG, 3/0 AWG

Minimum Conductor Size (Metric): 35 mm², 95 mm² Number of Conductors: 1 Operating Voltage: 15 kV, 25 kV, 28 kV Product Color: Back, White Product Series: 5411, 5411A & 5412 Series, 5450 Series, 5451A Series Product Type: Inline, Splice Splice Type: Inline Typical Splice Length: 14.4 in Typical Splice Length (Metric): 366 mm Voltage: 25/28 kV

# 3M<sup>™</sup> Motor Lead Pigtail Splice Kits, 1-Hole Lug Connections 5300-5304 Series

## Details

Splices motor lead cables to incoming feeder cables Designed to use with copper compression, 1-hole lugs Slip-on lug cover is made of durable EPDM rubber For pigtail (stub) connections at 1000V or less Includes 3 each of pigtail lug covers, mastic sealing strips, and tubes of silicone grease, plus an instruction sheet CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Application: Cross Linked Polyethylene Cable, Ethylene Propylene Rubber Cable, For Insulating and Sealing Motor Lead Connections for Copper Conductors, Polyethylene Cable Application/Industry: Commercial Construction, Industrial Construction Cable Shielding: Non-shielded, Single Conductor Cable Connection Type: Pigtail (Non-shielded) Insulation Outside Diameter: 0.17-0.36 Inch,0.12-0.21 Inch,0.34-0.54 Inch,0.40-0.80 Inch, 0.67-1.05 Inch Insulation Outside Diameter Range: 0.12-0.21 in, 0.17-0.36 in, 0.34-0.54 in, 0.40-0.80 in, 0.67-1.05 in Insulation Outside Diameter Range (Metric): 10.2 - 20.3 mm, 17.0 - 26.7 mm, 3.0 - 5.3 mm, 4.3 - 9.1 mm, 8.6 - 13.7 mm Kit Includes: (3) Pigtail Lug Covers Lug Cover Inner Diameter: 0.45 in, 0.70 in, 0.95 in, 1.20 in, 1.70 in Lug Cover Inner Diameter (Metric): 11.4 mm, 17.8 mm, 24.1 mm, 30.5 mm, 43.2 mm Lug Cover Length: 2.1 in, 3.4 in, 4.2 in, 5.3 in, 6.7 in Lug Cover Length (Metric): 106.7 mm, 134.6 mm, 170.2 mm, 53.3 mm, 86.4 mm Maximum Bolt Length: 1-1/2 in, 1-1/4 in, 1/2 in, 3/4 in, 3/8 in Maximum Bolt Length (Metric): 12.7 mm, 19.1 mm, 31.8 mm, 38.1 mm, 9.5 mm Maximum Feeder Lead Size: 1/0 AWG, 10 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Motor Lead Size: 1/0 AWG, 12 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Operating Voltage: 1 kV Product Color: Black Range Feeder Cable (AWG & kcmil): 1/0-250, 10-4, 14-10, 2-1/0, 250-500 Splice Type: Pigtail Only Units per Case: 1.0 Voltage: 1 kV

# 3M<sup>™</sup> PS Cold Shrink Insertion Seals

## Details

Designed to seal the open space between a steel casing and a plastic gas pipe Offers good thermal stability and resists acids, alkalis, fungus, ozone, ultraviolet light

Ideal for sealing between polyethylene gas pipe and steel casement Made of EPDM rubber for tight sealing RoHS 2011/65/EU Complaint

#### **Typical properties**

Brands: 3M™

Cable Accessory Products: Sealing and Grounding Kits Material: EPDM Rubber Maximum Cable Diameter (Imperial): 0.875 in, 1.056 in Maximum Cable Diameter (Metric): 22.2 mm, 28.6 mm Minimum Cable Diameter (Imperial): 0.625 in, 0.875 in Minimum Cable Diameter (Metric): 15.9 mm, 22.2 mm Units per Case: 10.0

# 3M<sup>™</sup> Heat Shrink Heavy-Wall Cable Sleeves ITCSN

## Details

IDEAL FOR A VARIETY OF APPLICATIONS: Used for insulating secondary splices; direct-buried, submersible, or dig in repairs; and physical protection of high voltage, air-insulated connectors or lugs

VOLTAGE: UL 486D, Voltage Rating 600 V; Applies to: ITCSN 0400, 0800, 1100, 1500, 2000; CSA Certified ITCSN 0400, 0800, 1100, 1500, 2000, 3000 DURABLE CONSTRUCTION: Adhesive-lined, split resistant, fast shrinking, and made from cross-linked polyolefin; non-adhesive options are also available HIGHLY RESISTANT: Delivers mechanical and environmental protection against abrasion, corrosion, and chemicals

WIDE OPERATING TEMPERATURE RANGE: Withstands temperatures between 67–230  $^\circ\text{F}$  (55–110  $^\circ\text{C})$ 

CERTIFICATIONS: UL Listed, CSA Certified, and RoHS 2011/65/EU Compliant

## **Typical properties**

Adhesive Lined: No.Yes Adhesive Material: Hot melt adhesive layer, Hot-melt adhesive Agency Approvals: CSA, ABS, CSA, UL 486D Applicable SAE-AMS-DTL-23053 Specifications: 23053/15 class 2 Application Specifications: UL Listed 486 D for 600V, File Number E102356; CSA Certified File LR86335 Brands: 3M<sup>™</sup> Cable Size Range: 12-6 AWG, 1500-2500 kcmil, 2-4/0 AWG, 2.1-4.8 in, 250-750 kcmil, 3/0 AWG-450 kcmil, 600-1250 kcmil, 8-1/0 AWG Case Quantity: 100,3 pieces/pack, 12 packs, 25, 5, 50, 20, 1 Reel, 10 **Chemical Resistant: Yes** Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 2 AWG, 2/0 AWG, 3/0 AWG, 4/0 AWG Conductor Sizes (Metric): 120 mm<sup>2</sup> Dielectric Strength (V/mil): 500 V/mil Direct Bury: No, Yes Elongation: 4.75 % Expanded Inner Diameter: 0.4 in, 0.8 in, 1.1 in, 1.5 in, 2 in, 3 in, 4.5 in, 6 in Expanded Inner Diameter (Metric): 10.2 mm, 114.3 mm, 152.4 mm, 20.3 mm, 27.9 mm, 38.1 mm, 50.8 mm, 76.2 mm Flame Retardant: No Flammability Rating: Non-Flame Retardant Heat Shrink Type: Adhesive-Lined Polyolefin Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.062 in, 0.15 in, 0.2 in, 0.37 in, 0.5 in, 0.65 in, 1 in, 1.5 in, 2.1 in Inner Diameter After Shrink (Metric): 0.381 cm<sup>2</sup>, 0.508 cm<sup>2</sup>, 0.94 cm<sup>2</sup>, 1.27 cm<sup>2</sup>, 1.57 mm, 1.651 cm<sup>2</sup>, 1.8 mm, 2.54 cm<sup>2</sup>, 3.8 mm, 3.81 cm<sup>2</sup>, 3.81 mm, 5.1 mm, 9.4 mm, 12.7 mm, 16.5 mm Inner Diameter Before Shrink (Imperial): 0.125 in, 0.4 in, 0.8 in, 1.1 in, 1.5 in, 2 in, 3 in, 4.5 in, 4.8 in

Inner Diameter Before Shrink (Metric): 1.016 cm<sup>2</sup>, 2.032 cm<sup>2</sup>, 2.794 cm<sup>2</sup>, 3.18 mm, 3.81 cm<sup>2</sup>, 5.08 cm<sup>2</sup>, 6 mm, 7.62 cm<sup>2</sup>, 10.16 mm, 10.2 mm, 11.43 cm<sup>2</sup>, 20.3 mm, 27.9 mm, 38.1 mm, 50.8 mm Material: Adhesive-lined Polyolefin, Polyolefin Maximum Conductor Size (Imperial): 1/0 AWG, 1250 kcmil, 2500 kcmil, 4/0 AWG, 450 kcmil, 6 AWG, 750 kcmil Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 1267 mm<sup>2</sup>, 16 mm<sup>2</sup>, 240 mm<sup>2</sup>, 400 mm<sup>2</sup>, 50 mm<sup>2</sup>, 633.4 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 100 °C, 110 °C Maximum Operating Temperature (Fahrenheit): 230 °F Maximum Voltage Rating: 1 kV Mil Spec: AMS-DTL-23053/15, Class 1, SAE-AMS-DTL-23053/15, Class 1 Minimum Conductor Size (Imperial): 12 AWG, 1500 kcmil, 2 AWG, 250 kcmil, 3/0 AWG, 600 kcmil, 8 AWG Minimum Conductor Size (Metric): 10 mm<sup>2</sup>, 120 mm<sup>2</sup>, 300 mm<sup>2</sup>, 35 mm<sup>2</sup>, 4 mm<sup>2</sup>, 760.1 mm<sup>2</sup>, 95 mm<sup>2</sup> Minimum Expanded Tubing I. D.: 0.4 in, 0.8 in, 1.1 in, 1.5 in, 2 in, 3 in, 4.5 in, 6 in Minimum Shrink Temperature (Celsius): 121 °C Minimum Shrink Temperature (Fahrenheit): 250 °F Non-Corrosive: Yes Operating Temperature (Celsius): -55 to 100 Degrees Celsius, -55 °C to 110 °C Operating Temperature (Fahrenheit): -67 °F to 230 °F Operating Temperature Range (Celsius): -55 °C to +110 °C, -55 °C to -100 °C Operating Temperature Range (Fahrenheit): -67 °F to 230 °F Product Color: Black, Red Product Form: Sleeve-roll Product Type: Sleeve, Splice Recovered Inner Diameter: 0.15 in, 0.2 in, 0.37 in, 0.5 in, 0.65 in, 1 in, 1.5 in, 1.8 in Recovered Inner Diameter (Metric): 3.8 mm, 5.1 mm, 9.4 mm, 12.7 mm, 16.5 mm, 25.4 mm, 38.1 mm, 45.7 mm Shrink Ratio: 3:1, 4:1 Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul Specifications Met: UL 486D\* Splice Configuration: Heat Shrink Heavy-Wall Cable Sleeve (ITCSN) Splice Type: Heat Shrink Tensile Strength (Imperial): 2400 Pound-Force Per Square Inch Tubing Type: Heavy Wall UL File Number: E-102356 Units per Case: 25.0,1.0,50.0,3.0,10.0,5.0,20.0,100.0 Voltage: 1 kV Voltage Rating: UL Rated to 600 V (Shall not exceed 1 kV),600 V eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 6 in, 9 in, 12 in, 25 ft, 48 in Overall Length (Metric): 7.62 mm, 152 mm, 152.4 mm, 228.6 mm, 229 mm, 304.8 mm, 305 mm, 1219 mm Overall Width (Imperial): 1.1 in, 48 in

# 3M<sup>™</sup> Highland<sup>™</sup> Terminal Kit, HTK-1, 180 pieces, refillable kit is compact, portable and durable, 4 Kits/Case

Part Number HTK-1 3M ID 7100112734 UPC 00051128613597

## Details

12 of the most popular 3M<sup>™</sup> Highland<sup>™</sup> Terminals in 1 convenient kit (15 pieces each, 180 pieces total) 3M Highland Terminals are UL LISTED and CSA Certified Refillable kit is compact, portable and durable Made in the U.S.A

## **Typical properties**

Brands: Highland™ Color Code: Clear Kit Material: Plastic Terminal Type: Terminal Kits Terminal quantity: 180

#### Details

Designed for use with armor power cable Used for indoor and outdoor installations Perfect for use in aerial, direct-burial and submersible applications Rated for up to 1 kV applications Includes 1 PST jacket tube, • constant force springs, • shielding tape 24 strips and 1 copper shielding sleeve CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: 3M™ Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Non-shielded Cable Size Range: 14-10 AWG, 2/0 AWG-250 MCM, 250-500 MCM, 500-750 MCM, 8-4 AWG Cable Type: Armored Power Cable, Power Cable Conductor Sizes (Imperial): 1/0 AWG, 10 AWG, 250 kcmil, 4 AWG, 500 kcmil, 750 kcmil Conductor Sizes (Metric): 120 mm<sup>2</sup>, 240 mm<sup>2</sup>, 25 mm<sup>2</sup>, 400 mm<sup>2</sup>, 50 mm<sup>2</sup>, 6 mm<sup>2</sup> Conductor Type: Aluminum or Copper Insulation Outer Diameter (Imperial): 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in, 2.33 in, 2.34 in, 2.35 in, 2.36 in, 2.37 in, 2.38 in, 2.39 in, 2.4 in, 2.41 in, 2.42 in, 2.43 in, 2.44 in, 2.45 in, 2.46 in, 2.47 in, 2.48 in, 2.49 in, 2.5 in, 2.51 in, 2.52 in, 2.53 in, 2.54 in, 2.55 in, 2.56 in, 2.57 in, 2.58 in, 2.59 in, 2.6 in, 2.61 in, 2.62 in, 2.63 in, 2.64 in, 2.65 in, 2.66 in, 2.67 in, 2.68 in, 2.69 in, 2.7 in, 2.71 in, 2.72 in, 2.73 in, 2.74 in, 2.75 in, 2.76 in, 2.77 in, 2.78 in, 2.79 in, 2.8 in, 2.81 in, 2.82 in, 2.83 in, 2.84 in, 2.85 in, 2.86 in, 2.87 in, 2.88 in, 2.89 in, 2.9 in, 2.91 in, 2.92 in, 2.93 in, 2.94 in, 2.95 in, 2.96 in, 2.97 in, 2.98 in, 2.99 in, 3 in, 3.01 in, 3.02 in, 3.03 in, 3.04 in, 3.05 in, 3.06 in, 3.07 in, 3.08 in, 3.09 in, 3.1 in, 3.11 in, 3.12 in, 3.13 in, 3.14 in, 3.15 in, 3.16 in, 3.17 in, 3.18 in, 3.19 in, 3.2 in, 3.21 in, 3.22 in, 3.23 in, 3.24 in, 3.25 in, 3.26 in, 3.27 in, 3.28 in, 3.29 in, 3.3 in, 3.31 in, 3.32 in, 3.33 in, 3.34 in, 3.35 in, 3.36 in, 3.37 in, 3.38 in, 3.39 in, 3.4 in, 3.41 in, 3.42 in, 3.43 in, 3.44 in, 3.45 in, 3.46 in, 3.47 in, 3.48 in, 3.49 in, 3.5 in, 3.51 in, 3.52 in, 3.53 in, 3.54 in, 3.55 in, 3.56 in, 3.57 in, 3.58 in, 3.59 in, 3.6 in,

3.61 in, 3.62 in, 3.63 in, 3.64 in, 3.65 in, 3.66 in, 3.67 in, 3.68 in, 3.69 in, 3.7 in, 3.71 in, 3.72 in, 3.73 in, 3.74 in, 3.75 in, 3.76 in, 3.77 in, 3.78 in, 3.79 in, 3.8 in, 3.81 in, 3.82 in, 3.83 in, 3.84 in, 3.85 in, 3.86 in, 3.87 in, 3.88 in, 3.89 in, 3.9 in, 3.91 in, 3.92 in, 3.93 in, 3.94 in, 3.95 in, 3.96 in, 3.97 in, 3.98 in, 3.99 in, 4 in Insulation Outer Diameter (Metric): 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm, 59.182 mm, 59.436 mm, 59.69 mm, 59.944 mm, 60.198 mm, 60.452 mm, 60.706 mm, 60.96 mm, 61.214 mm, 61.468 mm, 61.722 mm, 61.976 mm, 62.23 mm, 62.484 mm, 62.738 mm, 62.992 mm, 63.246 mm, 63.5 mm, 63.754 mm, 64.008 mm, 64.262 mm, 64.516 mm, 64.77 mm, 65.024 mm, 65.278 mm, 65.532 mm, 65.786 mm, 66.04 mm, 66.294 mm, 66.548 mm, 66.802 mm, 67.056 mm, 67.31 mm, 67.564 mm, 67.818 mm, 68.072 mm, 68.326 mm, 68.58 mm, 68.834 mm, 69.088 mm, 69.342 mm, 69.596 mm, 69.85 mm, 70.104 mm, 70.358 mm, 70.612 mm, 70.866 mm, 71.12 mm, 71.374 mm, 71.628 mm, 71.882 mm, 72.136 mm, 72.39 mm, 72.644 mm, 72.898 mm, 73.152 mm, 73.406 mm, 73.66 mm, 73.914 mm, 74.168 mm, 74.422 mm, 74.676 mm, 74.93 mm, 75.184 mm, 75.438 mm, 75.692 mm, 75.946 mm, 76.2 mm, 76.454 mm, 76.708 mm, 76.962 mm, 77.216 mm, 77.47 mm, 77.724 mm, 77.978 mm, 78.232 mm, 78.486 mm, 78.74 mm, 78.994 mm, 79.248 mm, 79.502 mm, 79.756 mm, 80.01 mm, 80.264 mm, 80.518 mm, 80.772 mm, 81.026 mm, 81.28 mm, 81.534 mm, 81.788 mm, 82.042 mm, 82.296 mm, 82.55 mm, 82.804 mm, 83.058 mm, 83.312 mm, 83.566 mm, 83.82 mm, 84.074 mm, 84.328 mm, 84.582 mm, 84.836 mm, 85.09 mm, 85.344 mm, 85.598 mm, 85.852 mm, 86.106 mm, 86.36 mm, 86.614 mm, 86.868 mm, 87.122 mm, 87.376 mm, 87.63 mm, 87.884 mm, 88.138 mm, 88.392 mm, 88.646 mm, 88.9 mm, 89.154 mm, 89.408 mm, 89.662 mm, 89.916 mm, 90.17 mm, 90.424 mm, 90.678 mm, 90.932 mm, 91.186 mm, 91.44 mm, 91.694 mm, 91.948 mm, 92.202 mm, 92.456 mm, 92.71 mm, 92.964 mm, 93.218 mm, 93.472 mm, 93.726 mm, 93.98 mm, 94.234 mm, 94.488 mm, 94.742 mm, 94.996 mm, 95.25 mm, 95.504 mm, 95.758 mm, 96.012 mm, 96.266 mm, 96.52 mm, 96.774 mm, 97.028 mm, 97.282 mm, 97.536 mm, 97.79 mm, 98.044 mm, 98.298 mm, 98.552 mm, 98.806 mm, 99.06 mm, 99.314 mm, 99.568 mm, 99.822 mm, 100.076 mm, 100.33 mm, 100.584 mm, 100.838 mm, 101.092 mm, 101.346 mm, 101.6 mm

Insulation Outside Diameter Range: 0.63-0.98 in, 0.94-1.42 in, 1.14-3.31 in, 1.54-4.02 in Insulation Outside Diameter Range (Metric): 16 - 25 mm, 24 - 36 mm, 29 - 84 mm, 39 - 102 mm Maximum Conductor Size (Imperial): 1/0 AWG, 10 AWG, 250 kcmil, 4 AWG, 500 kcmil, 750 kcmil Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 240 mm<sup>2</sup>, 25 mm<sup>2</sup>, 400 mm<sup>2</sup>, 50  $mm^2$ , 6  $mm^2$ Maximum Operating Voltage: 1000 Volt, 600 V Minimum Conductor Size (Imperial): 14 AWG, 2 AWG, 2/0 AWG, 250 kcmil, 500 kcmil, 8 AWG Minimum Conductor Size (Metric): 10 mm<sup>2</sup>, 120 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 240 mm<sup>2</sup>, 35 mm<sup>2</sup>, 70 mm<sup>2</sup> Number of Conductors: 3 Overall Jacket Diameter: 1.15 to 3.3 Inch,0.62 to 1.00 Inch,0.95 to 1.40 Inch,0.95 to 2.4 Inch,1.55 to 4.0 Inch Product Type: Splice Kit Splice Type: Inline Units per Case: 1.0,2.0 Voltage: 1 kV, 1000 V, 600 V, 600 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> QT-II PILC Cable Silicone Rubber Termination Kit 5804-Pb-250, 15 kV,

## Cable Ins. OD 1.20-1.90 in, 1/kit

3M ID 7100164404 UPC 00054007504597

#### **Typical properties**

BIL: 110 kV Breakout Boot: No Cable Insulation Outside Diameter Range: 1.20-1.90 in Cable Insulation Outside Diameter Range (Metric): 30.5-48.2 mm Cable Shielding: Paper Insulated Lead Covered (PILC) Case Quantity: 1 Conductor Sizes (Imperial): 1000 kcmil, 1250 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Indoor/Outdoor: Outdoor Skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 1.2 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in Insulation Rejacketing: No Lug/Stem Connector Included in Kit: No Maximum Installed Length: 18.50 in Number of Conductors: 1 Number of Skirts: 4 Product Series: 5800-Pb Voltage: 15 kV eClass 14 Classification Group: 27400102

## 3M<sup>™</sup> GSK Series Termination Grounding Kits

#### Details

Designed to convert concentric neutral or jacketed concentric neutral 3M QT-II or QT-III Termination kits

Suitable for use on tape-shielded and longitudinally corrugated power cables Ideal for use in applications where high-ampacity grounding is desired Rated for 5 to 35 kV applications

#### **Typical properties**

Brands:  $3M^{TM}$ Cable Accessory Products: Sealing and Grounding Kits Cable Shield Diameter Range: 0.74"-1.18" (18,8-30,0 mm),0.82"-1.63" (20,8-41,4 mm),1.15"-2.42" (29,2-61,5 mm) Cable Shield Diameter Range (Metric): 0.74"-1.18" (18,8-30,0 mm),0.82"-1.63" (20,8-41,4 mm),1.15"-2.42" (29,2-61,5 mm) Product Type: Grounding Shield Kit, Splice Units per Case: 3.0

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Aluminum Connectors 20000 Series

#### Details

Standard barrel ensures reliable performance Built-in solid center oil stop Made of aluminum for good conductivity and has corrosion-resistant tin plating Rated up to 35 kV Meets ANSI C119.4 and RoHS 2011/65/EU Compliant Barrel has color stripes that help to indicate the wire range

#### **Typical properties**

Barrel Style: Standard Barrel Body Material: Aluminum Cable Shielding: Non-shielded Case Quantity: 3,25,50,10 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 2/0 AWG, 250 kcmil, 3/0 AWG, 4/0 AWG Connector Base Metal: Aluminum Connector Included: No Connector Type: Compression Connectors Dielectric Strength (V/mil): 365 V/mil Electrical Connector Type: Compression Connectors Elongation: 750 % For Use With: Aluminum or Copper Conductors Indoor/Outdoor: Both Inside Diameter (Imperial): 0.2 in, 0.31 in, 0.39 in, 0.44 in, 0.48 in, 0.54 in, 0.59 in, 0.65 in, 0.72 in, 0.76 in, 0.84 in, 0.92 in, 1.03 in, 1.06 in, 1.19 in Inside Diameter (Metric): 7.8 mm, 16.5 mm, 26.2 mm, 23.4 mm, 19.3 mm, 5.1 mm,21.4 mm,26.9 mm,13.7 mm,11.2 mm,18.3 mm,15.1 mm,30.3 mm,12.3 mm,9.9 mm Maximum Conductor Size (Imperial): 1/0 AWG (Stranded), 1000 kcmil (Stranded), 2 AWG (Stranded), 2/0 AWG (Stranded), 250 kcmil (Stranded), 3/0 AWG (Stranded), 300 kcmil (Stranded), 350 kcmil (Stranded), 4/0 AWG (Stranded), 400 kcmil (Stranded), 500 kcmil (Stranded), 6 AWG (Stranded), 600 kcmil (Stranded), 750 kcmil (Stranded), 800 kcmil (Stranded) Maximum Conductor Size (Metric): 120 mm<sup>2</sup> (Stranded), 150 mm<sup>2</sup> (Stranded), 16 mm<sup>2</sup> (Stranded), 185 mm<sup>2</sup> (Stranded), 240 mm<sup>2</sup> (Stranded), 300 mm<sup>2</sup> (Stranded, 35 mm<sup>2</sup> (Stranded), 400 mm<sup>2</sup> (Stranded), 405 mm<sup>2</sup> (Stranded), 50 mm<sup>2</sup> (Stranded), 500 mm<sup>2</sup> (Stranded), 70 mm<sup>2</sup> (Stranded), 95 mm<sup>2</sup> (Stranded) Maximum Operating Voltage: 35 Kilovolt Minimum Conductor Size (Imperial): 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 750 kcmil, 800 kcmil Minimum Conductor Size (Metric): 120 mm<sup>2</sup>, 150 mm<sup>2</sup>, 16 mm<sup>2</sup>, 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 300 mm<sup>2</sup>, 35 mm<sup>2</sup>, 400 mm<sup>2</sup>, 405 mm<sup>2</sup>, 50 mm<sup>2</sup>, 500 mm<sup>2</sup>, 70 mm<sup>2</sup>, 95 mm<sup>2</sup> Outer Diameter (Imperial): 0.34 in, 0.53 in, 0.64 in, 0.69 in, 0.76 in, 0.88 in, 0.91 in, 1 in, 1.12 in, 1.187 in, 1.32 in, 1.43 in, 1.5 in, 1.65 in, 1.84 in Product Color: Black, Brown, Dark Blue, Gray, Green, Light Blue, Olive, Pink, Red, Ruby, White, Yellow

Product Series: 20000 eClass 14 Classification Group: 27400212

#### **Dimensions and Classifications**

Overall Length (Imperial): 1.62 in, 2 in, 2.12 in, 2.31 in, 2.62 in, 2.75 in, 2.94 in, 3.12 in, 3.38 in, 3.75 in, 3.88 in, 4.12 in, 4.68 in, 4.75 in, 5.25 in Overall Length (Metric): 41.1 mm, 50.8 mm, 53.8 mm, 58.7 mm, 66.5 mm, 69.9 mm, 74.7 mm, 79.2 mm, 85.8 mm, 95.3 mm, 98.6 mm, 104.6 mm, 118.8 mm, 120.7 mm, 133.4 mm

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated Brazed Seam Ring Tongues

#### Details

Nylon-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance Flared portion of the nylon sleeve offers easy insertion of wires Standard-style ring tongue fits around the stud Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C)

#### **Typical properties**

Barrel Inside Diameter: 0.25 Inch Barrel Length (Imperial): 0.39 Inch Barrel Style: Brazed Seam CSA File Number: LR22190 Clearance (C): 0.52 in Connection Type: Crimp Connection Width (Imperial): 0.086 in, 0.112 in, 0.138 in, 0.164 in, 0.19 in, 0.25 in, 0.315 in, 0.375 in, 0.5 in Connection Width (Metric): 2 mm, 2.845 mm, 3.5 mm, 4.166 mm, 4.826 mm, 6.35 mm, 8 mm, 9.525 mm, 12.7 mm Diameter (D): 0.25 in Dimension E: 1.27 Inch Finish: Tin Plated Insulated: Yes Insulation Color: Blue Insulation Material: Nylon Maximum Conductor Size (Imperial): 10 AWG, 24 AWG, 4 AWG, 6 AWG, 8 AWG Maximum Conductor Size (Metric): 0.205 mm<sup>2</sup>, 13.3 mm<sup>2</sup>, 21.2 mm<sup>2</sup>, 5.26 mm<sup>2</sup>, 8.37 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.44 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG, 26 AWG, 4 AWG, 6 AWG, 8 AWG Minimum Conductor Size (Metric): 0.14 mm<sup>2</sup>, 13.3 mm<sup>2</sup>, 21.2 mm<sup>2</sup>, 3.31 mm<sup>2</sup>, 8.37 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.25 in Minimum Stud Diameter (Metric): 6.35 mm Operating Temperature (Fahrenheit): -40 °F to 221 °F Operating Temperature Range (Celsius): -40 °C to 105 °C Operating Temperature Range (Fahrenheit): -40 °F to 221 °F Product Color: Blue, Red Ring Type: Standard Stud Size: 1/4 Inch

Terminal Material: ETP Copper Terminal Style: Standard Terminal Type: Ring Type: Standard UL File Number: E23438 Units per Case: 200.0

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.47 in, 0.6 in, 0.69 in, 0.74 in, 1.26 in, 1.38 in, 1.5 in, 1.58 in, 1.72 in, 1.74 in, 1.78 in Overall Length (Metric): 32.004 mm, 38.1 mm Overall Width (Imperial): 0.14 in, 0.2 in, 0.25 in, 0.47 in, 0.59 in, 0.63 in, 0.68 in, 0.81 in Overall Width (Metric): 11.93 mm, 11.938 mm

#### Details

Long barrel ensures a secure fit and offers reliable performance Barrel has colored stripes that help to indicate the wire range Suitable for indoor and outdoor applications Made of copper for good conductivity and tin plating for corrosion resistance For up to 35 kV applications UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Length (Imperial): 2.19 in, 2.81 in, 1.56 in, 1.94 in, 2.12 in, 2.62 in, 2.94 in Barrel Length (Metric): 39.7 mm, 49.2 mm, 53.8 mm, 55.6 mm, 66.5 mm, 71.5 mm, 74.6 mm Barrel Style: Long Barrel Brands: Scotchlok™ Case Quantity: 6,10 Center of Hole to Center of Hole: 1.75 Inch Center of Hole to Center of Hole (Metric): 44.5 mm Center of Hole to End of Pad: 0.63 Inch Center of Hole to End of Pad (Metric): 16.0 mm Compatible Conductor Size (Imperial): 1000 kcmil, 250 kcmil, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 750 kcmil Compatible Conductor Size (Metric): 120 mm<sup>2</sup>, 150 mm<sup>2</sup>, 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 300 mm<sup>2</sup>, 400 mm<sup>2</sup>, 500 mm<sup>2</sup> Connector Description: Two hole For Use With: Copper Conductor Only Inside Diameter (Imperial): 0.54 in, 0.59 in, 0.65 in, 0.7 in, 0.76 in, 0.83 in, 0.92 in, 1.03 in, 1.17 in Inside Diameter (Metric): 16.5 mm,26.2 mm,23.4 mm,19.3 mm,13.9 mm,15.1 mm,21.1 mm,29.7 mm,17.8 mm Lug Type: Compression Lugs Material: Copper Maximum Conductor Size (Imperial): 1000 kcmil, 250 kcmil, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 750 kcmil Maximum Conductor Size (Metric): 240 mm<sup>2</sup>, 300 mm<sup>2</sup>, 380 mm<sup>2</sup> Maximum Operating Voltage: 35 Kilovolt Number of Stud Holes: 2 Outer Diameter (Imperial): 0.68 in, 0.75 in, 0.81 in, 0.87 in, 0.95 in, 1.06 in, 1.18 in, 1.29 in, 1.5 in Pad Length (Imperial): 3 in Pad Length (Metric): 76.2 mm Pad Width: 1 in, 1.13 in, 1.22 in, 1.31 in, 1.41 in, 1.53 in, 1.69 in, 1.72 in Pad Width (Metric): 25.4 mm. 28.6 mm. 31.0 mm. 33.4 mm. 35.8 mm. 38.9 mm. 42.9 mm, 43.7 mm Product Color: Black, Blue, Brown, Green, Purple, Red, White, Yellow Product Series: 30000, 31000, 40000 Stud Sizes: 1/2 Inch Units per Case: 10.0,6.0

eClass 14 Classification Group: 15090900

#### **Dimensions and Classifications**

Overall Length (Imperial): 5.16 in, 5.31 in, 5.75 in, 6 in, 6.16 in, 6.72 in, 7 in, 7.28 in

Overall Length (Metric): 131.1 mm, 134.9 mm, 146.1 mm, 152.4 mm, 156.4 mm, 170.6 mm, 177.8 mm, 184.9 mm

## 3M<sup>™</sup> Copper Oil Seal Lugs

#### Details

Standard barrel ensures a secure fit and offers reliable performance A solid oil stop seals oil and moisture Made of copper for good conductivity and tin plating for corrosion resistance Rated for 35 kV voltage applications RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Length (Imperial): 2.875 in, 1.563 in, 1.875 in Barrel Length (Metric): 39.7 mm, 47.63 mm, 73.03 mm Barrel Style: Standard Barrel Case Quantity: 3,10 Center of Hole to Center of Hole: 1.75 Inch Center of Hole to Center of Hole (Metric): 44.5 mm Center of Hole to End of Pad: 0.625 Inch,0.406 Inch Center of Hole to End of Pad (Metric): 10.3 mm, 15.8 mm Compatible Conductor Size (Imperial): 1/0 AWG, 250 kcmil, 750 kcmil Compatible Conductor Size (Metric): 120 mm<sup>2</sup>, 400 mm<sup>2</sup>, 50 mm<sup>2</sup> For Use With: Copper Conductor Only Inside Diameter (Imperial): 0.394 in, 0.595 in, 1.031 in Inside Diameter (Metric): 26.2 mm,10.0 mm,15.1 mm Lug Type: Compression Lugs Material: Copper Maximum Conductor Size (Imperial): 1/0 AWG, 250 kcmil, 750 kcmil Number of Stud Holes: 1, 2 Outer Diameter (Imperial): 0.513 in, 0.75 in, 1.3 in Stud Sizes: 1/2 Inch, 3/8 Inch eClass 14 Classification Group: 15090900

### 3M<sup>™</sup> Flanged Block Fork Nylon Insulated, 100/bottle, MNG14-6FFB/SX, suitable for use in a terminal block, 500/Case

3M ID 7100165311 UPC 00051128589724

#### Details

Nylon-insulated, butted-seam barrel ensures a secure fit and offers reliable performance Funnel-designed, seamless brass sleeve offers easy insertion of wires Suitable for use in a terminal block Electrolytic copper construction offers good conductivity Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.090 Inch Barrel Style: Butted Brands: Scotchlok<sup>™</sup> CSA File Number: LR22190 Clearance (C): 0.25 Inch Dimension E: 0.71 Inch Fork Type: Flanged Block Insulation Material: Nylon with Insulation Grip Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.08 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.17 in Minimum Conductor Size (Imperial): 16 AWG Minimum Conductor Size (Metric): 1.31 mm<sup>2</sup> Stud Size: #6 **Terminal Style: Flanged Block** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.86 in Overall Width (Imperial): 0.25 in

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Interlock Barrel Female Disconnects

#### Details

Red, nylon-insulated connector is suitable to electrically tap into a wire in midspan without cutting Suitable for general purpose electrical connections on an auto, boat, van or trailer Accommodates 18 to 16 AWG solid/stranded or 14 AWG stranded UL Listed and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.128 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Interlocking Barrel CSA File Number: LR22190 Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Disconnect Type: Female Fastener Orientation: Female Insulation Material: Non-insulated Mates with Female Width: 0.25 Inch Mates with Male Tab Width (W'): 0.25 Inch Maximum Conductor Size (Imperial): 10 AWG Maximum Conductor Size (Metric): 6 mm<sup>2</sup> Minimum Conductor Size (Imperial): 12 AWG Minimum Conductor Size (Metric): 4 mm<sup>2</sup> Pad Width: 0.25 in Tab Width: 0.250,0.187 **Terminal Style: Standard** Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.64 in

## 3M<sup>™</sup> Cable Preparation Kits

#### Details

Cleans the various parts of the cable Prepares a normal cable for splicing or terminating Helps in cleaning cable insulation, metal, electrical and mechanical parts Ensures accelerated surface drying Removes excess grease from PCB Has excellent cleaning and degreasing properties Non-conductive abrasive cloth comes in the kit, helps to clean the cable insulation surfaces RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Accessory Products: Preparation and Cleaning Product Type: Preparation Kit Suitable for High Voltage: Yes Units per Case: 10.0 eClass 14 Classification Group: 15090300

#### Details

Superior resistance to abrasion, corrosion and chemicals Offers reliable performance for electrical splices, connections and terminations Suitable for insulating secondary splices, as well as direct buried, submersible and dig-in repairs Made of black cross-linked polyolefin Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C)

RoHS 2011/65/EU Compliant

#### **Typical properties**

Adhesive Lined: No,Yes Application Specifications: ABS, MIL-I-23053/15A Class 2 Brands: 3M<sup>™</sup> Cable Size Range: 1-4/0 AWG, 1/0 AWG-250 kcmil, 1000-2500 kcmil, 12-6 AWG, 2-2/0 AWG, 300-500 kcmil, 4/0 AWG-400 kcmil, 600-1250 kcmil, 8-3 AWG Expanded Inner Diameter: 0.4 in, 0.8 in, 1.1 in, 1.3 in, 1.5 in, 1.7 in, 2 in, 3 in Expanded Inner Diameter (Metric): 10.2 mm, 109.2 mm, 20.3 mm, 27.9 mm, 33.0 mm, 38.1 mm, 43.2 mm, 50.8 mm, 76.2 mm Flame Retardant: No Heat Shrink Type: Adhesive-Lined Polyolefin Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.15 in, 0.22 in, 0.37 in, 0.43 in, 0.5 in, 0.6 in, 0.65 in, 1 in, 1.5 in Inner Diameter After Shrink (Metric): 3.8 mm, 5.6 mm, 9.4 mm, 10.9 mm, 12.7 mm, 15.2 mm, 16.5 mm, 25.4 mm, 38.1 mm Inner Diameter Before Shrink (Imperial): 0.4 in, 0.8 in, 1.1 in, 1.3 in, 1.5 in, 1.7 in, 2 in, 3 in, 4.3 in Inner Diameter Before Shrink (Metric): 10.2 mm, 20.3 mm, 27.9 mm, 33 mm, 38.1 mm, 43.2 mm, 50.8 mm, 76.2 mm, 109.2 mm Material: Cross-linked Polyolefin Maximum Operating Temperature (Celsius): 100 °C, 110 °C Maximum Operating Temperature (Fahrenheit): 230 °F Minimum Expanded Tubing I. D.: 0.4 in, 0.8 in, 1.1 in, 1.3 in, 1.5 in, 1.7 in, 2 in, 3 in, 4.3 in Operating Temperature (Celsius): -55 to 100 Degrees Celsius Operating Temperature (Fahrenheit): -67 °F to 230 °F Operating Temperature Range (Celsius): -55 °C to +105 °C Operating Temperature Range (Fahrenheit): -67 °F to 230 °F Product Color: Black Recovered Inner Diameter: 0.15 in, 0.22 in, 0.37 in, 0.43 in, 0.5 in, 0.6 in, 0.65 in, 1 in, 1.5 in Recovered Inner Diameter (Metric): 3.8 mm, 5.6 mm, 9.4 mm, 10.9 mm, 12.7 mm, 15.2 mm, 16.5 mm, 25.4 mm, 38.1 mm Shrink Ratio: 3:1 Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul Tubing Type: Medium Wall

Units per Case: 15.0,1.0,10.0,20.0 Voltage Rating: 1 kV eClass 14 Classification Group: 27400105

### **Dimensions and Classifications**

Overall Length (Imperial): 25 ft, 48 in Overall Length (Metric): 1.22 m, 7.62 m

## 3M<sup>™</sup> PanelSafe<sup>™</sup> Lockout Systems

#### Details

Offers efficient lockout to electrical circuits prior to servicing and maintenance Safeguards your electrical machines and lighting and equipment Pins in the lockout system allow for simultaneously locking off multiple circuits Can purchase as entire system or buy specialized pins, shims and adaptors individually

#### **Typical properties**

Breaker Spacing: 3/4 Inch,1-1/4 Inch,1-3/8 Inch,1 Inch,1-1/2 Inch Case Quantity: 1,15,5,5 pair,1 Pair Number of Poles: 3, 6, 7, 8, 9, 10, 12, 15, 16, 18, 20, 21 Number of Slots: 3, 6, 7, 8, 9, 10, 12, 15, 16, 18, 20, 21 Pin Spacing (Imperial): 0.75 in, 1 in, 1.24 in, 1.375 in, 1.5 in Pin Spacing (Metric): 19.05 mm, 25.4 mm, 31.496 mm, 34.925 mm, 38.1 mm Product Type: Bracket, Breaker Lockout, Holder, Pin, Shim, System eClass 14 Classification Group: 15090900

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Grease-Filled Butt Connectors

#### **Typical properties**

Barrel Inside Diameter: 0.07 inch Body Material: Copper Alloy Connector Type: Butt Fork Type: Standard Insulation Material: Nylon, Nylon with Insulation Grip Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Product Color: Red eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 1.02 in, 1.06 in, 1.23 in Overall Length (Metric): 25.908 mm, 26.94 mm

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Female Disconnects

#### Details

Non-insulated, butted-seam barrel with a beveled mouth offers easy insertion of wires

This high-temperature female disconnect terminal has dents and rolled edges to allow for excellent holding force

Allows for quick and easy disconnect of wires

Accommodates wire sizes 16 to 14 AWG

Made of durable steel for high-temperature applications and has corrosionresistant nickel plating

Withstands a maximum temperature of 900 degrees F (482 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.085 Inch.0.095 Inch Barrel Length (Imperial): 0.25 Inch, 0.23 Inch Barrel Style: Butted Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm **Disconnect Type: Female** Fastener Orientation: Female Insulation Material: Non-insulated Mates with Female Width: 0.187 Inch, 0.25 Inch, 0.250 Inch Mates with Male Tab Width (W'): 0.187 Inch, 0.25 Inch, 0.250 Inch Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup> Minimum Conductor Size (Imperial): 16 AWG Minimum Conductor Size (Metric): 1.5 mm<sup>2</sup> Pad Width: 0.187 in. 0.25 in Product Color: Metal Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250 Terminal Style: High Temp **Terminal Type: Disconnect** Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.58 in, 0.64 in Overall Length (Metric): 16.256 mm Overall Width (Imperial): 0.25 in

## Scotch™ Bundling Wrap, RF3740, 0.75 in x 12 ft (19,0 mm x 3,6 m) Black

3M ID 70006911567 UPC 00051141380551

#### Details

Use for household, garden and garage organization Great for securing and holding bulky items Ideal for organizing like items together Self-fastening, adjustable design for a versatile hold Holds bulky items together Reuse again and again Quick, convenient organization Intended for indoor use Size: 3/4 in. x 12 ft Color: Black

#### **Typical properties**

Brands: Scotch<sup>™</sup> Factory ISO Certification: No ISO Certification information available Good For Outdoors: No Indoor/Outdoor: Indoor Package Contents: 1 Roll/Pack Product Color: Black Tensile Strength (Imperial): 175 lbs Tensile Strength (Metric): 79.379 kg Weight Capacity: N/A eClass 14 Classification Group: 27140702

#### **Dimensions and Classifications**

Overall Length (Imperial): 12 ft Overall Length (Metric): 3.6 m Overall Width (Imperial): 0.75 in

#### Details

Standard barrel ensures a secure fit and offers reliable performance Barrel sealing caps are color coded to help to indicate the wire guage Made of aluminum for good conductivity and tin plating for corrosion resistance Rated for 35 kV voltage applications UL Listed and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Length (Imperial): 3.38 in,1.5 in,3 in,1.94 in,2.25 in,4.62 in Barrel Length (Metric): 117.4 mm, 38.1 mm, 49.2 mm, 57.2 mm, 76.2 mm, 85.9 mm Barrel Style: Standard Barrel Brands: Scotchlok™ Case Quantity: 6,10 Center of Hole to Center of Hole: 1.75 Inch Center of Hole to Center of Hole (Metric): 44.5 mm Center of Hole to End of Pad: 0.62 Inch Center of Hole to End of Pad (Metric): 15.7 mm Compatible Conductor Size (Imperial): 1/0 AWG, 1000 kcmil, 2 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 500 kcmil, 600 kcmil, 750 kcmil Compatible Conductor Size (Metric): 120 mm<sup>2</sup>, 150 mm<sup>2</sup>, 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 300 mm<sup>2</sup>, 35 mm<sup>2</sup>, 400 mm<sup>2</sup>, 50 mm<sup>2</sup>, 500 mm<sup>2</sup>, 95 mm<sup>2</sup> Connector Description: Two hole For Use With: Aluminum or Copper Conductors Inside Diameter (Imperial): 0.414 in, 0.439 in, 0.484 in, 0.547 in, 0.594 in, 0.65 in, 0.72 in, 0.843 in, 0.92 in, 1.03 in, 1.19 in Inside Diameter (Metric): 10.5 mm,11.2 mm,16.5 mm,26.2 mm,18.3 mm,23.4 mm,15.1 mm,13.9 mm,12.3 mm,30.2 mm,21.4 mm Lug Type: Compression Lugs Material: Aluminum Maximum Conductor Size (Imperial): 1/0 AWG, 1000 kcmil, 2 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 500 kcmil, 600 kcmil, 750 kcmil Maximum Operating Voltage: 35 Kilovolt Number of Stud Holes: 2 Outer Diameter (Imperial): 0.64 in, 0.687 in, 0.76 in, 0.875 in, 0.906 in, 1.01 in, 1.105 in, 1.32 in, 1.43 in, 1.5 in, 1.84 in Pad Length (Imperial): 3.25 in, 3.38 in, 3.56 in, 3.62 in Pad Length (Metric): 82.6 mm, 85.8 mm, 90.4 mm, 92.0 mm Pad Width: 0.88 in, 0.94 in, 1.06 in, 1.19 in, 1.25 in, 1.38 in, 1.5 in, 1.75 in, 2.44 in Pad Width (Metric): 22.4 mm, 23.8 mm, 26.9 mm, 30.2 mm, 31.8 mm, 35.1 mm, 38.1 mm, 44.5 mm, 62 mm Product Color: Black, Brown, Dark Blue, Olive, Pink, Red, Ruby, White, Yellow Product Series: 40000 Stud Sizes: 1/2 Inch, 3/8 Inch Units per Case: 10.0,6.0 eClass 14 Classification Group: 15090900

## **Dimensions and Classifications**

Overall Length (Imperial): 5.28 in, 5.5 in, 6 in, 6.56 in, 7.31 in, 7.75 in, 8.25 in, 9.68 in

Overall Length (Metric): 134.1 mm, 139.7 mm, 152.4 mm, 166.6 mm, 185.7 mm, 196.9 mm, 209.6 mm, 245.8 mm

#### Details

Brown polypropylene-insulated connector Suitable for general purpose electrical connections on an auto, boat, van or trailer Accommodates 18 to 16 AWG solid/stranded or 14 AWG stranded UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok™ CSA File Number: LR15503, LR32411 Case Quantity: 1000 Conductor Sizes (Imperial): 10 AWG (Run), 12 AWG (Run), 14 AWG (Tap). 18 AWG (Tap) Conductor Sizes (Metric): 1 mm<sup>2</sup> (Tap), 2.5 mm<sup>2</sup> (Tap), 4 mm<sup>2</sup> (Run), 6 mm<sup>2</sup> (Run) Connection Type: Run & Tap Connector / Connector Tool: 3M Crimping Tool E-9BM and/or 9" Lineman's Pliers **Connector Style: Insulation Displacement** Flame Retardant: Yes Grease Filling Against Corrosion: No, Yes Insulation Color: Brown Insulation Material: Polypropylene Interrupt Free Shifting: No Material: Insulator: FR Polypropylene, U-contact: Tin-plated Brass Max. Number of Cores: 2 Maximum Conductor Size (Imperial): 10 AWG (Run), 14 AWG (Tap) Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup> (Tap), 6 mm<sup>2</sup> (Run) Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG (Run), 18 AWG (Tap) Minimum Conductor Size (Metric): 1 mm<sup>2</sup> (Tap), 4 mm<sup>2</sup> (Run) Moisture Resistant: No Package Quantity: 1000 Product Color: Brown Product Type: Connector, Run & Tap Recommended Crimping Tool: E-9BM or 9 in. Linemans Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.19 in Run Maximum Insulation Outer Diameter (Metric): 4.8 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.19 in Tap Maximum Insulation Outer Diameter (Metric): 4.8 mm UL File Number: E23438 Units per Case: 250.0,1000.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Brazed Seam Butt Connectors

#### Details

Non-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Built-in wire stop for correct positioning Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals 600V-rated for building wire and 1000V for signs, fixtures or luminaires

#### **Typical properties**

Barrel Inside Diameter: 0.175 Inch,0.090 Inch Barrel Length (Imperial): 0.25 Inch, 0.38 Inch Barrel Style: Brazed, Butted Body Material: Copper Alloy CSA File Number: LR22190 Conductor Sizes (Imperial): 8 AWG Connector Type: Butt Insulation Material: Non-insulated Material: ETP Copper Maximum Conductor Size (Imperial): 10 AWG, 16 AWG, 18 AWG, 4 AWG, 6 AWG. 8 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 10 mm<sup>2</sup>, 16 mm<sup>2</sup>, 25 mm<sup>2</sup>, 6 mm<sup>2</sup> Minimum Conductor Size (Imperial): 12 AWG, 14 AWG, 22 AWG, 4 AWG, 6 AWG, 8 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 10 mm<sup>2</sup>, 16 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 25 mm<sup>2</sup>,  $4 \text{ mm}^2$ Product Color: Metal Solution for: Wireless Network: Infrastructure Accessories **Terminal Style: Standard Terminal Type: Butt Connectors** UL File Number: E23438 Units per Case: 500.0,100.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.56 in, 0.81 in, 1.02 in, 1.13 in Overall Length (Metric): 20.574 mm

## 3M<sup>™</sup> Secure Grip Wire Connectors

#### Details

Robust spring design for high performance holding power Accommodates a wire range of 1,5 - 2,5 mm2 solid or stranded

#### **Typical properties**

Brands: 3M<sup>™</sup> Maximum Conductor Size (Imperial): 10 AWG, 12 AWG, 6 AWG, 8 AWG Maximum Conductor Size (Metric): 10 mm², 16 mm², 4 mm², 6 mm² Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Minimum Conductor Size (Imperial): 14 AWG, 18 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm², 1 mm², 2.5 mm² Product Color: Assorted, Blue, Green, Red, Tan, Yellow Specifications Met: CSA, UL Listed Voltage Rating: 600 V,0 NP Wire Connector Type: Twist-on Wire Connectors eClass 14 Classification Group: 27400215

## 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5660 Series

#### Details

Provides a void-free seal to power cables high dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications Termination has 0.84 to 1.33-in O.D. insulation Accommodates wire size of 3/0 AWG to 500 kcmil Silicone sealing compounds provide constant radial pressure Comes with sufficient materials to make 1 termination Withstands voltages up to 15 kV and is 110 kV BIL-rated

#### **Typical properties**

BIL: 110 kV Brands: 3M<sup>™</sup> Breakout Boot: No Cable Insulation Outside Diameter Range: 0.84-1.33 in Cable Insulation Outside Diameter Range (Metric): 21.3-33.8 mm Cable Shielding: Concentric Neutral (CN) Indoor/Outdoor: Outdoor Skirted Insulation Outer Diameter (Imperial): 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in Insulation Outer Diameter (Metric): 21.3 mm Insulation Rejacketing: No Number of Conductors: 1 Number of Skirts: 4 Product Series: 5660 Voltage: 15 kV, 5 kV, 8 kV eClass 14 Classification Group: 27400102

## 3M<sup>™</sup> Cold Shrink QS4 Integrated Splice Kits 25-JCN Series

#### Details

Inline splice for joining JCN and flat strap neutral power cables Special-electrode design reduces electrical stress at critical cable and splice interface

Designed for feeder and distribution circuits, size transition splicing, direct-burial installations and submerged locations

Rated for 25/28 kV applications

Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

#### **Typical properties**

Application: Cable Connection Cable Shielding: Jacketed Concentric Neutral (JCN) Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in. 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Insulation Outside Diameter Range (Metric): 21.3 - 34.5 mm Number of Conductors: 1 Product Color: Black Splice Type: Cold Shrink Voltage: 25/28 kV eClass 14 Classification Group: 27400107

## 3M<sup>™</sup> Cold Shrink Splice Kit QS-III Series 5545A, Longitudinally Corrugated, 46kV, 4/0-1000 kcmil (120-500 mm<sup>2</sup>), 1/case

3M ID 7100022471 UPC 00051128550892

#### Details

Perfect to use with standard copper or aluminum inline compression connectors Specially designed to splice tape, wire, LC and UniShield ® power cable Rated for 46 kV applications EPDM rubber jacket for unique physical property Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Shielding: Longitudinally Corrugated (LC) Voltage: 46 kV eClass 14 Classification Group: 27400107

#### Details

Rubber sleeve with sealing mastic provides a water-resistant sealing Factory-expanded for easy installation For direct-bury, secondary low-voltage, non-shielded cable splices Rated for up to 1 kV applications Splices both aluminum and copper conductors RoHS 2011/65/EU Compliant and ANSI Certified

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Outside Diameter (Metric): 19 mm Cable Shielding: Non-shielded Cable Type: Power Cable Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1000 kcmil, 2 AWG Conductor Sizes (Metric): 35 mm<sup>2</sup>, 500 mm<sup>2</sup> Connector Included: No Connector Maximum Outside Diameter: 0.687 in Connector Maximum Outside Diameter (Metric): 17.0 mm Dielectric Strength (V/mil): 365 V/mil Elongation: 750 % For connection of paper - with plasticinsulated cables: No Indoor/Outdoor: Both Insulation O.D. Range: 0.20-0.75 in, 0.40-1.60 in Insulation O.D. Range (Metric): 5-19 mm,10-41 mm Insulation Outer Diameter (Imperial): 0.2 in, 0.21 in, 0.22 in, 0.23 in, 0.24 in, 0.25 in, 0.26 in, 0.27 in, 0.28 in, 0.29 in, 0.3 in, 0.31 in, 0.32 in, 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in Insulation Outer Diameter (Metric): 5.08 mm, 5.334 mm, 5.588 mm, 5.842 mm, 6.096 mm, 6.35 mm, 6.604 mm, 6.858 mm, 7.112 mm, 7.366 mm, 7.62 mm, 7.874 mm, 8.128 mm, 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm,

16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm. 34.544 mm. 34.798 mm. 35.052 mm. 35.306 mm. 35.56 mm. 35.814 mm. 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm Maximum Conductor Size (Imperial): 1000 kcmil (Copper), 2/0 AWG, 500 kcmil (Aluminum) Maximum Conductor Size (Metric): 240 mm<sup>2</sup> (Aluminum), 500 mm<sup>2</sup> (Copper), 70 mm<sup>2</sup> Maximum Connector Length: 2.50 in, 4.25 in Maximum Connector Length (Metric): 108 mm, 63 mm Maximum Connector O.D.: 0.687 in, 1.500 in Maximum Connector O.D. (Metric): 17 mm, 38 mm Minimum Conductor Size (Imperial): 2 AWG (Aluminum), 2 AWG (Copper), 8 AWG Minimum Conductor Size (Metric): 10 mm<sup>2</sup>, 35 mm<sup>2</sup> (Aluminum), 35 mm<sup>2</sup> (Copper) Model: Cold Shrink Number of Conductors: 3 Product Color: Black Splice Type: Inline Voltage: 1 kV Voltage Rating: 0.6/1 kV eClass 14 Classification Group: 27400107

#### **Dimensions and Classifications**

Overall Diameter (Metric): 41 mm Overall Length (Metric): 108 mm

#### Details

Designed for jacketing inline splices on jacketed concentric neutral (JCN) cables Resists fungus, acids and alkalis

Suitable for use on direct burial, aerial and submersible applications Cold shrink jackets made of EPDM rubber provides moisture resistance and

durabilitv

Includes Cold Shrink sealing sleeves, Scotch 2228 rubber mastic tape and a profile bushing

Water resistant - meets the water seal requirements of ANSI C119.1

#### **Typical properties**

Cable Shielding: Jacketed Concentric Neutral (JCN) Conductor Sizes (Imperial): 2 AWG, 3/0 AWG, 400 kcmil Conductor Sizes (Metric): 185 mm<sup>2</sup>, 35 mm<sup>2</sup>, 95 mm<sup>2</sup> Insulation Outer Diameter (Imperial): 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in, 2.33 in, 2.34 in, 2.35 in, 2.36 in, 2.37 in, 2.38 in, 2.39 in, 2.4 in, 2.41 in, 2.42 in, 2.43 in, 2.44 in, 2.45 in, 2.46 in, 2.47 in, 2.48 in, 2.49 in, 2.5 in, 2.51 in, 2.52 in, 2.53 in, 2.54 in, 2.55 in, 2.56 in, 2.57 in, 2.58 in, 2.59 in, 2.6 in, 2.61 in, 2.62 in, 2.63 in, 2.64 in, 2.65 in, 2.66 in, 2.67 in, 2.68 in, 2.69 in, 2.7 in, 2.71 in, 2.72 in, 2.73 in, 2.74 in, 2.75 in, 2.76 in, 2.77 in, 2.78 in, 2.79 in, 2.8 in, 2.81 in, 2.82 in, 2.83 in, 2.84 in, 2.85 in, 2.86 in, 2.87 in, 2.88 in, 2.89 in, 2.9 in, 2.91 in, 2.92 in, 2.93 in, 2.94 in, 2.95 in, 2.96 in, 2.97 in, 2.98 in, 2.99 in, 3 in, 3.01 in, 3.02 in, 3.03 in, 3.04 in, 3.05 in, 3.06 in, 3.07 in, 3.08 in, 3.09 in, 3.1 in, 3.11 in, 3.12 in, 3.13 in, 3.14 in, 3.15 in, 3.16 in, 3.17 in, 3.18 in, 3.19 in, 3.2 in, 3.21 in, 3.22 in, 3.23 in, 3.24 in, 3.25 in, 3.26 in, 3.27 in, 3.28 in, 3.29 in, 3.3 in, 3.31 in, 3.32 in, 3.33 in, 3.34 in, 3.35 in, 3.36 in, 3.37 in, 3.38 in, 3.39 in, 3.4 in, 3.41 in, 3.42 in, 3.43 in, 3.44 in, 3.45 in, 3.46 in, 3.47 in, 3.48 in, 3.49 in, 3.5 in, 3.51 in, 3.52 in, 3.53 in, 3.54 in, 3.55 in, 3.56 in, 3.57 in, 3.58 in, 3.59 in, 3.6 in, 3.61 in. 3.62 in

Insulation Outer Diameter (Metric): 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496

mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm, 59.182 mm, 59.436 mm, 59.69 mm, 59.944 mm, 60.198 mm, 60.452 mm, 60.706 mm, 60.96 mm, 61.214 mm, 61.468 mm, 61.722 mm, 61.976 mm, 62.23 mm, 62.484 mm, 62.738 mm, 62.992 mm, 63.246 mm, 63.5 mm, 63.754 mm, 64.008 mm, 64.262 mm, 64.516 mm, 64.77 mm, 65.024 mm, 65.278 mm, 65.532 mm, 65.786 mm, 66.04 mm, 66.294 mm, 66.548 mm, 66.802 mm, 67.056 mm, 67.31 mm, 67.564 mm, 67.818 mm, 68.072 mm, 68.326 mm, 68.58 mm, 68.834 mm, 69.088 mm, 69.342 mm, 69.596 mm, 69.85 mm, 70.104 mm, 70.358 mm, 70.612 mm, 70.866 mm, 71.12 mm, 71.374 mm, 71.628 mm, 71.882 mm, 72.136 mm, 72.39 mm, 72.644 mm, 72.898 mm, 73.152 mm, 73.406 mm, 73.66 mm, 73.914 mm, 74.168 mm, 74.422 mm, 74.676 mm, 74.93 mm, 75.184 mm, 75.438 mm, 75.692 mm, 75.946 mm, 76.2 mm, 76.454 mm, 76.708 mm, 76.962 mm, 77.216 mm, 77.47 mm, 77.724 mm, 77.978 mm, 78.232 mm, 78.486 mm, 78.74 mm, 78.994 mm, 79.248 mm, 79.502 mm, 79.756 mm, 80.01 mm, 80.264 mm, 80.518 mm, 80.772 mm, 81.026 mm, 81.28 mm, 81.534 mm, 81.788 mm, 82.042 mm, 82.296 mm, 82.55 mm, 82.804 mm, 83.058 mm, 83.312 mm, 83.566 mm, 83.82 mm, 84.074 mm, 84.328 mm, 84.582 mm, 84.836 mm, 85.09 mm, 85.344 mm, 85.598 mm, 85.852 mm, 86.106 mm, 86.36 mm, 86.614 mm, 86.868 mm, 87.122 mm, 87.376 mm, 87.63 mm, 87.884 mm, 88.138 mm, 88.392 mm, 88.646 mm, 88.9 mm, 89.154 mm, 89.408 mm, 89.662 mm, 89.916 mm, 90.17 mm, 90.424 mm, 90.678 mm, 90.932 mm, 91.186 mm, 91.44 mm, 91.694 mm, 91.948 mm Maximum Cable Jacket Opening: 35 Inch.31 Inch.23 Inch Maximum Splice O.D.: 3.62 Inch, 1.95 Inch, 3.00 Inch Maximum Splice Outside Diameter: 1.95 in, 3 in, 3.62 in Maximum Splice Outside Diameter (Metric): 49.5, 76.2 Minimum Cable Jacket O.D.: 0.95 in, 1.15 in, 1.55 in Splice Type: Inline, Rejacketing Units per Case: 6.0 Voltage: 15 kV, 25/28 kV, 35 kV eClass 14 Classification Group: 27400107

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Electrical IDC 316IR, Pigtail, Irrigation Applications, Black/White, 22-16 AWG, 30 per carton, 300 /Case

3M ID 7000058271 UPC 00054007504191

#### Details

Helps provide a moisture-resistant seal Suitable for applications requiring moisture and UV protection Accommodates 16 to 14 AWG solid/stranded, 12 AWG stranded (outer ports) and 18 AWG solid/stranded, 20 AWG stranded (inner port) C UL Listed and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok™ Conductor Sizes (Imperial): 16 AWG, 22 AWG Conductor Sizes (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup> **Connection Type: Pigtail** Connector / Connector Tool: 3M Crimping Tool E-9BM, 8" Mechanics (slip joint) Pliers Connector Style: Insulation Displacement Flame Retardant: Yes Grease Filling Against Corrosion: Yes Insulation Color: cap black, body white Insulation Material: Nylon Insulation Outer Diameter (Imperial): 0.155 in Interrupt Free Shifting: No Material: Flame Retardant Nylon Max. Number of Cores: 3 Maximum Conductor Size (Imperial): 16 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup> Moisture Resistant: Yes Package Quantity: 1000 Product Color: Black, White Product Type: Connectors Recommended Crimping Tool: E-9BM Run Maximum Insulation Outer Diameter (Imperial): 0.155 in Run Maximum Insulation Outer Diameter (Metric): 3.9 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.155 in Tap Maximum Insulation Outer Diameter (Metric): 3.9 mm UL File Number: E23438 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

## 3M<sup>™</sup> Scotchcast<sup>™</sup> Sheath Seal Kits

#### Details

Requires no heat Seals the sheath area for 3-conductor cables without ground wires Handles conductors of size 2 to 4/0 AWG RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Accessory Products: Sheath Seal Kits Conductor Sizes (Imperial): 2 - 4/0 AWG (35 - 100 mm<sup>2</sup>), 4/0 AWG - 500 kcmil (120 - 250 mm<sup>2</sup>) Inner Diameter After Shrink (Imperial): 1.2 in, 1.8 in Inner Diameter After Shrink (Metric): 30.5 mm, 45.7 mm Inner Diameter Before Shrink (Imperial): 1.9 in, 3.1 in Inner Diameter Before Shrink (Metric): 48.3 mm, 78.7 mm Insulation O.D. Range: 0.30 - 1.18 in, 0.77 - 1.38 in Insulation O.D. Range (Metric): 19.6 - 35.1 mm, 7.6 - 30.0 mm Insulation/Jacket O.D. Range: 1.20 - 1.90 in, 1.80 - 3.10 in Insulation/Jacket O.D. Range (Metric): 30.5 - 48.3 mm, 45.7 - 78.7 mm Maximum Conductor Size (Imperial): 4/0 AWG, 500 kcmil Maximum Conductor Size (Metric): 100 mm<sup>2</sup>, 250 mm<sup>2</sup> Maximum Jacket Outside Diameter: 1.9 in, 3.1 in Maximum Jacket Outside Diameter (Metric): 48.3 mm, 78.7 mm Minimum Conductor Size (Imperial): 2 AWG, 4/0 AWG Minimum Conductor Size (Metric): 120 mm<sup>2</sup>, 35 mm<sup>2</sup> Units per Case: 1.0 eClass 14 Classification Group: 27400108

## 3M<sup>™</sup> Cable Grounding Kits

#### Details

Provides a simple technique for grounding and resealing the jacket of directburied distribution cables Suitable for use with jacketed concentric neutral power cables Rated for up to 35 kV applications UL Listed

#### **Typical properties**

**Application: Cable Connection** Brands: 3M<sup>™</sup> Cable Accessory Products: Sealing and Grounding Kits Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield Conductor Material: Aluminum, Copper **Connector Included: None** Insulation Outside Diameter Range: 0.64 - 1.01 Inch Insulation Outside Diameter Range (Metric): 16.3 - 25.7 mm Maximum Operating Voltage: 35 Kilovolt Number of Conductors: 1 Product Type: Grounding Kit, Splice Splice Type: Inline Typical Splice Length: 28 in Typical Splice Length (Metric): 711 mm Units per Case: 10.0 Voltage: 15 kV Voltage Application: Medium Voltage

#### **Typical properties**

Barrel Inside Diameter: 0.070 Inch.0.135 Inch.0.090 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.25 Inch,0.29 Inch Dimension E: 0.71 Inch,0.84 Inch,0.69 Inch Fork Type: Block Insulated: Yes Insulation Material: Nylon with Insulation Grip Material: ETP Copper, Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 18 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 0.823 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Product Color: Blue, Red, Yellow Stud Diameter (Imperial): 0.138 in Stud Diameter (Metric): 3.505 mm Stud Size: #10,#6,#8 **Terminal Style: Block** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.84 in, 0.86 in, 1.03 in Overall Length (Metric): 21.336 mm, 21.844 mm, 26.162 mm Overall Width (Imperial): 0.25 in, 0.3 in, 0.32 in Overall Width (Metric): 6.35 mm, 7.62 mm, 8.128 mm

#### Details

Reduces vibrations in wire connections to prevent the loosening of connections Resistant towards water, condensation and varying weather conditions RoHS 2002/95/EC Compliant

#### **Typical properties**

**Application: Electrical Maintenance** Case Quantity: 10 Kits,10 Lug/Stem Connector Included in Kit: No Maximum Operating Temperature (Celsius): 105 °C Operating Temperature Range (Celsius): -18 °C to 105 °C, 0 °C to 80 °C, Up to 30 °C Operating Temperature Range (Fahrenheit): 0 to 221 °F, 32 °F to 176 °F, Up to 176 °F Performance Level: Economy, General Use, Professional Grade Product Color: Black Product Type: Wireless Weatherproofing Kits Self-sticking: Yes Shelf Life: 5 Year Solution for: Wireless Network: Weatherproofing Suitable for High Voltage: No Tape Type: Wireless Weatherproofing Kits UV Resistant: Yes Voltage Application: Low Voltage Vulcanizing: No

# 3M<sup>™</sup> Spacer Web 7820, 15 kV, 1 /Case

3M ID 7000005911 UPC 50054007024151

#### Details

Compatible with re-enterable inline and tap splice kits RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: 3M<sup>™</sup> Operating Voltage: 15 kV Product Type: Resin Splice Splice Type: Resin

#### **Dimensions and Classifications**

Overall Length (Imperial): 20 ft Overall Length (Metric): 6.1 m Overall Width (Imperial): 3 in Overall Width (Metric): 76.2 mm

## Scotch™ Bundling Strap RF3730, .5 in x 8 in (12,7 mm x 20.3 cm) Multi-Color

3M ID 70006911559 UPC 00051141380544

#### Details

Use for household, garden and garage organization Great for securing and holding bulky items Ideal for organizing like items together Self-fastening, adjustable design for a versatile hold Holds bulky items together Reuse again and again Quick, convenient organization Intended for indoor use Size: 1/2 in. x 8 in Color: Assorted Colors

#### **Typical properties**

Brands: Scotch<sup>™</sup> Factory ISO Certification: No ISO Certification information available Good For Outdoors: No Indoor/Outdoor: Indoor Package Contents: 6 Straps/Pack Product Color: Multi-color Tensile Strength (Imperial): 175 lbs Weight Capacity: N/A eClass 14 Classification Group: 27140702

#### **Dimensions and Classifications**

Overall Length (Imperial): 8 in Overall Width (Imperial): 0.5 in

#### Details

intended for use with common thermoplastic insulated wire such as: T, TF, TFF, TFN, TFN, AWM, TEW, SAE GPT with a maximum insulation diameter of 3,5 mm Accommodates 22 to 16 AWG solid/stranded

UL Listed and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok™ CSA File Number: LR15503 Case Quantity: 1000 Conductor Sizes (Imperial): 16 AWG, 22 AWG Conductor Sizes (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup> Connection Type: Pigtail Connector / Connector Tool: 3M Crimping Tool E-9BM and/or 9" Lineman's Pliers **Connector Style: Insulation Displacement** Flame Retardant: Yes Grease Filling Against Corrosion: No Insulation Color: Red Insulation Material: Polypropylene Insulation Outer Diameter (Imperial): 0.12 in Interrupt Free Shifting: No Material: Insulator: FR Polypropylene, U-contact: Tin-plated Brass, Polypropylene, Fitted Contact - Tinned Brass (Body) Max. Number of Cores: 2 Maximum Conductor Size (Imperial): 16 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup> Moisture Resistant: No Product Color: Red Product Type: Connector Recommended Crimping Tool: E-9BM Run Maximum Insulation Outer Diameter (Imperial): 0.12 in Run Maximum Insulation Outer Diameter (Metric): 3.05 mm, 3.1 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.12 in Tap Maximum Insulation Outer Diameter (Metric): 3.05 mm, 3.1 mm UL File Number: E23438 Units per Case: 1000.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

#### Details

Terminates solid dielectric shielded power cables rated 5 to 15 kV Withstands voltages from 5 to 15 kV Comes with sufficient materials to make 3 terminations

#### **Typical properties**

**Application: Cable Termination** Cable Shielding: Concentric Neutral (CN), Tape Shield, UniShield®, Wire Shield Cable Size Range: 1500-3000 kcmil Cable Type: Concentric Neutral (CN) Case Quantity: 3 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Conductor Sizes (Metric): 10 mm<sup>2</sup>, 120 mm<sup>2</sup>, 16 mm<sup>2</sup>, 25 mm<sup>2</sup>, 35 mm<sup>2</sup>, 50 mm<sup>2</sup>, 70 mm<sup>2</sup>, 95 mm<sup>2</sup> For connection of paper - with plasticinsulated cables: No Indoor/Outdoor: Indoor Insulation Level: 1, 100%, 133% Insulation Rejacketing: No Lug/Stem Connector Included in Kit: No Maximum Conductor Size (Imperial): 1000 kcmil, 4/0 AWG Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 500 mm<sup>2</sup> Maximum Installed Length: (Concentric Neutral, 15 kV) 18.50 in, (Concentric Neutral, 5 kV) 11.25 in, (Concentric Neutral, 8 kV) 13.50 in, (UniShield®, 15 kV) 18.50 in, (UniShield®, 5 kV) 11.25 in, (UniShield®, 8 kV) 13.50 in, (Wire Shielded Cable, 15 kV) 20.00 in, (Wire Shielded Cable, 5 kV) 12.75 in, (Wire Shielded Cable, 8 kV) 15.00 in, Wire Shielded Cable: 15 kV: 20 in/Unishield: 15 kV: 18.5 in/Concentric Neutral: 15 kV: 18.5 in, Wire Shielded Cable: 5 kV: 12.75 in Minimum Conductor Size (Imperial): 8 AWG, 800 kcmil Minimum Conductor Size (Metric): 10 mm<sup>2</sup>, 405 mm<sup>2</sup> Number of Conductors: 1 Number of Skirts: 0 Product Series: 5700 Product Type: Termination Kit Suitable for High Voltage: No Tape Type: Tape Termination Kit UV Resistant: Yes Voltage: 15 kV, 25/28 kV, 25/28 kV, 15 kV, 28 kV, 5 kV, 5 kV, 15 kV, 8 kV, 8 kV Vulcanizing: No eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Aluminum Connectors CI Series

#### Details

Standard barrel ensures a secure fit and offers reliable performance Built-in solid center oil stop allows for correct positioning For use with the 3M Cable Splice Kits QS-I, QS-II and QS-III Series Made of aluminum for good conductivity and tin plating for corrosion resistance Rated up to 35 kV Meets ANSI C119.4 RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Style: Standard Barrel Body Material: Aluminum Breakout Boot: No Cable Insulation Outside Diameter Range: 0.33-0.50 in Cable Insulation Outside Diameter Range (Metric): 8.4-12.7 mm Case Quantity: 10 Compatible With: 5420, 5450 & 5451A, 5451R, 5451R Splice Body, 5461, Molded Rubber Splices 15 kV, Molded Rubber Splices 15 kV and 25 kV, Molded Rubber Splices 25 kV Conductor Sizes (Imperial): 2 AWG, 4 AWG, 6 AWG, 8 AWG **Connector Base Metal: Aluminum Connector Type: Compression Connectors** Electrical Connector Type: Compression Connectors For Use With: Aluminum or Copper Conductors Indoor/Outdoor: Indoor Non-skirted Insulation Rejacketing: Yes Lug/Stem Connector Included in Kit: No Maximum Conductor Size (Imperial): 1/0 AWG (Stranded), 2 AWG (Stranded), 2/0 AWG (Stranded), 250 kcmil (Stranded), 3/0 AWG (Stranded), 350 kcmil (Stranded), 4 AWG (Stranded), 4/0 AWG (Stranded), 500 kcmil (Compact), 500 kcmil (Stranded), 750 kcmil (Stranded) Maximum Conductor Size (Metric): 120 mm<sup>2</sup> (Stranded), 185 mm<sup>2</sup> (Stranded), 240 mm<sup>2</sup> (Compact), 240 mm<sup>2</sup> (Stranded), 25 mm<sup>2</sup> (Stranded), 35 mm<sup>2</sup> (Stranded), 400 mm<sup>2</sup> (Stranded), 50 mm<sup>2</sup> (Stranded), 70 mm<sup>2</sup> (Stranded), 95 mm<sup>2</sup> (Stranded Maximum Installed Length: 8.50 in Maximum Operating Voltage: 35 Kilovolt Minimum Conductor Size (Imperial): 1/0 AWG, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 350 kcmil, 4 AWG, 4/0 AWG, 450 kcmil, 500 kcmil, 650 kcmil, 750 kcmil Minimum Conductor Size (Metric): 120 mm<sup>2</sup>, 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 25 mm<sup>2</sup>, 329 mm<sup>2</sup>, 35 mm<sup>2</sup>, 400 mm<sup>2</sup>, 50 mm<sup>2</sup>, 70 mm<sup>2</sup>, 95 mm<sup>2</sup> Number of Conductors: 3 Number of Skirts: 0 Outer Diameter (Imperial): 0.64 in, 0.91 in, 1.12 in, 1.32 in, 1.59 in Product Series: 7600-T-RJS, CI Series, CI-A Series Solution: constructionindconnectors eClass 14 Classification Group: 27400212

### **Dimensions and Classifications**

Overall Length (Imperial): 2 in, 3 in, 3.7 in, 3.75 in, 4.25 in, 4.66 in, 9 in Overall Length (Metric): 50.8 mm, 76.2 mm, 94 mm, 95.3 mm, 107.9 mm, 118.4 mm, 228.6 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated with Insulation Grip Male Disconnects

#### Details

This male disconnect terminal offers excellent holding force Allows for quick and easy disconnect of wires Made of electrolytic copper for good conductivity and has corrosion-resistant tin plating Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.25 Inch,0.170 Inch,0.145 Inch,0.17 Inch,0.250 Inch Barrel Length (Imperial): 0.25 Inch, 0.24 Inch Barrel Style: Butted Bullet Diameter: 0.180.0.156 CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.187 in, 0.25 in Connection Width (Metric): 4.75 mm, 6.35 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.39 Inch,0.3 Inch,0.30 Inch Disconnect Type: Male Fastener Orientation: Male Grease Filling Against Corrosion: No Insulation Color: Blue, Red, Yellow Insulation Material: Nvlon with Insulation Grip Male Tab Width (W'): 0.187 Inch, 0.25 Inch, 0.250 Inch Material: ETP Copper, Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.187 in, 0.25 in Product Color: Blue, Red, Yellow Tab Width: 0.250,0.187 **Terminal Style: Fully Insulated** Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 Voltage Application: Low Voltage

eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.3 in, 0.39 in Overall Length (Imperial): 0.87 in, 0.95 in, 1.05 in Overall Length (Metric): 22.098 mm, 24.13 mm, 26.67 mm Overall Width (Imperial): 0.37 in, 0.44 in, 0.47 in Overall Width (Metric): 9.398 mm, 9.4 mm, 11.17 mm, 11.93 mm

# 3M<sup>™</sup> Industrial Loadbreak Protective Caps

3M ID B00049313

#### Details

Electrically insulates and mechanically seals loadbreak bushing interfaces Provides fully shielded, insulating cover for energized bushings Suitable for permanent or temporary installation on bushings, junctions or feedthru devices Meets ANSI/IEEE Standard 386 requirement

#### **Typical properties**

Brands: 3M<sup>™</sup> Separable Connector Type: Load Break Elbows eClass 14 Classification Group: 27440308

#### Details

Strong bite for a secure, reliable connection Flexible spring expands for greater wire range and reuse Dual color coded: one connector does the job of two traditional connectors in the majority of applications UL Listed

#### **Typical properties**

Boxes per Case: 10.0,20.0,8.0 Case Quantity: 1,000,40,000,10,000,25,000,6,000 Conductor Sizes (Imperial): 14 - 6 AWG, 22 - 12 AWG, 22 - 8 AWG Connection Type: Pigtail, Wire Connector Style: Twist On Flame Retardant: Yes Grease Filling Against Corrosion: No Insulation Color: Blue/Gray, Orange/Blue Insulation Material: Polypropylene & Thermoplastic Elastomer Interrupt Free Shifting: No Material: Plastic Maximum Conductor Size (Imperial): 12 AWG, 6 AWG, 8 AWG Maximum Conductor Size (Metric): 10 mm<sup>2</sup>, 16 mm<sup>2</sup>, 4 mm<sup>2</sup> Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 V, 600 V (1000 V in signs, lighting fixtures and luminaries) Minimum Conductor Size (Imperial): 14 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Product Color: Blue, Gray, Orange, Red, Tan, Yellow Product Type: Connector Specifications Met: CSA, UL Listed Units per Case: 40000.0,10000.0,4000.0,1000.0,17000.0,25000.0 Voltage: 750 V Voltage Rating: 600 V Wire Connector Type: Twist-on Wire Connectors eClass 14 Classification Group: 27400215

## 3M<sup>™</sup> Connector Drivers

#### Details

Spins on the connector for ease and speed of installation Straight wings and slip-resistant ridges for secure, comfortable grip Available in yellow, tan, green (grounding), red and blue UL Listed

#### **Typical properties**

Brands: 3M<sup>™</sup> Connector / Connector Tool: Connector Tool Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Product Color: Red Product Type: Tool Voltage Rating: 0 NP Wire Connector Type: Wire Connector Tools eClass 14 Classification Group: 27400215

# 3M<sup>™</sup> Cross-Arm Mounting Brackets

3M ID B00028150

#### Details

Galvanized steel construction for durability Used in conjuction with MB and MBS Series mounting brackets Designed for supporting terminated cable RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: 3M<sup>™</sup> eClass 14 Classification Group: 15090300

# 3M<sup>™</sup> Heat Shrink Tubing PSTH

#### Details

Specially designed for harsh operating conditions Resists a wide range of solvents and chemicals, such as aviation fuel, diesel fuel, lubricating oils and hydraulic fluid Suitable for heavy-duty equipment, off-road vehicles and wire-harnessing applications on military ground vehicles Made of black flexible elastomeric polyester Withstands temperatures of -70 to 302 degrees F (-55 to 150 degrees C) Flame-retardant

#### **Typical properties**

Agency Approvals: SC-X15111C Applicable SAE-AMS-DTL-23053 Specifications: 23053/16 Dielectric Strength: 500 V/mil Elongation: 350 % Expanded Inner Diameter: 0.375 in Expanded Inner Diameter (Metric): 9.53 mm Flammability Rating: Self-Extinguishing Heat Shrink Type: Specialty Polymer Tubing Inner Diameter After Shrink (Imperial): 0.125 in, 0.187 in, 0.25 in, 0.313 in, 0.375 in, 0.437 in, 0.625 in, 0.75 in Inner Diameter After Shrink (Metric): 3.17 mm, 4.75 mm, 6.35 mm, 7.95 mm, 9.53 mm, 11.1 mm, 15.87 mm, 19.05 mm Inner Diameter Before Shrink (Imperial): 0.25 in, 0.375 in, 0.5 in, 0.625 in, 0.75 in, 0.875 in, 1.25 in, 1.5 in Inner Diameter Before Shrink (Metric): 6.35 mm, 9.53 mm, 12.7 mm, 15.87 mm, 19.05 mm, 22.22 mm, 31.75 mm, 38.1 mm Material: Flexible Elastomeric Polyester Maximum Operating Temperature (Celsius): 200 °C Maximum Operating Temperature (Fahrenheit): 392 °F Mil Spec: AMS-DTL-23053/16 Minimum Expanded Tubing I. D.: 1 in, 1.25 in, 1.5 in, 3 in, 5 in, 7 in Non-Corrosive: Yes Operating Temperature Range (Celsius): -55 °C to +200 °C Product Color: Black Recovered Inner Diameter: 0.01 in, 0.187 in, 0.75 in, 1 in, 5 in, 7 in Recovered Inner Diameter (Metric): 4.75 mm, 19.05 mm Recovered Inner Diameter Millimetres: 19.05 mm Recovered Wall Thickness: 0.035 in Shrink Ratio: 2:1 Tensile Strength (Imperial): 2200 Pound-Force Per Square Inch Tubing Type: Special Purpose, Flexible Elastomeric Polyester eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 50 ft, 100 ft, 150 ft, 200 ft

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Non-Insulated Seamless Compression Butt Connectors

3M ID B10397992

#### Details

Non-insulated, seamless barrel ensures a secure fit and offers reliable performance Offers electrical connection to a pre-stripped end of a stranded wire Barrel has brown stripes that help to indicate the wire range Accommodates wire size 2 AWG Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

eClass 14 Classification Group: 27400204

# 3M<sup>™</sup> Industrial Loadbreak Bushing Inserts

3M ID B00034535

#### Details

Provides the same function as an integral loadbreak bushing All-copper current path offers high performance Suitable for use in transformers, switches and other apparatus Meets ANSI/IEEE Standard 386 requirement

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Voltage Rating: 15 kV Compatible With: Loadbreak Elbow Kit Series 5810 Separable Connector Type: Load Break Elbows eClass 14 Classification Group: 27440308

#### Details

Standard barrel ensures a secure fit and offers reliable performance Barrel sealing caps are color coded to help to indicate the wire guage Suitable for indoor and outdoor applications

Made of aluminum for good conductivity and tin plating for corrosion resistance Rated for 35 kV applications

#### **Typical properties**

Barrel Length (Imperial): 0.75 in,2.19 in,3.32 in,0.94 in,0.92 in,1.44 in,1.3 in,1.5 in,1.56 in,4.62 in,1.18 in,2.2 in,2.94 in

Barrel Length (Metric): 117.3 mm, 19.1 mm, 23.4 mm, 23.8 mm, 30.0 mm, 33.0 mm, 36.5 mm, 38.1 mm, 39.6 mm, 55.6 mm, 74.6 mm, 84.3 mm Barrel Style: Standard Barrel

Case Quantity: 25,6,50,10

Center of Hole to Center of Hole: 0.625 Inch,0.62 Inch,0.437 Inch Center of Hole to End of Pad: 0.625 Inch,0.88 Inch,0.62 Inch,0.44 Inch Center of Hole to End of Pad (Metric): 11.1 mm, 11.2 mm, 15.7 mm, 15.9 mm, 22.4 mm

Compatible Conductor Size (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 500 kcmil, 6 AWG, 750 kcmil

Compatible Conductor Size (Metric): 120 mm<sup>2</sup>, 150 mm<sup>2</sup>, 16 mm<sup>2</sup>, 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 25 mm<sup>2</sup>, 35 mm<sup>2</sup>, 400 mm<sup>2</sup>, 50 mm<sup>2</sup>, 500 mm<sup>2</sup>, 70 mm<sup>2</sup>, 95 mm<sup>2</sup> Connector Description: One Hole

For Use With: Aluminum or Copper Conductors

Inside Diameter (Imperial): 0.2 in, 0.265 in, 0.307 in, 0.35 in, 0.414 in, 0.439 in, 0.484 in, 0.547 in, 0.594 in, 0.65 in, 0.72 in, 0.843 in, 1.031 in, 1.193 in Inside Diameter (Metric): 10.5 mm,16.5 mm,7.8 mm,26.2 mm,6.7 mm,5.1 mm,13.9 mm,21.4 mm,8.9 mm,11.2 mm,18.3 mm,15.1 mm,30.3 mm,12.3 mm Lug Description: One Hole

Lug Type: Compression Lugs

Material: Aluminum

Maximum Conductor Size (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 500 kcmil, 6 AWG, 750 kcmil

Maximum Operating Voltage: 35 Kilovolt

Number of Stud Holes: 1

Outer Diameter (Imperial): 0.34 in, 0.47 in, 0.53 in, 0.64 in, 0.69 in, 0.76 in, 0.88 in, 0.91 in, 1.01 in, 1.11 in, 1.32 in, 1.5 in, 1.84 in

Pad Length (Imperial): 0.88 in, 0.96 in, 1.03 in, 1.12 in, 1.25 in, 1.28 in, 1.31 in, 1.34 in, 1.5 in, 1.87 in

Pad Length (Metric): 22.3 mm, 24.4 mm, 26.2 mm, 28.4 mm, 31.8 mm, 32.5 mm, 33.2 mm, 33.3 mm, 34.1 mm, 38.1 mm, 47.5 mm

Pad Width: 0.56 in, 0.62 in, 0.75 in, 0.88 in, 0.95 in, 1.06 in, 1.19 in, 1.24 in, 1.38 in, 1.49 in, 1.5 in, 1.72 in, 1.73 in, 2.42 in

Pad Width (Metric): 14.2 mm, 15.7 mm, 19.1 mm, 22.4 mm, 24.2 mm, 26.9 mm, 30.2 mm, 31.4 mm, 34.5 mm, 37.8 mm, 43.6 mm, 43.9 mm, 61.4 mm

Product Color: Brown, Dark Blue, Gold, Gray, Green, Olive, Pink, Red, Ruby, White, Yellow Product Series: 40000 Stud Sizes: 1/2 Inch, 3/8 Inch, 5/16 inch, 5/8 Inch Units per Case: 25.0,50.0,10.0,6.0 eClass 14 Classification Group: 15090900

#### **Dimensions and Classifications**

Overall Length (Imperial): 2.28 in, 2.3 in, 2.56 in, 2.62 in, 3.12 in, 3.19 in, 3.44 in, 3.56 in, 3.62 in, 4 in, 4.25 in, 4.32 in, 5.44 in, 6.38 in, 7.94 in Overall Length (Metric): 57.9 mm, 58.4 mm, 66.5 mm, 66.7 mm, 79.2 mm, 81 mm, 87.4 mm, 90.4 mm, 91.9 mm, 101.6 mm, 108 mm, 109.7 mm, 138.2 mm, 162.1 mm, 201.6 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Electrical IDC 564-BULK, Double Run, White, 18-14 AWG, 500 per carton, 5000/case

3M ID 7000005870 UPC 00054007061182

#### Details

Beige polypropylene-insulated connector for parallel splicing Suitable for control circuit wiring, fixture wiring, appliance wiring, signal and PA systems and automotive/boat/RV wiring Accommodates 18 to 14 AWG solid/stranded (tap) and 12 to 10 AWG solid/stranded (run) UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok™ Conductor Sizes (Imperial): 14 AWG, 18 AWG Conductor Sizes (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Connection Type: Double Run or Tap **Connector Style: Insulation Displacement** Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: White Insulation Material: Polypropylene Insulation Outer Diameter (Imperial): 0.145 in Material: Plastic Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Recommended Voltage Rating: 32 V Minimum Conductor Size (Imperial): 18 AWG Minimum Conductor Size (Metric): 1 mm<sup>2</sup> Moisture Resistant: No Pad Width: 0.25 in Product Color: White Product Type: Double Run Recommended Crimping Tool: E-9BM or 9 in. Linemans Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.145 in Run Maximum Insulation Outer Diameter (Metric): 3.7 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.145 in Tap Maximum Insulation Outer Diameter (Metric): 3.7 mm Units per Case: 500.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Nylon Fully Insulated Female Disconnects

#### Details

Dents and rolled edges of this female disconnect terminal offer excellent holding force

When crimped and shrunk, pre-insulated adhesive-lined polyolefin offers seal resistance to water and salt

Mates with 0.25-in wide male tab

Made of durable brass for good conductivity and has corrosion-resistant tin plating

Withstands a maximum temperature of 221 degrees F (105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.080 Inch,0.165 Inch,0.08 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Connection Type: Wire Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Connector / Connector Tool: Connector Connector Style: Insulation Displacement Diameter (D): 0.23 Inch,0.32 Inch Disconnect Type: Female Fastener Orientation: Female Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Blue, Yellow Insulation Material: Heat Shrink Interrupt Free Shifting: No Male Tab Width (W'): 0.25 Inch, 0.250 Inch Material: ETP Copper Mates with Male Tab Width (W'): 0.25 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.25 in Product Color: Blue, Yellow Tab Width: 0.250,0.187 Terminal Style: Fully Insulated

Terminal Type: Disconnect Units per Case: 250.0,125.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in, 0.32 in Overall Length (Imperial): 1.2 in Overall Length (Metric): 30.48 mm Overall Width (Imperial): 0.37 in, 0.39 in Overall Width (Metric): 9.4 mm

# 3M<sup>™</sup> Scotchcast<sup>™</sup> M-Series Cable Repair Kits

#### Details

Features a wraparound mold, which maintains excellent physical and electrical properties

Provides permanent, flexible and moisture-resistant jacket repair For insulation, mechanical protection and repair of cables

Repairs both portable power cables or standard cables

Wraparound mold repairs the jacket without cutting through the cable Works on cables rated up to 2 kV

Includes reusable wraparound mold, flame-retardant compound and accessory materials

#### **Typical properties**

Adhesive Lined: No Application: Insulation, mechanical protection, repair Brands: 3M<sup>™</sup> Cable Accessory Products: Electrical Resins Cable Outside Diameter Range: 1.60-2.50 inch, 1.85-4.00 inch, 1.85-6.00 inch Cable Type: multi core, non shielded, polymeric insulated cable Flame Retardant: Yes Inner Diameter After Shrink (Imperial): 1.6 in, 1.9 in Inner Diameter After Shrink (Metric): 41 mm, 47 mm Inner Diameter Before Shrink (Imperial): 2.5 in, 4 in, 6 in Inner Diameter Before Shrink (Metric): 63 mm, 102 mm, 152 mm Max Repair Length: 13.0-15 inch, 20.0 inch, 32.0 inch Mining Sector Approval: Yes Model: Cast Resin Number of Conductors: 3 Resin Type: SC 2131 Shelf Life: 36 Month Splice Type: Inline Units per Case: 1.0 Voltage: 6 kV Voltage Application: Medium Voltage Voltage Rating: 0.6/1 kV With Screw Connectors: No eClass 14 Classification Group: 27400108

#### **Dimensions and Classifications**

Overall Length (Imperial): 20.1 in, 29.1 in, 44 in Overall Length (Metric): 510 mm, 740 mm, 1118 mm

# 3M<sup>™</sup> Heat Shrink Flexible Polyolefin Tubing EPS-200

#### Details

Dual-wall construction provides abrasion resistance and moisture-seal protection Offers the advantage of integral, adhesive-lined construction

Protects electronic components, automotive, truck and marine wiring splices or bundling of wires

Made of black flexible polyolefin

Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C) Flame-retardant tubing is rated for 600V applications

#### **Typical properties**

Agency Approvals: UL Recognized, CSA Certified Brands: 3M™ Dielectric Strength: 800 V/mil Dielectric Strength (V/mil): 500 V/mil Elongation: 450 % Expanded Inner Diameter: 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 1.5 in, 2 in Expanded Inner Diameter (Metric): 12.70 mm, 19.05 mm, 25.40 mm, 3.18 mm, 38.10 mm, 4.75 mm, 50.80 mm, 6.35 mm, 9.53 mm Flame Retardant: Yes Flammability Rating: UL 224 All Tubing Flame Test, UL 224 All Tubing Flame Test [jacket] Heat Shrink Type: Adhesive-Lined Polyolefin Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.06 in, 0.062 in, 0.093 in, 0.125 in, 0.16 in, 0.187 in, 0.195 in, 0.25 in, 0.375 in, 0.5 in, 0.65 in, 0.75 in, 1 in Inner Diameter After Shrink (Metric): 0.25 mm, 1.52 mm, 1.57 mm, 2.36 mm, 3.18 mm, 4.06 mm, 4.75 mm, 5 mm, 9.53 mm, 12.7 mm, 16.5 mm, 19.05 mm, 25.4 mm Inner Diameter Before Shrink (Imperial): 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 1.5 in, 2 in Inner Diameter Before Shrink (Metric): 3.18 mm, 4.75 mm, 4.8 mm, 6.35 mm, 9.53 mm, 12.7 mm, 19.05 mm, 25.4 mm, 38.1 mm, 50.8 mm Material: Flexible Polyolefin, Polyolefin Maximum Operating Temperature (Celsius): 105 °C, 110 °C Maximum Operating Temperature (Fahrenheit): 230 °F, 275 °F Mil Spec: AMS-DTL-23053/4, Class 2 Minimum Expanded Tubing I. D.: 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 1.5 in, 2 in Non-Corrosive: Yes Operating Temperature (Celsius): -55 °C to 110 °C Operating Temperature (Fahrenheit): -67 °F to 230 °F Operating Temperature Range (Celsius): -55 °C to 110 °C Operating Temperature Range (Fahrenheit): -67 °F to 230 °F Recovered Inner Diameter: 0.063 in, 0.093 in, 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in Recovered Inner Diameter (Metric): 1.6 mm, 2.36 mm, 3.18 mm, 4.75 mm, 6.35 mm, 9.53 mm, 12.7 mm, 19.05 mm, 25.4 mm

Shrink Ratio: 2:1 Tape Type: Barricade Tensile Strength (Imperial): 2100 Pound-Force Per Square Inch UL File Number: E-39100 Units per Case: 25.0,12.0,2.0,3.0,10.0,5.0,75.0,8.0,125.0 eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 6 in, 6 ft, 48 in

# 3M<sup>™</sup> Heat Shrink Multiple-Wall

#### Details

Multiple wall is co-extruded and cross-linked to offer a meltable inner wall Offers a skintight fit and strain-relief sealing of electrical connections, wire splices and components

Provides the advantage of integral, adhesive-lined construction Made of black semi-rigid polyolefin

Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C) Rated for 600V applications

#### **Typical properties**

Agency Approvals: UL Listed, UL Recognized, CSA Certified Applicable SAE-AMS-DTL-23053 Specifications: 23053/4 class 1 Elongation: 4 %, 4 Decibel, 400 % Expanded Inner Diameter: 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in Expanded Inner Diameter (Metric): 12.70 mm, 19.05 mm, 25.40 mm, 3.18 mm, 3.2 mm, 4.8 mm, 6.4 mm, 9.5 mm Flame Retardant: No, Yes Heat Shrink Type: Adhesive-Lined Polyolefin Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.023 in, 0.06 in, 0.062 in, 0.08 in, 0.135 in, 0.187 in, 0.195 in, 0.31 in, 0.313 in, 0.4 in Inner Diameter After Shrink (Metric): 0.6 mm, 1.5 mm, 1.52 mm, 1.57 mm, 2 mm, 2.03 mm, 3.4 mm, 4.75 mm, 5 mm, 7.95 mm, 10.2 mm Inner Diameter Before Shrink (Imperial): 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in Inner Diameter Before Shrink (Metric): 3.18 mm, 3.2 mm, 4.8 mm, 6.4 mm, 9.5 mm, 9.53 mm, 12.7 mm, 19.05 mm, 25.4 mm Material: Polyolefin, Semi-rigid Polyolefin Maximum Operating Temperature (Celsius): 110 °C Maximum Operating Temperature (Fahrenheit): 230 °F Minimum Expanded Tubing I. D.: 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in. 1 in Non-Corrosive: Yes Operating Temperature (Celsius): -55 °C to 110 °C Operating Temperature (Fahrenheit): -67 °F to 230 °F Operating Temperature Range (Celsius): -55 °C to 110 °C Operating Temperature Range (Fahrenheit): -67 °F to 230 °F Product Color: Black, Blue, Brown, Green, Red, White, Yellow Recovered Inner Diameter: 0.023 in, 0.06 in, 0.08 in, 0.135 in, 0.195 in, 0.313 in, 0.4 in Recovered Inner Diameter (Metric): 0.58 mm, 0.6 mm, 1.5 mm, 2 mm, 3.4 mm, 5 mm, 7.95 mm, 10.2 mm Recovered Inner Diameter Millimetres: 0.58 mm, 1.52 mm, 2.03 mm, 3.43 mm, 4.95 mm. 7.94 mm Shrink Ratio: 2.5:1 Tensile Strength (Imperial): 2200 Pound-Force Per Square Inch Tubing Type: Dual Wall (Adhesive Lined) UL File Number: E-157227

Units per Case: 25.0,12.0,5.0 eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 4 ft, 6 in, 48 in Overall Length (Metric): 152 mm, 1219 mm

#### Details

Long barrel ensures a secure fit and offers reliable performance Barrel has colored stripes that help to indicate the wire range Suitable for indoor and outdoor applications Made of copper for good conductivity and tin plating for corrosion resistance Rated for 35 kV applications UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Length (Imperial): 2.19 in, 1.5 in, 1.56 in, 2 in, 1.94 in, 1.44 in, 2.69 in Barrel Length (Metric): 36.5 mm, 38.1 mm, 39.7 mm, 49.2 mm, 50.8 mm, 55.6 mm, 68.2 mm Barrel Style: Long Barrel Brands: Scotchlok™ Case Quantity: 6,10 Center of Hole to Center of Hole: 0.531 Inch,0.66 Inch,0.375 Inch Center of Hole to End of Pad: 0.37 Inch,0.88 Inch,0.66 Inch,0.53 Inch Center of Hole to End of Pad (Metric): 13.4 mm, 16.7 mm, 22.4 mm, 9.5 mm Compatible Conductor Size (Imperial): 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil Compatible Conductor Size (Metric): 120 mm<sup>2</sup>, 150 mm<sup>2</sup>, 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 300 mm<sup>2</sup>, 70 mm<sup>2</sup>, 95 mm<sup>2</sup> **Connector Description: One Hole** For Use With: Copper Conductor Only Inside Diameter (Imperial): 0.43 in, 0.49 in, 0.54 in, 0.59 in, 0.65 in, 0.7 in, 0.76 in, 0.83 in, 0.92 in Inside Diameter (Metric): 11.2 mm, 16.5 mm, 23.4 mm, 19.3 mm, 15.1 mm, 13.9 mm,21.1 mm,12.4 mm,17.8 mm Lug Type: Compression Lugs Material: Copper Maximum Conductor Size (Imperial): 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil Maximum Operating Voltage: 35 Kilovolt Number of Stud Holes: 1 Outer Diameter (Imperial): 0.56 in, 0.62 in, 0.68 in, 0.75 in, 0.81 in, 0.88 in, 0.95 in, 1.06 in, 1.18 in Pad Length (Imperial): 0.89 in, 1.11 in, 1.34 in, 1.75 in Pad Length (Metric): 22.6 mm, 28.2 mm, 34.2 mm, 44.4 mm Pad Width: 0.81 in, 0.91 in, 1 in, 1.11 in, 1.22 in, 1.27 in, 1.41 in, 1.53 in, 1.69 in Pad Width (Metric): 20.6 mm, 23 mm, 25.4 mm, 28.2 mm, 30.9 mm, 32.2 mm, 35.8 mm, 38.9 mm, 42.9 mm Product Color: Black, Blue, Brown, Green, Orange, Purple, Red, White, Yellow Product Series: 31000 Stud Sizes: 1/2 Inch, 3/8 Inch, 5/8 Inch Units per Case: 10.0,6.0 eClass 14 Classification Group: 15090900

#### **Dimensions and Classifications**

Overall Length (Imperial): 2.84 in, 3.13 in, 3.32 in, 3.38 in, 3.78 in, 3.85 in, 4.16 in, 4.5 in, 5.12 in Overall Length (Metric): 72.2 mm, 79.5 mm, 84.4 mm, 85.8 mm, 96 mm, 97.6

mm, 105.7 mm, 114.3 mm, 130 mm

#### Details

Yellow, polypropylene-insulated connector is suitable for tap or parallel splicing Rated for 32V applications Accommodates 18 to 14 AWG solid/stranded RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok™ Case Quantity: 1000 Conductor Sizes (Imperial): 10 AWG (Stranded), 12 AWG Conductor Sizes (Metric): 4 mm<sup>2</sup>, 6 mm<sup>2</sup> (Stranded) Connection Type: Double Run or Tap Connector / Connector Tool: 3M Crimping Tool E-9BM and/or 9" Lineman's Pliers **Connector Style: Insulation Displacement** Flame Retardant: Yes Grease Filling Against Corrosion: No Insulation Color: Yellow Insulation Material: Polypropylene Insulation Outer Diameter (Imperial): 0.19 in Interrupt Free Shifting: No Material: Insulator: FR Polypropylene, U-contact: Tin-plated Brass Max. Number of Cores: 2 Maximum Conductor Size (Imperial): 10 AWG (Stranded), 12 AWG Maximum Conductor Size (Metric): 4 mm<sup>2</sup>, 6 mm<sup>2</sup> (Stranded) Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG Minimum Conductor Size (Metric): 4 mm<sup>2</sup> Moisture Resistant: No Package Quantity: 1000 Product Color: Yellow Product Type: Connector Run Maximum Insulation Outer Diameter (Imperial): 0.19 in Run Maximum Insulation Outer Diameter (Metric): 4.82 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.19 in Tap Maximum Insulation Outer Diameter (Metric): 4.82 mm UL File Number: E23438 Units per Case: 1000.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Nylon Fully Insulated Butted Seam Male Disconnects

#### Details

This male disconnect terminal offers excellent holding force When crimped and shrunk, pre-insulated adhesive-lined polyolefin offers seal resistance to water and salt Mates with 0.25-in wide female tab Made of electrolytic copper for good conductivity and has corrosion-resistant tin plating Withstands a maximum temperature of 221 degrees F (105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.085 Inch,0.065 Inch,0.15 Inch,0.150 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted Bullet Diameter: 0.156 Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Diameter (D): 0.39 Inch,0.3 Inch,0.30 Inch Disconnect Type: Male Fastener Orientation: Male Insulation Color: Blue, Red, Yellow Insulation Material: Heat Shrink Male Tab Width (W'): 0.25 Inch, 0.250 Inch Material: Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.25 in Product Color: Blue, Red, Yellow Tab Width: 0.250,0.110,0.187 Terminal Style: Fully Insulated Terminal Type: Disconnect Units per Case: 250.0,125.0 Voltage Application: Low Voltage eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.3 in, 0.39 in

Overall Length (Imperial): 1.2 in Overall Length (Metric): 30.48 mm Overall Width (Imperial): 0.44 in, 0.47 in Overall Width (Metric): 11.17 mm, 11.93 mm

# 3M<sup>™</sup> Cold Shrink Splice Jacket Kits

#### Details

The versatile 1-piece design offers quick installation Resists fungus, acids and alkalis Suitable for direct burial, aerial and submersible applications Cold shrink jacket made of EPDM rubber provides moisture resistance and durability Includes Cold Shring sealing sleeve and Scotch 2228 rubber mastic tape

Water resistant - meets the water seal requirements of ANSI C119.1

#### **Typical properties**

**Application: Cable Connection** Cable Insulation Outside Diameter Range: 0.91-1.06 in Cable Insulation Outside Diameter Range (Metric): 23.0-26.8 mm Cable Shielding: Jacketed Concentric Neutral (JCN) Cable Type: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Conductor Sizes (Imperial): 1 AWG (Solid), 1 AWG (Stranded), 1/0 AWG (Solid), 1/0 AWG (Stranded), 2 AWG (Stranded), 2/0 AWG, 2/0 AWG (Stranded), 600 kcmil Conductor Sizes (Metric): 300 mm<sup>2</sup>, 35 mm<sup>2</sup> (Stranded), 50 mm<sup>2</sup> (Solid), 50 mm<sup>2</sup> (Stranded), 70 mm<sup>2</sup>, 70 mm<sup>2</sup> (Stranded) Connector Included: None Dielectric Strength (V/mil): 490 V/mil Elongation: 635 % For Use With: 3M<sup>™</sup> 5400 Series Cold Shrink Splices Insulation Outer Diameter (Imperial): 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in, 2.33 in, 2.34 in, 2.35 in, 2.36 in, 2.37 in, 2.38 in, 2.39 in, 2.4 in, 2.41 in, 2.42 in, 2.44 in, 2.45 in, 2.46 in, 2.47 in, 2.48 in, 2.49 in, 2.5 in, 2.51 in, 2.52 in, 2.53 in, 2.54 in, 2.55 in, 2.56 in, 2.57 in, 2.58 in, 2.59 in, 2.6 in, 2.61 in, 2.62 in, 2.63 in, 2.64 in, 2.65 in, 2.66 in, 2.67 in, 2.68 in, 2.69 in, 2.7 in, 2.71 in, 2.72 in, 2.73 in, 2.74 in, 2.75 in, 2.76 in, 2.77 in, 2.78 in, 2.79 in, 2.8 in, 2.81 in, 2.82 in, 2.83 in, 2.84 in, 2.85 in, 2.86 in, 2.87 in, 2.88 in, 2.89 in, 2.9 in, 2.91 in, 2.92 in, 2.93 in, 2.94 in, 2.95 in, 2.96 in, 2.97 in, 2.98 in, 2.99 in, 3 in, 3.01 in, 3.02 in, 3.03 in, 3.04 in, 3.05 in, 3.06 in, 3.07 in, 3.08 in, 3.09 in, 3.1 in, 3.11 in, 3.12 in, 3.13 in, 3.14 in, 3.15 in, 3.16 in,

3.17 in, 3.18 in, 3.19 in, 3.2 in, 3.21 in, 3.22 in, 3.23 in, 3.24 in, 3.25 in, 3.26 in, 3.27 in, 3.28 in, 3.29 in, 3.3 in, 3.31 in, 3.32 in, 3.33 in, 3.34 in, 3.35 in, 3.36 in, 3.37 in, 3.38 in, 3.39 in, 3.4 in, 3.41 in, 3.42 in, 3.43 in, 3.44 in, 3.45 in, 3.46 in, 3.47 in, 3.48 in, 3.49 in, 3.5 in, 3.51 in, 3.52 in, 3.53 in, 3.54 in, 3.55 in, 3.56 in, 3.57 in, 3.58 in, 3.59 in, 3.6 in, 3.61 in, 3.62 in, 3.63 in, 3.64 in, 3.65 in, 3.66 in, 3.67 in, 3.68 in, 3.69 in, 3.7 in, 3.71 in, 3.72 in, 3.73 in, 3.74 in, 3.75 in, 3.76 in, 3.77 in, 3.78 in, 3.79 in, 3.8 in, 3.81 in, 3.82 in, 3.83 in, 3.84 in, 3.85 in, 3.86 in, 3.87 in, 3.88 in, 3.89 in, 3.9 in, 3.91 in, 3.92 in, 3.93 in, 3.94 in, 3.95 in, 3.96 in, 3.97 in, 3.98 in, 3.99 in, 4 in

Insulation Outer Diameter (Metric): 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm, 59.182 mm, 59.436 mm, 59.69 mm, 59.944 mm, 60.198 mm, 60.452 mm, 60.706 mm, 60.96 mm, 61.214 mm, 61.468 mm, 61.976 mm, 62.23 mm, 62.484 mm, 62.738 mm, 62.992 mm, 63.246 mm, 63.5 mm, 63.754 mm, 64.008 mm, 64.262 mm, 64.516 mm, 64.77 mm, 65.024 mm, 65.278 mm, 65.532 mm, 65.786 mm, 66.04 mm, 66.294 mm, 66.548 mm, 66.802 mm, 67.056 mm, 67.31 mm, 67.564 mm, 67.818 mm, 68.072 mm, 68.326 mm, 68.58 mm, 68.834 mm, 69.088 mm, 69.342 mm, 69.596 mm, 69.85 mm, 70.104 mm, 70.358 mm, 70.612 mm, 70.866 mm, 71.12 mm, 71.374 mm, 71.628 mm, 71.882 mm, 72.136 mm, 72.39 mm, 72.644 mm, 72.898 mm, 73.152 mm, 73.406 mm, 73.66 mm, 73.914 mm, 74.168 mm, 74.422 mm, 74.676 mm, 74.93 mm, 75.184 mm, 75.438 mm, 75.692 mm, 75.946 mm, 76.2 mm, 76.454 mm, 76.708 mm, 76.962 mm, 77.216 mm, 77.47 mm, 77.724 mm, 77.978 mm, 78.232 mm, 78.486 mm, 78.74 mm, 78.994 mm, 79.248 mm, 79.502 mm, 79.756 mm, 80.01 mm, 80.264 mm, 80.518 mm, 80.772 mm, 81.026 mm, 81.28 mm, 81.534 mm, 81.788 mm, 82.042 mm, 82.296 mm, 82.55 mm, 82.804 mm, 83.058 mm, 83.312 mm, 83.566 mm, 83.82 mm, 84.074 mm, 84.328 mm, 84.582 mm, 84.836 mm, 85.09 mm, 85.344 mm, 85.598 mm, 85.852 mm, 86.106 mm, 86.36 mm, 86.614 mm, 86.868 mm, 87.122 mm, 87.376 mm, 87.63 mm, 87.884 mm, 88.138 mm, 88.392 mm, 88.646 mm, 88.9 mm, 89.154 mm, 89.408 mm, 89.662 mm, 89.916 mm, 90.17 mm, 90.424 mm, 90.678 mm, 90.932 mm, 91.186 mm, 91.44 mm, 91.694 mm, 91.948 mm, 92.202 mm, 92.456 mm, 92.71 mm, 92.964 mm, 93.218 mm, 93.472

mm, 93.726 mm, 93.98 mm, 94.234 mm, 94.488 mm, 94.742 mm, 94.996 mm, 95.25 mm, 95.504 mm, 95.758 mm, 96.012 mm, 96.266 mm, 96.52 mm, 96.774 mm, 97.028 mm, 97.282 mm, 97.536 mm, 97.79 mm, 98.044 mm, 98.298 mm, 98.552 mm, 98.806 mm, 99.06 mm, 99.314 mm, 99.568 mm, 99.822 mm, 100.076 mm, 100.33 mm, 100.584 mm, 100.838 mm, 101.092 mm, 101.346 mm, 101.6 mm Lug/Stem Connector Included in Kit: No Maximum Cable Jacket Opening: 30 Inch,28 Inch,20 Inch Maximum Conductor Size (Imperial): 1 AWG Maximum Conductor Size (Metric): 50 mm<sup>2</sup> Maximum Splice O.D.: 3.3 Inch,2.4 Inch,4.0 Inch Maximum Splice Outside Diameter: 2.4 in. 3.3 in. 4 in Maximum Splice Outside Diameter (Metric): 61, 101.6 Minimum Cable Jacket O.D.: 0.95 in, 1.15 in, 1.55 in Number of Conductors: 1 Product Color: Black Product Series: 5450 Series Splice Type: Inline Units per Case: 6.0 Voltage: 15 kV, 25/28 kV, 35 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5640 & 5650 Series

#### Details

One-piece cold shrink termination

High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor, weather exposed applications

Silicone rubber insulation is track-resistance and hydrophobic

Silicone cold shrink application provides constant radial pressure, "living seal" Voltage ratings: 4 skirt kits up to 15kV, 110 kV BIL; 6 skirt kits up to 25/28 kV, 150 kV BIL; 8 skirt kits up to 35 kV, 200 kV BIL

Meets IEEE Standard 48, Class 1 for outdoor, weather-exposed applications

#### **Typical properties**

Additional Kit Contents: (1) MB3 Mounting Bracket, (1) MB4 Mounting Bracket, (1) SC0001 Stem Connector, (1) SC0002 Stem Connector, (1) SC0010 Stem Connector, (1) SC0020 Stem Connector, (1) SC0040 Stem Connector **Application: Cable Termination** Application/Industry: Utility BIL: 110 kV, 150 kV, 200 kV Breakout Boot: No Cable Insulation Outside Diameter Range: 0.64 to 1.12 in, 0.84-1.38 in, 1.08-1.80 in, 1.31-2.10 in, 1.80-2.30 in Cable Insulation Outside Diameter Range (Metric): 16.2 - 28.5 mm, 16.2-28.4 mm, 16.3 to 28.4 mm, 21.3 - 35.0 mm, 21.3-35.1 mm, 27.4 - 45.7 mm, 33.3 -53.3 mm. 45.7-58.4 mm Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Tape Shield Cable Type: Jacketed Concentric Neutral (JCN), Polymeric insulated, copper wire screened, unarmored cable, Power Cable Case Quantity: 1 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 450 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil **Connector Included: No** Connector Maximum Outside Diameter: 1.50 in Connector Maximum Outside Diameter (Metric): 38.1 mm Dielectric Strength (V/mil): 507 V/mil Elongation: 750 % Indoor/Outdoor: Outdoor Skirted Insulation Level: 100%, 133% Insulation Material: Silicone Rubber Insulation O.D. Range (Metric): 16.2-28.4 mm,21.3-35.1 mm Insulation Outer Diameter (Imperial): 0.61 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in,

1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.28 in, 2.29 in, 2.3 in

Insulation Outer Diameter (Metric): 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm

Insulation Rejacketing: No

Jacket Outside Diameter Range: 0.93-1.35 in, 1.19-1.72 in, 1.37-2.02 in, 1.62-2.55 in, 2.10-2.75 in Jacket Outside Diameter Range (Metric): 23.6-34.3 mm, 30.2-43.6 mm, 30.2-43.7 mm, 34.8-51.3 mm, 41.2-64.8 mm, 53.4-69.8 mm Lug/Stem Connector Included in Kit: No, Yes Material: Silicone Rubber Maximum Conductor Size (Imperial): 250 kcmil, 500 kcmil Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 240 mm<sup>2</sup> Maximum Installed Length: 10.00 in, 11.00 in, 11.25 in, 13.00 in, 14.50 in, 14.75 in, 17.50 in, 19.50 in, 19.75 in, 21.00 in Maximum Installed Length (Metric): 444 mm Minimum Conductor Size (Imperial): 2/0 AWG, 250 kcmil, 4 AWG Minimum Conductor Size (Metric): 120 mm², 25 mm², 70 mm² Number of Conductors: 1 Number of Skirts: 4 , 6 , 8 Product Color: Gray Product Series: 5640, 5650 Product Type: Splice Type: Cold Shrink QT-II Voltage: 15 kV, 25 kV, 25/28 kV, 25/35 kV, 35 kV Voltage Rating: 12/20 kV eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7600-T-3G Series for 5-35 kV

#### Details

Provides a void-free seal to tape shield, wire shield and UniShield® power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for indoor applications

Silicone rubber insulation offers durability and reduces leakage currents in damp conditions

#### **Typical properties**

Application: Cable Connection, Cable Termination BIL: 110 kV, 150 kV, 95 kV Brands: 3M<sup>™</sup> Breakout Boot: Yes Cable Insulation Outside Diameter Range: 0.33-0.50 in, 0.50-0.70 in, 0.70-0.92 in, 0.92-1.18 in, 1.18-1.52 in Cable Insulation Outside Diameter Range (Metric): 12.7-17.8 mm, 17.8-23.4 mm, 23.4-30.0 mm, 30.0-38.6 mm, 8.4-12.7 mm Cable Shielding: Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield Case Quantity: 1 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Connector Included: None Indoor/Outdoor: Indoor Non-skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in Insulation Outer Diameter (Metric): 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm,

22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm. 34.29 mm. 34.544 mm. 34.798 mm. 35.052 mm. 35.306 mm. 35.56 mm. 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm Insulation Outside Diameter Range: 1.08 - 1.70 Inch Insulation Outside Diameter Range (Metric): 27.4 - 43.2 mm Insulation Rejacketing: Yes Lug/Stem Connector Included in Kit: No Material: Silicone Rubber Maximum Cable Outside Diameter: 2.80 in.4.50 in.3.90 in.2.20 in.3.30 in Maximum Cable Outside Diameter (Metric): 114.3 mm, 55.9 mm, 71.1 mm, 83.8 mm, 99.1 mm Maximum Conductor Size (Imperial): 1000 kcmil Maximum Conductor Size (Metric): 500 mm<sup>2</sup> Maximum Installed Length: 12.00 in, 16.00 in, 8.50 in Minimum Conductor Size (Imperial): 500 kcmil Minimum Conductor Size (Metric): 240 mm<sup>2</sup> Number of Conductors: 3 Product Color: Gray Product Series: 7600-3G, 7600-T-3G Product Type: Splice Splice Type: Inline Typical Splice Length: 32 in Typical Splice Length (Metric): 813 mm Units per Case: 1.0 Voltage: 15 kV, 25 kV, 35 kV, 5 kV, 8 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Cold Shrink QS-III Inline Shielded Cable Splice Kits 5535A and 5536A

#### Details

Inline splice for joining tape shield, wire shield, UniShield® or longitudinally corrugated shielded power cables

Special electrode design of the kit reduces the electrical stress at a critical cable/splice interface

Designed for inline splicing, feeder and distribution circuits, size transition splicing, direct burial installations and submerged locations

Silicon rubber-splice body provides good high and low temperature performance, and the EPDM rubber jacket offers physical protection

Rated for 35 kV cables

High-voltage, production-tested for partial discharge and AC ensure reliability

#### **Typical properties**

Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield

Conductor Material: Aluminum, Copper

Conductor Sizes (Imperial): 1/0 AWG, 1000 kcmil, 250 kcmil, 350 kcmil, 4/0 AWG, 500 kcmil, 750 kcmil

Insulation Level: 1.33, 100%, 133%

Insulation Outer Diameter (Imperial): 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Insulation Outside Diameter Range: 1.07 - 1.70 Inch, 1.24 - 2.07 Inch Insulation Outside Diameter Range (Metric): 27.2 - 43.2 mm, 31.5 - 52.6 mm Number of Conductors: 1 Product Series: 5535A, 5536A Splice Type: Cold Shrink Voltage: 35 kV

eClass 14 Classification Group: 27400107

## 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5600 & 5680 Series

#### Details

One-piece cold shrink termination High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor, weather exposed applications Silicone rubber insulation is track-resistance and hydrophobic Silicone cold shrink application provides constant radial pressure, "living seal" Withstands voltages of 5 to 15kV and is 110 kV BIL-rated Meets IEEE Standard 48, Class 1 for outdoor, weather-exposed applications

#### **Typical properties**

Additional Kit Contents: (1) SC0001 Stem Connector, (1) SC0010 Stem Connector, (1) SC0020 Stem Connector, (1) SC0040 Stem Connector Application: Cable Termination Application/Industry: Utility BIL: 110 kV, 150 kV, 200 kV Brands: 3M™ Breakout Boot: No Cable Insulation Outside Diameter Range: 0.637-1.12 in, 0.64 to 1.12 in, 0.84-1.38 in, 1.08-1.80 in, 1.31-2.10 in, 1.80-2.75 in Cable Insulation Outside Diameter Range (Metric): 16-28 mm, 16.3 to 28.4 mm, 21.3-35.1 mm, 27.4 - 45.7 mm, 33.3 - 53.3 mm, 45.7-69.8 mm Cable Shielding: Concentric Neutral (CN) Cable Type: Compact/Solid, Stranded Case Quantity: 1 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3 AWG, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Indoor/Outdoor: Outdoor, Outdoor Skirted Insulation Level: 100%, 133% Insulation Material: Silicone Rubber Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in,

2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in, 2.33 in, 2.34 in, 2.35 in, 2.36 in, 2.37 in, 2.38 in, 2.39 in, 2.4 in, 2.41 in, 2.42 in, 2.43 in, 2.44 in, 2.45 in, 2.46 in, 2.47 in, 2.48 in, 2.49 in, 2.5 in, 2.51 in, 2.52 in, 2.53 in, 2.54 in, 2.55 in, 2.56 in, 2.57 in, 2.58 in, 2.59 in, 2.6 in, 2.61 in, 2.62 in, 2.63 in, 2.64 in, 2.65 in, 2.66 in, 2.67 in, 2.68 in, 2.69 in, 2.7 in, 2.71 in, 2.72 in, 2.73 in, 2.74 in, 2.75 in Insulation Outer Diameter (Metric): 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm. 23.876 mm. 24.13 mm. 24.384 mm. 24.638 mm. 24.892 mm. 25.146 mm. 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm, 59.182 mm, 59.436 mm, 59.69 mm, 59.944 mm, 60.198 mm, 60.452 mm, 60.706 mm, 60.96 mm, 61.214 mm, 61.468 mm, 61.722 mm, 61.976 mm, 62.23 mm, 62.484 mm, 62.738 mm, 62.992 mm, 63.246 mm, 63.5 mm, 63.754 mm, 64.008 mm, 64.262 mm, 64.516 mm, 64.77 mm, 65.024 mm, 65.278 mm, 65.532 mm, 65.786 mm, 66.04 mm, 66.294 mm, 66.548 mm, 66.802 mm, 67.056 mm, 67.31 mm, 67.564 mm, 67.818 mm, 68.072 mm, 68.326 mm, 68.58 mm, 68.834 mm, 69.088 mm, 69.342 mm, 69.596 mm, 69.85 mm Insulation Rejacketing: No Lug/Stem Connector Included in Kit: No, Yes Maximum Installed Length: 11.50 in, 13.25 in, 16.00 in, 18.00 in, 18.25 in, 19.50 in, 8.50 in, 9.50 in Maximum Installed Length (Metric): 216 mm, 40.64 cm, 45.72 cm, 46.36 cm Number of Conductors: 1 Number of Skirts: 4, 6, 8 Product Series: 5600, 5680 **Termination Type: Single Termination** Type: Cold Shrink QT-II Voltage: 15 kV, 25 kV, 25/28 kV, 25/5 kV, 35 kV, 5 kV, 8 kV eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Cold Shrink QS-III Inline Shielded Cable Splice Kits 5524A, 5525A and 5526A

#### Details

Inline splice for joining tape shield, wire shield, UniShield® or longitudinally corrugated shielded power cables

Special electrode design of the kit reduces the electrical stress at a critical cable/splice interface

Designed for inline splicing, feeder and distribution circuits, size transition splicing, direct burial installations and submerged locations

Silicon rubber-splice body provides good high and low temperature performance, and the EPDM rubber jacket offers physical protection

Rated for 25/28 kV cables

High-voltage, production-tested for partial discharge and AC ensure reliability

#### **Typical properties**

Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield

Conductor Material: Aluminum, Copper, Copper/Aluminum

Conductor Sizes (Imperial): 1000 kcmil, 2/0 AWG, 250 kcmil, 350 kcmil, 4/0 AWG, 500 kcmil, 750 kcmil

Insulation Level: 1.33, 100%, 133%

Insulation Outer Diameter (Imperial): 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.894 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Insulation Outer Diameter (Metric): 27.2 mm, 31.5 mm Maximum Conductor Size (Imperial): 1579 kcmil, 750 kcmil Maximum Conductor Size (Metric): 400 mm<sup>2</sup>, 800 mm<sup>2</sup> Minimum Conductor Size (Imperial): 1000 kcmil, 500 kcmil Minimum Conductor Size (Metric): 240 mm<sup>2</sup>, 500 mm<sup>2</sup> Number of Conductors: 1 Splice Type: Cold Shrink Voltage: 25/28 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> LBC Series Industrial Loadbreak Elbow Connectors

3M ID B5005045090

#### Details

Transitions from cable to the loadbreak probe Ideal for use with 3M<sup>™</sup> 5810 Series and 5811 Series Industrial Loadbreak Elbows

### **Typical properties**

Brands: 3M<sup>™</sup> Component Type: Connector Current Rating: 200.0 A Product Type: Accessory eClass 14 Classification Group: 27440308

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Brazed Seam Ring Tongues

#### Details

Brazed-seam terminal uses yellow pre-insulated, heat shrink tubing and ensures a secure fit while offering reliable performance

When crimped and shrunk, pre-insulated adhesive-lined polyolefin offers seal resistance to water and salt

Standard-style ring tongue fits around the stud

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

Withstands a maximum temperature of 221 degrees F (105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires

#### **Typical properties**

Connection Type: Crimp

Connection Width (Imperial): 0.138 in, 0.164 in, 0.19 in, 0.25 in, 0.315 in, 0.375 in Connection Width (Metric): 3.5 mm, 4.166 mm, 4.826 mm, 6.35 mm, 8 mm, 9.525 mm

Insulation Material: Heat Shrink

Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG

Maximum Conductor Size (Metric): 0.823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup>

Maximum Operating Temperature (Celsius): 105 °C

Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG

Minimum Conductor Size (Metric): 0.326 mm², 1.31 mm², 126.7 mm², 3.31 mm² Product Color: Blue, Red, Yellow

Terminal Type: Ring

#### **Dimensions and Classifications**

Overall Length (Imperial): 1 in, 1.1 in, 1.2 in Overall Length (Metric): 25.4 mm, 27.94 mm, 30.48 mm Overall Width (Imperial): 0.31 in, 0.38 in, 0.47 in, 0.56 in, 0.59 in Overall Width (Metric): 7.87 mm, 9.65 mm, 11.93 mm, 14.22 mm, 14.98 mm

# 3M<sup>™</sup> Cold Shrink QT-III Termination Kit 7600-T-3-RJS Series for 5-35 kV

#### Details

Provides a void-free seal to tape shield, wire shield and UniShield® power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for indoor applications and cabinet-mount installations Integrated design allows for easier installation, while sealing compounds provide constant radial pressure

#### **Typical properties**

Application: Cable Connection, Cable Termination BIL: 110 kV, 125 kV, 150 kV, 95 kV Brands: 3M™ Breakout Boot: No Cable Insulation Outside Diameter Range: 0.33-0.50 in, 0.50-0.70 in, 0.70-0.92 in, 0.92-1.18 in, 1.18-1.52 in, 1.53-1.81 in Cable Insulation Outside Diameter Range (Metric): 12.7-17.8 mm, 17.8-23.4 mm, 23.4-30.0 mm, 30.0-38.6 mm, 38.8-46.0mm, 8.4-12.7 mm Cable Minimum Outside Diameter: 0.66 in Cable Minimum Outside Diameter (Metric): 16.8 mm Cable Shielding: Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield Cable Type: MV-105, MV-90 Case Quantity: 1 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1500 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Connector Included: None Connector Maximum Installed Length: 4.80 in Connector Maximum Installed Length (Metric): 122 mm Connector Maximum Outside Diameter: 1.90 in Connector Maximum Outside Diameter (Metric): 48.3 mm Indoor/Outdoor: Indoor Non-skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in,

1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in

Insulation Outer Diameter (Metric): 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm. 21.082 mm. 21.336 mm. 21.59 mm. 21.844 mm. 22.098 mm. 22.352 mm. 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm. 45.974 mm Insulation Outside Diameter Range: 0.84 - 1.36 Inch, 1.24 - 2.07 Inch Insulation Outside Diameter Range (Metric): 21.3 - 34.5 mm, 31.5 - 52.6 mm Insulation Rejacketing: Yes Lug/Stem Connector Included in Kit: No Maximum Conductor Size (Imperial): 1000 kcmil, 250 kcmil Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 500 mm<sup>2</sup> Maximum Installed Length: 10.50 in, 12.00 in, 16.00 in, 8.50 in, Termination only (not including RJS sleeving or Break-out boot: 21.5") Maximum Installed Length (Metric): Termination only (not including RJS sleeving or Break-out boot: 546mm) Minimum Conductor Size (Imperial): 1/0 AWG, 500 kcmil Minimum Conductor Size (Metric): 240 mm<sup>2</sup>, 50 mm<sup>2</sup> Number of Conductors: 3 Product Series: 3-RJS, 7600 RJS, 7600-T-RJS Product Type: Splice Splice Type: Inline Typical Splice Length: 30 in, 35 in

Typical Splice Length (Metric): 762 mm, 889 mm

Units per Case: 1.0

Voltage: 15 kV, 20 kV, 25 kV, 35 kV, 5 kV, 8 kV

Voltage Application: Medium Voltage

eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Cold Shrink QS-III Inline Shielded Cable Splice Kits 5513A, 5514A, 5515A and 5516A Series

#### Details

Inline splice for joining tape shield, wire shield, UniShield® or longitudinally corrugated shielded power cables

Special electrode design of the kit reduces the electrical stress at a critical cable/splice interface

Designed for feeder and distribution circuits, it transitions from shielded to neutral power cables and fits type MV-90 cables

Silicon rubber-splice body provides good high and low temperature performance, and the EPDM rubber jacket offers physical protection

Rated for 15 kV class cables

Factory-tested partial discharge and AC ensure reliability

#### **Typical properties**

Application: Cable Connection

Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield

Conductor Material: Aluminum, Copper

Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 350 kcmil, 4/0 AWG, 500 kcmil, 750 kcmil Insulation Level: 1.33, 100%, 133%

Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in Insulation Outside Diameter Range: 0.64 - 1.01 Inch, 0.84 - 1.38 Inch, 1.04 - 1.70 Inch, 1.07 - 1.70 Inch Insulation Outside Diameter Range (Metric): 16.3 - 25.7 mm, 21.3 - 35.1 mm, 26.4 - 43.2 mm, 27.2 - 43.2 mm Number of Conductors: 1 Product Color: Black

Product Series: 5513A, 5514A, 5515A, 5516A, 5610A

Splice Type: Cold Shrink

Voltage: 15 kV

eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Cold Shrink QT-III Termination Kits 7673 S Series

#### Details

High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications

Silicone rubber insulation offers durability and reduces leakage currents in damp conditions

Meets requirements of IEEE Standard 48 Class 1 for outdoor, weather-exposed applications

#### **Typical properties**

Brands: 3M™ Breakout Boot: No Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Over Wire, Wire-Over-Tape Shield Conductor Sizes (Imperial): 1000 kcmil, 1250 kcmil, 1500 kcmil, 350 kcmil, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Indoor/Outdoor: Outdoor Skirted Insulation Material: Silicone Rubber Insulation Outside Diameter Range: 2.79-3.45 in Insulation Outside Diameter Range (Metric): 70.9 - 87.6 mm Insulation Rejacketing: No Material: Silicone Rubber Number of Conductors: 1 Number of Skirts: 1,8 Product Color: Black Product Series: 7673-S Product Type: Termination Kit Splice Type: Cold Shrink Voltage: 325 kV, 350 kV, 69 kV, 69 kV - 72.5 kV, 72.5 kV eClass 14 Classification Group: 27400102

# Scotch™ Bundling Straps RF3710, 0.5 in x 8 in, (12,7 mm x 20,3 cm) Black

3M ID 70006911534 UPC 00051131868076

#### Details

Use for household, garden and garage organization Great for securing and holding bulky items Ideal for organizing like items together Self-fastening, adjustable design for a versatile hold Holds bulky items together Reuse again and again Quick, convenient organization Intended for indoor use Size: 1/2 in. x 8 in Color: Black

#### **Typical properties**

Brands: Scotch<sup>™</sup> Factory ISO Certification: No ISO Certification information available Good For Outdoors: No Indoor/Outdoor: Indoor Package Contents: 6 Straps/Pack Product Color: Black Tensile Strength (Imperial): 175 lbs Weight Capacity: N/A eClass 14 Classification Group: 27140702

#### **Dimensions and Classifications**

Overall Length (Imperial): 8 in Overall Width (Imperial): 0.5 in

# 3M<sup>™</sup> Deadbreak Equipment Connection Kit

#### Details

Meets IEEE Strandard 386 and IEEE Standard 592 Capacitive test-point Fully shielded, deadfront connection Cold shrink jacket seal with integrated bleeder and ground wire Suitable for submerged locations Disconnectable, bolted connection

#### **Typical properties**

Brands: 3M<sup>™</sup> Current Rating: 600.0 A Maximum Operating Voltage: 33 kV, 35 kV Voltage: 15 kV, 25 kV eClass 14 Classification Group: 27440308

# 3M<sup>™</sup> Cold Shrink QS4s Integrated Short Splice Kit 35SP Series

#### Details

Cold Shrink Design — for quick and easy installation; excellent for cable size transitions

Complete Kit — includes the required products to make one splice Silicone Rubber Construction — for good high and low temperature performance Production Tested — partial discharge and A.C. withstand tests to provide reliability

Computer Aided Design — for compact size and optimal distribution of electrical field

Special Electrode Design — minimizes electrical stress at critical cable/splice interface

Smooth Edge Neutral Extension Sock — virtually no frayed edges

Integrated Ground — standard joint includes braid for easy connection to ground

#### **Typical properties**

Conductor Sizes (Imperial): 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 750 kcmil eClass 14 Classification Group: 27400107

### 3M<sup>™</sup> SJ Cold Shrink Foldback Splice Jacket Kits

#### Details

1-piece design for quick installation

Resists fungus, acids and alkalis

Suitable for use on direct burial, aerial and submersible applications Cold shrink jacket made of EPDM rubber provides moisture resistance and durability

Includes Cold Shring sealing sleeve and Scotch 2228 rubber mastic tape Water resistant - meets the water seal requirements of ANSI C119.1

#### **Typical properties**

Application: Cable Connection Cable Shielding: Jacketed Concentric Neutral (JCN) Cable Type: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 2/0 AWG, 3/0 AWG, 4 AWG Conductor Sizes (Metric): 25 mm<sup>2</sup>, 50 mm<sup>2</sup>, 70 mm<sup>2</sup>, 95 mm<sup>2</sup> **Connector Included: None** Dielectric Strength (V/mil): 490 V/mil Elongation: 635 % For Use With: 3M<sup>™</sup> 5400 Series Cold Shrink Splices Insulation Outer Diameter (Imperial): 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in, 2.33 in, 2.34 in, 2.35 in, 2.36 in, 2.37 in, 2.38 in, 2.39 in, 2.4 in, 2.41 in, 2.42 in, 2.43 in, 2.44 in, 2.45 in, 2.46 in, 2.47 in, 2.48 in, 2.49 in, 2.5 in, 2.51 in, 2.52 in, 2.53 in, 2.54 in, 2.55 in, 2.56 in, 2.57 in, 2.58 in, 2.59 in, 2.6 in, 2.61 in, 2.62 in, 2.63 in, 2.64 in, 2.65 in, 2.66 in, 2.67 in, 2.68 in, 2.69 in, 2.7 in, 2.71 in, 2.72 in, 2.73 in, 2.74 in, 2.75 in, 2.76 in, 2.77 in, 2.78 in, 2.79 in, 2.8 in, 2.81 in, 2.82 in, 2.83 in, 2.84 in, 2.85 in, 2.86 in, 2.87 in, 2.88 in, 2.89 in, 2.9 in, 2.91 in, 2.92 in, 2.93 in, 2.94 in, 2.95 in, 2.96 in, 2.97 in, 2.98 in, 2.99 in, 3 in, 3.01 in, 3.02 in, 3.03 in, 3.04 in, 3.05 in, 3.06 in, 3.07 in, 3.08 in, 3.09 in, 3.1 in, 3.11 in, 3.12 in, 3.13 in, 3.14 in, 3.15 in, 3.16 in, 3.17 in, 3.18 in, 3.19 in, 3.2 in, 3.21 in, 3.22 in, 3.23 in, 3.24 in, 3.25 in, 3.26 in, 3.27 in, 3.28 in, 3.29 in, 3.3 in, 3.31 in, 3.32 in, 3.33 in, 3.34 in, 3.35 in, 3.36 in, 3.37 in, 3.38 in, 3.39 in, 3.4 in, 3.41 in, 3.42 in, 3.43 in, 3.44 in, 3.45 in, 3.46 in, 3.47 in, 3.48 in, 3.49 in, 3.5 in, 3.51 in, 3.52 in, 3.53 in, 3.54 in, 3.55 in, 3.56 in, 3.57 in, 3.58 in, 3.59 in, 3.6 in,

3.61 in, 3.62 in, 3.63 in, 3.64 in, 3.65 in, 3.66 in, 3.67 in, 3.68 in, 3.69 in, 3.7 in, 3.71 in, 3.72 in, 3.73 in, 3.74 in, 3.75 in, 3.76 in, 3.77 in, 3.78 in, 3.79 in, 3.8 in, 3.81 in, 3.82 in, 3.83 in, 3.84 in, 3.85 in, 3.86 in, 3.87 in, 3.88 in, 3.89 in, 3.9 in, 3.91 in, 3.92 in, 3.93 in, 3.94 in, 3.95 in, 3.96 in, 3.97 in, 3.98 in, 3.99 in, 4 in Insulation Outer Diameter (Metric): 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm, 59.182 mm, 59.436 mm, 59.69 mm, 59.944 mm, 60.198 mm, 60.452 mm, 60.706 mm, 60.96 mm, 61.214 mm, 61.468 mm, 61.722 mm, 61.976 mm, 62.23 mm, 62.484 mm, 62.738 mm, 62.992 mm, 63.246 mm, 63.5 mm, 63.754 mm, 64.008 mm, 64.262 mm, 64.516 mm, 64.77 mm, 65.024 mm, 65.278 mm, 65.532 mm, 65.786 mm, 66.04 mm, 66.294 mm, 66.548 mm, 66.802 mm, 67.056 mm, 67.31 mm, 67.564 mm, 67.818 mm, 68.072 mm, 68.326 mm, 68.58 mm, 68.834 mm, 69.088 mm, 69.342 mm, 69.596 mm, 69.85 mm, 70.104 mm, 70.358 mm, 70.612 mm, 70.866 mm, 71.12 mm, 71.374 mm, 71.628 mm, 71.882 mm, 72.136 mm, 72.39 mm, 72.644 mm, 72.898 mm, 73.152 mm, 73.406 mm, 73.66 mm, 73.914 mm, 74.168 mm, 74.422 mm, 74.676 mm, 74.93 mm, 75.184 mm, 75.438 mm, 75.692 mm, 75.946 mm, 76.2 mm, 76.454 mm, 76.708 mm, 76.962 mm, 77.216 mm, 77.47 mm, 77.724 mm, 77.978 mm, 78.232 mm, 78.486 mm, 78.74 mm, 78.994 mm, 79.248 mm, 79.502 mm, 79.756 mm, 80.01 mm, 80.264 mm, 80.518 mm, 80.772 mm, 81.026 mm, 81.28 mm, 81.534 mm, 81.788 mm, 82.042 mm, 82.296 mm, 82.55 mm, 82.804 mm, 83.058 mm, 83.312 mm, 83.566 mm, 83.82 mm, 84.074 mm, 84.328 mm, 84.582 mm, 84.836 mm, 85.09 mm, 85.344 mm, 85.598 mm, 85.852 mm, 86.106 mm, 86.36 mm, 86.614 mm, 86.868 mm, 87.122 mm, 87.376 mm, 87.63 mm, 87.884 mm, 88.138 mm, 88.392 mm, 88.646 mm, 88.9 mm, 89.154 mm, 89.408 mm, 89.662 mm, 89.916 mm, 90.17 mm, 90.424 mm, 90.678 mm, 90.932 mm, 91.186 mm, 91.44 mm, 91.694 mm, 91.948 mm, 92.202 mm, 92.456 mm, 92.71 mm, 92.964 mm, 93.218 mm, 93.472 mm, 93.726 mm, 93.98 mm, 94.234 mm, 94.488 mm, 94.742 mm, 94.996 mm, 95.25 mm, 95.504 mm, 95.758 mm, 96.012 mm, 96.266 mm, 96.52 mm, 96.774 mm, 97.028 mm, 97.282 mm, 97.536 mm, 97.79 mm, 98.044 mm, 98.298 mm, 98.552 mm, 98.806 mm, 99.06 mm, 99.314 mm, 99.568 mm, 99.822 mm, 100.076 mm, 100.33 mm, 100.584 mm, 100.838 mm, 101.092 mm, 101.346 mm, 101.6 mm

Insulation Outside Diameter Range: 1.04 - 1.70 Inch Insulation Outside Diameter Range (Metric): 26.4 - 43.2 mm Maximum Cable Jacket Opening: 34 Inch,25 Inch,31 Inch,32 Inch Maximum Conductor Size (Imperial): 641 kcmil Maximum Conductor Size (Metric): 325 mm<sup>2</sup> Maximum Splice O.D.: 2.00 Inch, 3.62 Inch, 4.10 Inch, 3.00 Inch Maximum Splice Outside Diameter: 2 in, 3 in, 3.62 in, 4.1 in Maximum Splice Outside Diameter (Metric): 50.8, 104.1 Minimum Cable Jacket O.D.: 0.95 in, 1.15 in, 1.55 in, 1.75 in Minimum Conductor Size (Imperial): 400 kcmil Minimum Conductor Size (Metric): 185 mm<sup>2</sup> Number of Conductors: 1 Product Color: Black Splice Type: Inline Typical Splice Length: 32 in Typical Splice Length (Metric): 813 mm Units per Case: 6.0 Voltage: 15 kV, 25/28 kV, 35 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Heat Shrink Tubing HDCW

#### Details

Excellent protection against mechanical stress Offers excellent corrosion protection on undamaged cables Rated for 35 kV applications Made of adhesive-lined, cross-linked polyolefin Thick-walled sheet is tough and reliable ANSI Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Adhesive Lined: Yes Adhesive Material: Hot melt adhesive layer, Hot-melt adhesive Application Specifications: Qualified to ANSI C119.1 Brands: 3M<sup>™</sup> Cable Type: Any type of cable **Chemical Resistant: Yes** Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Conductor Sizes (Metric): 10 mm<sup>2</sup>, 1013 mm<sup>2</sup>, 185 mm<sup>2</sup>, 456 mm<sup>2</sup>, 500 mm<sup>2</sup> Dielectric Strength (V/mil): 14 kV/mm, 15 kV/mm, 16 kV/mm, 17 kV/mm, 18 kV/mm, 19 kV/mm, 21 kV/mm, 22 kV/mm, 23 kV/mm, 24 kV/mm, 25 kV/mm, 26 kV/mm Elongation: 3 % Expanded Inner Diameter: 1.97 in, 2.95 in, 3.94 in, 5.2 in, 5.71 in Expanded Inner Diameter (Metric): 100 mm, 132 mm, 145 mm, 50 mm, 75 mm, 76 mm, 77 mm, 78 mm Expanded Sleeve Diameter: 1.69 in, 2.68 in, 3.66 in, 4.72 in, 5.75 in Flame Retardant: No Halogen Free: Yes Heat Shrink Type: Heavy-Duty Heat Shrink Tubing, Heat Shrink Molded Shapes Inner Diameter After Shrink (Imperial): 0.3 in, 0.5 in, 0.9 in, 1 in, 1.3 in Inner Diameter After Shrink (Metric): 8 mm, 13 mm, 23 mm, 25 mm, 32 mm Inner Diameter Before Shrink (Imperial): 1.97 in, 2.95 in, 3.94 in, 5.2 in, 5.71 in Inner Diameter Before Shrink (Metric): 50 mm, 75 mm, 100 mm, 132 mm, 145 mm Jacket Repair Range: 0.39 to 1.38 Inch, 0.59 to 2.17 Inch, 0.98 to 3.15 Inch, 1.18 to 4.33 Inch, 1.38 to 5.39 Inch, 1.57 to 5.51 Inch Material: Adhesive-lined, Cross-Linked Polyolefin Maximum Voltage Rating: 1 kV to 35 kV Minimum Expanded Tubing I. D.: 1.69 in, 2.68 in, 3.66 in, 4.72 in, 5.75 in Minimum Shrink Temperature (Celsius): 125 °C Operating Temperature Range (Celsius): -40 °C to 100 °C Product Color: Black Product Form: Sleeve-roll Product Type: Splice Recovered Sleeve Diameter: 0.32 in, 0.59 in, 0.98 in, 1.1 in, 1.34 in

Sleeve Length: 9.8 in, 19.7 in, 29.5 in, 39.4 in, 47.2 in Splice Configuration: Heat Shrink Cable Repair Wrap Sleeve (HDCW) Splice Type: Heat Shrink UV Resistant: Yes Units per Case: 5.0 Voltage: 1 kV, 15 kV, 25/28 kV, 35 kV, 600 V, 660 V, 8 kV eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 9.8 in, 19.7 in, 29.5 in, 39.4 in, 47.2 in Overall Length (Metric): 250 mm, 500 mm, 750 mm, 1000 mm, 1200 mm, 1219 mm

# Shearbolt One-Hole Lug QLS Series

3M ID B00014731

#### Details

Shearbolt design has a friction plate that helps to prevent damage to the electrical conductor while offering enhanced contact force Accommodates wire size of 2 AWG to 250 kcmil Made of durable aluminum and has tin plating for corrosion resistance Offers easy installation without crimp tools Meets the requirements of ANSI C119.4

### 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Bullet-Style Male Disconnects

#### Details

This male disconnect terminal offers excellent holding force Allows for quick and easy disconnect of wires Mates with 0.156-in wide female tab Accommodates wire sizes 22 to 18 AWG Made of durable brass for good conductivity and has corrosion-resistant tin plating Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires 1000/case

#### **Typical properties**

Barrel Style: Butted Bullet Diameter: 0.180 CSA File Number: LR22190 Connection Width (Imperial): 0.156 in, 0.18 in Connection Width (Metric): 3.962 mm, 4.572 mm Disconnect Type: Male Fastener Orientation: Male Insulation Material: Vinyl Mating Snap Diameter (S): 0.18 Inch,0.156 Inch,0.180 Inch Maximum Insulation Outer Diameter (Imperial): 0.15 in, 0.17 in Pad Width: 0.156 in, 0.18 in Product Color: Blue Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250.0.187 Terminal Style: Bullet Snap Plug Terminal Type: Bullet, Standard UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.39 in Overall Length (Imperial): 0.83 in Overall Length (Metric): 21 mm

# 3M<sup>™</sup> Cold Shrink 3-Conductor Breakout Kits 3C-BOK Series

#### Details

Designed to allow the use of 3M<sup>™</sup> Single Conductor Cable Accessories on 3core conductor cables

Engineered for flexibility of medium-voltage applications

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Accessory Products: Cable Breakout Boot Kits Cable Insulation Outside Diameter Range: 0.33-0.50 in, 0.50-0.70 in, 0.70-0.92 in, 0.92-1.18 in, 1.18-1.52 in, 1.53-1.81 in Cable Insulation Outside Diameter Range (Metric): 12.7-17.8 mm, 17.8-23.4 mm, 23.4-30.0 mm, 30.0-38.6 mm, 38.8-46.0mm, 8.4-12.7 mm Case Quantity: 1 Maximum Cable Outside Diameter: 2.67 in,4.32 in,5.52 in,4.7 in,1.94 in,3.1 in Maximum Cable Outside Diameter (Metric): 109.7 mm, 119.4 mm, 140.2 mm, 49.3 mm, 67.8 mm, 78.7 mm Outer Diameter After Shrink (Imperial): 0.33 in, 0.5 in, 0.7 in, 0.92 in, 1.18 in, 1.53 in Outer Diameter After Shrink (Metric): 8.4 mm, 12.7 mm, 17.8 mm, 23.4 mm, 30 mm, 38.9 mm Outer Diameter Before Shrink (Imperial): 0.5 in, 0.7 in, 0.92 in, 1.18 in, 1.52 in, 1.81 in Outer Diameter Before Shrink (Metric): 12.7 mm, 17.8 mm, 23.4 mm, 30 mm, 38.6 mm, 46 mm Shrink Type: Cold Shrink Transition Type: 1 - 3 Breakout eClass 14 Classification Group: 27400109

### 3M<sup>™</sup> SC Stem Connectors

#### Details

Tin plated aluminum barrel offers reliable performance Tin-plated copper stem for connection to overhead connections Rated up to 35 kV Factory crimped and sealed copper pin RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Style: Standard Barrel Brands: 3M<sup>™</sup> Case Quantity: 10 Compatible Conductor Size (Imperial): 1/0 AWG, 2/0 AWG, 3/0 AWG, 4 AWG, 4/0 AWG Compatible Conductor Size (Metric): 120 mm<sup>2</sup> (Stranded), 25 mm<sup>2</sup> (Stranded), 50 mm<sup>2</sup> (Stranded), 70 mm<sup>2</sup> (Stranded), 95 mm<sup>2</sup> (Stranded) For Use With: Aluminum or Copper Conductors Indoor/Outdoor: Both Lug Base Metal: Aluminum Lug Type: Compression Lugs Maximum Operating Voltage: 35 Kilovolt Number of Holes: 0 none Product Series: SC Product Type: Stem Connector Stem Diameter (Imperial): 0.25 Inch,0.31 Inch Stem Diameter (Metric): 6.35 mm, 7.874 mm Stem Length (Imperial): 6 inch Stem Length (Metric): 152.4 mm Units per Case: 10.0

# Scotch® Grounding Braid 25, 1/2 in x 15 ft, 1 Roll/Case

3M ID 7100011690 UPC 00054007116028

#### Details

240 strands of #30 AWG is the approximate equivelant to #6 AWG wire Ideal for grounding shiled power cable and cable accessories Can be soldered and is compatible with cable oils, common solvents, adhesives and corrosion resistant Made of copper RoHS 2011/65/EU Compliant

#### **Typical properties**

Application: For Shielding and Bonding Backing Material: Tinned Copper Wires Backing Thickness (Metric): 2.38 mm Brands: Scotch® Case Quantity: 1 Roll Compatible With: All Copper Closures, All Fiber Closures Dielectric Strength (V/mil): Conductive High Temperature Rating: 266°F (130°C) Indoor/Outdoor: Outdoor Insulation: No Low Temperature Rating: 32°F (0°C) Material: All-metal Woven Grounding Braid Operating Temperature Range (Celsius): 0 °C to 130 °C Operating Temperature Range (Fahrenheit): 32 °F to 266 °F Product Color: Silver Product Type: Grounding Braid Self-extinguishing: No Self-sticking: No Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: Outdoor, Wireless Network: Backhaul Suitable for High Voltage: No **Tape Grade: Professional** Tape Type: Grounding Braid Total Thickness: 2.38 mm UV Resistant: Yes Vulcanizing: No

#### **Dimensions and Classifications**

Overall Length (Imperial): 15 ft Overall Length (Metric): 4.5 m Overall Width (Imperial): 0.5 in Overall Width (Metric): 12.7 mm

# 3M<sup>™</sup> Grounding and Sealing Accessories

### Details

For grounding or sealing cable accessories To improve reliability of cable accessories

### 3M<sup>™</sup> Screw-Mount Ties

#### Details

Secure wire bundles and harness components quickly, without slipping Can be quickly mounted to walls and structures with screws, bolts or rivets for added security Made in the USA UL Listed 62275 Type 21 and Plenum Rated AH-2 for use in air handling spaces

#### **Typical properties**

Approximate Length: 6,8 Brands: 3M<sup>™</sup> Cable Length (Imperial): 6 in, 8 in Cable Length (Metric): 147.32 mm, 228.6 mm Cable Management Products: Cable Ties Cable Tie Base Height: 8 in,6 in Cable Tie Length: 203 mm, 226 mm Cable Tie Type: Intermediate, Standard Case Quantity: 10.000 Flammability Rating: UL 94 V-2 Material: Nylon 6/6 Maximum Bundle Diameter: 2 Inch.1.25 Inch Maximum Bundle Diameter (Metric): 50.8 mm, 51 mm Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature: 85 Degree Celsius Maximum Operating Temperature (Celsius): 85 °C Maximum Operating Temperature (Fahrenheit): 185 °F Mil Spec: MS3367-5-0 Minimum Bundle Diameter: 0.0625 Inch Minimum Bundle Diameter (Metric): 1.6 mm Minimum Installation Temperature (Celsius): -20 Degree Celsius Minimum Installation Temperature (Fahrenheit): -4 Degree Fahrenheit Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F **Operating Temperature (Celsius): 85 Degree Celsius** Operating Temperature (Fahrenheit): 185 Degree Fahrenheit Operating Temperature Range (Celsius): -40 °C to 85 °C Operating Temperature Range (Fahrenheit): -40 °F to 185 °F Plenum Rated: Yes Product Color: Black Product Type: Cable Tie Solution for: Long-haul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul, Wireless Network: Infrastructure Accessories Tensile Strength (Imperial): 120 lbs,40 lbs,50 lbs Tensile Strength (Metric): 18.14 kg, 22.68 kg, 80 N, 220 N, 530 N Type: Standard UL Approval: Yes

UV Resistant: No, Yes Units per Case: 10000.0,1000.0 Units per bag: 100 eClass 14 Classification Group: 27140702

#### **Dimensions and Classifications**

Overall Length (Imperial): 5.8 in, 8.6 in, 15.1 in Overall Length (Metric): 147 mm, 218 mm, 384 mm, 399 mm Overall Width (Imperial): 0.142 in, 0.18 in, 0.3 in Overall Width (Metric): 3.6 mm, 4.6 mm, 7.6 mm

# 3M<sup>™</sup> Cold Shrink Shielded Splice Kits 5550 Series

#### Details

Provides splicing on tape shield, wire shield and UniShield® cables This kit is suitable for use on solid dielectric cables, indoor or outdoor locations and direct-burial applications Insulator and jacket is made of EPDM for easy installation Rated for 5/8 kV applications IEEE Approved

#### **Typical properties**

Application: Cable Connection Brands: 3M™ Cable Shielding: Tape Shield, UniShield®, Wire Shield Cable Type: Cable with rubber insulation Case Quantity: 1 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 350 kcmil, 900 kcmil Conductor Sizes (Metric): 185 mm<sup>2</sup>, 456 mm<sup>2</sup> Halogen Free: No Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in Material: EPDM Rubber Maximum Conductor Size (Imperial): 1000 kcmil (Aluminum), 1000 kcmil (Copper), 400 kcmil (Aluminum), 500 kcmil (Copper Maximum Conductor Size (Metric): 185 mm<sup>2</sup> (Aluminum), 240 mm<sup>2</sup> (Copper), 500 mm<sup>2</sup> (Aluminum), 500 mm<sup>2</sup> (Copper) Maximum Connector Length: 3.7 inch (Al), 4.3 inch (Cu), 5.3 inch (Al), 6.3 inch (Cu) Maximum Connector Length (Metric): 109 mm (Cu), 134.6 mm (AI), 160.0 mm (Cu), 94 mm (Al) Minimum Conductor Size (Imperial): 4/0 AWG (Aluminum), 4/0 AWG (Copper), 500 kcmil (Aluminum), 500 kcmil (Copper) Minimum Conductor Size (Metric): 120 mm<sup>2</sup> (Aluminum), 120 mm<sup>2</sup> (Copper), 240 mm<sup>2</sup> (Aluminum), 240 mm<sup>2</sup> (Copper) Number of Conductors: 3 Product Color: Black Product Series: 5550 Series Splice Type: Cold Shrink, Inline Suggested Accessory: 3M<sup>™</sup> Ground Strap Assembly GS-2, 3M<sup>™</sup> Ground Strap Assembly GS-3

Typical Splice Length: 21.0 in, 23.0 in Typical Splice Length (Metric): 533.4 mm, 584.2 mm Units per Case: 1.0 Voltage: 5 kV, 5/8 kV, 8 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400107

#### **Dimensions and Classifications**

Overall Length (Imperial): 21 in, 23 in Overall Length (Metric): 533 mm, 584 mm

#### Details

Offers good resistance to moisture, corrosion, ozone and UV rays Secures the phase legs of medium-voltage and 3/C shielded power cables Designed for use on tape shield, wire shield, armored and non-armored power cables

Comes in dark gray color

Silicone rubber insulator on inner-expandable polyester braid minimizes sliding friction and ensures a leak-proof seal Voltages of up to 35 kV or less

**Typical properties** 

Brands: 3M™ Breakout Boot: No Cable Accessory Products: Cable Breakout Boot Kits Cable Insulation Outside Diameter Range: 0.43 - 0.60 in, 1.02 - 1.28 in Dielectric Strength (V/mil): 428 V/mil Elongation: 910 % Inner Diameter After Shrink (Imperial): 0.4 in, 0.6 in, 0.8 in, 1 in, 1.3 in, 1.6 in Inner Diameter After Shrink (Metric): 10.9 mm, 15.2 mm, 20.3 mm, 25.9 mm, 32.5 mm. 41.1 mm Inner Diameter Before Shrink (Imperial): 0.6 in, 0.8 in, 1.02 in, 1.28 in, 1.62 in, 1.91 in Inner Diameter Before Shrink (Metric): 15.2 mm, 20.3 mm, 25.9 mm, 32.5 mm, 41.1 mm, 48.5 mm Insulation Rejacketing: Yes Metallic Shield Diameter Range: 0.43 - 0.60 in, 0.60 - 0.80 in, 0.80 - 1.02 in, 1.02 - 1.28 in, 1.28 - 1.62 in, 1.62-1.91 in Metallic Shield Diameter Range (Metric): 20.3-25.9 mm, 10.9-15.2 mm, 15.2-20.3 mm,32.5-41.1 mm,41.1-48.5 mm,25.9-32.5 mm **Operating Temperature (Celsius): 105** Operating Temperature (Fahrenheit): 194, 221 Degree Fahrenheit Product Color: Dark Gray Product Type: Splice Jacketing and Rejacketing Kits Solution: utilitybreakout Temperature Rating: 356°F (180°C) Class H Tensile Strength (Imperial): 1058 Pound-Force Per Square Inch Units per Case: 1.0,10.0 Voltage Range: 3.3 - 15 kV, 3.3 - 25 kV, 3.3 - 35 kV, 3.3 - 8 kV eClass 14 Classification Group: 27400108

#### **Dimensions and Classifications**

Overall Length (Imperial): 4 ft, 10 ft Overall Length (Metric): 1219 mm, 3048 mm

# 3M<sup>™</sup> ACCR High-Capacity Transmission Conductor

3M ID B00014620

#### Details

High-capacity transmission conductor with a high-strength, lightweight aluminum matrix core Provides maximum ampacity with less sag Provides long-term reliability Fast and easy to use Results in lower total project cost

#### **Typical properties**

eClass 14 Classification Group: 15090300

# 3M<sup>™</sup> Mechanical Shearbolt Connectors QCI

#### Details

Stepless shearbolt barrel and contact pad ensures optimun contract pressure for reliable performance and mechanical pull-out strength Built-in center stop enables correct positioning Ideal for connecting copper, aluminum or transition from copper to aluminum conductors Size 5.12-in x 1.3-in O.D Accommodates wire size of 1/0 AWG to 350 kcmil (stranded) Made of aluminum for good conductivity and has corrosion-resistant tin plating Withstands a maximum temperature of 221 °F (105 °C) Rated for 35 kV voltage applications

#### **Typical properties**

Electrical Connector Type: Shearbolt Connectors Maximum Conductor Size (Imperial): 1000 kcmil, 1250 kcmil, 250 kcmil, 350 kcmil, 600 kcmil, 750 kcmil Maximum Conductor Size (Metric): 120 mm², 185 mm², 300 mm², 400 mm², 500 mm², 633 mm² Minimum Conductor Size (Imperial): 1/0 AWG, 1000 kcmil, 2 AWG, 350 kcmil, 4/0 AWG, 500 kcmil Minimum Conductor Size (Metric): 120 mm², 185 mm², 240 mm², 35 mm², 50 mm², 500 mm² Outer Diameter (Imperial): 1.1 in, 1.3 in, 1.5 in, 1.65 in, 2.05 in Outer Diameter (Metric): 27.9 mm, 33 mm, 38.1 mm, 41.9 mm, 52.1 mm Product Type: Connector

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Butt Connectors

#### Details

Nylon-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, seamless brass sleeve offers easy insertion of wires Built-in wire stop for correct positioning

Made of copper for good conductivity and has tin plating for corrosion resistance Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Body Material: Copper Alloy Connector Type: Butt Disconnect Type: Female Fork Type: Standard Insulation Material: Nylon with Insulation Grip Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Product Color: Blue, Red, Yellow Terminal Style: Standard Terminal Type: Butt Connectors eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 1 in, 1.15 in Overall Length (Metric): 25.4 mm, 29.21 mm

#### **Typical properties**

Barrel Inside Diameter: 0.070 Inch.0.135 Inch.0.090 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Brazed CSA File Number: LR22190 Clearance (C): 0.25 Inch,0.29 Inch Dimension E: 0.50 Inch, 0.54 Inch, 0.5 Inch Fork Type: Block Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Product Color: Metal Stud Diameter (Imperial): 0.138 in, 0.164 in, 0.19 in Stud Diameter (Metric): 3.505 mm, 4.166 mm, 4.826 mm Stud Size: #10,#6,#8 **Terminal Style: Block** Terminal Type: Fork UL File Number: E23438, E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.65 in, 0.73 in Overall Length (Metric): 16.51 mm Overall Width (Imperial): 0.25 in, 0.3 in, 0.32 in Overall Width (Metric): 7.62 mm

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Standard Forks

#### Details

Non-insulated, butted-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Wider tongue design for use on free-standing studs Made of durable steel for high-temperature applications and has nickel plating for corrosion resistance Withstands a maximum temperature of 900 degrees F (482 degrees C)

#### **Typical properties**

Barrel Inside Diameter: 0.09 Inch,0.07 Inch,0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.28 Inch,0.29 Inch Dimension E: 0.54 Inch,0.53 Inch Fork Type: High Temp Insulation Material: Non-insulated Material: Copper Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Solution for: Wireless Network: Infrastructure Accessories Stud Size: #10 Terminal Style: High Temp Terminal Type: Fork, High Temperature Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.7 in, 0.73 in Overall Width (Imperial): 0.34 in, 0.38 in

## 3M<sup>™</sup> Heat Shrink Tubing MDT

## Details

Superior resistance to abrasion, corrosion and chemicals Offers reliable performance for electrical splices, connections and terminations Suitable for large transitions, splices and battery cables Made of black cross-linked polyolefin Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C) Flame-retardant

## **Typical properties**

Adhesive Lined: Yes Adhesive Material: Hot melt adhesive layer Application Specifications: SAE-AMS-DTL-23053/15, Class 2 Brands: 3M<sup>™</sup> Cable Size Range: 1-4/0 AWG, 1/0 AWG-250 kcmil, 1000-2500 kcmil, 12-6 AWG, 2-2/0 AWG, 300-500 kcmil, 4/0 AWG-400 kcmil, 600-1250 kcmil, 8-3 AWG Chemical Resistant: Yes Dielectric Strength: 500 mV Dielectric Strength (V/mil): 200 Elongation: 4.75 % Expanded Inner Diameter: 0.4 in, 0.8 in, 1.1 in, 1.3 in, 1.5 in, 1.7 in, 2 in, 3 in, 4.3 in Expanded Inner Diameter (Metric): 10.2 mm, 109.2 mm, 20.3 mm, 27.9 mm, 33.0 mm, 38.1 mm, 43.2 mm, 50.8 mm, 76.2 mm Flame Retardant: Yes Flammability Rating: Self-Extinguishing Heat Shrink Type: Heavy-Duty Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.13 in, 0.27 in, 0.37 in, 0.43 in, 0.5 in, 0.6 in, 0.66 in, 1 in, 1.43 in Inner Diameter After Shrink (Metric): 3.4 mm, 6.77 mm, 9.4 mm, 10.9 mm, 12.7 mm, 15.2 mm, 16.93 mm, 25.4 mm, 36.4 mm Inner Diameter Before Shrink (Imperial): 0.4 in, 0.8 in, 1.1 in, 1.3 in, 1.5 in, 1.7 in, 2 in, 3 in, 4.3 in Inner Diameter Before Shrink (Metric): 10.2 mm, 20.3 mm, 27.9 mm, 33 mm, 38.1 mm, 43.2 mm, 50.8 mm, 76.2 mm, 109.2 mm Material: Polyolefin Maximum Operating Temperature (Celsius): 110 °C Maximum Operating Temperature (Fahrenheit): 230 °F Minimum Expanded Tubing I. D.: 0.4 in, 0.8 in, 1.1 in, 1.3 in, 1.5 in, 1.7 in, 2 in, 3 in, 4.3 in Minimum Shrink Temperature (Celsius): 121 °C Minimum Shrink Temperature (Fahrenheit): 250 °F Operating Temperature (Celsius): -55 to 100 Degrees Celsius Operating Temperature (Fahrenheit): -67 °F to 230 °F Operating Temperature Range (Celsius): -55 °C to +105 °C Operating Temperature Range (Fahrenheit): -67 °F to 230 °F Product Color: Black Product Form: Sleeve-roll

Product Type: Heat Shrink MDT Recovered Inner Diameter: 0.15 in, 0.2 in, 0.37 in, 0.43 in, 0.5 in, 0.6 in, 0.65 in, 1 in, 1.5 in Recovered Inner Diameter (Metric): 3.8 mm, 5.1 mm, 9.4 mm, 10.9 mm, 12.7 mm, 15.2 mm, 16.5 mm, 25.4 mm, 38.1 mm Shrink Ratio: 3:1 Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: Outdoor, Wireless Network: Backhaul, Wireless Network: Infrastructure Accessories Tensile Strength (Imperial): 2400 Pound-Force Per Square Inch Tubing Type: Heavy Wall, Medium Wall Units per Case: 15.0,10.0,20.0 Voltage Rating: 1 kV eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 48 in Overall Length (Metric): 1.22 m

## Details

Suitable to mark electrical wires and terminal strips quickly Marker has a vinyl impregnated cloth film with a top coat and natural rubber adhesive

Available in 15 options with various numbers, letters and symbols

## **Typical properties**

Adhesive Material: Natural Rubber Application: Marking Wire and Cable Dispenser/Marker Type: Pre-printed & Write-on Books, Pre-printed Books Kit Includes: 10 ea 1-45, 10 ea 46-90, 10 ea A-Z, 0-15, +, -, /, 15 ea 1-30, 15 ea A-Z, 8 ea + , 7 ea - , 21 ea Blank write-on markers, 150 ea 1,2,3, 150 ea A,B,C, 150 ea L1,L2,L3, 150 ea T1,T2,T3, 45 ea +, -, AC, DC, 33 ea POS, NEG, GND, 27 ea NEUT, SPARE, 21 ea blank write-on markers, 45 ea 0-9; 15 ea L1,L2,L3,T1,T2,T3, 45 ea 1,2,3,A,B,C; 30 ea L1,L2,L3,T1,T2,T3, 5 ea of 68 Load Center Legends; 110 ea blank write on markers, 6 ea 1-15; 4 ea 16-90; 2 ea A-Z, +, -, /, 0, 9 ea of 30 Alarm System Legends; 5 ea 1-15; 2 ea 16-45; 21 ea blank write-on markers Legend: +, 1 - 45, 30 Alarm System Legend, C, L1, L3, T1 - T3 Legend Color: White Marker ID Style: Pre-printed, Pre-printed & Write-on Marker Size: 1.37 x 0.22 in (34,8 x 5,6 mm) Marker Type: Books Material: Vinyl Impregnated Cloth Film Maximum Cable Diameter (Imperial): 0.47 in Maximum Cable Diameter (Metric): 11.9 mm Maximum Operating Temperature (Celsius): 66 °C Maximum Operating Temperature (Fahrenheit): 150 °F Maximum Outside Diameter: 0.47 in (11,9 mm) Operating Temperature Range (Celsius): -40 °C to 121 °C Printed Text Type: Letters & Symbols, Letters - A-C, Numbers & Symbols, Numbers - 1-30, Numbers - 46-90, Numbers, Letters, & Symbols, Numbers: 1-3, Numbers: 1-45, Symbols, Symbols: L1, L2, L3 Product Color: White Product Type: Identification, Wire Marker Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul Units per Case: 5.0 Wire Marker Products: Wire Marker Books

## 3M<sup>™</sup> CI-T Splice Connectors

#### Details

Standard barrel ensures a secure fit and offers reliable performance Built-in solid center oil stop allows for correct positioning Made of aluminum for good conductivity and tin plating for corrosion resistance Rated for 35 kV voltage applications ANSI Certified

## **Typical properties**

Barrel Style: Standard Barrel Body Material: Aluminum Case Quantity: 10 Compatible With: 3M<sup>™</sup> Molded Rubber QS-II Cable Splice 5411 and 3M<sup>™</sup> Molded Rubber QS-II Cable Splice 5501, Molded Rubber Splices 15 kV Connector Base Metal: Aluminum Connector Type: Compression Connectors, Transition Compression Connectors Electrical Connector Type: Compression Connectors For Use With: Aluminum or Copper Conductors Maximum Conductor Size (Imperial): 1 AWG, 1 AWG (Stranded), 1/0 AWG Maximum Conductor Size (Metric): 50 mm<sup>2</sup>, 50 mm<sup>2</sup> (Stranded) Maximum Operating Voltage: 35 Kilovolt Minimum Conductor Size (Imperial): 2 AWG, 2 AWG (Stranded), 4 AWG Minimum Conductor Size (Metric): 25 mm<sup>2</sup>, 35 mm<sup>2</sup>, 35 mm<sup>2</sup> (Stranded) Outer Diameter (Imperial): 0.64 in, 0.91 in eClass 14 Classification Group: 27400212

#### **Dimensions and Classifications**

Overall Length (Imperial): 2 in Overall Length (Metric): 50.8 mm

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Butted Seam High-Temperature Ring Tongues

## Details

Non-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Beveled mouth offers easy insertion of wires

For use in ovens, motors, light fixtures and other applications Made of durable steel for high-temperature applications and has nickel plating for

corrosion resistance

Withstands a maximum temperature of 900 degrees F (482 degrees C)

## **Typical properties**

Connection Width (Imperial): 0.138 in, 0.164 in, 0.19 in, 0.25 in, 0.375 in Connection Width (Metric): 3.5 mm, 4.166 mm, 4.826 mm, 6.35 mm, 9.525 mm Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG, 4 AWG, 6 AWG, 8 AWG Maximum Conductor Size (Metric): 0.823 mm<sup>2</sup>, 13.3 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 21.2 mm<sup>2</sup>, 5.26 mm<sup>2</sup>, 8.37 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 482 °C Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG, 4 AWG, 6 AWG, 8 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 13.3 mm<sup>2</sup>, 21.2 mm<sup>2</sup>, 3.31 mm<sup>2</sup>, 8.37 mm<sup>2</sup> Product Color: Metal Terminal Type: Ring

## **Dimensions and Classifications**

Overall Length (Imperial): 0.6 in, 0.7 in, 0.73 in, 0.93 in, 0.95 in, 0.99 in, 1.22 in, 1.34 in Overall Length (Metric): 15.24 mm, 17.78 mm, 18.54 mm, 23.62 mm

Overall Width (Imperial): 0.25 in, 0.33 in, 0.38 in, 0.47 in, 0.56 in, 0.59 in, 0.63 in Overall Width (Metric): 6.35 mm, 8.38 mm, 9.65 mm, 14.22 mm

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Female Disconnect Vinyl Insulated, 100/bottle, MVG24-110/32DFX, 500/Case

3M ID 7100165324 UPC 10051128589981

#### Details

Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires Mates with 0.187-in wide male tab Made of durable brass for good conductivity and has corrosion-resistant tin plating Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires

UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.055 Inch Barrel Style: Butted Brands: Scotchlok™ Connection Width (Imperial): 0.11 in Connection Width (Metric): 2.794 mm **Disconnect Type: Female** Fastener Orientation: Female Insulation Material: Vinyl with Insulation Grip Mates with Female Width: 0.110 Inch Mates with Male Tab Width (W'): 0.110 Inch Maximum Conductor Size (Imperial): 24 AWG Maximum Conductor Size (Metric): .25 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.093 in Minimum Conductor Size (Imperial): 26 AWG Minimum Conductor Size (Metric): .14 mm<sup>2</sup> Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.187 **Terminal Style: Standard** Terminal Type: Disconnect Units per Case: 500.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.63 in

## 3M<sup>™</sup> Motor Lead Inline Splice Kits, Non-Shielded and Shielded Cables, 5331- 5334

## Details

Features shielded, non-shielded cables Designed for splicing motor lead cables to the incoming feeder cables Suitable for use with 30000 Series copper compression lugs or other UL Listed copper lugs 0.3 to 0.51-in O.D. insulation Accommodates wire size of 10 to 4 AWG Rated for 5/8 kV applications Includes 3 rolls Scotch® stress-control tape 2220, 12 adapters, 3 instruction sheets and more Withstands temperatures of 194 degrees F (90 degrees C)

## **Typical properties**

Connection Type: Inline (Shielded or Non-shielded), Pigtail (Non-shielded), Pigtail (Shielded)

Insulation Outside Diameter Range: 10-6 AWG: 0.30-0.46 in / 6-4 AWG: 0.37-0.51 in, 2-2/0 AWG: 0.53-0.71 in / 3/0 AWG-250 kcmil: 0.70-0.88 in, 4-2 AWG: 0.43-0.57 in / 2-1/0 AWG: 0.52-0.65 in, 4/0-350 kcmil: 0.75-0.98 in / 350-500 kcmil: 0.94-1.12 in

Insulation Outside Diameter Range (Metric): 10-6 AWG: 7.6-11.7 mm / 6-4 AWG: 9.4-13.0 mm, 2-2/0 AWG: 13.5-18.0 mm / 3/0 AWG-250 kcmil: 17.8-22.4 mm, 4-2 AWG: 10.9-14.5 mm / 2-1/0 AWG: 0.52-0.65 in, 4/0-350 kcmil: 19.1-24.9 mm / 350-500 kcmil: 23.9-28.4 mm

Insulation Outside Diameter by Conductor Size: 2-2/0 AWG (0.53-0.71 Inch), 3/0 AWG-250 kcmil (0.70-0.88 Inch),4/0-350 kcmil (0.75-0.98 Inch), 350-500 kcmil (0.94-1.12 Inch),10-6 AWG (0.30-0.46 Inch), 6-4 AWG (0.37-0.51 Inch),4-2 AWG (0.43-0.57 Inch), 2-1/0 AWG (0.52-0.65 Inch)

Insulation Outside Diameter by Conductor Size (Metric): 4-2 AWG (10.9-14.5 mm), 2-1/0 AWG (13.2-16.5 mm),10-6 AWG (7.6-11.7 mm), 6-4 AWG (9.4-13.0 mm),4/0-350 kcmil (19.1-24.9 mm), 350-500 kcmil (23.9-28.4 mm),2-2/0 AWG (13.5-18.0 mm), 3/0 AWG-250 kcmil (17.8-22.4 mm)

Maximum Bolt Length: 1-1/2 in, 1-1/4 in, 3/4 in

Maximum Bolt Length (Metric): 19.1 mm, 31.8 mm, 38.1 mm Maximum Feeder Lead Size: 1/0 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Motor Lead Size: 1/0 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Operating Voltage: 8 kV

Range Feeder Cable (AWG & kcmil): 1/0-250, 2-1/0, 250-500, 8-4 Splice Cover Inner Diameter: 10-6 AWG: 0.24 in/ 6-4 AWG 0.30 in, 2-2/0 AWG: 0.50 in / 3/0 AWG-250 kcmil: 0.60 in, 4-2 AWG: 0.30 in / 2- 1/0 AWG: 0.42 in, 4/0 AWG-350 kcmil: 0.60 in / 350-500 kcmil: 0.84 in

Splice Cover Inner Diameter (Metric): 10-6 AWG: 6.1 mm / 6-4 AWG: 7.6 mm, 2-2/0 AWG: 12.7 mm / 3/0 AWG-250 kcmil: 15.2 mm, 4-2 AWG: 7.6 mm / 2- 1/0 AWG: 10.7 mm, 4/0 AWG-350 kcmil: 15.2 mm / 350-500 kcmil: 21.3 mm Splice Cover Length: 10-11 in, 12-13 in, 15-16 in, 17-18 in Splice Cover Length (Metric): 254.0-279.4 mm, 304.8-330.2 mm, 381.0-406.4 mm, 431.8-457.2 mm Splice Type: Inline Units per Case: 1.0 Voltage: 5 kV - 8 kV

## 3M<sup>™</sup> Parallel Clamp CP-1, up to 35 kV, 6 AWG

Part Number CP-1 3M ID 7000149328 UPC 00054007122043

## Details

Designed to use with 3M Stem Connectors SC Series stem connectors For use with aluminum or copper conductors Accommodates 6 AWG (solid) thru 2/0 AWG (stranded) conductors Aluminum material Rated up to 35 kV RoHS 2011/65/EU Compliant 10/case

## **Typical properties**

Brands: 3M<sup>™</sup> Breakout Boot: No Case Quantity: 10 Compatible Conductor Size (Imperial): 2/0 AWG Compatible Conductor Size (Metric): 70 mm<sup>2</sup> (Stranded) For Use With: Aluminum or Copper Conductors Insulation Rejacketing: No Lug Base Metal: Aluminum Lug Type: Compression Lugs Product Type: Parallel Clamp

## 3M<sup>™</sup> Connector CIR Series

#### Details

Standard barrel ensures a secure fit and offers reliable performance Virtually eliminates the need to splice in a new section of cable Specially designed for use with the 5411R and 5412R splice kits Tin plated aluminum for good conductivity and corrosion-resistantance Meets the requirements of ANSI C119.4

## **Typical properties**

Barrel Style: Standard Barrel Case Quantity: 10 Compatible With: 5411R & 5412R, 5411R Splice Body, 5412R Splice Body, 5451R, 5451R Splice Body **Connector Base Metal: Aluminum** Electrical Connector Type: Compression Connectors For Use With: Aluminum or Copper Conductors Insulation Outer Diameter (Imperial): 0.64 in, 0.91 in Insulation Outer Diameter (Metric): 16.256 mm, 23.114 mm Maximum Conductor Size (Imperial): 1 AWG (Stranded), 1/0 AWG (Stranded), 2/0 AWG (Stranded), 4 AWG (Stranded), 4/0 AWG (Stranded) Maximum Conductor Size (Metric): 120 mm<sup>2</sup> (Stranded), 25 mm<sup>2</sup> (Stranded), 50 mm<sup>2</sup> (Stranded), 70 mm<sup>2</sup> (Stranded) Maximum Operating Voltage: 35 Kilovolt Minimum Conductor Size (Imperial): 2 AWG (Stranded) Minimum Conductor Size (Metric): 35 mm<sup>2</sup> (Stranded) Operating Voltage: 15 kV, 25 kV, 28 kV Outer Diameter (Imperial): 0.64 in, 0.91 in **Product Series: CIR Series** Product Type: Repair Splice Connector Voltage: 25/28 kV

#### **Dimensions and Classifications**

Overall Length (Imperial): 8 in, 9 in Overall Length (Metric): 203.2 mm, 228.6 mm

## **Typical properties**

Cable Shielding: Non-shielded Cable Type: Polymeric insulated cables Connection Type: Pigtail (Non-shielded), Pigtail (Shielded) Indoor/Outdoor: Indoor Insulation Outside Diameter: 0.53-0.88 Inch, 0.30-0.51 Inch, 0.43-0.65 Inch, 0.75-1.12 Inch Insulation Outside Diameter Range: 0.30-0.51 in, 0.43-0.65 in, 0.53-0.88 in, 0.75-1.12 in Insulation Outside Diameter Range (Metric): 1.90 - 28.4 mm, 10.9 - 16.5 mm, 13.5-22.4 mm, 7.6-13.0 mm Lug Cover Length: 10.5-11.5 in, 7-8 in, 8-9 in, 9-10 in Lug Cover Length (Metric): 177.8-203.2 mm, 203.2-228.6 mm, 228.6-254.0 mm, 266.7-292.1 mm Lug/Stem Connector Included in Kit: No Maximum Bolt Length: 1-1/2 in, 1-1/4 in, 1/2 in, 3/4 in Maximum Bolt Length (Metric): 12.7 mm, 19.1 mm, 31.8 mm, 38.1 mm Maximum Conductor Size (Imperial): 500 kcmil Maximum Conductor Size (Metric): 240 mm<sup>2</sup> Maximum Feeder Lead Size: 1/0 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Motor Lead Size: 1/0 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Operating Voltage: 8 kV Minimum Conductor Size (Imperial): 4/0 AWG Minimum Conductor Size (Metric): 95 mm<sup>2</sup> Number of Conductors: 1 Number of Skirts: 0 Range Feeder Cable (AWG & kcmil): 1/0-250, 2-1/0, 250-500, 8-4 Splice Type: Pigtail Only Units per Case: 1.0 Voltage: 5 kV - 8 kV, 5/8 kV

## 3M<sup>™</sup> Scotchcast<sup>™</sup> Cold Shrink Inline Splice Kits 5760 Series

#### Details

Splices shielded cables The constant force springs provide a connection for ground braid jumpers Rated for 5/8 to 15 kV applications The insulators are made of EPDM for a long-term seal and offer easy installation Withstands a temperature range of 194 to 266 °F (90 to 130 °C)

## **Typical properties**

**Application: Cable Connection Cable Accessory Products: Electrical Resins** Cable Shielding: Tape Shield Case Quantity: 1 Insulation O.D. Range: 0.65 - 1.00 Inch, 0.93 - 1.94 Inch Insulation Outer Diameter (Imperial): 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in Insulation Outer Diameter (Metric): 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99

mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm Insulation Outside Diameter Range (Metric): 16.5 - 25.4 mm, 23.6 - 49.3 mm Maximum Connector Length: 2.75 Inch, 5.0 inch Maximum Connector Length (Metric): 127.0 mm, 69.9 mm Maximum Connector O.D.: 0.90 in, 1.40 in Maximum Connector O.D. (Metric): 22.9 mm, 35.5 mm Number of Conductors: 3 Product Series: 5760 Series Splice Type: Inline Typical Splice Length (Metric): 1118 mm, 737 mm Voltage: 15 kV, 5 kV, 8 kV eClass 14 Classification Group: 27400107

## 3M<sup>™</sup> Highland<sup>™</sup> Wire Connectors

## Details

Used for connecting and insulating wire connections in a pigtail application Suitable for select 3M<sup>™</sup> Peformance Plus<sup>™</sup> Wire Connectors and 3M<sup>™</sup> Secure Grip Wire Connectors Available in hand driver or power driver options

## **Typical properties**

Brands: Highland™ Case Quantity: 5000,2500,10,000,1000 Conductor Sizes (Imperial): 18 -10 AWG, 18 -12 AWG, 18 -14 AWG, 22 - 14 AWG, 22 - 16 AWG Connection Type: Wire Connector Style: Twist On Flame Retardant: No Maximum Conductor Size (Imperial): 10 AWG, 12 AWG, 14 AWG, 16 AWG, 22 AWG Maximum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 4 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 300 V, 600 V Maximum Voltage Rating: 300 V, 600 V (1000 V in signs, lighting fixtures and luminaries) Minimum Conductor Size (Imperial): 14 AWG, 18 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Product Color: Blue, Gray, Orange, Red, Yellow Product Type: Connector Solution: constructionspring, constructionspringres Voltage Rating: 600 V Wire Connector Type: Twist-on Wire Connectors eClass 14 Classification Group: 27400215

## 3M<sup>™</sup> Heatshrink Cable End Cap SKE

## Details

Offers mechanical and environmental protection to cable ends Adhesive lining offers flexible, water-resistant barrier Suitable for heavy-duty applications Comes in black color Made of flame-retardant, semi-rigid, cross-linked polyolefin Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C)

## **Typical properties**

Application: Sealing the end of the cable Brands: 3M<sup>™</sup> Cable End Expanded: 0.39 in, 0.79 in, 1.57 in, 2.48 in, 2.99 in, 3.94 in Cable End Recovered: 0.16 in, 0.3 in, 0.59 in, 0.98 in, 1.18 in, 1.77 in End Cap Type: Heat Shrink Expanded Height: 0.39 in, 0.79 in, 1.18 in, 1.57 in, 2.48 in, 3.94 in Flame Retardant: Yes Heat Shrink Type: Heat Shrink Molded Shapes Inner Diameter After Shrink (Imperial): 0.16 in, 0.315 in, 0.591 in, 0.984 in, 1.181 in, 1.772 in Inner Diameter After Shrink (Metric): 4 mm, 8 mm, 15 mm, 25 mm, 30 mm, 45 mm Inner Diameter Before Shrink (Imperial): 0.394 in, 0.787 in, 1.575 in, 2.48 in, 2.992 in, 3.937 in Inner Diameter Before Shrink (Metric): 10 mm, 20 mm, 40 mm, 63 mm, 76 mm, 100 mm Material: Semi-rigid, Cross-linked Polyolefin Product Color: Black Recovered Height: 0.16 in, 0.3 in, 0.59 in, 0.98 in, 1.18 in, 1.77 in Recovered Length: 0.12 in, 0.26 in, 0.41 in, 0.63 in, 0.67 in, 1.02 in Shrink Ratio: 2:1 Shrink Type: Heat Shrink UV Resistant: Yes Units per Case: 60.0,250.0,40.0,30.0,1000.0 Use Range: 0.16 in - 0.31 in, 0.31 in - 0.43 in, 0.59 in - 1.26 in, 1.00 in - 1.97 in, 1.18 in - 2.36 in, 1.77 in - 3.15 in With Inner Glue: Yes eClass 14 Classification Group: 27400104

## 3M<sup>™</sup> Constant Force Springs

#### Details

Applies a uniform radial pressure onto the cable For use in earthing or grounding applications Used on lead and aluminum cable sheaths, cable screening tapes or wires and steel or aluminum armor wires Solderless connection RoHS 2011/65/EU Compliant

## **Typical properties**

Application Range: 0.50 in - 0.75 in, 0.80 in - 1.50 in, 1.00 in -2.20 in, 1.50 in -3.00 in, 1.80 in - 4.00 in Cable Accessory Products: Sealing and Grounding Kits Material: Stainless Steel Product Type: Shield Connector Units per Case: 30.0,9.0

#### **Dimensions and Classifications**

Overall Width (Imperial): 0.5 in, 0.625 in, 0.75 in Overall Width (Metric): 12.7 mm, 15.875 mm

## 3M<sup>™</sup> Mechanical Shearbolt Two-Hole Lug QL2 Series

## Details

Designed to use with cold shrink QT-III terminations

Stepless shearbolt bolt shears at the same location regardless of conductor cross section

Contact pad ensures optimun contract pressure for reliable performance and mechanical pull-out strength

Suitable for copper or aluminum conductors

Made of aluminum for good conductivity and has corrosion-resistant tin plating Meets the requirements of ANSI 199.4, class 2 pull out

## **Typical properties**

Lug Type: Shearbolt Lugs

Maximum Conductor Size (Imperial): 1000 kcmil, 1250 kcmil, 250 kcmil, 750 kcmil

Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 400 mm<sup>2</sup>, 500 mm<sup>2</sup>, 633 mm<sup>2</sup> Minimum Conductor Size (Imperial): 1000 kcmil, 2 AWG, 350 kcmil, 500 kcmil Minimum Conductor Size (Metric): 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 35 mm<sup>2</sup>, 500 mm<sup>2</sup> Outer Diameter (Imperial): 1.1 in, 1.65 in, 2.05 in Outer Diameter (Metric): 28 mm, 42 mm, 52 mm Product Type: Lug Stud Hole Quantity: 2 Voltage: 15 kV

## 3M<sup>™</sup> Shield Adapter Kits

## Details

Splices tape shield, wire shield and UniShield® cables Adapter bleeder wire offers quick and simple installation when soldered to the ground braid Suitable for use on accessories such as elbows, modular splices and terminations ANSI Certified

## **Typical properties**

Brands: 3M™ Cable Accessory Products: Sealing and Grounding Kits Cable Shielding: Tape, Wire, Unishield® Cable Size by Voltage: (15 kV) 1250-1750 kcmil (600-850 mm<sup>2</sup>), (15 kV) 2 AWG-250 kcmil (35-150 mm<sup>2</sup>), (15 kV) 350-1000 kcmil (185-500 mm<sup>2</sup>), (25 kV) 1000-1500 kcmil (600-725 mm<sup>2</sup>), (25 kV) 2 AWG-250 kcmil (35-150 mm<sup>2</sup>), (25 kV) 350-750 kcmil (185-500 mm<sup>2</sup>), (35 kV) 2-1/0 AWG (35-60 mm<sup>2</sup>), (35 kV) 2/0 AWG-350 kcmil (70-200 mm<sup>2</sup>), (35 kV) 500-1000 kcmil (240-500 mm<sup>2</sup>), (5/8 kV) 1/0 AWG-350 kcmil (50-200 mm<sup>2</sup>), (5/8 kV) 500-1000 kcmil (240-500 mm<sup>2</sup>), (5/8 kV) 8-1 AWG (10-38 mm<sup>2</sup>) Cable Voltage Rating: 15 kV, 25 kV, 35 kV, 5/8 kV Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3 AWG, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 450 kcmil, 5 AWG, 500 kcmil, 6 AWG, 600 kcmil, 7 AWG, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Jacket Outside Diameter: 0.59 to 1.05 Inch, 0.83 to 1.64 Inch, 1.27 to 2.17 Inch, 1.70 to 2.60 Inch Jacket Outside Diameter Range: 0.59-1.05 in, 0.83-1.64 in, 1.27-2.17 in, 1.70-2.60 in Jacket Outside Diameter Range (Metric): 15.0-26.6 mm, 21.1-41.6 mm, 32.3-55.1 mm, 43.2-66.0 mm Maximum Operating Voltage: 35 kV Product Color: Black Product Type: Cold Shrink Separable Connector Type: Dead Break Elbows Units per Case: 3.0 eClass 14 Classification Group: 27440308

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Ring Tongues

## Details

Nylon-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, seamless brass sleeve offers easy insertion of wires Standard-style ring tongue fits around the stud

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.090 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.33 Inch Connection Width (Imperial): 0.112 in, 0.138 in, 0.164 in, 0.19 in, 0.25 in, 0.315 in, 0.375 in Connection Width (Metric): 2.845 mm, 3.5 mm, 4.166 mm, 4.826 mm, 6.35 mm, 8 mm. 9.525 mm Dimension E: 0.79 Inch Insulation Color: Blue Insulation Material: Nylon, Nylon with Insulation Grip Material: Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 0.823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.17 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.19 in Minimum Stud Diameter (Metric): 5 mm Operating Temperature Range (Celsius): -40 °C to 105 °C Operating Temperature Range (Fahrenheit): -40 °F to 221 °F Product Color: Blue, Red, Yellow Ring Type: Standard Stud Size: #10 Stud Sizes: #10 **Terminal Style: Standard** Terminal Type: Ring Type: Standard UL File Number: E23438

Units per Case: 500.0

## **Dimensions and Classifications**

Overall Length (Imperial): 0.79 in, 0.81 in, 0.91 in, 0.92 in, 0.94 in, 0.98 in, 1.03 in, 1.07 in, 1.09 in, 1.12 in, 1.14 in, 1.26 in

Overall Length (Metric): 20.06 mm, 20.57 mm, 23.11 mm, 23.36 mm, 23.87 mm, 26.16 mm, 27.17 mm, 27.68 mm, 28.95 mm, 32 mm

Overall Width (Imperial): 0.25 in, 0.28 in, 0.31 in, 0.33 in, 0.38 in, 0.47 in, 0.53 in, 0.54 in, 0.56 in

Overall Width (Metric): 6.35 mm, 7.87 mm, 8.38 mm, 9.65 mm, 11.93 mm, 13.46 mm, 13.71 mm, 14.22 mm

## 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 5690K Series

## Details

One-piece cold shrink termination

High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor, weather exposed applications

Silicone rubber insulation is track-resistance and hydrophobic

Silicone cold shrink application provides constant radial pressure, "living seal" Meets IEEE Standard 48, Class 1 for outdoor, weather-exposed applications

## **Typical properties**

Application: Cable Termination BIL: 150 kV, 200 kV

Breakout Boot: No

Cable Insulation Outside Diameter Range: 0.64-0.90 in, 0.84-1.33 in, 1.10-1.65 in, 1.30-1.95 in

Cable Insulation Outside Diameter Range (Metric): 16.3-22.9 mm, 21.3-33.8 mm, 27.9-41.9 mm, 33.0-49.5 mm

Cable Shielding: Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield Case Quantity: 1

Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil

Indoor/Outdoor: Outdoor Skirted

Insulation Level: 100%, 133%

Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in Insulation Outer Diameter (Metric): 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm Insulation Rejacketing: No

Jacket Outside Diameter Range: 0.80-1.20 in, 1.00-1.60 in, 1.30-1.90 in, 1.50-2.40 in

Jacket Outside Diameter Range (Metric): 20,3-30,5 mm, 25,4-40,6 mm, 25.4-40.6 mm, 33,0-48,3 mm, 33.0-48.2 mm, 38,1-61,0 mm, 38.1-61.0 mm Lug/Stem Connector Included in Kit: No

Maximum Installed Length: 15.00 in (Tape and Wire Shield) 14.50 in (UniShield®), 16.50 in (Tape and Wire Shield) 16.00 in (UniShield®), 16.75 in (Tape and Wire Shield) 16.25 in (UniShield®), 19.50 in (Tape and Wire Shield) 19.00 in (UniShield®), 21.50 in (Tape and Wire Shield) 21.00 in (UniShield®), 21.75 in (Tape and Wire Shield) 21.25 in (UniShield®)

Maximum Installed Length (Metric): 381 mm (Tape and Wire Shield) 368 mm (UniShield®), 419 mm (Tape and Wire Shield) 406 mm (UniShield®), 425 mm (Tape and Wire Shield) 413 mm (UniShield®), 495 mm (Tape and Wire Shield) 483 mm (UniShield®), 546 mm (Tape and Wire Shield) 533 mm (UniShield®), 552 mm (Tape and Wire Shield) 540 mm (UniShield®)

Number of Conductors: 1

Number of Skirts: 6, 8

Product Series: 5690K, 7600-T-3G

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

eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Cold Shrink QT-III Termination 7640-T-HSG & 7650-T-HSG Series for 5-35 kV

## Details

Provides a void-free seal to tape shield, wire-over-tape shield and longitudinally corrugated shield power cables

High dielectric-constant material regulates the distribution of electric field stress Suitable for indoor and high-ampacity ground applications

Molded, silicone rubber insulation offers durability and provides constant radial pressure

## **Typical properties**

Application: Cable Termination BIL: 110 kV, 150 kV Brands: 3M™ Breakout Boot: No Cable Insulation Outside Diameter Range: 0.64-1.08 in, 0.72-1.29 in, 0.83-1.53 in, 1.05-1.80 in, 1.53-2.32 in Cable Insulation Outside Diameter Range (Metric): 16.3 - 27.4 mm, 18.3-32.8 mm, 21.1 - 38.9 mm, 26.7 - 45.7 mm, 38.9 - 58.9 mm Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, Wire-Over-Tape Shield Case Quantity: 1 Compatible Lug: QL2-A-4/0-600,QL2-A-500-1000,QL2-A-2-250,QL2-A-350-750,QL2-A-1/0-350,QL2-A-1000-1250 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil. 900 kcmil Indoor/Outdoor: Indoor Non-skirted Insulation Level: 100%, 133% Insulation O.D. Range: 18.3 - 32.8 mm Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in,

2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in

Insulation Outer Diameter (Metric): 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm Insulation Rejacketing: No Lug/Stem Connector Included in Kit: No Material: Silicone Rubber Maximum Installed Length: 12.00 in, 16.00 in Number of Conductors: 1 Number of Skirts: 0 Product Color: Grav Product Series: 7640-T-HSG, 7640-T-HSG-110, 7650-T-HSG, 7650-T-HSG-150 Voltage: 15 kV, 25 kV, 25/28 kV, 35 kV, 5 kV, 8 kV Voltage Application: Medium Voltage

eClass 14 Classification Group: 27400102

## 3M<sup>™</sup> Cold Shrink QT-III High Fault Current Termination Kit 7650-S-HSG & 7660-HSG Series

## Details

Provides a void-free seal to tape shield, longitudinally corrugated shield and wireover-tape shield power cables

High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications

Unique step-core design and silicone sealing compounds enable easier installation

## **Typical properties**

BIL: 150 kV, 200 kV

Brands: 3M™

Breakout Boot: No

Cable Insulation Outside Diameter Range: 0.64-1.08 in, 0.72-1.29 in, 0.83-1.53 in, 1.05-1.80 in, 1.15-1.98 in, 1.53-2.32 in, 0.69-1.22 in

Cable Insulation Outside Diameter Range (Metric): 16.3 - 27.4 mm, 18.3-32.8 mm, 21.1 - 38.9 mm, 26.7 - 45.7 mm, 29,2-50,3 mm, 38.9 - 58.9 mm, 17,5-31,0 mm

Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Shield, Wire-Over-Tape Shield Case Quantity: 1

Compatible Lug: QL2-A-4/0-600,QL2-A-2-250,QL2-A-500-1000,QL2-A-350-750,QL2-A-1/0-350,QL2-A-1000-1250

Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil

## Indoor/Outdoor: Outdoor, Outdoor Skirted

Insulation Level: 100%, 133%

Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in

Insulation Outer Diameter (Metric): 16.256 mm, 16.3 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm Insulation Rejacketing: No Lug/Stem Connector Included in Kit: No, Yes Maximum Installed Length: 12.25 in, 13.25 in, 20.50 in, 21.50 in Mounting Bracket Included: No, Yes Number of Conductors: 1 Number of Skirts: 4,8

Product Series: 7650-S, 7650-S-HSG, 7650-S-HSG-4, 7660-S-HSG Voltage: 15 kV, 25 kV, 25/28 kV, 25/5 kV, 28 kV, 35 kV, 5 kV, 8 kV

Voltage Application: Medium Voltage

eClass 14 Classification Group: 27400102

## 3M<sup>™</sup> Cold Shrink QS-III Inline CN/JCN Cable Splice Kits 5467A and 5468A Series

## Details

Inline splice for joining jacketed concentric neutral (JCN) and concentric neutral (CN) power cables

Special electrode design of the kit reduces the electrical stress at a critical cable/splice interface

Designed for feeder and distribution circuits, size transition splicing, direct burial installations, submerged locations and use with standard inline crimp connectors Silicon rubber-splice body provides good high and low temperature performance, and the EPDM rubber jacket offers physical protection

Rated for 35 kV cables

High-voltage, production-tested for partial discharge and AC ensure reliability

## **Typical properties**

Application: Cable Connection Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield Cable Type: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 350 kcmil, 4/0 AWG, 500 kcmil, 750 kcmil For Use With: Aluminum and/or Copper Conductors Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Material: Silicone Rubber Number of Conductors: 1 Product Color: Black Product Series: 5467A, 5468A, 5670 Splice Type: Cold Shrink, Inline Voltage: 15 kV, 25/28 kV, 35 kV eClass 14 Classification Group: 27400107

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Fork Non-Insulated, 100/bottle, M14-10FX, widertongue design for use on free-standing studs, 500/Case

3M ID 7010399921 UPC 00051128586648

## Details

Non-insulated, brazed-seam barrel ensures a secure fit and offers reliable performance Beveled mouth offers easy insertion of wires Wider tongue design for use on free-standing studs Electrolytic copper construction offers good conductivity Withstands a maximum temperature of 347 degrees F (175 degrees C) for bare terminals 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Barrel Inside Diameter: 0.090 Inch Barrel Style: Brazed Brands: Scotchlok™ CSA File Number: LR22190 Clearance (C): 0.29 Inch Dimension E: 0.54 Inch Fork Type: Standard Insulation Material: Non-insulated Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 2.08 mm<sup>2</sup> Minimum Conductor Size (Imperial): 16 AWG Minimum Conductor Size (Metric): 1.31 mm<sup>2</sup> Stud Size: #10 **Terminal Style: Standard** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.7 in Overall Width (Imperial): 0.34 in

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Butted Seam Piggy-Back Disconnects

## Details

The tongue portion with fingers grip a male quick-slide and a tongue extension grips a female quick-slide Allows for quick and easy disconnect of wires Mates with 0.25-in wide male and female tab Accommodates wire sizes 22 to 18 AWG Made of durable brass for good conductivity and has corrosion-resistant tin plating Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant 1000/case

## **Typical properties**

Barrel Inside Diameter: 0.070 Inch,0.09 Inch,0.07 Inch Barrel Length (Imperial): 0.23 Inch Barrel Style: Butted Bullet Diameter: 0.180.0.156 Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Disconnect Type: Female|Male,Female,Male Fastener Orientation: Male-Female Insulation Material: Vinyl Mates with Female Width: 0.25 Inch, 0.250 Inch Mates with Male Tab Width (W'): 0.25 Inch, 0.250 Inch Maximum Conductor Size (Imperial): 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.15 in, 0.17 in Minimum Conductor Size (Imperial): 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup> Pad Width: 0.25 in Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250 Terminal Style: Piggy-back Terminal Type: Disconnect Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 0.87 in

## Details

Specially designed for inline and tee splicing Rated for use on 5 to 15 kV OSHA Approved

## **Typical properties**

Barrel Length (Imperial): 0.94 Inch Barrel Length (Metric): 23.8 mm Barrel Style: Standard Barrel Cable Shielding: Tape Shield, UniShield®, Wire Shield Case Quantity: 1 Center of Hole to End of Pad: 0.531 Inch Center of Hole to End of Pad (Metric): 13.4 mm Conductor Material: Aluminum, Copper Conductor Size by Voltage for Tee Splice: (5 & 8 kV, Cu) 400-750 kcmil, (5 & 8 kV, AI) 250-500 kcmil, (15 kV, 100%, Cu) 1/0 AWG - 350 kcmil, (15 kV, 100%, AI) 4-4/0 AWG, (15 kV, 133%, Cu) 4 AWG - 250 kcmil, (15 kV, 133%, Al) 4-3/0 AWG,(5 & 8 kV, Cu) 4-2/0 AWG, (5 & 8 kV, AI) 4-1/0 AWG,(5 & 8 kV, Cu) 3/0 AWG - 350 kcmil, (5 & 8 kV, Al) 2/0-4/0 AWG, (15 kV, 100%, Cu) 4-1 AWG Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Conductor Sizes (Metric): 120 mm<sup>2</sup>, 150 mm<sup>2</sup>, 185 mm<sup>2</sup>, 240 mm<sup>2</sup>, 25 mm<sup>2</sup>, 300 mm<sup>2</sup>, 329 mm<sup>2</sup>, 35 mm<sup>2</sup>, 354 mm<sup>2</sup>, 400 mm<sup>2</sup>, 405 mm<sup>2</sup>, 456 mm<sup>2</sup>, 50 mm<sup>2</sup>, 70 mm<sup>2</sup>, 95 mm<sup>2</sup> **Connector Description: One Hole Connector Material: Copper** For Use With: Copper Conductor Only Inside Diameter (Imperial): 0.49 in Inside Diameter (Metric): 12.4 mm Lug Base Metal: Copper Lug/Stem Connector Included in Kit: No Maximum Conductor Size (Imperial): 4 AWG Maximum Conductor Size (Metric): 25 mm<sup>2</sup> Maximum Operating Voltage: 15 kV, 35 Kilovolt Minimum Conductor Size (Imperial): 4 AWG Minimum Conductor Size (Metric): 25 mm<sup>2</sup> Minimum Operating Voltage: 5 kV Number of Conductors: 1 Number of Holes: 1 none Outer Diameter (Imperial): 0.617 in Pad Length (Imperial): 1.11 in Pad Length (Metric): 28.2 mm Pad Width: 0.91 in Pad Width (Metric): 23.1 mm Product Color: Orange Product Series: 5700, 5700 Series

Product Type: Splice Splice Type: Inline, Tape, Tee Stud Sizes: 1/2 Inch Suitable for High Voltage: No Tape Type: Tape Splice Kit Voltage: 15 kV, 5/8 kV Vulcanizing: No eClass 14 Classification Group: 20420490

## **Dimensions and Classifications**

Overall Length (Imperial): 2.63 in Overall Length (Metric): 66.8 mm

## 3M<sup>™</sup> CXS Series Cold Shrink Coax Sealing Kits

## Details

Reliable seal against water Tough, resilient rubber holds pressure seal, even after exposure Broad application range; can lower inventory costs Eliminates need for heat source or special tools Reduces installation time for sealing jobs

## **Typical properties**

Brands: 3M<sup>™</sup> Material: EPDM Rubber Product Type: Sealing Kit Solution for: Wireless Network: Weatherproofing

## **Typical properties**

Body Material: Copper Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Insulation Material: Nylon Maximum Conductor Size (Imperial): 16 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 1.5 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Minimum Conductor Size (Imperial): 10 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 6 mm<sup>2</sup> Product Color: Translucent White Terminal Type: Standard eClass 14 Classification Group: 27400212

## **Dimensions and Classifications**

Overall Length (Imperial): 0.83 in, 1 in Overall Length (Metric): 21.1 mm, 25.4 mm

## 3M<sup>™</sup> Heat Shrink Tubing VFP-876

3M ID B10398087

## Details

Rated for continuous operation from  $-55^{\circ}C$  ( $-67^{\circ}F$ ) to  $135^{\circ}C$  ( $275^{\circ}F$ ) VFP-876 Tubing has a 2:1 shrink ratio

## **Typical properties**

Brands: 3M<sup>™</sup> Flame Retardant: Yes Maximum Operating Temperature (Celsius): 135 °C Maximum Operating Temperature (Fahrenheit): 275 °F Operating Temperature (Celsius): -55 to 135 Degrees Celsius Operating Temperature (Fahrenheit): -67 °F to 275 °F Shrink Ratio: 2:1 UL Bug Temperature (Celsius): 125 Degrees Celsius UL Bug Temperature (Fahrenheit): 257 Degrees Fahrenheit UL Bug Voltage: 600 Volt eClass 14 Classification Group: 27400105

## 3M<sup>™</sup> Cable Tie Mounting Bases

3M ID B00034736

## Details

Keep your wire or cable bundles organized in narrow spaces Ideal for use with miniature, intermediate and standard cable ties Bag quantity of 100 RoHS 2011/65/EU Compliant

## **Typical properties**

eClass 14 Classification Group: 15090300

## **Shearbolt Holding Tool**

#### Details

Designed for use with mechanical shearbolt lugs and connectors Offers physical support for the mechanical shearbolt lug and/or connector during the installation on the electrical medium-voltage cable conductor For use with 3M mechanical shearbolt connectors QCI Series Suitable for use with 3M mechanical shearbolt 1-hole T-body lugs QLS Series and 3M shearbolt 2-hole lugs QL2 Series

#### **Typical properties**

Electrical Connector Type: Shearbolt Connectors Lug Type: Shearbolt Lugs Product Type: Tool

## 3M<sup>™</sup> Trifurcating Transition Splice Kits

#### Details

Specially designed splice to connect a 3/C paper insulated lead covered (PILC) cable to three 1/C Poly/EPR insulated cables Poly/EPR cables include CN, JCN, LC, tape shield, wire shield, poly/EP lead or UniShield® cables Mastic components seal at Poly/EPR cable jacket ends Silicone rubber-splice body controls the electrical field of the high voltage over the connector Rated for 15 kV cables Meets the requirements of IEEE 404 standards

#### **Typical properties**

Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Voltage: 15 kV eClass 14 Classification Group: 27400107

#### **Dimensions and Classifications**

Overall Length (Imperial): 4.13 in Overall Length (Metric): 104.8 mm

### 3M<sup>™</sup> Scotchcast<sup>™</sup> Mine and Portable Cable Splicing Kits 8096 Series

#### Details

Designed for splicing SHD-GC, MPF-GC and MPF non-shielded cables Flame-retardant resin 2131 is used as an insulating material for cable splices Perfect for use on draglines, power shovels, drills and type MPF underground power feeder cables

Rated for 5 to 15 kV applications

ABS Certified, MSHA Approved and RoHS 2011/65/EU Compliant

#### **Typical properties**

**Application: Cable Connection** Cable Accessory Products: Electrical Resins Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield Cable Type: MPF, MPF-GC, MV-105, MV-90, SHD-GC Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 350 kcmil Conductor Sizes (Metric): 185 mm<sup>2</sup>, 50 mm<sup>2</sup> Connector Included: None Flame Retardant: Yes Gel Time: 17 min 73 °F (23 °C) Hardness: 82 Shore A Indoor/Outdoor: Both Insulation Outer Diameter (Imperial): 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in, 2.08 in, 2.09 in, 2.1 in, 2.11 in, 2.12 in, 2.13 in, 2.14 in, 2.15 in, 2.16 in, 2.17 in, 2.18 in, 2.19 in, 2.2 in, 2.21 in, 2.22 in, 2.23 in, 2.24 in, 2.25 in, 2.26 in, 2.27 in, 2.28 in, 2.29 in, 2.3 in, 2.31 in, 2.32 in, 2.33 in, 2.34 in, 2.35 in, 2.36 in, 2.37 in, 2.38 in, 2.39 in, 2.4 in, 2.41 in, 2.42 in, 2.44 in, 2.45 in, 2.46 in, 2.47 in, 2.48 in, 2.49 in, 2.5 in, 2.51 in, 2.52 in, 2.53 in, 2.54 in, 2.55 in, 2.56 in, 2.57 in, 2.58 in, 2.59 in, 2.6 in, 2.61 in, 2.62 in, 2.63 in, 2.64 in, 2.65 in, 2.66 in, 2.67 in, 2.68 in, 2.69 in, 2.7 in, 2.71 in, 2.72 in, 2.73 in, 2.74 in, 2.75 in, 2.76 in, 2.77 in, 2.78 in, 2.79 in, 2.8 in, 2.81 in, 2.82 in, 2.83 in, 2.84 in, 2.85 in, 2.86 in, 2.87 in, 2.88 in, 2.89 in, 2.9 in, 2.91 in, 2.92 in, 2.93 in, 2.94 in, 2.95 in, 2.96 in, 2.97 in, 2.98 in, 2.99 in, 3 in, 3.01 in, 3.02 in, 3.03 in, 3.04 in, 3.05 in, 3.06 in, 3.07 in, 3.08 in, 3.09 in, 3.1 in, 3.11 in, 3.12 in, 3.13 in, 3.14 in, 3.15 in, 3.16 in, 3.17 in, 3.18 in, 3.19 in, 3.2 in, 3.21 in, 3.22 in, 3.23 in, 3.24 in, 3.25 in, 3.26 in, 3.27 in, 3.28 in, 3.29 in, 3.3 in, 3.31 in, 3.32 in, 3.33 in, 3.34 in, 3.35 in, 3.36 in, 3.37 in, 3.38 in, 3.39 in, 3.4 in, 3.41 in, 3.42 in, 3.43 in, 3.44 in, 3.45 in, 3.46 in, 3.47 in, 3.48 in, 3.49 in, 3.5 in, 3.51 in, 3.52 in, 3.53 in, 3.54 in, 3.55 in, 3.56 in, 3.57 in, 3.58 in, 3.59 in, 3.6 in, 3.61 in, 3.62 in, 3.63 in, 3.64 in, 3.65 in, 3.66 in, 3.67 in, 3.68 in, 3.69 in, 3.7 in, 3.71 in, 3.72 in, 3.73 in, 3.74 in, 3.75 in, 3.76 in, 3.77 in, 3.78 in, 3.79 in, 3.8 in, 3.81 in, 3.82 in, 3.83 in, 3.84 in, 3.85 in, 3.86 in, 3.87 in, 3.88 in, 3.89 in, 3.9 in, 3.91 in, 3.92 in, 3.93 in, 3.94 in, 3.95 in, 3.96 in, 3.97 in, 3.98 in, 3.99 in, 4 in, 4.01 in, 4.02 in, 4.03 in, 4.04 in, 4.05 in, 4.06 in, 4.07 in, 4.08 in, 4.09 in, 4.1 in, 4.11 in, 4.12 in, 4.13 in, 4.14 in, 4.15 in, 4.16 in, 4.17 in, 4.18 in, 4.19 in, 4.2 in, 4.21 in, 4.22 in, 4.23 in, 4.24 in, 4.25 in, 4.26 in, 4.27 in, 4.28 in, 4.29 in, 4.3 in, 4.31 in,

4.32 in, 4.33 in, 4.34 in, 4.35 in, 4.36 in, 4.37 in, 4.38 in, 4.39 in, 4.4 in, 4.41 in, 4.42 in, 4.43 in, 4.44 in, 4.45 in, 4.46 in, 4.47 in, 4.48 in, 4.49 in, 4.5 in, 4.51 in, 4.52 in, 4.53 in, 4.54 in, 4.55 in, 4.56 in, 4.57 in, 4.58 in, 4.59 in, 4.6 in, 4.61 in, 4.62 in, 4.63 in, 4.64 in, 4.65 in, 4.66 in, 4.67 in, 4.68 in, 4.69 in, 4.7 in, 4.71 in, 4.72 in, 4.73 in, 4.74 in, 4.75 in, 4.76 in, 4.77 in, 4.78 in, 4.79 in, 4.8 in, 4.81 in, 4.82 in, 4.83 in, 4.84 in, 4.85 in, 4.86 in, 4.87 in, 4.88 in, 4.89 in, 4.9 in, 4.91 in, 4.92 in, 4.93 in, 4.94 in, 4.95 in, 4.96 in, 4.97 in, 4.98 in, 4.99 in, 5 in, 5.01 in, 5.02 in, 5.03 in, 5.04 in, 5.05 in, 5.06 in, 5.07 in, 5.08 in, 5.09 in, 5.1 in, 5.11 in, 5.12 in, 5.13 in, 5.14 in, 5.15 in, 5.16 in, 5.17 in, 5.18 in, 5.19 in, 5.2 in, 5.21 in, 5.22 in, 5.23 in, 5.24 in, 5.25 in, 5.26 in, 5.27 in, 5.28 in, 5.29 in, 5.3 in, 5.31 in, 5.32 in, 5.33 in, 5.34 in, 5.35 in, 5.36 in, 5.37 in, 5.38 in, 5.39 in, 5.4 in, 5.41 in, 5.42 in, 5.43 in, 5.44 in, 5.45 in, 5.46 in, 5.47 in, 5.48 in, 5.49 in, 5.5 in, 5.51 in, 5.52 in, 5.53 in, 5.54 in, 5.55 in, 5.56 in, 5.57 in, 5.58 in, 5.59 in, 5.6 in, 5.61 in, 5.62 in, 5.63 in, 5.64 in, 5.65 in, 5.66 in, 5.67 in, 5.68 in, 5.69 in, 5.7 in, 5.71 in, 5.72 in, 5.73 in, 5.74 in, 5.75 in, 5.76 in, 5.77 in, 5.78 in, 5.79 in, 5.8 in, 5.81 in, 5.82 in, 5.83 in, 5.84 in, 5.85 in, 5.86 in, 5.87 in, 5.88 in, 5.89 in, 5.9 in, 5.91 in, 5.92 in, 5.93 in, 5.94 in, 5.95 in, 5.96 in, 5.97 in, 5.98 in, 5.99 in, 6 in Insulation Outer Diameter (Metric): 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm, 50.546 mm, 50.8 mm, 51.054 mm, 51.308 mm, 51.562 mm, 51.816 mm, 52.07 mm, 52.324 mm, 52.578 mm, 52.832 mm, 53.086 mm, 53.34 mm, 53.594 mm, 53.848 mm, 54.102 mm, 54.356 mm, 54.61 mm, 54.864 mm, 55.118 mm, 55.372 mm, 55.626 mm, 55.88 mm, 56.134 mm, 56.388 mm, 56.642 mm, 56.896 mm, 57.15 mm, 57.404 mm, 57.658 mm, 57.912 mm, 58.166 mm, 58.42 mm, 58.674 mm, 58.928 mm, 59.182 mm, 59.436 mm, 59.69 mm, 59.944 mm, 60.198 mm, 60.452 mm, 60.706 mm, 60.96 mm, 61.214 mm, 61.468 mm, 61.976 mm, 62.23 mm, 62.484 mm, 62.738 mm, 62.992 mm, 63.246 mm, 63.5 mm, 63.754 mm, 64.008 mm, 64.262 mm, 64.516 mm, 64.77 mm, 65.024 mm, 65.278 mm, 65.532 mm, 65.786 mm, 66.04 mm, 66.294 mm, 66.548 mm, 66.802 mm, 67.056 mm, 67.31 mm, 67.564 mm, 67.818 mm, 68.072 mm, 68.326 mm, 68.58 mm, 68.834 mm, 69.088 mm, 69.342 mm, 69.596 mm, 69.85 mm, 70.104 mm, 70.358 mm, 70.612 mm, 70.866 mm, 71.12 mm, 71.374 mm, 71.628 mm, 71.882 mm, 72.136 mm, 72.39 mm, 72.644 mm, 72.898 mm, 73.152 mm, 73.406 mm, 73.66 mm, 73.914 mm, 74.168 mm, 74.422 mm, 74.676 mm, 74.93 mm, 75.184 mm, 75.438 mm, 75.692 mm, 75.946 mm, 76.2 mm, 76.454 mm, 76.708 mm, 76.962 mm, 77.216 mm, 77.47 mm, 77.724 mm, 77.978 mm, 78.232 mm, 78.486 mm, 78.74 mm, 78.994 mm, 79.248 mm, 79.502 mm, 79.756 mm, 80.01 mm, 80.264 mm, 80.518 mm, 80.772 mm, 81.026 mm, 81.28 mm, 81.534 mm, 81.788 mm, 82.042 mm, 82.296 mm, 82.55 mm, 82.804 mm, 83.058 mm, 83.312 mm, 83.566 mm, 83.82 mm, 84.074 mm, 84.328 mm, 84.582 mm, 84.836 mm, 85.09 mm, 85.344 mm, 85.598 mm, 85.852 mm, 86.106 mm, 86.36 mm, 86.614 mm, 86.868 mm, 87.122 mm, 87.376 mm, 87.63 mm, 87.884 mm, 88.138 mm, 88.392 mm, 88.646 mm, 88.9 mm, 89.154 mm, 89.408 mm, 89.662 mm, 89.916 mm, 90.17 mm, 90.424 mm, 90.678 mm, 90.932 mm, 91.186 mm, 91.44 mm, 91.694 mm, 91.948 mm, 92.202 mm, 92.456 mm, 92.71 mm, 92.964 mm, 93.218 mm, 93.472 mm, 93.726 mm, 93.98 mm, 94.234 mm, 94.488 mm, 94.742 mm, 94.996 mm, 95.25 mm, 95.504 mm, 95.758 mm, 96.012 mm, 96.266 mm, 96.52 mm, 96.774 mm, 97.028 mm, 97.282 mm, 97.536 mm, 97.79 mm, 98.044 mm, 98.298 mm, 98.552 mm, 98.806 mm, 99.06 mm, 99.314 mm, 99.568 mm, 99.822 mm, 100.076 mm, 100.33 mm, 100.584 mm, 100.838 mm, 101.092 mm, 101.346 mm, 101.6 mm, 101.854 mm, 102.108 mm, 102.362 mm, 102.616 mm, 102.87 mm, 103.124 mm, 103.378 mm, 103.632 mm,

103.886 mm, 104.14 mm, 104.394 mm, 104.648 mm, 104.902 mm, 105.156 mm, 105.41 mm, 105.664 mm, 105.918 mm, 106.172 mm, 106.426 mm, 106.68 mm, 106.934 mm, 107.188 mm, 107.442 mm, 107.696 mm, 107.95 mm, 108.204 mm, 108.458 mm, 108.712 mm, 108.966 mm, 109.22 mm, 109.474 mm, 109.728 mm, 109.982 mm, 110.236 mm, 110.49 mm, 110.744 mm, 110.998 mm, 111.252 mm, 111.506 mm, 111.76 mm, 112.014 mm, 112.268 mm, 112.522 mm, 112.776 mm, 113.03 mm, 113.284 mm, 113.538 mm, 113.792 mm, 114.046 mm, 114.3 mm, 114.554 mm, 114.808 mm, 115.062 mm, 115.316 mm, 115.57 mm, 115.824 mm, 116.078 mm, 116.332 mm, 116.586 mm, 116.84 mm, 117.094 mm, 117.348 mm, 117.602 mm, 117.856 mm, 118.11 mm, 118.364 mm, 118.618 mm, 118.872 mm, 119.126 mm, 119.38 mm, 119.634 mm, 119.888 mm, 120.142 mm, 120.396 mm, 120.65 mm. 120.904 mm. 121.158 mm. 121.412 mm. 121.666 mm. 121.92 mm. 122.174 mm, 122.428 mm, 122.682 mm, 122.936 mm, 123.19 mm, 123.444 mm, 123.698 mm, 123.952 mm, 124.206 mm, 124.46 mm, 124.714 mm, 124.968 mm, 125.222 mm, 125.476 mm, 125.73 mm, 125.984 mm, 126.238 mm, 126.492 mm, 126.746 mm, 127 mm, 127.254 mm, 127.508 mm, 127.762 mm, 128.016 mm, 128.27 mm, 128.524 mm, 128.778 mm, 129.032 mm, 129.286 mm, 129.54 mm, 129.794 mm, 130.048 mm, 130.302 mm, 130.556 mm, 130.81 mm, 131.064 mm, 131.318 mm, 131.572 mm, 131.826 mm, 132.08 mm, 132.334 mm, 132.588 mm, 132.842 mm, 133.096 mm, 133.35 mm, 133.604 mm, 133.858 mm, 134.112 mm, 134.366 mm, 134.62 mm, 134.874 mm, 135.128 mm, 135.382 mm, 135.636 mm, 135.89 mm, 136.144 mm, 136.398 mm, 136.652 mm, 136.906 mm, 137.16 mm, 137.414 mm, 137.668 mm, 137.922 mm, 138.176 mm, 138.43 mm, 138.684 mm, 138.938 mm, 139.192 mm, 139.446 mm, 139.7 mm, 139.954 mm, 140.208 mm, 140.462 mm, 140.716 mm, 140.97 mm, 141.224 mm, 141.478 mm, 141.732 mm, 141.986 mm, 142.24 mm, 142.494 mm, 142.748 mm, 143.002 mm, 143.256 mm, 143.51 mm, 143.764 mm, 144.018 mm, 144.272 mm, 144.526 mm, 144.78 mm, 145.034 mm, 145.288 mm, 145.542 mm, 145.796 mm, 146.05 mm, 146.304 mm, 146.558 mm, 146.812 mm, 147.066 mm, 147.32 mm, 147.574 mm, 147.828 mm, 148.082 mm, 148.336 mm, 148.59 mm, 148.844 mm, 149.098 mm, 149.352 mm, 149.606 mm, 149.86 mm, 150.114 mm, 150.368 mm, 150.622 mm, 150.876 mm, 151.13 mm, 151.384 mm, 151.638 mm, 151.892 mm, 152.146 mm, 152.4 mm Insulation Outside Diameter Range: 1.24 - 2.07 Inch Insulation Outside Diameter Range (Metric): 31.5 - 52.6 mm Material: EPDM Rubber Maximum Conductor Size (Imperial): 1000 kcmil Maximum Conductor Size (Metric): 500 mm<sup>2</sup> Minimum Conductor Size (Imperial): 250 kcmil Minimum Conductor Size (Metric): 120 mm<sup>2</sup> Mining Sector Approval: Yes Number of Conductors: 1, 3 Product Color: Black Splice Type: Inline Typical Splice Length: 35 in Typical Splice Length (Metric): 889 mm Units per Case: 1.0 Voltage: 15 kV, 46 kV, 5 kV, 8 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400107

## 3M<sup>™</sup> Splice Kit UF

#### Details

Moisture-proof electrical connection for type UF-B underground feeder Designed for use with non-shielded cables Heavy-wall tubing for high level of moisture protection 4 cylindrical set screw connectors separated by a piece of vinyl insulation Rated for 600V applications Withstands a temperature range of -67 to 230 degrees F (-55 to 110 degrees C) UL Listed and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: 3M<sup>™</sup> Conductor Sizes (Imperial): 10 AWG, 12 AWG, 14 AWG, 8 AWG Maximum Conductor Size (Metric): 10 mm<sup>2</sup> Product Type: Splice Units per Case: 6.0 Voltage: 600 V

# 3M<sup>™</sup> Cold Shrink Mine and Portable Splice Kit 8043-1, Max. Cable O.D. 1.80 in, 1/Case

3M ID 7000031367 UPC 00054007156680

#### Details

Perfect for splicing non-shielded cables Rated for 5 to 8 kV applications Includes Scotch® 24 electrical shielding tape, cold shrink filler tube, jacket tube, Scotch 13 electrical semi-conducting tape and more ABS Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

**Application: Cable Connection** Brands: 3M<sup>™</sup> Cable Shielding: Non-shielded Cable Type: Cable with rubber insulation Conductor Sizes (Imperial): 1/0 AWG Conductor Sizes (Metric): 50 mm<sup>2</sup> Halogen Free: No Insulation Outer Diameter (Imperial): 1.8 in Insulation Outer Diameter (Metric): 45.7 mm Material: EPDM Rubber Maximum Cable Outside Diameter: 1.8 Inch Maximum Conductor Size (Imperial): 1/0 AWG Maximum Conductor Size (Metric): 50 mm<sup>2</sup> Maximum Recommended Voltage Rating: 8 Minimum Conductor Size (Imperial): 4 AWG Minimum Conductor Size (Metric): 25 mm<sup>2</sup> Minimum Recommended Voltage Rating: 5 Kilovolt Number of Conductors: 3 Product Color: Black Splice Type: Inline Units per Case: 1.0 Voltage: 5 kV, 8 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400107

## 3M<sup>™</sup> GS Series Ground Strap Assembly Kits

#### Details

Designed for use with grounding tape and wire-shielded power cables Rated for 5 to 35 kV applications

#### **Typical properties**

Brands: 3M<sup>™</sup> Cable Accessory Products: Sealing and Grounding Kits Product Type: Ground Strap Units per Case: 9.0

#### **Dimensions and Classifications**

Overall Length (Imperial): 4.75 in, 6.87 in, 7.12 in Overall Width (Imperial): 0.31 in, 0.62 in Overall Width (Metric): 15.748 mm

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Vinyl Insulated Interlock Barrel Female Disconnects

#### Details

Vinyl-insulated, butted seam with an interlocking barrel and funnel-designed, polyvinyl chloride sleeve offers easy insertion of wires Dents and rolled edges of this female disconnect terminal offer excellent holding force Allows for quick and easy disconnect of wires Mates with 0.25-in wide male tab Made of durable brass for good conductivity and has corrosion-resistant tin plating Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.076 Inch,0.128 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Interlocking Barrel CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.23 Inch **Disconnect Type: Female** Fastener Orientation: Female Flame Retardant: No Fork Type: Standard Fork Grease Filling Against Corrosion: No Insulation Color: Yellow Insulation Material: Vinyl Interrupt Free Shifting: No Material: ETP Copper Mates with Female Width: 0.25 Inch, 0.250 Inch Mates with Male Tab Width (W'): 0.25 Inch, 0.250 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.25 in Product Color: Yellow

Solution for: Wireless Network: Infrastructure Accessories Tab Width: 0.250 Terminal Style: Standard Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in Overall Length (Imperial): 0.83 in, 0.95 in Overall Length (Metric): 24.13 mm Overall Width (Imperial): 0.37 in

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Locking Forks

#### Details

Nylon-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, seamless brass sleeve offers easy insertion of wires Spring-like tongue firmly fits around the stud

Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.070 Inch,0.090 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.25 Inch Dimension E: 0.71 Inch,0.69 Inch Fork Type: Locking Insulation Material: Nylon with Insulation Grip Material: Plastic Maximum Conductor Size (Imperial): 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Lock Width: 0.34 Inch,0.27 Inch,0.35 Inch Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup> Product Color: Blue, Red Stud Diameter (Imperial): 0.138 in Stud Diameter (Metric): 3.505 mm Stud Size: #10,#6,#8 **Terminal Style: Locking** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.87 in, 0.89 in Overall Length (Metric): 22.098 mm, 22.6 mm Overall Width (Imperial): 0.24 in, 0.25 in, 0.3 in, 0.32 in Overall Width (Metric): 6.09 mm, 6.35 mm, 8.12 mm

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Standard Forks

#### Details

Nylon-insulated, butted-seam barrel ensures a secure fit and offers reliable performance

Funnel-designed, seamless brass sleeve offers easy insertion of wires Wider tongue design for use on free-standing studs Electrolytic copper construction offers good conductivity

Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.070 Inch,0.09 Inch,0.135 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.29 Inch Dimension E: 0.75 Inch,0.84 Inch,0.73 Inch Fork Type: Standard Insulation Material: Nylon with Insulation Grip Material: ETP Copper Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.17 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Product Color: Blue, Red, Yellow Stud Diameter (Imperial): 0.164 in Stud Diameter (Metric): 4.166 mm Stud Size: #10,#6,#8 **Terminal Style: Standard** Terminal Type: Fork UL File Number: E23438 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Length (Imperial): 0.89 in, 0.91 in, 1.03 in Overall Length (Metric): 22.6 mm, 23.11 mm, 23.114 mm, 26.16 mm Overall Width (Imperial): 0.34 in, 0.38 in Overall Width (Metric): 8.6 mm, 8.636 mm, 9.6 mm

## 3M<sup>™</sup> Scotchcast<sup>™</sup> Flexible Power Cable Splicing Kits 82-F Series

#### Details

The self-curing resin forms a splice or repair that resists abrasion Designed to splice or re-jacket non-shielded portable power cable and portable cord Suitable for use with compression inline connectors 1 kV-rated for multi-conductor and 5 kV-rated for single-conductor cable applications MSHA Approved and RoHS 2011/65/EU Compliant MSHA Approved and RoHS 2011/65/EU Compliant Typical properties Cable Accessory Products: Electrical Resins Cable Outside Diameter Range: 0.80-1.20 inch Cable Shielding: Non-shielded Cable Type: multi core, non shielded, rubber insulated reeling cables Conductor Amount: Multiple, Single Conductor Sizes (Imperial): Single Conductor - 2/0-4/0 AWG, Single Conductor -6-1/0 AWG Connection Max Outside Diameter: Multiple Conductors - 0.90 inch, Multiple Conductors - 1.30 inch, Single Conductor - 0.62 inch, Single Conductor - 0.82 inch Dielectric Strength (V/mil): 343 V/mil Flame Retardant: Resin only Gel Time: 17 min 73 °F (23 °C) Hardness: 82 Shore A Indoor/Outdoor: Both Insulation Outside Diameter Range: 0.25 - 0.80 Inch, 0.80 - 1.20 Inch Insulation Outside Diameter Range (Metric): 20.0 - 30.0 mm, 6.0 - 20.0 mm Maximum Conductor Size (Imperial): 4/0 AWG, 6 AWG Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 50 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.8 in, 1.2 in Maximum Insulation Outer Diameter (Metric): 20 mm, 30 mm Maximum Operating Voltage: 5 Kilovolt Minimum Conductor Size (Imperial): 10 AWG, 4/0 AWG Minimum Conductor Size (Metric): 120 mm<sup>2</sup>, 6 mm<sup>2</sup> Minimum Insulation Outer Diameter (Imperial): 0.25 in, 0.8 in Minimum Insulation Outer Diameter (Metric): 6 mm, 20 mm Mining Sector Approval: Yes Model: Cast Resin Number of Conductors: 3, 4 Product Color: Black Product Series: 82-B Series Resin Type: SC 2131 Shelf Life: 36 Month Splice Type: Inline Voltage: 5 kV (single), 1 kV (multiple) Voltage Application: Low Voltage

Voltage Rating: 0.6/1 kV With Screw Connectors: No eClass 14 Classification Group: 27400107

Ensures excellent insulation and void-free sealing of cable breakouts High dry- and wet-insulation resistance Creates an environmental enclosure for individual cable phases Has an outer jacket diameter range of 1.3 to 1.94 inches 3-way outlet Dark gray silicone rubber construction Withstands temperatures of 221 °F (105 °C) RoHS 2011/65/EU Compliant

#### **Typical properties**

Application: Sealing of the spine cutting stranded cable Breakout Boot: Yes Cable Accessory Products: Cable Breakout Boot Kits Cable Insulation Outside Diameter Range: 1.30-1.95 in, 1.46-2.67 in, 1.92-3.10 in. 2.52-4.32 in Cable Insulation Outside Diameter Range (Metric): 33.0-49.5 mm, 37.1-67.8 mm, 48.8-78.7 mm, 64.0-109.7 mm Cable Outside Diameter Range: 2.60-4.70 inch Cable Shield Diameter Range: 0.48-0.72 in 0.82-1.18 in 1.02-1.63 in 1.09-1.94 in,1.23-2.17 in,0.61-0.95 in Cable Shield Diameter Range (Metric): 20.8–30.0 mm,27.7–49.3 mm,25.9–41.4 mm,12.2–18.3 mm,15.5–24.1 mm,31.2–55.1 mm Dielectric Strength (V/mil): 587 V/mil Elongation: 780 % Inner Diameter After Shrink (Imperial): 0.48 in, 0.61 in, 0.82 in, 1.02 in, 1.09 in, 1.23 in Inner Diameter After Shrink (Metric): 12.2 mm, 15.5 mm, 20.8 mm, 25.9 mm, 27.7 mm, 31.2 mm Inner Diameter Before Shrink (Imperial): 0.72 in, 0.95 in, 1.18 in, 1.63 in, 1.94 in, 2.17 in Inner Diameter Before Shrink (Metric): 18.3 mm, 24.1 mm, 30 mm, 41.4 mm, 49.3 mm, 55.1 mm Inner Diameter Finger After Shrink: 15.5 mm, 20.8 mm Inner Diameter Finger Before Shrink: 21.3 mm, 33 mm Insulation Rejacketing: No Jacket Outside Diameter Range: 1.30 - 1.94 in, 1.46 - 2.67 in, 1.92 - 3.10 in, 2.52 - 4.32 in, 2.60 - 4.70 in Jacket Outside Diameter Range (Metric): 33.0 - 49.3 mm, 37.1 - 67.8 mm, 48.8 -78.7 mm, 64.0 - 109.7 mm, 66.0 - 119.4 mm, 80.7 - 140.2 mm Material: Silicone Maximum Voltage Rating: 35 kV Metallic Shield Diameter Range: 0.48 - 0.72 in, 0.61 - 0.95 in, 0.82 - 1.18 in, 1.09 - 1.94 in, 1.28 - 1.62 in Minimum Bundle Diameter (Metric): 12.2-18.3 mm, 15.5-24.1 mm, 20.8-30.0 mm Model: Cold-shrink Operating Temperature (Celsius): Up to 180 °C

Outer Diameter After Shrink (Imperial): 1.3 in, 1.46 in, 1.92 in, 2.52 in, 2.6 in, 3.18 in Outer Diameter After Shrink (Metric): 33 mm, 37.1 mm, 48.8 mm, 64 mm, 66 mm, 80.7 mm Outer Diameter Before Shrink (Imperial): 1.94 in, 2.67 in, 3.1 in, 4.32 in, 4.7 in, 5.52 in Outer Diameter Before Shrink (Metric): 49.3 mm, 67.8 mm, 78.7 mm, 109.7 mm, 119.4 mm, 140.2 mm Product Color: Gray Product Type: Cable & Wire Accessory Shrink Type: Cold Shrink Temperature Rating: 356°F (180°C) Class H Tensile Strength (Imperial): 1370 Pound-Force Per Square Inch Total Length After Shrink: 127 mm, 146 mm Transition Type: 1 - 3 Breakout Units per Case: 1.0 eClass 14 Classification Group: 27400109

Features a write-on area with a transparent self-laminating protective shield to wrap around the written label Write-on dispenser includes permanent marking pen Refill rolls available (indicated by -R)

#### **Typical properties**

Adhesive Material: Acrylic Application: Marking Wire and Cable Cable Diameter Range: 2,3 - 7,8 mm, 4,0 - 12 mm, 6,0 - 35 mm Dispenser Type: Dispenser with Tape Dispenser/Marker Type: Write-On Dispenser with Tape & Pen Kit Includes: Dispenser filled with SLS Tape and 1 SMP pen, Dispenser filled with SLW Tape and 1 SMP pen, Dispenser filled with SWD Tape and 1 SMP pen Labels Per Roll: 70,170,50 Legend Color: White Marker ID Style: Write-on Marker Size: 0.75 inch x 1.375 inch, 1.0 inch x 2.312 inch, 1.0 inch x 5.0 inch Marker Type: Dispenser Material: Plastic Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 49 °C Maximum Operating Temperature (Fahrenheit): 120 °F Maximum Outside Diameter: 7.9 mm, 33.5 mm Maximum Recommended Voltage Rating: 600 V Minimum Outside Diameter: 0.09 Inch.0.23 Inch.0.15 Inch Printed Text Type: Write-on Product Color: White Product Type: Write-on Dispenser Refill: Tape Roll Refillable: Yes Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul Units per Case: 10.0 Wire Marker Products: Write-On Dispenser and Refill Rolls With Label Space: Yes Write-on Area Size (Imperial): 0.75 inch x 0.312 inch, 1.0 inch x 0.50 inch, 1.0 inch x 0.75 inch Write-on Area Size (Metric): 19.1 x 7.9 mm,25.4 x 19.1 mm,25.4 x 12.7 mm

#### **Dimensions and Classifications**

Overall Width (Metric): 19 mm, 25 mm

## 3M<sup>™</sup> Elbow Surge Arrester

#### Details

Meets IEEE Standard C62.11 safe-failure mode Gapless, metal oxide varistor (MOV) arrester Fully shielded and suitable for subermsible applications Flexible copper ground lead

#### **Typical properties**

Brands: 3M<sup>™</sup> Current Rating: 200.0 A Maximum Operating Voltage: 35 kV eClass 14 Classification Group: 27440308

Red, polypropylene-insulated connector is suitable for tap or parallel splicing Suitable for use in light fixtures, appliances and other electrical OEM applications 951 accommodates 22 to 18 AWG solid/stranded, 952 accommodates 18 to 14 AWG solid/stranded and 953 accommodates 12 AWG solid/stranded UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok™ Case Quantity: 500 Conductor Sizes (Imperial): 14 AWG (Run), 18 AWG (Run), 18 AWG (Tap), 22 AWG (Tap) Conductor Sizes (Metric): .34 mm<sup>2</sup> (Tap), 1 mm<sup>2</sup> (Run), 1 mm<sup>2</sup> (Tap), 2.5 mm<sup>2</sup> (Run) Connection Type: Double Run or Tap Connector / Connector Tool: 3M Crimping Tool E-9BM and/or 9" Lineman's Pliers and/or Mechanics (slip joint) Pliers **Connector Style: Insulation Displacement** Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Red Insulation Material: Polypropylene Interrupt Free Shifting: No Material: Insulator: Polypropylene, U-contact: Tin-plated Copper Alloy, Plastic Max. Number of Cores: 2 Maximum Conductor Size (Imperial): 14 AWG (Run) Maximum Conductor Size (Metric): 2.5 mm<sup>2</sup> (Run) Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Recommended Voltage Rating: 32 V Minimum Conductor Size (Imperial): 18 AWG (Run) Minimum Conductor Size (Metric): .34 mm<sup>2</sup> (Tap) Moisture Resistant: No Package Quantity: 500 Product Color: Red Product Type: Double Run or Tap Recommended Crimping Tool: E-9BM or 9 in. Linemans Pliers, E-9BM or 9 in. Linemans Pliers and/or Mechanics (slip joint) Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.145 in Run Maximum Insulation Outer Diameter (Metric): 3.7 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.11 in, 0.145 in Tap Maximum Insulation Outer Diameter (Metric): 2.79 mm, 3.7 mm Units per Case: 5000.0,500.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Insulated with Insulation Grip Multi-Stud Ring Tongues

#### Details

Funnel-designed, seamless brass sleeve offers easy insertion of wires Multi-stud style ring tongue fits around multiple stud sizes
Stud size #6 to #10
Made of electrolytic copper for good conductivity and has tin plating for corrosion resistance
Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires
UL Listed, CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.090 Inch Barrel Style: Butted CSA File Number: LR22190 Clearance (C): 0.31 Inch Dimension E: 0.77 Inch Insulation Color: Blue Insulation Material: Nylon Material: Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 0.823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.17 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Maximum Voltage Rating: 600 to 1000 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Minimum Stud Diameter (Imperial): 0.138 in Minimum Stud Diameter (Metric): 3.5 mm Operating Temperature Range (Celsius): -40 °C to 105 °C Operating Temperature Range (Fahrenheit): -40 °F to 221 °F Product Color: Blue, Red, Yellow Ring Type: Standard Stud Size: #6 to #10 Terminal Style: Multi-Stud Terminal Type: Ring Type: Standard UL File Number: E23438 Units per Case: 500.0

#### **Dimensions and Classifications**

Overall Length (Imperial): 1 in, 1.02 in, 1.19 in

Overall Length (Metric): 25.4 mm, 25.9 mm, 30.22 mm Overall Width (Imperial): 0.34 in, 0.39 in Overall Width (Metric): 8.63 mm, 9.9 mm

## 3M<sup>™</sup> Cold Shrink QS4s Integrated Short Splice Kit 15SP Series

#### Details

Cold Shrink Design — for quick and easy installation; excellent for cable size transitions

Complete Kit — includes the required products to make one splice Silicone Rubber Construction — for good high and low temperature performance Production Tested — partial discharge and A.C. withstand tests to provide reliability

Computer Aided Design — for compact size and optimal distribution of electrical field

Special Electrode Design — minimizes electrical stress at critical cable/splice interface

Smooth Edge Neutral Extension Sock — virtually no frayed edges

Integrated Ground — standard joint includes braid for easy connection to ground

#### **Typical properties**

Conductor Sizes (Imperial): 1000 kcmil, 250 kcmil, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 750 kcmil Voltage: 15 kV eClass 14 Classification Group: 27400107

Designed for use with copper compression, 1 or 2 hole lugs Has a durable EPDM rubber construction

#### **Typical properties**

Application: Used on Cables with a Rated Operating Temperature of 90 deg C and an Emergency Overload Rating of 130 deg C; to Splice (Insulate and Seal) Motor Lead Connections for 1000V and Less Cables Sized 16 AWG to 500 kcmil Application/Industry: Commercial Construction, Industrial Construction Cable Shielding: Single Conductor Non-Shielded Cable Connection Type: Inline, Inline (Non-shielded) Insulation Outside Diameter: 0.34-0.54 Inch Insulation Outside Diameter Range: 0.34-0.54 in, 2-1/0 AWG: 0.40-0.54 in / 1/0 AWG-250 kcmil: 0.52-0.80 in, 4/0 AWG-350 kcmil: 0.67-0.91 in / 350-500 kcmil: 0.90-1.05 in, 8 to 4 AWG: 0.30 to 0.36 in Insulation Outside Diameter Range (Metric): 2-1/0 AWG: 10.2-13.7 mm / 1/0 AWG-250 kcmil: 13.2-20.3 mm, 4/0 AWG-350 kcmil: 17.0-23.1 mm / 350-500 kcmil: 22.9-26.7 mm, 8 to 4 AWG: 7.6 to 9.1 mm, 8.6-13.7 mm Insulation Outside Diameter by Conductor Size: 4/0 AWG-350 kcmil (0.67-0.91 Inch), 350-500 kcmil (0.90-1.05 Inch),2–1/0 AWG (0.40–0.54 Inch), 1/0 AWG-250 kcmil (0.52-0.80 Inch),12-8 AWG (0.17-0.24 Inch), 8-4 AWG (0.30-0.36 Inch) Insulation Outside Diameter by Conductor Size (Metric): 2–1/0 AWG (10.2-13.7 mm), 1/0 AWG-250 kcmil (13.2-20.3 mm),4/0 AWG-350 kcmil (17.0-23.1 mm), 350-500 kcmil (22.9-26.7 mm), 12-8 AWG (4.3-6.1 mm), 8-4 AWG (7.6-9.1 mm) Kit Includes: (3) Adapter Sleeves Maximum Bolt Length: 1-1/4 in, 1/2 in, 3/4 in Maximum Bolt Length (Metric): 12.7 mm, 19.1 mm, 31.8 mm Maximum Feeder Lead Size: 1/0 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Motor Lead Size: 1/0 AWG, 250 kcmil, 4 AWG, 500 kcmil Maximum Operating Voltage: 1 kV Product Color: Black Range Feeder Cable (AWG & kcmil): 1/0-250, 10-4, 2-1/0, 250-500 Splice Cover Inner Diameter: 0.30 in, 12-8 AWG: 0.14 in / 8-4 AWG: 0.24 in, 2-1/0 AWG: 0.50 in / 1/0 AWG-250 kcmil: 0.42 in, 4/0 AWG-350 kcmil: 0.60 in / 350-500 kcmil: 0.84 in Splice Cover Inner Diameter (Metric): 12-8 AWG: 3.6 mm / 8-4 AWG: 6.1 mm, 2-1/0 AWG: 12.7 mm / 1/0 AWG-250 kcmil: 10.7 mm, 4/0 AWG-350 kcmil: 15.2 mm / 350-500 kcmil: 21.3 mm, 7.6 mm Splice Cover Length: 12-13 in, 4-5 in, 8-9 in, 9-10 in Splice Cover Length (Metric): 101.6-127.0 mm, 203.2-228.6 mm, 228.6-254.0 mm, 304.8-330.2 mm Splice Type: Inline Units per Case: 1.0 Voltage: 1 kV

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Connectors 2000T-CU

#### Details

They can be used to connect copper cable only They can be used on concentric, compressed and compact stranded conductors

#### **Typical properties**

Barrel Length (Imperial): 0 NP Compatible Conductor Size (Imperial): 4/0 AWG, 500 kcmil, 750 kcmil Compatible Conductor Size (Metric): 120 mm<sup>2</sup>, 240 mm<sup>2</sup>, 400 mm<sup>2</sup> Material: Copper Maximum Conductor Size (Imperial): 4/0 AWG, 500 kcmil, 750 kcmil eClass 14 Classification Group: 15090900

#### **Dimensions and Classifications**

Overall Length (Imperial): 5.25 in, 6.9 in Overall Length (Metric): 133.3 mm, 175.3 mm

Inline splice to use on tape shield, wire shield, or UniShield® cables Designed for direct burial installations, as well as indoor and outdoor applications Peroxide-cured EPDM rubber construction provides physical protection Rated for 15 kV cables Factory-tested to offer reliability

Meets the requirements of IEEE 404 standards

#### **Typical properties**

Cable Shielding: Concentric Neutral (CN), Tape Shield, UniShield®, Wire Shield Case Quantity: 1 Conductor Material: Aluminum, Copper Connector Included: 20006, CI-1/0, CI-2/0, CI-21, CI-4/0, None Insulation O.D. Range: 0.637 - 0.900 Inch, 0.84 - 1.05 Inch Insulation Outer Diameter (Imperial): 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in Insulation Outer Diameter (Metric): 16 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm Insulation Outside Diameter Range: 0.637 - 0.900 Inch, 0.84 - 1.05 Inch Insulation Outside Diameter Range (Metric): 16.2 - 22.9 mm, 21.3 - 26.7 mm Maximum Conductor Size (Imperial): 1 AWG (Stranded), 1/0 AWG (Stranded), 2 AWG (Stranded), 2/0 AWG (Stranded), 250 kcmil (Stranded), 3/0 AWG (Stranded), 4 AWG (Stranded), 4/0 AWG (Stranded) Maximum Conductor Size (Metric): 120 mm<sup>2</sup> (Stranded), 25 mm<sup>2</sup> (Stranded), 35 mm<sup>2</sup> (Stranded), 50 mm<sup>2</sup> (Solid), 50 mm<sup>2</sup> (Stranded), 70 mm<sup>2</sup> (Stranded), 95 mm<sup>2</sup> (Stranded) Minimum Conductor Size (Imperial): 2 AWG (Stranded) Minimum Conductor Size (Metric): 35 mm<sup>2</sup> (Stranded) Number of Conductors: 1 Operating Voltage: 15 kV Product Series: 5500 Series Product Type: Inline Splice Type: Inline Voltage: 25/28 kV

## 3M<sup>™</sup> Cold Shrink QT-III Termination Kit with Jumper Wire Top Insulator 7640-S & 7650-S Series

#### Details

Provides a void-free seal to jacketed concentric neutral and concentric neutral power cables

High dielectric-constant material regulates the distribution of electric field stress Suitable for outdoor applications

Integrated, jumper wire-top insulator and step-core design allows for easier installation, while sealing compounds provide constant radial pressure

#### **Typical properties**

BIL: 150 kV Brands: 3M™ Breakout Boot: No Cable Insulation Outside Diameter Range: 0.64-1.08 in, 0.72-1.29 in, 0.83-1.53 in, 1.05-1.80 in, 1.15-1.98 in Cable Insulation Outside Diameter Range (Metric): 16.3 - 27.4 mm, 18.3-32.8 mm, 21.1 - 38.9 mm, 26.7 - 45.7 mm, 29,2-50,3 mm Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN), Tape Shield, UniShield®, Wire Shield Case Quantity: 1 Compatible Lug: QL2-A-4/0-600, QL2-A-2-250, QL2-A-500-1000, QL2-A-350-750,QL2-A-1/0-350 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 450 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Indoor/Outdoor: Outdoor Skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in Insulation Outer Diameter (Metric): 11.684 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368

mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm. 41.91 mm. 42.164 mm. 42.418 mm. 42.672 mm. 42.926 mm. 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm, 49.784 mm, 50.038 mm, 50.292 mm Insulation Rejacketing: No Jacket Outside Diameter Range: 0.97-1.48 Inch, 1.04-1.60 Inch, 1.12-1.87 Inch, 1.39-2.40 Inch Jacket Outside Diameter Range (Metric): 24.6-37.6 mm, 26.4-40.6 mm, 28.4-47.5 mm, 35.3-61.0 mm Lug/Stem Connector Included in Kit: No Maximum Installed Length: 12.25 in Metallic Shield Diameter Range: 0.60-0.80 in Number of Conductors: 1, 3 Number of Skirts: 4 **Operating Temperature (Celsius): 90** Operating Temperature (Fahrenheit): 194 Product Color: Black Product Series: 7640-S-TI, 7650-S-TI Series Product Type: Termination Kit Type: Cold Shrink QT-III

Units per Case: 1.0

Voltage: 15 kV, 25 kV, 25/28 kV, 28 kV, 35 kV, 5 kV, 8 kV

eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Cold Shrink QS-III Inline CN/JCN Splice Kits 5415A, 5416A, 5417A and 5418A Series

#### Details

Inline splice for joining jacketed concentric neutral (JCN) and concentric neutral (CN) power cables

Special electrode design of the kit reduces the electrical stress at a critical cable/splice interface

Designed for feeder and distribution circuits, size transition splicing, direct burial installations, submerged locations and use with standard inline crimp connectors Silicon rubber-splice body provides good high and low temperature performance, and the EPDM rubber jacket offers physical protection

Rated for 15 kV class cables

Factory-tested partial discharge and AC ensure reliability

#### **Typical properties**

Application: Cable Connection Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 350 kcmil, 4/0 AWG, 500 kcmil, 750 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in Material: EPDM Rubber Maximum Conductor Size (Imperial): 1000 kcmil, 4/0 AWG Maximum Conductor Size (Metric): 500 mm<sup>2</sup>, 95 mm<sup>2</sup> Minimum Conductor Size (Imperial): 2/0 AWG, 500 kcmil Minimum Conductor Size (Metric): 240 mm<sup>2</sup>, 35 mm<sup>2</sup> Number of Conductors: 1 Product Color: Black Product Series: 5415A, 5418A, 5610A Splice Type: Cold Shrink Voltage: 15 kV eClass 14 Classification Group: 27400107

Inline splice for joining tape shield, wire shield, UniShield® and LC power cables Special-electrode design reduces electrical stress at critical cable and splice interface

Designed for feeder and distribution circuits, size transition splicing, direct-burial installations and submerged locations

Rated for 15 kV applications

Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

#### **Typical properties**

Cable Shielding: Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield

Conductor Material: Aluminum, Copper

Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil

Insulation Level: 1.33, 100%, 133%

Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in Insulation Outside Diameter Range: 0.64 - 1.01 Inch, 0.84 - 1.38 Inch, 1.04 - 1.70 Inch, 1.07 - 1.70 Inch Insulation Outside Diameter Range (Metric): 16.3 - 25.7 mm, 21.3 - 35.1 mm, 26.4 - 43.2 mm, 27.4 - 43.2 mm Number of Conductors: 1 Product Series: QS4 Splice Type: Cold Shrink

Voltage: 15 kV, 25/28 kV

eClass 14 Classification Group: 27400107

## 3M<sup>™</sup> Scotchlok<sup>™</sup> Nylon Fully Insulated with Insulation Grip Interlock Barrel Female Disconnects

#### Details

Dents and rolled edges of this female disconnect terminal offer excellent holding force

Allows for quick and easy disconnect of wires Mates with 0.25-in wide male tab Made of durable brass for good conductivity and has corrosion-resistant tin plating Withstands a temperature range of -40 to 221 degrees F (-40 to 105 degrees C) Rated 600V for building wire and 1000V for signs, fixtures or luminaires UL Listed. CSA Certified and RoHS 2011/65/EU Compliant

#### **Typical properties**

Barrel Inside Diameter: 0.080 Inch,0.165 Inch,0.08 Inch Barrel Length (Imperial): 0.25 Inch Barrel Style: Interlocking Barrel CSA File Number: LR22190 Connection Type: Wire Connection Width (Imperial): 0.25 in Connection Width (Metric): 6.35 mm Connector / Connector Tool: Connector **Connector Style: Insulation Displacement** Diameter (D): 0.23 Inch **Disconnect Type: Female** Fastener Orientation: Female Flame Retardant: No Grease Filling Against Corrosion: No Insulation Color: Yellow Insulation Material: Nylon with Insulation Grip Interrupt Free Shifting: No Male Tab Width (W'): 0.250 Inch Material: ETP Copper Mates with Female Width: 0.25 Inch Mates with Male Tab Width (W'): 0.25 Inch Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): 1 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 6 mm<sup>2</sup> Maximum Insulation Outer Diameter (Imperial): 0.145 in, 0.25 in Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 4 mm<sup>2</sup> Pad Width: 0.25 in Product Color: Yellow Tab Width: 0.250,0.187

Terminal Style: Fully Insulated Terminal Type: Disconnect UL File Number: E70512 Units per Case: 500.0,1000.0 eClass 14 Classification Group: 27400204

#### **Dimensions and Classifications**

Overall Diameter (Imperial): 0.23 in Overall Length (Imperial): 0.83 in, 0.94 in Overall Length (Metric): 23.87 mm Overall Width (Imperial): 0.37 in

## 3M<sup>™</sup> Modified Polyvinylidene Flouride Heat Shrink Tubing MFP

#### Details

Transparent insulation for easy, see-through inspection and identification Offers shrink-fit protection and strain relief of wires, solder joints, terminals and connections

Suitable for marking electronics and appliances

Made of clear semi-rigid, modified polyvinylidene fluoride

Withstands temperatures of -67 to 347 degrees F (-55 to 175 degrees C) Flame-retardant tubing is rated for 600V applications

#### **Typical properties**

Agency Approvals: UL Recognized, CSA Certified and AMS 3632, UL, CSA Applicable SAE-AMS-DTL-23053 Specifications: 23053/8 and 23053/18 class 1 Elongation: 350 %, 350 Decibel Expanded Inner Diameter: 0.06 in, 0.125 in, 0.375 in, 0.5 in Expanded Inner Diameter (Metric): 1.17 mm, 1.6 mm, 12.70 mm, 19.05 mm, 2.36 mm, 25.40 mm, 3.18 mm, 4.75 mm, 6.35 mm, 9.53 mm Flammability Rating: UL 224 VW-1 / CSA Oft Heat Shrink Type: Specialty Polymer Tubing Inner Diameter After Shrink (Imperial): 0.02 in, 0.023 in, 0.03 in, 0.031 in, 0.046 in, 0.06 in, 0.062 in, 0.093 in, 0.125 in, 0.187 in, 0.195 in, 0.25 in, 0.312 in, 0.375 in, 0.5 in Inner Diameter After Shrink (Metric): 0.58 mm, 0.79 mm, 0.8 mm, 1.17 mm, 1.52 mm, 1.57 mm, 2.36 mm, 3.18 mm, 4.75 mm, 5 mm, 6.35 mm, 7.93 mm, 9.53 mm, 12.7 mm, 58 mm Inner Diameter Before Shrink (Imperial): 0.04 in, 0.046 in, 0.06 in, 0.063 in, 0.093 in, 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.625 in, 0.75 in, 1 in Inner Diameter Before Shrink (Metric): 1.17 mm, 1.6 mm, 2.36 mm, 3.18 mm, 4.75 mm, 4.8 mm, 6.35 mm, 9.53 mm, 12.7 mm, 15.87 mm, 19.05 mm, 25.4 mm Material: Polyvinylidene Fluoride Maximum Operating Temperature (Celsius): 135 °C, 175 °C Maximum Operating Temperature (Fahrenheit): 230 °F, 275 °F, 347 °F Mil Spec: AMS-DTL-23053/8 and AMS-DTL-23053/18, Class 1 Minimum Expanded Tubing I. D.: 0.04 in, 0.063 in, 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 1 in, 3 in, 5 in Non-Corrosive: Yes Operating Temperature Range (Celsius): -55 °C to +175 °C Operating Temperature Range (Fahrenheit): -67 °F to 375 °F Product Color: Transparent Product Form: 48 in (1.22 m) sticks, 48 in (1.22 m) sticks with header label, 6 in (15.24 cm) pieces, Stick Recovered Inner Diameter: 0.02 in, 0.03 in, 0.05 in, 0.06 in, 0.09 in, 0.093 in, 0.125 in, 0.13 in, 0.187 in, 0.19 in, 0.25 in, 0.31 in, 0.38 in, 1 in Recovered Inner Diameter (Metric): 0.58 mm, 0.8 mm, 1.17 mm, 1.57 mm, 2.36 mm, 3.175 mm, 3.18 mm, 4.7498 mm, 4.75 mm, 6.4 mm, 7.9 mm, 9.52 mm, 12.7 mm Recovered Inner Diameter Millimetres: 0.79 mm, 1.57 mm, 2.36 mm, 3.18 mm, 4.75 mm, 6.35 mm

Shrink Ratio: 2:1 Size (Metric): 2.38 mm,1.17 mm,9.52 mil,15.88 mm,1.59 mm,4.75 mm,9.52 mm,6.35 mil,19.05 mm,6.35 mm,12.7 mm,3.18 mm,25.4 mm Tubing Type: Special Purpose, Polyvinylidene Fluoride UL Bug Temperature (Fahrenheit): 301 Degrees Fahrenheit UL Bug Voltage: 600 Volt Units per Case: 25.0,12.0,50.0,250.0,5.0,30.0,100.0,125.0 eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 4 ft, 6 in, 48 in Overall Length (Metric): 1219 mm

# 3M<sup>™</sup> Deadbreak Component

#### Details

Meets IEEE Standard 386 Connecting system component Interchangeability per IEEE standard 386

## **Typical properties**

Brands: 3M<sup>™</sup> Current Rating: 600.0 A Maximum Operating Voltage: 33 kV, 35 kV Product Type: Dead Break eClass 14 Classification Group: 27440308

White cap and white body nylon-insulated connector is suitable to connect 2 or 3 wires

Accommodates a wire range of 1,5 - 2,5 mm2 solid or stranded

#### **Typical properties**

Brands: Scotchlok™ CSA File Number: LR15503 Case Quantity: 500 Conductor Sizes (Imperial): 14 AWG, 22 AWG Conductor Sizes (Metric): .34 mm<sup>2</sup>, 0.5 mm<sup>2</sup>, 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Connection Type: Pigtail **Connector Style: Insulation Displacement** Flame Retardant: Yes Grease Filling Against Corrosion: No Insulation Color: White Insulation Material: Nylon Insulation Outer Diameter (Imperial): 0.15 in, 0.155 in Interrupt Free Shifting: No Material: Flame Retardant Nylon, Plastic Max. Number of Cores: 3 Maximum Conductor Size (Imperial): 14 AWG Maximum Conductor Size (Metric): 1.5 mm<sup>2</sup>, 2.5 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 22 AWG Minimum Conductor Size (Metric): .34 mm<sup>2</sup>, 0.5 mm<sup>2</sup> Moisture Resistant: No Package Quantity: 1000 Product Color: White Product Type: Connector Recommended Crimping Tool: E-9BM or 9 in. Linemans Pliers Run Maximum Insulation Outer Diameter (Imperial): 0.155 in Run Maximum Insulation Outer Diameter (Metric): 3.9 mm Tap Maximum Insulation Outer Diameter (Imperial): 0.155 in Tap Maximum Insulation Outer Diameter (Metric): 3.9 mm UL File Number: E23438 Units per Case: 500.0 Voltage Application: Low Voltage Wire Connector Type: IDC Connectors eClass 14 Classification Group: 27400215

Yellow, polypropylene-insulated connector is suitable for tap or parallel splicing Electrically connects 2 wires in a tap, inline, pigtail or double run installation Accommodates 12 -10 AWG solid or stranded copper conductors RoHS 2011/65/EU Compliant

#### **Typical properties**

Brands: Scotchlok™ Flame Retardant: Yes Insulation Color: Yellow Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Moisture Resistant: No Product Color: Yellow Product Type: Connector eClass 14 Classification Group: 27400215

## **Typical properties**

Application: Cable Connection Cable Shielding: Tape Shield, UniShield®, Wire Shield Cable Type: Cable with rubber insulation Case Quantity: 1 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 4/0 AWG Conductor Sizes (Metric): 120 mm<sup>2</sup> Halogen Free: No Insulation Level: 100%, 133% Insulation O.D. Range: 0.37-0.78 Inch Insulation O.D. Range (Metric): 9.4 - 19.8 mm Insulation Outer Diameter (Imperial): 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in Insulation Outer Diameter (Metric): 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm Material: EPDM Rubber Maximum Conductor Size (Imperial): 3/0 AWG (Aluminum), 4/0 AWG (Copper) Maximum Conductor Size (Metric): 120 mm<sup>2</sup> (Copper), 95 mm<sup>2</sup> (Aluminum) Maximum Connector Length: 2.7 inch, 2.7 inch (AI), 3.3 inch (Cu) Maximum Connector Length (Metric): 68.6 mm, 69 mm (AI), 84 mm (Cu) Minimum Conductor Size (Imperial): 6 AWG (Aluminum), 6 AWG (Copper) Minimum Conductor Size (Metric): 16 mm<sup>2</sup> (Aluminum), 16 mm<sup>2</sup> (Copper) Model: Cold Shrink Number of Conductors: 1, 3 Product Color: Black Product Series: 5550 Series, 5551-3C-AC Series Splice Type: Cold Shrink, Inline Suggested Accessory: 3M<sup>™</sup> Ground Strap Assembly GS-1 Typical Splice Length: 19.0 in, 34 in Typical Splice Length (Metric): 482.6 mm, 864 mm Units per Case: 1.0 Voltage: 5 kV, 5/8 kV, 8 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400107

## **Dimensions and Classifications**

Overall Length (Imperial): 19 in Overall Length (Metric): 483 mm

# 3M<sup>™</sup> Copper Compression Connectors

## Details

Simple installation using readily available tools Integral center cable stop Manufactured using tin-plated copper Color coded printing for easy connector identification

## **Typical properties**

Barrel Length (Imperial): 0 NP Brands: Scotchlok<sup>™</sup> Compatible Conductor Size (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 500 kcmil, 6 AWG, 750 kcmil Compatible Conductor Size (Metric): 120 mm², 150 mm², 16 mm², 185 mm², 240 mm², 25 mm², 35 mm², 400 mm², 50 mm², 500 mm², 70 mm², 95 mm² Material: Copper Maximum Conductor Size (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 500 kcmil, 6 AWG, 750 kcmil eClass 14 Classification Group: 15090900

## **Dimensions and Classifications**

Overall Length (Imperial): 1.75 in, 1.88 in, 2 in, 2.13 in, 2.25 in, 2.38 in, 2.88 in, 3.38 in, 3.88 in Overall Length (Metric): 44.4 mm, 47.7 mm, 50.8 mm, 54 mm, 57.2 mm, 60.4 mm, 73.2 mm, 85.8 mm, 98.5 mm

# 3M<sup>™</sup> Cold Shrink QT-II Outdoor Termination Kits 6020K Series

## Details

One-piece cold shrink termination High dielectric-constant material regulates the distribution of electric field stress Suitable for weather protected areas (indoor) Silicone rubber insulation is track-resistance and hydrophobic Silicone cold shrink application provides constant radial pressure, "living seal" Comes with sufficient materials to make 3 terminations Meets IEEE Standard 48 Class 1 for outdoor, weather protected applications. Withstand voltages of 15 to 25/28 kV, 125 kV BIL - rated

## **Typical properties**

BIL: 125 kV Brands: 3M™ Breakout Boot: No Cable Insulation Outside Diameter Range: 0.64-0.90 in, 0.84-1.33 in, 1.10-1.65 in, 1.30-1.95 in Cable Insulation Outside Diameter Range (Metric): 16.3-22.9 mm, 21.3-33.8 mm, 27.9-41.9 mm, 33.0-49.5 mm Cable Minimum Outside Diameter: 0.50 in Cable Minimum Outside Diameter (Metric): 12.7 mm Cable Shielding: Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield Cable Type: Shielded Case Quantity: 1 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Connector Maximum Installed Length: 4.50 in Connector Maximum Installed Length (Metric): 114 mm Connector Maximum Outside Diameter: 1.60 in Connector Maximum Outside Diameter (Metric): 40.6 mm Dielectric Strength (V/mil): 507 V/mil Indoor/Outdoor: Indoor Non-skirted Insulation Level: 100%, 133% Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in,

1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in Insulation Outer Diameter (Metric): 16.256 mm, 16.3 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm. 30.48 mm. 30.734 mm. 30.988 mm. 31.242 mm. 31.496 mm. 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm, 38.862 mm, 39.116 mm, 39.37 mm, 39.624 mm, 39.878 mm, 40.132 mm, 40.386 mm, 40.64 mm, 40.894 mm, 41.148 mm, 41.402 mm, 41.656 mm, 41.91 mm, 42.164 mm, 42.418 mm, 42.672 mm, 42.926 mm, 43.18 mm, 43.434 mm, 43.688 mm, 43.942 mm, 44.196 mm, 44.45 mm, 44.704 mm, 44.958 mm, 45.212 mm, 45.466 mm, 45.72 mm, 45.974 mm, 46.228 mm, 46.482 mm, 46.736 mm, 46.99 mm, 47.244 mm, 47.498 mm, 47.752 mm, 48.006 mm, 48.26 mm, 48.514 mm, 48.768 mm, 49.022 mm, 49.276 mm, 49.53 mm Insulation Rejacketing: No

Jacket Outside Diameter Range: 0.80-1.20 in, 1.00-1.60 in, 1.30-1.90 in, 1.50-2.40 in

Jacket Outside Diameter Range (Metric): 20.3-30.5 mm, 25.4-40.6 mm, 33.0-48.3 mm, 38.1-61.0 mm

Lug/Stem Connector Included in Kit: No

Maximum Installed Length: 21.80 in, 22.25 in

Number of Conductors: 1

Product Color: Gray

Product Series: 6020K

Voltage: 15 kV, 25/28 kV

eClass 14 Classification Group: 27400102

## Details

The splice features a 1-piece molded design for simple and easy installation Designed for use with JCN and CN cables

Suitable for direct-burial, aerial installations and submerged locations Rated for 35 kV applications

The inline splice design allows direct contact between insulation shields Includes 1 CI-1/0A connector, 1 molded rubber-splice body, 1 porta-pencil, 1 template, 1 instruction sheet and 2 packets of silicone grease

## **Typical properties**

Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Case Quantity: 1 Conductor Sizes (Imperial): 1 AWG, 1/0 AWG Connector Included: CI-1/0A, None Insulation O.D. Range: 1.00 - 1.15 Inch Insulation Outer Diameter (Imperial): 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in Insulation Outer Diameter (Metric): 25.4 mm, 25.654 mm, 25.908 mm, 26.162 mm, 26.416 mm, 26.67 mm, 26.924 mm, 27.178 mm, 27.432 mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm Insulation Outside Diameter Range: 1.00 - 1.15 Inch Insulation Outside Diameter Range (Metric): 25.4 - 29.2 mm Maximum Conductor Size (Imperial): 1/0 AWG (Stranded) Maximum Conductor Size (Metric): 50 mm<sup>2</sup> (Stranded) Minimum Conductor Size (Imperial): 1 AWG (Stranded) Minimum Conductor Size (Metric): 50 mm<sup>2</sup> (Stranded) Number of Conductors: 1 Operating Voltage: 35 kV Product Series: 5432, 5433 & 5461 Series Product Type: Inline Splice Type: Inline Voltage: 25/28 kV

## Details

Inline splice for joining tape shield, wire shield, UniShield® and LC power cables Special-electrode design reduces electrical stress at critical cable and splice interface

Designed for feeder and distribution circuits, size transition splicing, direct-burial installations and submerged locations

Rated for 35 kV cables

Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

## **Typical properties**

Cable Shielding: Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Shield, UniShield®, Wire Shield Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Number of Conductors: 1 Splice Type: Cold Shrink Voltage: 35 kV eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Cold Shrink QS4 Integrated Splice Kits 15-SP Series

## Details

Inline splice for joining JCN, flat strap neutral, tape shield and LC cables Special-electrode design reduces electrical stress at critical cable and splice interface

Designed for feeder and distribution circuits, size transition splicing, direct-burial installations and submerged locations

Rated for 15 kV applications

Withstands a temperature range of 221 to 284 °F (105 to 140 °C)

## **Typical properties**

Application: Cable Connection Cable Shielding: Flat Strap Neutral, Jacketed Concentric Neutral (JCN), Longitudinally Corrugated (LC), Tape Shield Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.86 in, 0.87 in, 0.88 in, 0.89 in, 0.9 in, 0.91 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in Number of Conductors: 1 Product Color: Black Splice Type: Cold Shrink Voltage: 15 kV eClass 14 Classification Group: 27400107

## Details

Secure wire bundles and harness components quickly, without slipping Curved tip allows for faster threading and installation Made in the USA UL Listed 62275 Type 21 or 21S and Plenum Rated AH-2 for use in air handling spaces

## **Typical properties**

Approximate Length: 11,24,36,4,15,6,8 Brands: 3M<sup>™</sup> Cable Diameter Range: 8,1 - 39,4 mm Cable Length (Imperial): 4 in, 6 in, 7.6 in, 8 in, 11 in, 11.1 in, 15 in, 24 in, 36 in Cable Length (Metric): 104.14 mm, 147.32 mm, 154.94 mm, 193 mm, 193.04 mm, 205.74 mm, 226.06 mm, 228.6 mm, 281.94 mm, 282 mm, 314.3 mm, 370.84 mm, 381 mm, 609.6 mm, 914.4 mm **Cable Management Products: Cable Ties** Cable Tie Base Height: 8 in,36 in,6 in,9 in,4 in,15 in,24 in,11 in Cable Tie Length: 101 mm, 101.6 mm, 152 mm, 155 mm, 193 mm, 203 mm, 218 mm, 229 mm, 282 mm, 371 mm, 381 mm, 399 mm, 609 mm, 914 mm Cable Tie Type: Heavy Duty, Intermediate, Miniature, Standard Case Quantity: 10,000 Flammability Rating: UL 94 V-2 MIL Approval: No Material: Nylon 6/6 Maximum Bundle Diameter: 2 Inch, 1.87 Inch, Multiple, 0.75 Inch, 1.25 Inch, 4 Inch,7.2 Inch,3 Inch,11 Inch Maximum Bundle Diameter (Metric): 19.1 mm, 31.75 mm, 31.8 mm, 32 mm, 48 mm, 50.8 mm, 51 mm, 76 mm, 102 mm, 183 mm, 279 mm Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature: 85 Degree Celsius Maximum Operating Temperature (Celsius): 85 °C Maximum Operating Temperature (Fahrenheit): 185 °F Maximum Recommended Voltage Rating: 600 V Mil Spec: MS3367-1-0, MS3367-1-9, MS3367-12-0, MS3367-12-9, MS3367-2-0, MS3367-2-9, MS3367-3-0, MS3367-3-9, MS3367-4-0, MS3367-4-9, MS3367-5-0, MS3367-5-9, MS3367-7-0, MS3367-7-9, MS3367-8-0, MS3367-8-9 Minimum Bundle Diameter: 0.0625 Inch,0.1875 Inch,0.125 Inch,1.5 Inch,0.062 Inch Minimum Bundle Diameter (Metric): 1.6 mm, 3.2 mm, 4.8 mm, 8.1 mm Minimum Installation Temperature (Celsius): -20 Degree Celsius, 0 Degree Celsius, Varies Minimum Installation Temperature (Fahrenheit): -4 Degree Fahrenheit, 32 °F, Varies Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Operating Temperature (Celsius): 85 Degree Celsius

Operating Temperature (Fahrenheit): 185 Degree Fahrenheit Operating Temperature Range (Celsius): -40 °C to 85 °C, 0 °C to 85 °C Operating Temperature Range (Fahrenheit): -40 °F to 185 °F, 32 °F to 185 °F Plenum Rated: Yes Product Color: Black, Red Product Type: Cable Ties Recovered Inner Diameter (Metric): 4.75 mm, 6.35 mm Shrink Ratio: 2:1 Solution for: Long-haul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul, Wireless Network: Infrastructure Accessories Tape Type: Barricade Tensile Strength (Imperial): 120 lbs,18 lbs,40 lbs,175 lbs,50 lbs,Varies Tensile Strength (Metric): 8.17 kg, 18.14 kg, 22.68 kg, 54.43 kg, 79.38 kg, 220 N Type: Standard UL Approval: Yes UL File Number: E-39100 UV Resistant: No, Varies, Yes Units per Case: 2500.0,500.0,5000.0,10000.0,1000.0 Units per bag: 100, 1000, 50, 500 eClass 14 Classification Group: 27140702

## **Dimensions and Classifications**

Overall Length (Imperial): 4.1 in, 5.8 in, 6.1 in, 7.6 in, 8.1 in, 8.9 in, 9 in, 11.1 in, 14.6 in, 15 in, 24 in, 36 in Overall Length (Metric): 104 mm, 147 mm, 155 mm, 193 mm, 206 mm, 226 mm, 229 mm, 282 mm, 371 mm, 381 mm, 610 mm, 914 mm Overall Width (Imperial): 0.096 in, 0.1 in, 0.142 in, 0.18 in, 0.298 in, 0.335 in Overall Width (Metric): 2.4 mm, 2.5 mm, 3.6 mm, 4.6 mm, 7.6 mm, 8.5 mm

# 3M<sup>™</sup> Cold Shrink QS4s Integrated Short Splice Kit 25SP Series

## Details

Cold Shrink Design — for quick and easy installation; excellent for cable size transitions

Complete Kit — includes the required products to make one splice Silicone Rubber Construction — for good high and low temperature performance Production Tested — partial discharge and A.C. withstand tests to provide reliability

Computer Aided Design — for compact size and optimal distribution of electrical field

Special Electrode Design — minimizes electrical stress at critical cable/splice interface

Smooth Edge Neutral Extension Sock — virtually no frayed edges

Integrated Ground — standard joint includes braid for easy connection to ground

## **Typical properties**

Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 750 kcmil eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Scotchlok<sup>™</sup> Heat Shrink Brazed Seam Locking Forks

## Details

When crimped and shrunk, pre-insulated adhesive-lined polyolefin offers seal resistance to water and salt Spring-like tongue firmly fits around the stud Electrolytic copper construction offers good conductivity Withstands a maximum temperature of 221 degrees F (105 degrees C) 600V-rated for building wire and 1000V for signs, fixtures or luminaires

## **Typical properties**

Barrel Inside Diameter: 0.070 Inch,0.09 Inch,0.07 Inch,0.090 Inch,0.135 Inch Barrel Length (Imperial): 0.25 Inch,0.76 Inch,0.80 Inch,0.70 Inch Barrel Style: Brazed CSA File Number: LR22190 Clearance (C): 0.16 Inch,0.27 Inch,0.3 Inch,0.30 Inch,0.15 Inch,0.12 Inch Dimension E: 0.76 Inch,0.85 Inch,0.80 Inch,0.70 Inch,0.95 Inch,0.7 Inch,0.8 Inch Fork Type: Locking Insulation Material: Heat Shrink Material: ETP Copper, Plastic Maximum Conductor Size (Imperial): 10 AWG, 14 AWG, 18 AWG Maximum Conductor Size (Metric): .0823 mm<sup>2</sup>, 2.08 mm<sup>2</sup>, 5.26 mm<sup>2</sup> Maximum Insulation Outer Diameter (Metric): 3.7 mm Maximum Insulation Outside Diameter: 0.145 in Maximum Operating Temperature (Celsius): 105 °C Maximum Operating Temperature (Fahrenheit): 221 °F Maximum Recommended Voltage Rating: 600 V Minimum Conductor Size (Imperial): 12 AWG, 16 AWG, 18 AWG, 22 AWG Minimum Conductor Size (Metric): 0.326 mm<sup>2</sup>, 0.823 mm<sup>2</sup>, 1.31 mm<sup>2</sup>, 3.31 mm<sup>2</sup> Product Color: Blue, Red, Yellow Stud Diameter (Imperial): 0.138 in, 0.164 in, 0.19 in, 0.25 in Stud Diameter (Metric): 3.505 mm, 4.166 mm, 4.826 mm, 6.35 mm Stud Size: #10.#6.1/4 Inch.#8 Terminal Style: Locking Terminal Type: Fork UL File Number: E23438 Units per Case: 250.0,125.0 eClass 14 Classification Group: 27400204

## **Dimensions and Classifications**

Overall Length (Imperial): 1 in, 1.1 in, 1.2 in Overall Length (Metric): 25.4 mm Overall Width (Imperial): 0.25 in, 0.3 in, 0.32 in, 0.43 in Overall Width (Metric): 6.09 mm, 7.62 mm, 8.12 mm, 8.128 mm

## Details

Provides a void-free seal to tape shield, wire shield and UniShield® power cables High dielectric-constant material regulates the distribution of electric field stress Suitable for indoor applications and cabinet-mount installations Integrated design allows for easier installation in limited spaces, while sealing compounds provide constant radial pressure

## **Typical properties**

BIL: 110 kV, 150 kV, 95 kV

Brands: 3M™

Breakout Boot: Yes

Cable Insulation Outside Diameter Range: 0.33-0.50 in, 0.50-0.70 in, 0.70-0.92 in, 0.92-1.18 in, 1.18-1.52 in

Cable Insulation Outside Diameter Range (Metric): 12.7-17.8 mm, 17.8-23.4 mm, 23.4-30.0 mm, 30.0-38.6 mm, 8.4-12.7 mm

Cable Shielding: Tape Shield, UniShield®, Wire Shield, Wire-Over-Tape Shield Case Quantity: 1

Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Indoor/Outdoor: Indoor Non-skirted

Insulation Level: 100%, 133%

Insulation Outer Diameter (Imperial): 0.33 in, 0.34 in, 0.35 in, 0.36 in, 0.37 in, 0.38 in, 0.39 in, 0.4 in, 0.41 in, 0.42 in, 0.43 in, 0.44 in, 0.45 in, 0.46 in, 0.47 in, 0.48 in, 0.49 in, 0.5 in, 0.51 in, 0.52 in, 0.53 in, 0.54 in, 0.55 in, 0.56 in, 0.57 in, 0.58 in, 0.59 in, 0.6 in, 0.61 in, 0.62 in, 0.63 in, 0.64 in, 0.65 in, 0.66 in, 0.67 in, 0.68 in, 0.69 in, 0.7 in, 0.71 in, 0.72 in, 0.73 in, 0.74 in, 0.75 in, 0.76 in, 0.77 in, 0.78 in, 0.79 in, 0.8 in, 0.81 in, 0.82 in, 0.83 in, 0.84 in, 0.85 in, 0.96 in, 0.97 in, 0.81 in, 0.92 in, 0.93 in, 0.94 in, 0.95 in, 0.96 in, 0.97 in, 0.98 in, 0.99 in, 1 in, 1.01 in, 1.02 in, 1.03 in, 1.04 in, 1.05 in, 1.06 in, 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.51 in, 1.52 in

Insulation Outer Diameter (Metric): 8.382 mm, 8.636 mm, 8.89 mm, 9.144 mm, 9.398 mm, 9.652 mm, 9.906 mm, 10.16 mm, 10.414 mm, 10.668 mm, 10.922 mm, 11.176 mm, 11.43 mm, 11.684 mm, 11.938 mm, 12.192 mm, 12.446 mm, 12.7 mm, 12.954 mm, 13.208 mm, 13.462 mm, 13.716 mm, 13.97 mm, 14.224 mm, 14.478 mm, 14.732 mm, 14.986 mm, 15.24 mm, 15.494 mm, 15.748 mm, 16.002 mm, 16.256 mm, 16.51 mm, 16.764 mm, 17.018 mm, 17.272 mm, 17.526 mm, 17.78 mm, 18.034 mm, 18.288 mm, 18.542 mm, 18.796 mm, 19.05 mm, 19.304 mm, 19.558 mm, 19.812 mm, 20.066 mm, 20.32 mm, 20.574 mm, 20.828 mm, 21.082 mm, 21.336 mm, 21.59 mm, 21.844 mm, 22.098 mm, 22.352 mm, 22.606 mm, 22.86 mm, 23.114 mm, 23.368 mm, 23.622 mm, 23.876 mm, 24.13 mm, 24.384 mm, 24.638 mm, 24.892 mm, 25.146 mm, 25.4 mm, 27.178 mm, 27.432

mm, 27.686 mm, 27.94 mm, 28.194 mm, 28.448 mm, 28.702 mm, 28.956 mm, 29.21 mm, 29.464 mm, 29.718 mm, 29.972 mm, 30.226 mm, 30.48 mm, 30.734 mm, 30.988 mm, 31.242 mm, 31.496 mm, 31.75 mm, 32.004 mm, 32.258 mm, 32.512 mm, 32.766 mm, 33.02 mm, 33.274 mm, 33.528 mm, 33.782 mm, 34.036 mm, 34.29 mm, 34.544 mm, 34.798 mm, 35.052 mm, 35.306 mm, 35.56 mm, 35.814 mm, 36.068 mm, 36.322 mm, 36.576 mm, 36.83 mm, 37.084 mm, 37.338 mm, 37.592 mm, 37.846 mm, 38.1 mm, 38.354 mm, 38.608 mm Insulation Rejacketing: Yes Lug/Stem Connector Included in Kit: No Maximum Installed Length: 12.00 in, 16.00 in, 8.50 in Number of Conductors: 3 Product Series: 7600-3-W, 7600-T-3W Voltage: 10 kV, 15 kV, 25 kV, 25/28 kV, 35 kV, 5 kV, 8 kV Voltage Application: Medium Voltage eClass 14 Classification Group: 27400102

# 3M<sup>™</sup> Cold Shrink Connector Insulators 8420 and 8430 Series

## Details

Specially designed for primary insulation of solid dielectric insulated wires and cable splicing rated to 1000 volts

Simple installation which requires no tools

Sealing of terminal lug barrels, conduit couplings and conduit-to-cable breakouts Made of EPDM rubber which contains no chlorides or sulfur

Covers a wide range of cable cross sections

Withstands temperatures of -40 to 90 degC (-40 to 194 degF)

Environmental sealing for communication and other non-electrical applications

## **Typical properties**

Application: Insulation, mechanical protection, repair Brands: 3M™ Cable Shielding: Non-shielded, Tape Shield, UniShield®, Wire Shield Cable Type: Non-Shieled, Solid Dielectric Power Cable, Power Cable Case Quantity: 25,50,10 Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 10 AWG, 1000 kcmil, 1250 kcmil, 1500 kcmil, 1750 kcmil, 2 AWG, 2/0 AWG, 2000 kcmil, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Conductor Sizes (Metric): 10 mm<sup>2</sup>, 1013 mm<sup>2</sup>, 120 mm<sup>2</sup>, 16 mm<sup>2</sup>, 185 mm<sup>2</sup>, 35 mm<sup>2</sup>, 405 mm<sup>2</sup>, 456 mm<sup>2</sup> Connector Included: No Dielectric Strength (V/mil): 365 V/mil Elongation: 750 % Halogen Free: No Indoor/Outdoor: Both Inner Diameter After Shrink (Imperial): 0.098 in, 0.189 in, 0.24 in, 0.307 in, 0.398 in, 0.547 in, 0.661 in, 0.67 in, 0.839 in, 0.949 in, 1.268 in, 1.677 in Inner Diameter After Shrink (Metric): 2.5 mm, 4.8 mm, 6.1 mm, 7.8 mm, 10.1 mm, 13.9 mm, 16.8 mm, 17.02 mm, 21.3 mm, 24.1 mm, 32.2 mm, 42.6 mm Inner Diameter Before Shrink (Imperial): 0.559 in, 0.669 in, 0.823 in, 0.941 in, 1.185 in, 1.38 in, 1.382 in, 1.937 in, 2.669 in, 2.85 in, 3.689 in Inner Diameter Before Shrink (Metric): 14.2 mm, 17 mm, 20.9 mm, 23.9 mm, 30.1 mm, 35.1 mm, 49.2 mm, 67.8 mm, 72.4 mm, 93.7 mm Material: EPDM Rubber Maximum Conductor Size (Imperial): 1000 kcmil, 14 AWG, 177 kcmil, 19.93 kcmil, 246 kcmil, 394 kcmil, 6 AWG, 63.55 kcmil, 800 kcmil, 84.07 kcmil Maximum Conductor Size (Metric): 10.1 mm<sup>2</sup>, 125 mm<sup>2</sup>, 16 mm<sup>2</sup>, 2.5 mm<sup>2</sup>, 200 mm<sup>2</sup>, 32.2 mm<sup>2</sup>, 400 mm<sup>2</sup>, 42.6 mm<sup>2</sup>, 50 mm<sup>2</sup>, 500 mm<sup>2</sup>, 90 mm<sup>2</sup> Maximum Connector Length: 11.0 in, 12.0 in, 14.0 in, 2.0 in, 3.0 in, 5.0 in, 7.0 in, 8.0 in Maximum Connector Length (Metric): 127.0 mm, 177.8 mm, 203.2 mm, 279.4 mm, 304.8 mm, 355.6 mm, 50.8 mm, 76.2 mm Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F

Minimum Conductor Size (Imperial): 10 AWG, 1250 kcmil, 2 AWG, 246 kcmil, 27 kcmil, 3/0 AWG, 500 kcmil, 59 kcmil, 600 kcmil, 900 kcmil Minimum Conductor Size (Metric): 125 mm<sup>2</sup>, 14 mm<sup>2</sup>, 240 mm<sup>2</sup>, 30 mm<sup>2</sup>, 300 mm<sup>2</sup>, 35 mm<sup>2</sup>, 456 mm<sup>2</sup>, 6 mm<sup>2</sup>, 633 mm<sup>2</sup>, 70 mm<sup>2</sup> Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Model: Cold-shrink Number of Conductors: 1 Operating Temperature (Celsius): -40 up to +90°C Product Color: Black Product Type: Cold Shrink, Splice Relaxed Tube Length: 6 in, 8 in, 9 in, 11 in, 12 in, 15 in, 16 in, 18 in Relaxed Tube Length (Metric): 152.4 mm, 203.2 mm, 228.6 mm, 279.4 mm, 304.8 mm, 381 mm, 406.4 mm, 457.2 mm Shrink Ratio: 2:1 Splice Type: Cold Shrink UL Approval: No Units per Case: 10.0 Voltage: 1 kV Voltage Application: Low Voltage Wall Thickness after Shrinking: 1.4 mm, 3 mm, 3.8 mm, 4.6 mm With Inner Glue: No eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Diameter (Metric): 20.9 mm, 23.9 mm, 67.8 mm, 93.7 mm Overall Length (Imperial): 6 in, 8 in, 9 in, 11 in, 12 in, 16 in, 18 in Overall Length (Metric): 152 mm, 152.4 mm, 203.2 mm, 228.6 mm, 279.4 mm, 304.8 mm, 381 mm, 406.4 mm, 457.2 mm

# 3M<sup>™</sup> Cold Shrink End Caps EC Series

## Details

Close-ended, EPDM tubular rubber sleeves that are loaded onto a removable core

Resists water, alkalis, acids, abrasion and ozone Moisture sealing and provides physical protection for cables and pipes Made of EPDM rubber which contains no chlorides or sulfur Simple and fast installation without any tools RoHS 2011/65/EU Compliant

#### **Typical properties**

Adhesive Lined: No Brands: 3M™ End Cap Type: Cold Shrink Flame Retardant: No Inner Diameter After Shrink (Imperial): 0.46 in, 0.63 in, 1.02 in, 1.79 in Inner Diameter After Shrink (Metric): 11.6 mm, 15.9 mm, 26 mm, 45.5 mm Inner Diameter Before Shrink (Imperial): 0.82 in, 1.18 in, 1.94 in, 3.32 in Inner Diameter Before Shrink (Metric): 20.9 mm, 30.1 mm, 49.2 mm, 84.3 mm Material: EPDM Rubber Product Color: Black Product Type: Cold Shrink, End Cap Shrink Ratio: 2:1 Shrink Type: Cold Shrink Units per Case: 10.0 Use Range: 0.46 - 0.82 in, 0.63 - 1.18 in, 1.02 - 1.94 in, 1.79 - 3.32 in Use Range (Metric): 11.6-20.9 mm, 15.9-30.1 mm, 26.0-49.3 mm, 45.6-84.3 mm With Inner Glue: No eClass 14 Classification Group: 27400104

# 3M<sup>™</sup> Cold Shrink Branch Splice Adapter Kits

3M ID B00014007

## Details

Perfect for tape shield, wire shield and UniShield® cables Rated for 15 kV applications IEEE Approved

## **Typical properties**

Application: Cable Connection Model: Cold Shrink eClass 14 Classification Group: 27400107

# 3M<sup>™</sup> Heat Shrink Tubing EPS-400

## Details

Dual-wall construction provides abrasion resistance and moisture-seal protection Offers the advantage of integral, adhesive-lined construction Offers protection for sealing voids in multiple wire bundles for automotive and marine applications Made of semi-rigid polyolefin Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C) Flame-retardant tubing is rated for 600V applications UL Listed, CSA Certified and RoHS 2011/65/EU Compliant Typical properties Agency Approvals: UL Recognized, CSA Certified Dielectric Strength (V/mil): 800 V/mil Elongation: 400 % Expanded Inner Diameter: 0.3 in, 0.35 in, 0.45 in, 0.7 in Expanded Inner Diameter (Metric): 11.43 mm, 17.78 mm, 7.62 mm, 8.89 mm Flame Retardant: Yes Flammability Rating: Self-Extinguishing Heat Shrink Type: Adhesive-Lined Polyolefin Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.06 in, 0.08 in, 0.105 in, 0.113 in, 0.175 in. 0.8 in Inner Diameter After Shrink (Metric): 1.52 mm, 2.03 mm, 2.67 mm, 2.86 mm, 4.45 mm Inner Diameter Before Shrink (Imperial): 0.3 in, 0.35 in, 0.45 in, 0.7 in Inner Diameter Before Shrink (Metric): 7.62 mm, 8.89 mm, 11.43 mm, 17.78 mm Lubricant Type: Gel Material: Polyolefin, Semi-rigid Polyolefin Maximum Operating Temperature (Celsius): 110 °C Maximum Operating Temperature (Fahrenheit): 230 °F, 275 °F Minimum Expanded Tubing I. D.: 0.3 in, 0.35 in, 0.45 in, 0.7 in Non-Corrosive: Yes Operating Temperature (Celsius): -55 °C to 110 °C Operating Temperature (Fahrenheit): -67 °F to 230 °F, -67 °F to 275 °F Operating Temperature Range (Celsius): -55 °C to 110 °C Operating Temperature Range (Fahrenheit): -67 °F to 230 °F Product Color: Black Recovered Inner Diameter: 0.06 in, 0.105 in, 0.175 in, 0.8 in Recovered Inner Diameter (Metric): 1.52 mm, 2.03 mm, 2.67 mm, 4.45 mm Shrink Ratio: 4:1 Solution for: Wireless Network: Infrastructure Accessories Tensile Strength (Imperial): 1900 Pound-Force Per Square Inch Tensile Strength lb/in (N/100 mm): 90 (1577) Tubing Type: Dual Wall (Adhesive Lined) UL File Number: E-157227 Units per Case: 24.0,12.0,10.0,5.0,45.0 eClass 14 Classification Group: 27400105

# **Dimensions and Classifications**

Overall Length (Imperial): 6 in, 48 in

## 3M<sup>™</sup> Steel Barb Cable Ties

## Details

Fast, tough hold for industrial applications Infinite locking positions to secure wire or cable Head design helps prevent snagging for fast, easy installation Ribbed body helps prevent slippage in high-vibration environments UL Listed 62275 Type 21 or 21S Plenum Rated AH-2 for use in air handling spaces

## **Typical properties**

Approximate Length: 8 inches,6 inches,28 inches,4 inches,18 inches,11 inches,15 inches Cable Management Products: Cable Ties Maximum Bundle Diameter: 0.9 in,2 in,4.21 in,1.77 in,4.29 in,4.88 in,3.19 in,1.37 in,7.99 in Maximum Operating Temperature: 85 °C Maximum Operating Temperature (Celsius): 85 °C Maximum Operating Temperature (Fahrenheit): 185 °F Maximum Outside Diameter: NP Minimum Bundle Diameter: 0.9 in.2 in.4.21 in.1.77 in.4.29 in.4.88 in.3.19 in.1.37 in.7.99 in Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Minimum Outside Diameter: NP Number of Characters: NP Number of Characters - Compressed: NP Number of Characters - Standard: NP Product Color: Black, Multi-color, Natural Tensile Strength (Imperial): 124 lbs,112 lbs,18 lbs,40 lbs,49 lbs Tensile Strength (Metric): 218 N, 220 N, 500 N, 550 N, 551 N, 800 N Units per bag: 100, 50 eClass 14 Classification Group: 27140702

## **Dimensions and Classifications**

Overall Length (Imperial): 4 in, 6.1 in, 7.3 in, 7.9 in, 11.6 in, 14.8 in, 15.7 in, 17.7 in, 27.5 in, 47.9 in Overall Length (Metric): 4 mm, 6.1 mm, 7.3 mm, 7.9 mm, 11.6 mm, 14.8 mm, 15.7 mm, 185 mm, 186 mm, 295 mm, 376 mm, 399 mm, 450 mm, 699 mm Overall Thickness (Imperial): 0.04 in, 0.05 in, 0.06 in, 0.07 in Overall Thickness (Metric): 1 mm, 1.3 mm, 1.5 mm, 1.6 mm, 1.7 mm Overall Width (Imperial): 0.09 in, 0.14 in, 0.19 in, 0.28 in, 0.39 in Overall Width (Metric): 2.4 mm, 3.6 mm, 4.8 mm, 7 mm, 10 mm

# 3M<sup>™</sup> Cold Shrink Quick Insulators QI Series

## Details

Specially designed for primary insulation of solid dielectric insulated wires and cable splicing rated to 1000 volts Simple installation which requires no tools Offers excellent wet electrical properties and resists water, acids and alkalis Made of EPDM rubber which contains no chlorides or sulfur Withstands temperatures of -40 to 90 degC (-40 to 194 degF) Environmental sealing for communication and other non-electrical applications Open-ended tubular sleeves with a sealing mastic on each end

## **Typical properties**

**Application: Cable Connection** Cable End Expanded: 2.35 in Cable End Recovered: 1 in Cable Shielding: Non-shielded Cable Type: Power Cable Case Quantity: 10 Conductor Legs Expanded: 1 in Conductor Legs Recovered: 0.35 in Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1 AWG, 1/0 AWG, 1000 kcmil, 1250 kcmil, 2 AWG, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4 AWG, 4/0 AWG, 400 kcmil, 500 kcmil, 6 AWG, 600 kcmil, 650 kcmil, 700 kcmil, 750 kcmil, 8 AWG, 800 kcmil, 900 kcmil Conductor Sizes (Metric): 10 mm<sup>2</sup>, 400 mm<sup>2</sup>, 456 mm<sup>2</sup> Connector Included: No, None Dielectric Strength (V/mil): 365 V/mil Elongation: 750 % Flame Retardant: Yes Halogen Free: No Indoor/Outdoor: Both Inner Diameter After Shrink (Imperial): 0.2 in, 0.4 in, 0.71 in Inner Diameter After Shrink (Metric): 5.1 mm, 10.2 mm, 18 mm Inner Diameter Before Shrink (Imperial): 0.65 in, 1.45 in, 2.25 in Inner Diameter Before Shrink (Metric): 16.5 mm, 36.8 mm, 57.2 mm Insulation O.D. Range: 0.20-0.65 in, 0.40-1.45 in, 0.71-2.25 in Insulation O.D. Range (Metric): 10.2-36.8 mm, 18.0-57.2 mm, 5.1-16.5 mm Insulation Outside Diameter Range: 0.84 - 1.38 Inch, 1.04 - 1.70 Inch Insulation Outside Diameter Range (Metric): 21.3 - 35.1 mm, 26.4 - 43.2 mm Material: EPDM Rubber Maximum Conductor Size (Imperial): 1/0 AWG (Aluminum), 2/0 AWG (Copper), 4/0 AWG, 400 kcmil Maximum Conductor Size (Metric): 185 mm<sup>2</sup>, 50 mm<sup>2</sup> (Aluminum), 70 mm<sup>2</sup> (Copper), 95 mm<sup>2</sup> Maximum Connector Length: 2.75 in, 4.50 in, 6.00 in Maximum Connector Length (Metric): 114.3 mm, 152.4 mm, 69.9 mm Maximum Connector O.D.: 0.65 in, 1.45 in, 2.25 in

Maximum Connector O.D. (Metric): 16.5 mm, 36.8 mm, 57.2 mm Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Minimum Conductor Size (Imperial): 2 AWG (Aluminum), 250 kcmil (Aluminum), 250 kcmil (Copper), 8 AWG (Aluminum), 8 AWG (Copper) Minimum Conductor Size (Metric): 10 mm<sup>2</sup> (Aluminum), 10 mm<sup>2</sup> (Copper), 120 mm<sup>2</sup> (Aluminum), 120 mm<sup>2</sup> (Copper), 35 mm<sup>2</sup> (Aluminum) Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Model: Cold-shrink Number of Conductors: 1 Number of Outlets: 4 Outlet Style: 4-Way Product Color: Black Product Type: Splice Splice Type: Cold Shrink Typical Splice Length: 29 in, 32 in Typical Splice Length (Metric): 736 mm, 813 mm Units per Case: 1.0 Voltage: 1 kV Voltage Application: Medium Voltage With Inner Glue: No eClass 14 Classification Group: 27400105

# 3M<sup>™</sup> Heat Shrink Tubing HDT

## Details

Superior resistance to abrasion, corrosion and chemicals Offers reliable performance for electrical splices, connections and terminations Made of black cross-linked polyolefin Withstands temperatures of -67 to 230 degrees F (-55 to 110 degrees C) Flame-retardant SAE AS23053/15, Class 1 Certified and RoHS 2011/65/EU Compliant

## **Typical properties**

Adhesive Lined: Yes Adhesive Material: Hot-melt adhesive Applicable SAE-AMS-DTL-23053 Specifications: 23053/5 class 1 Application Specifications: ABS, SAE-AMS-DTL-23053/15, Class 1 Brands: 3M<sup>™</sup> Breaking Strength (Imperial): 0 lb/in Cable Size Range: 1000-2500 kcmil, 12-6 AWG, 2-4/0 AWG, 2.1-4.8 in, 2.5-5.6 in, 250-750 kcmil, 3/0 AWG-400 kcmil, 600-1250 kcmil, 8-1/0 AWG Dielectric Strength (V/mil): 500 V/mil Expanded Inner Diameter: 0.4 in, 0.8 in, 1.1 in, 1.5 in, 2 in, 3 in, 4.5 in, 6 in, 7 in Expanded Inner Diameter (Metric): 10.2 mm, 114.3 mm, 152.4 mm, 177.8 mm, 20.3 mm, 27.9 mm, 38.1 mm, 50.8 mm, 76.2 mm Flame Retardant: Yes Flammability Rating: Self-Extinguishing Halogen Free: No Heat Shrink Type: Heavy-Duty Heat Shrink Tubing Inner Diameter After Shrink (Imperial): 0.15 in, 0.2 in, 0.37 in, 0.5 in, 0.65 in, 1 in, 1.5 in, 1.8 in, 2 in Inner Diameter After Shrink (Metric): 3.8 mm, 5.1 mm, 9.4 mm, 12.7 mm, 16.5 mm, 25.4 mm, 38.1 mm, 45.7 mm, 50.8 mm Inner Diameter Before Shrink (Imperial): 0.4 in, 0.8 in, 1.1 in, 1.5 in, 2 in, 3 in, 4.5 in. 6 in. 7 in Inner Diameter Before Shrink (Metric): 10.2 mm, 20.3 mm, 27.9 mm, 38.1 mm, 50.8 mm, 76.2 mm, 114.3 mm, 152.44 mm, 177.8 mm Material: Polyolefin Maximum Conductor Size (Imperial): 1/0 AWG, 1250 kcmil, 2500 kcmil, 4/0 AWG, 400 kcmil, 6 AWG, 750 kcmil Maximum Conductor Size (Metric): 120 mm<sup>2</sup>, 1267 mm<sup>2</sup>, 16 mm<sup>2</sup>, 240 mm<sup>2</sup>, 400 mm<sup>2</sup>, 50 mm<sup>2</sup>, 633.4 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 0 °C, 100 °C Maximum Operating Temperature (Fahrenheit): 0 °F, 230 °F Mil Spec: SAE-AMS-DTL-23053/15,Class 1 Minimum Conductor Size (Imperial): 1000 kcmil, 12 AWG, 2 AWG, 250 kcmil, 3/0 AWG, 600 kcmil, 8 AWG Minimum Conductor Size (Metric): 10 mm<sup>2</sup>, 120 mm<sup>2</sup>, 300 mm<sup>2</sup>, 35 mm<sup>2</sup>, 4 mm<sup>2</sup>, 500 mm<sup>2</sup>, 95 mm<sup>2</sup> Minimum Expanded Tubing I. D.: 0.4 in, 0.8 in, 1.1 in, 1.5 in, 2 in, 3 in, 4.5 in, 6 in, 7 in

Minimum Shrink Temperature (Celsius): 121 °C Minimum Shrink Temperature (Fahrenheit): 250 °F Operating Temperature (Celsius): -55 to 100 Degrees Celsius, -55 to 135 Degrees Celsius Operating Temperature (Fahrenheit): -67 °F to 230 °F, -67 °F to 275 °F Operating Temperature Range (Celsius): -55 °C to -100 °C Operating Temperature Range (Fahrenheit): -67 °F to 230 °F Product Color: Black Product Form: Sleeve-roll Product Type: Heavy Wall Tubing (Adhesive Lined), Sleeve Recovered Inner Diameter: 0.15 in, 0.2 in, 0.37 in, 0.5 in, 0.65 in, 1 in, 1.5 in, 1.8 in. 2 in Recovered Inner Diameter (Metric): 3.8 mm, 5.1 mm, 9.4 mm, 12.7 mm, 16.5 mm, 25.4 mm, 38.1 mm, 45.7 mm, 50.8 mm Relaxed Tube Length (Metric): 1 m Shrink Ratio: 2:1, 3:1 Solution for: Wireless Network: Infrastructure Accessories, Wireless Network: Weatherproofing Splice Type: Heat Shrink Tensile Strength (Imperial): 2400 Pound-Force Per Square Inch Tubing Type: Heavy Wall UL Approval: No UL Bug Temperature (Celsius): 125 Degrees Celsius UL Bug Temperature (Fahrenheit): 257 Degrees Fahrenheit UL Bug Voltage: 600 Volt UV Resistant: Yes Units per Case: 10.0,5.0,20.0 Voltage Rating: 1 kV eClass 14 Classification Group: 27400105

#### **Dimensions and Classifications**

Overall Length (Imperial): 48 in Overall Length (Metric): 1.22 m

## Details

Ensures excellent insulation and void-free sealing of cable breakouts Internal coating of adhesive offers reliable environmental sealing Provides maximum electrical and mechanical protection Semi-rigid, flame-retardant polyolefin construction RoHS 2011/65/EU Compliant

## **Typical properties**

Brands: 3M™

Cable End Expanded: 0.8 in, 0.9 in, 1.2 in, 1.25 in, 1.5 in, 1.7 in, 1.75 in, 1.9 in, 2.35 in, 2.36 in, 2.39 in, 2.4 in, 2.65 in, 3 in, 3.2 in, 4.9 in, 5.25 in Cable End Recovered: 0.36 in, 0.37 in, 0.43 in, 0.5 in, 0.6 in, 0.69 in, 0.8 in, 0.9 in, 0.96 in, 0.98 in, 1 in, 1.4 in, 1.45 in, 1.9 in, 2 in, 2.32 in, 3 in Cable Insulation Outside Diameter Range: 0.87-1.06 in Cable Insulation Outside Diameter Range (Metric): 22.1-26.8 mm Cable Shielding: Concentric Neutral (CN), Jacketed Concentric Neutral (JCN) Conductor Legs Expanded: 0.28 in, 0.33 in, 0.5 in, 0.65 in, 0.75 in, 0.79 in, 0.8 in, 0.82 in, 1 in, 1.18 in, 1.2 in, 1.25 in, 1.35 in, 1.4 in, 1.45 in, 2 in Conductor Leas Recovered: 0.11 in, 0.12 in, 0.16 in, 0.17 in, 0.18 in, 0.19 in, 0.28 in, 0.29 in, 0.3 in, 0.35 in, 0.5 in, 0.53 in, 0.55 in, 0.75 in, 1 in Connector Included: CIR-1/0 Dielectric Strength (V/mil): 10 kV / mm Flame Retardant: Yes Heat Shrink Type: Heat Shrink Molded Shapes Indoor/Outdoor: Both Inner Diameter After Shrink (Imperial): 0.11 in, 0.12 in, 0.16 in, 0.17 in, 0.18 in, 0.19 in, 0.28 in, 0.29 in, 0.3 in, 0.35 in, 0.5 in, 0.53 in, 0.55 mm, 0.75 in, 1 in Inner Diameter After Shrink (Metric): 2.8 mm, 3.1 mm, 4.1 mm, 4.3 mm, 4.6 mm, 4.8 mm, 7.1 mm, 7.4 mm, 7.6 mm, 8.9 mm, 12.7 mm, 13.5 mm, 14 mm, 19.1 mm, 25.4 mm Inner Diameter Before Shrink (Imperial): 0.28 in, 0.33 in, 0.5 in, 0.65 in, 0.75 in, 0.79 in, 0.8 in, 0.82 in, 1 in, 1.18 in, 1.2 in, 1.25 in, 1.35 in, 1.4 in, 1.45 in, 2 in Inner Diameter Before Shrink (Metric): 7.1 mm, 8.4 mm, 12.7 mm, 16.5 mm, 19.1 mm, 20.1 mm, 20.3 mm, 20.8 mm, 25.4 mm, 30 mm, 30.5 mm, 31.8 mm, 34.33 mm, 35.6 mm, 36.8 mm, 50.8 mm Lug/Stem Connector Included in Kit: No Material: Semi-rigid, Flame Retardant Polyolefin Maximum Operating Temperature (Celsius): 135 °C Minimum Shrink Temperature (Celsius): 120 °C Model: Cold-shrink Number of Conductors: 1 Number of Outlets: 2.3.4.5.6 Operating Temperature (Celsius): -30 up to +135°C Outer Diameter After Shrink (Imperial): 0.36 in, 0.37 in, 0.43 in, 0.5 in, 0.69 in, 0.8 in, 0.9 in, 0.96 in, 0.98 in, 1 in, 1.4 in, 1.45 in, 1.5 in, 2 in, 2.32 in, 3 in, 15.2 in

Outer Diameter After Shrink (Metric): 0.9 mm, 9.1 mm, 9.4 mm, 10.9 mm, 12.7 mm, 17.5 mm, 20.3 mm, 22.9 mm, 24.4 mm, 24.9 mm, 25.4 mm, 35.6 mm, 36.8 mm, 38.1 mm, 50.8 mm, 58.9 mm, 76.2 mm, 322.6 mm Outer Diameter Before Shrink (Imperial): 0.8 in, 0.9 in, 1.2 in, 1.25 in, 1.5 in, 1.7 in, 1.75 in, 1.9 in, 2.35 in, 2.36 in, 2.39 in, 2.4 in, 2.65 in, 3 in, 3.2 in, 4.9 in, 5.25 in, 30.5 in Outer Diameter Before Shrink (Metric): 20.3 in, 22.9 mm, 30.5 mm, 31.8 mm, 38.1 mm, 43.2 mm, 44.5 mm, 48.3 mm, 59.7 mm, 59.9 mm, 60.7 mm, 61 mm, 67.3 mm, 76.2 mm, 81.3 mm, 124.5 mm, 133.4 mm, 386.1 mm Outlet Style: 2-Way, 3-Way, 4-Way, 5-Way, 6-Way Product Color: Black Product Series: 5450 Series Product Type: Cable & Wire Accessory, Splice Shrink Type: Heat Shrink Splice Type: Inline Repair Transition Type: 1 - 3 Breakout, 1 - 4 Breakout, 1-2 Breakout, 1-5 Breakout, 1-6 Breakout UV Resistant: Yes Units per Case: 1.0 Voltage: 25 kV, 28 kV eClass 14 Classification Group: 27400109

# 3M<sup>™</sup> Cold Shrink QS-III 3/C Armored or Non-Armored Splice Kits 5797A-MT and 5798A-MT

## Details

Splices shielded cables Silicon rubber-splice body provides good high- or low-temperature performance and Armorcast<sup>™</sup> jacket offers mechanical protection Suitable for use with 10000 and 20000 Series connectors or other UL Listed inline compression connectors Solderless ground braid offers constant force spring connection Rated for 35 kV applications

## **Typical properties**

Cable Shielding: Non-Armored Shielded, Shielded Armored Conductor Material: Aluminum, Copper Conductor Sizes (Imperial): 1/0 AWG, 1000 kcmil, 2/0 AWG, 250 kcmil, 3/0 AWG, 300 kcmil, 350 kcmil, 4/0 AWG, 400 kcmil, 500 kcmil, 600 kcmil, 700 kcmil, 750 kcmil, 800 kcmil, 900 kcmil Insulation Level: 1.33, 100%, 133% Insulation Outer Diameter (Imperial): 1.07 in, 1.08 in, 1.09 in, 1.1 in, 1.11 in, 1.12 in, 1.13 in, 1.14 in, 1.15 in, 1.16 in, 1.17 in, 1.18 in, 1.19 in, 1.2 in, 1.21 in, 1.22 in, 1.23 in, 1.24 in, 1.25 in, 1.26 in, 1.27 in, 1.28 in, 1.29 in, 1.3 in, 1.31 in, 1.32 in, 1.33 in, 1.34 in, 1.35 in, 1.36 in, 1.37 in, 1.38 in, 1.39 in, 1.4 in, 1.41 in, 1.42 in, 1.43 in, 1.44 in, 1.45 in, 1.46 in, 1.47 in, 1.48 in, 1.49 in, 1.5 in, 1.51 in, 1.52 in, 1.53 in, 1.54 in, 1.55 in, 1.56 in, 1.57 in, 1.58 in, 1.59 in, 1.6 in, 1.61 in, 1.62 in, 1.63 in, 1.64 in, 1.65 in, 1.66 in, 1.67 in, 1.68 in, 1.69 in, 1.7 in, 1.71 in, 1.72 in, 1.73 in, 1.74 in, 1.75 in, 1.76 in, 1.77 in, 1.78 in, 1.79 in, 1.8 in, 1.81 in, 1.82 in, 1.83 in, 1.84 in, 1.85 in, 1.86 in, 1.87 in, 1.88 in, 1.89 in, 1.9 in, 1.91 in, 1.92 in, 1.93 in, 1.94 in, 1.95 in, 1.96 in, 1.97 in, 1.98 in, 1.99 in, 2 in, 2.01 in, 2.02 in, 2.03 in, 2.04 in, 2.05 in, 2.06 in, 2.07 in Number of Conductors: 3 Splice Type: Cold Shrink Voltage: 35 kV eClass 14 Classification Group: 27400107

Part Number WF102 3M ID 7100022229 UPC 00051128601471

## Details

Specially designed for primary insulation of solid dielectric insulated wires and cable splicing rated to 2000 volts Simple installation which requires no tools Sealing of terminal lug barrels, conduit couplings and conduit-to-cable breakouts Made of EPDM rubber which contains no chlorides or sulfur Covers a wide range of cable cross sections Withstands temperatures of -40 to 90 degC (-40 to 194 degF) Environmental sealing for communication and other non-electrical applications

## **Typical properties**

Brands: 3M™ Cable Insulation Outside Diameter Range: 0.62-1.18 in Cable Insulation Outside Diameter Range (Metric): 15.9 - 30.0 mm Cable Type: Low Voltage Single Conductor Insulated Cable Case Quantity: 10 Conductor Sizes (Imperial): 3/0 AWG-250 kcmil Insulation O.D. Range: 0.62-1.18 in Insulation O.D. Range (Metric): 15.7-30.1 mm Material: EPDM Rubber Maximum Conductor Size (Imperial): 250 kcmil Maximum Conductor Size (Metric): 120 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Operating Voltage: 2000 Volt Minimum Conductor Size (Imperial): 3/0 AWG Minimum Conductor Size (Metric): 95 mm<sup>2</sup> Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Number of Conductors: 1 Voltage: 2000 V eClass 14 Classification Group: 27400105

# 3M<sup>™</sup> Cold Shrink Connector Insulator WF104

Part Number WF104 3M ID 7100022241 UPC 00051128601488

## Details

Specially designed for primary insulation of solid dielectric insulated wires and cable splicing rated to 2000 volts Simple installation which requires no tools Sealing of terminal lug barrels, conduit couplings and conduit-to-cable breakouts Made of EPDM rubber which contains no chlorides or sulfur Covers a wide range of cable cross sections Withstands temperatures of -40 to 90 degC (-40 to 194 degF) Environmental sealing for communication and other non-electrical applications

## **Typical properties**

Brands: 3M™ Cable Insulation Outside Diameter Range: 1.00-1.94 in Cable Insulation Outside Diameter Range (Metric): 25.4-49.3 mm Cable Type: Low Voltage Single Conductor Insulated Cable Case Quantity: 10 Conductor Sizes (Imperial): 600-750 kcmil (AI) 600-1000 kcmil (Cu) Insulation O.D. Range: 1.00-1.94 in Insulation O.D. Range (Metric): 25.4-49.3 mm Material: EPDM Rubber Maximum Conductor Size (Imperial): 1000 kcmil (Copper), 750 kcmil (Aluminum) Maximum Conductor Size (Metric): 400 mm<sup>2</sup> (Aluminum), 500 mm<sup>2</sup> (Copper) Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Operating Voltage: 2000 Volt Minimum Conductor Size (Imperial): 600 kcmil (Aluminum), 600 kcmil (Copper) Minimum Conductor Size (Metric): 300 mm<sup>2</sup> (Aluminum), 300 mm<sup>2</sup> (Copper) Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Number of Conductors: 1 Voltage: 2000 V eClass 14 Classification Group: 27400105

Part Number WF100 3M ID 7100022225 UPC 00051128601457

## Details

Specially designed for primary insulation of solid dielectric insulated wires and cable splicing rated to 2000 volts Simple installation which requires no tools Sealing of terminal lug barrels, conduit couplings and conduit-to-cable breakouts Made of EPDM rubber which contains no chlorides or sulfur Covers a wide range of cable cross sections Withstands temperatures of -40 to 90 degC (-40 to 194 degF) Environmental sealing for communication and other non-electrical applications

## **Typical properties**

Brands: 3M™ Cable Insulation Outside Diameter Range: 0.35-0.56 in Cable Insulation Outside Diameter Range (Metric): 8.9-14.2 mm Cable Type: Low Voltage Single Conductor Insulated Cable Case Quantity: 10 Conductor Sizes (Imperial): 4-2 AWG Insulation O.D. Range: 0.35-0.56 in Insulation O.D. Range (Metric): 8.9-14.2 mm Material: EPDM Rubber Maximum Conductor Size (Imperial): 2 AWG Maximum Conductor Size (Metric): 35 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Operating Voltage: 2000 Volt Minimum Conductor Size (Imperial): 4 AWG Minimum Conductor Size (Metric): 25 mm<sup>2</sup> Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Number of Conductors: 1 Voltage: 2000 V eClass 14 Classification Group: 27400105

Part Number WF101 3M ID 7100022226 UPC 00051128601464

## Details

Specially designed for primary insulation of solid dielectric insulated wires and cable splicing rated to 2000 volts Simple installation which requires no tools Sealing of terminal lug barrels, conduit couplings and conduit-to-cable breakouts Made of EPDM rubber which contains no chlorides or sulfur Covers a wide range of cable cross sections Withstands temperatures of -40 to 90 degC (-40 to 194 degF) Environmental sealing for communication and other non-electrical applications

## **Typical properties**

Brands: 3M™ Cable Insulation Outside Diameter Range: 0.45-0.82 in Cable Insulation Outside Diameter Range (Metric): 11.4-20.8 mm Cable Type: Low Voltage Single Conductor Insulated Cable Case Quantity: 10 Conductor Sizes (Imperial): 1-2/0 AWG Insulation O.D. Range: 0.45-0.82 in Insulation O.D. Range (Metric): 11.4-20.8 mm Material: EPDM Rubber Maximum Conductor Size (Imperial): 2/0 AWG Maximum Conductor Size (Metric): 70 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Operating Voltage: 2000 Volt Minimum Conductor Size (Imperial): 1 AWG Minimum Conductor Size (Metric): 50 mm<sup>2</sup> Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Number of Conductors: 1 Voltage: 2000 V eClass 14 Classification Group: 27400105

Part Number WF103 3M ID 7100022240 UPC 00051128595466

## Details

Specially designed for primary insulation of solid dielectric insulated wires and cable splicing rated to 2000 volts Simple installation which requires no tools Sealing of terminal lug barrels, conduit couplings and conduit-to-cable breakouts Made of EPDM rubber which contains no chlorides or sulfur Covers a wide range of cable cross sections Withstands temperatures of -40 to 90 degC (-40 to 194 degF) Environmental sealing for communication and other non-electrical applications

## **Typical properties**

Brands: 3M™ Cable Insulation Outside Diameter Range: 0.88-1.63 in Cable Insulation Outside Diameter Range (Metric): 23,3 - 42,0 mm Cable Type: Low Voltage Single Conductor Insulated Cable Case Quantity: 10 Conductor Sizes (Imperial): 350-500 kcmil Insulation O.D. Range: 0.88-1.63 in Insulation O.D. Range (Metric): 22.4-41.4 mm Material: EPDM Rubber Maximum Conductor Size (Imperial): 500 kcmil Maximum Conductor Size (Metric): 240 mm<sup>2</sup> Maximum Operating Temperature (Celsius): 90 °C Maximum Operating Temperature (Fahrenheit): 194 °F Maximum Operating Voltage: 2000 Volt Minimum Conductor Size (Imperial): 350 kcmil Minimum Conductor Size (Metric): 185 mm<sup>2</sup> Minimum Operating Temperature (Celsius): -40 °C Minimum Operating Temperature (Fahrenheit): -40 °F Number of Conductors: 1 Voltage: 2000 V eClass 14 Classification Group: 27400105

# 3M<sup>™</sup> Heat Shrink Thin-Wall Flexible Polyolefin Tubing FP-301

## Details

A VARIETY OF APPLICATIONS: Offers a 2:1 shrink-fit ratio and serves as protection in wire-harnessing, split-resistance covering, wire marking, wire bundling, and component packaging

FLAME-RETARDANT TUBING: For applications up to 600V (clear is not flame retardant)

HIGH-STRENGTH PROTECTION: Balances electrical, physical, and chemical properties for various industrial and military applications

FOR DEMANDING CONDITIONS: Performs at an operating temperature up to 275 °F (135 °C)

KEY SPECIFICATIONS: UL Listed, File E-39100, SAE AS23053/5, Class 1 (all colors), Class 2 (clear), CSA Certified, and RoHS 2011/65/EU Compliant

## **Typical properties**

Additional Flammability Rating: 23053/5 class1 Agency Approvals: CSA,CSA, UL Recognized,CSA Certified,UL Recognized,UL Recognized, CSA Certified, ABS, and AMS 3636 & 3637 Applicable SAE-AMS-DTL-23053 Specifications: 23053/5 class 1 **Application Specifications: ABS** Assortment Kits: Yes Brands: 3M<sup>™</sup> Dielectric Strength: 900 V/mil Elongation: 175 %, 175 Decibel, 400 %, 400 Decibel Expanded Inner Diameter: 0.046 in, 0.06 in, 0.063 in, 0.093 in, 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 1.25 in, 1.5 in, 2 in, 3 in, 4 in Expanded Inner Diameter (Metric): 1.17 mm, 1.59 mm, 1.6 mm, 101.6 mm, 12.70 mm, 19.05 mm, 2.36 mm, 25.40 mm, 3.18 mm, 31.75 mm, 38.1 mm, 38.10 mm, 4.75 mm, 50.8 mm, 50.80 mm, 6.35 mm, 76.2 mm, 9.5 mm, 9.53 mm Flame Retardant: No, Yes, Yes (except clear) Flammability Rating: No Flame Rating, UL 224 All Tubing Flame Test Heat Shrink Type: Heat Shrink Tubing Kits, Single-Wall Polyolefin Heat Shrink Tubina Inner Diameter After Shrink (Imperial): 0.023 in, 0.031 in, 0.046 in, 0.062 in, 0.093 in, 0.125 in, 0.187 in, 0.25 in, 0.252 in, 0.375 in, 0.5 in, 0.63 in, 0.75 in, 1 in, 1.5 in, 2 in Inner Diameter After Shrink (Metric): 0.58 mm, 0.787 mm, 0.79 mm, 1.16 mm, 1.17 mm, 1.57 mm, 2.36 mm, 3.17 mm, 3.18 mm, 3.75 mm, 4.75 mm, 6.35 mm, 7.87 mm, 9.53 mm, 12.7 mm, 16 mm, 19.05 mm, 21.7 mm, 25.4 mm, 38.1 mm, 50.8 mm Inner Diameter Before Shrink (Imperial): 0.046 in, 0.063 in, 0.093 in, 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.472 in, 0.5 in, 0.75 in, 1 in, 1.25 in, 1.5 in, 2 in, 3 in, 4 in Inner Diameter Before Shrink (Metric): 1.17 mm, 1.6 mm, 2.36 mm, 3.18 mm, 4.75 mm, 6.35 mm, 9.53 mm, 12.7 mm, 19.05 mm, 25.4 mm, 31.75 mm, 38.1 mm, 50.8 mm, 76.2 mm, 101.6 mm Material: Flexible Polyolefin, Polyolefin Maximum Operating Temperature (Celsius): 135 °C

Maximum Operating Temperature (Fahrenheit): 275 °F Mil Spec: AMS-DTL-23053/5, Class 1, AMS-DTL-23053/5, Class 2, SAE-AMS-DTL-23053/5, Class 1, SAE-AMS-DTL-23053/5, Class 2 Minimum Expanded Tubing I. D.: 0.063 in, 0.093 in, 0.125 in, 0.187 in, 0.25 in, 0.375 in, 0.5 in, 0.75 in, 1 in, 2 in, 3 in, 4 in Minimum Shrink Temperature (Celsius): 100 °C Non-Corrosive: Yes Operating Temperature (Celsius): -55 to 135 Degrees Celsius Operating Temperature (Fahrenheit): -67 °F to 275 °F Operating Temperature Range (Celsius): -55 °C to +135 °C, -55 °C to 135 °C Operating Temperature Range (Fahrenheit): -67 °F to 275 °F Product Color: Black, Blue, Green, Red, Transparent, White, Yellow Product Form: 48 in (1.22 m) sticks, 48 in (1.22 m) sticks with header label, 6 in (15.24 cm) pieces, Spool, Stick, Tube Product Type: Single (Thin) Wall Tubing Recovered Inner Diameter: 0.02 in, 0.023 in, 0.031 in, 0.046 in, 0.05 in, 0.06 in, 0.062 in, 0.09 in, 0.093 in, 0.125 in, 0.13 in, 0.187 in, 0.19 in, 0.25 in, 0.31 in, 0.375 in, 0.5 in, 0.63 in, 0.75 in, 1 in, 1.5 in, 2 in, 3 in Recovered Inner Diameter (Metric): 0.58 mm, 0.5842 mm, 0.7874 mm, 0.8 mm, 1.1684 mm, 1.17 mm, 1.57 mm, 1.5748 mm, 2.36 mm, 2.3622 mm, 3.175 mm, 3.18 mm, 4.7498 mm, 4.75 mm, 6.35 mm, 6.4 mm, 9.52 mm, 9.525 mm, 12.7 mm, 16.002 mm, 19.05 mm, 19.1 mm, 25.4 mm, 38.1 mm, 50.8 mm Recovered Wall Thickness: 0.025 in Shrink Ratio: 2:1 Size (Metric): 2.38 mm,1.17 mm,38.1 mil,101.6 mm,76.2 mm,25.4 mil,1.59 mm,4.75 mm,9.52 mm,19.05 mm,50.8 mm,6.35 mm,12.7 mm,38.1 mm,3.18 mm.50.8 mil.3.18 none.4.75 none.12.7 mil.25.4 mm Solution for: Access Network: FTTH/FTTB/CATV, Access Network: xDSL, Longhaul/Metro Loop Network: CO/POP, Long-haul/Metro Loop Network: Outdoor, Wireless Network: Backhaul, Wireless Network: Infrastructure Accessories, Wireless Network: Weatherproofing Tensile Strength (Imperial): 2400 Pound-Force Per Square Inch Tubing Type: Single (Thin) Wall, Single Wall (Thin) UL Approval: Yes UL Bug Temperature (Celsius): 125 Degrees Celsius UL Bug Temperature (Fahrenheit): 257 Degrees Fahrenheit UL Bug Voltage: 600 Volt UL File Number: E-39100 Units per Case: 200.0,50.0,25.0,14.0,1.0,24.0,35.0,12.0,2.0,3.0,10.0,250.0,21.0,5.0,133.0,100.0, 102.0,125.0,28.0 With Inner Glue: No eClass 14 Classification Group: 27400105 **Dimensions and Classifications** 

Overall Length (Imperial): 6 in, 48 in, 50 ft, 100 ft, 150 ft, 200 ft, 250 ft, 500 ft, 1000 ft Overall Length (Metric): 1.219 m, 15.2 m, 15.24 cm, 15.24 m, 30.5 m, 152 mm, 1220 mm

#### По вопросам продаж и поддержки обращайтесь:

Алматы (7273)495-231 Ангарск (3955)60-70-56 Архангельск (8182)63-90-72 Астрахань (8512)99-46-04 Барнаул (3852)73-04-60 Белгород (4722)40-23-64 Благовещенск (4162)22-76-07 Брянск (4832)59-03-52 Владивосток (423)249-28-31 Владикавказ (8672)28-90-48 Владимир (4922)49-43-18 Волгоград (844)278-03-48 Вологда (8172)26-41-59 Воронеж (473)204-51-73 Екатеринбург (343)384-55-89

Иваново (4932)77-34-06 Ижевск (3412)26-03-58 Иркутск (395)279-98-46 Казань (843)206-01-48 Калининград (4012)72-03-81 Калуга (4842)92-<u>23-67</u> Кемерово (3842)65-04-62 Киров (8332)68-02-04 Коломна (4966)23-41-49 Кострома (4942)77-07-48 Краснодар (861)203-40-90 Красноярск (391)204-63-61 Курск (4712)77-13-04 Курган (3522)50-90-47 Липецк (4742)52-20-81

Россия +7(495)268-04-70

Магнитогорск (3519)55-03-13 Москва (495)268-04-70 Мурманск (8152)59-64-93 Набережные Челны (8552)20-53-41 Нижний Новгород (831)429-08-12 Новокузнецк (3843)20-46-81 Ноябрьск (3496)41-32-12 Новосибирск (383)227-86-73 Омск (3812)21-46-40 Орел (4862)44-53-42 Оренбург (3532)37-68-04 Пенза (8412)22-31-16 Петрозаводск (8142)55-98-37 Псков (8112)59-10-37 Пермь (342)205-81-47

Ростов-на-Дону (863)308-18-15 Рязань (4912)46-61-64 Самара (846)206-03-16 Санкт-Петербург (812)309-46-40 Саратов (845)249-38-78 Севастополь (8692)22-31-93 Саранск (8342)22-96-24 Симферополь (3652)67-13-56 Смоленск (4812)29-41-54 Сочи (862)225-72-31 Ставрополь (8652)20-65-13 Сургут (3462)77-98-35 Сыктывкар (8212)25-95-17 Тамбов (4752)50-40-97 Тверь (4822)63-31-35

Тольятти (8482)63-91-07 Томск (3822)98-41-53 Тула (4872)33-79-87 Тюмень (3452)66-21-18 Ульяновск (8422)24-23-59 Улан-Удэ (3012)59-97-51 Уфа (347)229-48-12 Хабаровск (4212)92-98-04 Чебоксары (8352)28-53-07 Челябинск (351)202-03-61 Череповец (8202)49-02-64 Чита (3022)38-34-83 Якутск (4112)23-90-97 Ярославль (4852)69-52-93

Киргизия +996(312)96-26-47

эл.почта: tam@nt-rt.ru || сайт: https://3m.nt-rt.ru/

Казахстан +7(7172)727-132