3M Science. Applied to Life.™

Electrical Supplies Application Guide

Electrical Craftsmanship Every Day

3M Electrical Solutions

Discover craftsmanship in the many ways 3M helps workers in the electrical industry do their job better, from the innovative design of our spring connectors to the science behind our cold shrink products. Choose from a variety of industry-leading solutions backed by more than 100 years of 3M science.

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Connectors

On the worksite, only the right connector does the job. So forget the guesswork, and look for top quality products that match your project needs exactly. 3M electrical connectors are designed for maximum efficiency, so you can get ahead and stay ahead on every project.

3M™ Performance Plus Wire Connectors

Applications:

- Connect and insulate copper wires in a variety of industry applications
- Use with electrical components, fixtures and switches

Product Highlights:

- Quick-biting spring creates more secure connections
- Wings enable easier, higher torque installation
- Spring design enables inventory consolidation; three Performance Plus connectors handle the range of eight standard connectors (22-6 AWG)
- Flexible skirt helps prevent copper exposure for enhanced safety
- UL Listed for 600 volts
- Made in the USA

For product details, visit 3M.com/springconnectors.

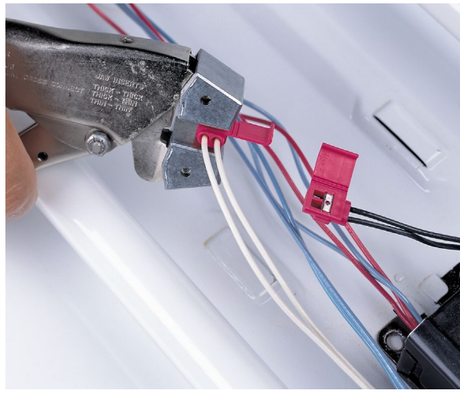
3M™ Scotchlok™ Insulation Displacement Connectors (IDCs)

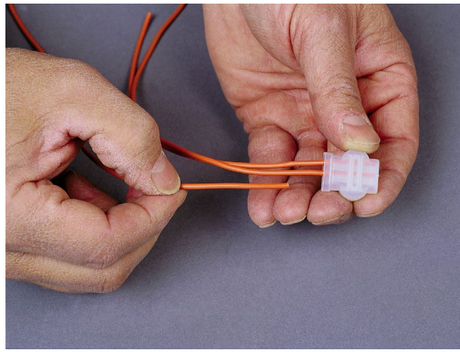
Applications:

- Connect and insulate copper wires in a variety of industry applications
- Common uses: indoor/ outdoor lighting, automotive, marine, security and control systems, electrical panels, irrigation

Product Highlights:

- Quick and easy; no stripping copper wire
- Large portfolio of sizes fits a spectrum of wire gauges (22-10 AWG) and applications
- Moisture resistant (select products)
- Easily disconnect the IDC to enable removable applications (select products)
- Majority are UL Listed for 600 volts
- Majority made in USA





3M™ Direct Bury Splice Kits

Applications:

- Reduce exposure to the elements in outdoor boxes and underground connections
- Common uses: golf course irrigation, landscape lighting, direct bury

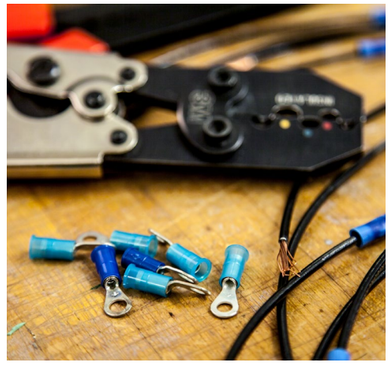
Product Highlights:

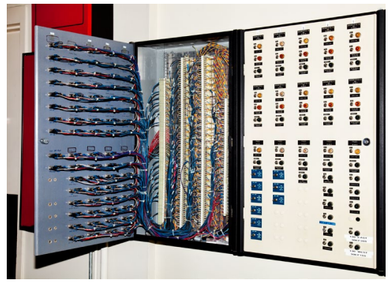
- UL Listed for 600 volts in direct bury applications, 18-10 AWG range
- Moisture resistant grease acts as barrier for damp environments
- Strain relief built into cap ensures connection holds, reducing call-backs and repeat visits
- UV resistant for long-term durability
- Made in the USA

For product details, visit 3M.com/directbury.

Terminals

Peace of mind is knowing that your wiring is secure. Whether it's defense against corrosion, mechanical stress or tension, 3M terminals forge connections that last and last. For more than 30 years, we've grown our expertise and built a legacy of durability through a robust offering of high-quality terminals.





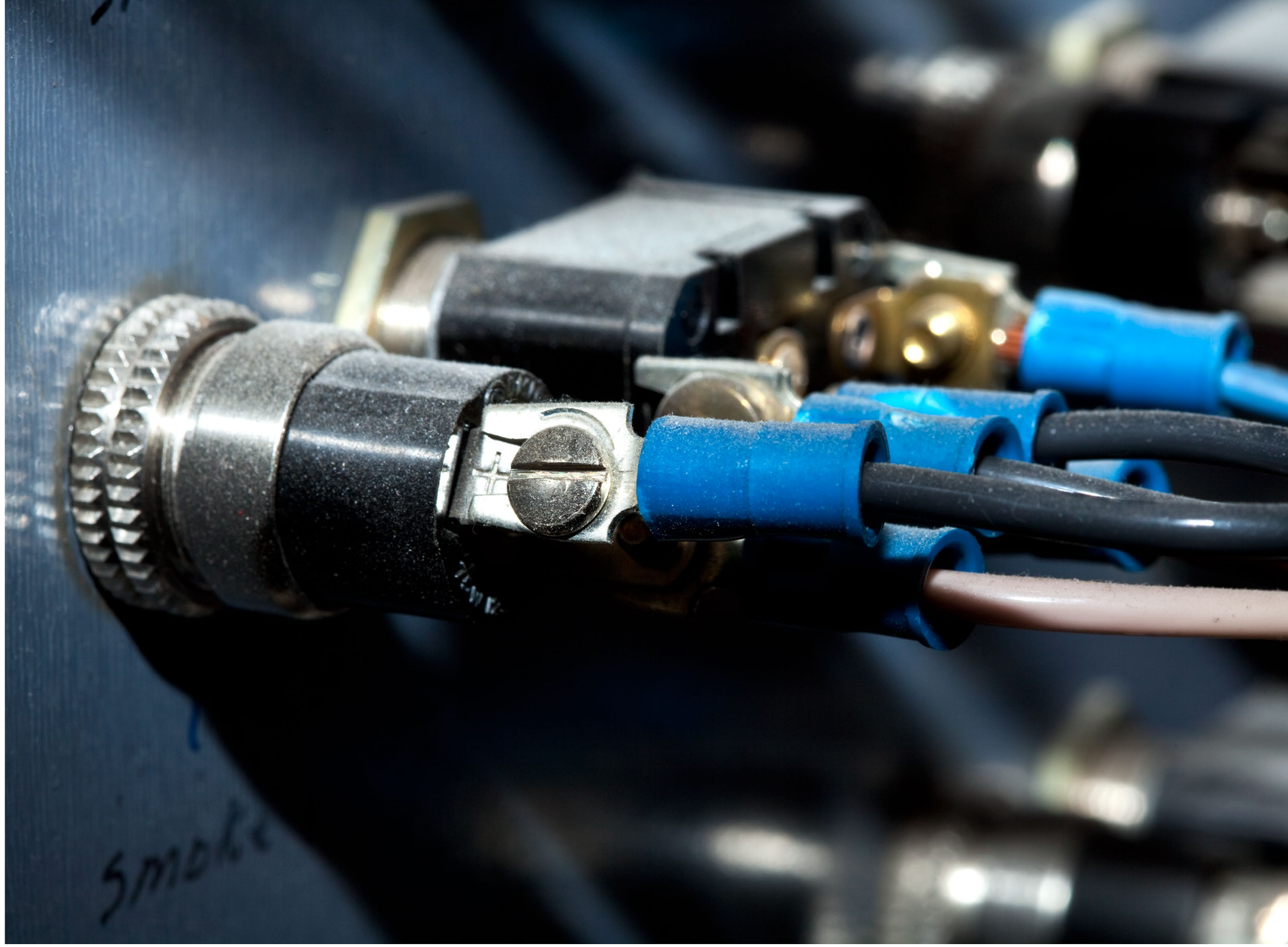
3M™ Scotchlok™ and 3M™ Highland™ Terminals

Applications:

- Terminal Blocks
- Control Panels
- Motors
- Appliances
- Automotive/Marine
- Fixtures

Product Highlights:

- Majority made in USA
- UL and CSA Listing
- Individually molded insulators incorporate a funnel barrel that reduces wire hang-ups and a crimp ridge that enables correct tool placement
- Complete line
- Multiple packaging options



For product details, visit 3M.com/terminals.

Splicing and Insulating Solutions

From extreme temperatures to wet and oily conditions, a harsh environment is always a challenge. 3M has a host of products that help you conquer those conditions.

3M™ Cold Shrink Tubing

Applications:

- Low voltage splicing, insulating and sealing
- Motor connections
- Cable and seals
- Splice jacketing

Product Highlights:

- Suitable for direct bury, submersion and harsh environments
- UV resistant
- Available in a variety of sizes
- EPDM and Silicone rubber materials
- Provides a “living” seal
- Made in the USA

3M™ Heat Shrink Tubing

Applications:

- Bundle electrical wires
- Color code by wire type
- Helps protect wires from cuts and abrasions

Product Highlights:

- Abrasion and cut resistance
- Moisture resistant insulation
- Built to SAE-AMS-DTL-23053/5 (thin wall) /4 (dual wall) /15 (heavy wall)
- Thin wall available in translucent and multiple colors
- Dual wall adds protection from moisture and airborne contaminants
- Heavy wall used for larger wires and underground environments
- Majority made in USA

3M™ Scotchcast™ Energy Resins

Applications:

- Low voltage splicing, insulating and sealing
- Insulate and seal odd-sized, odd-shaped connections
- Inline and Wye splices
- Signal and control cable splices
- Splice and jacket repair
- Sealing wet niche electrical connections
- Potting and break-out applications
- Corrosion protection

Product Highlights:

- Suitable for direct bury, submersed and wet environments
- Epoxy Resins – tough and durable for harsh environments
- Polyurethane Resins – flexible with high mechanical strength for rugged conditions
- Polybutadiene Resins – re-enterable
- Made in the USA

3M™ Scotchkote™ Electrical Coating FD

Applications:

- Rubber coating to seal vinyl tape in a variety of environments

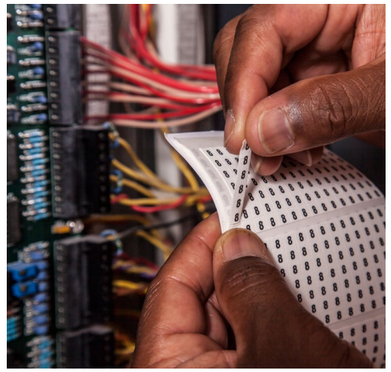
Product Highlights:

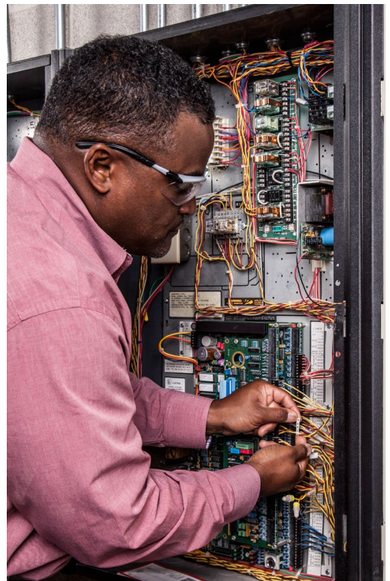
- Provides additional oil and moisture resistance for vinyl tapes in outdoor environments
- Seals underground splices
- Remains flexible after application to splices or tapes
- Meets state and local volatile organic compound (VOC) limits
- Made in the USA

For product details, visit 3M.com/electricalcoatings and 3M.com/electricaltapes.

Wire Identification and Management Systems

Consistency is key in all of your electrical projects. 3M identification and management systems provide easy management of wires, panels, and terminal blocks. 3M products meet or exceed the latest compliance standards, helping you keep your project on track.





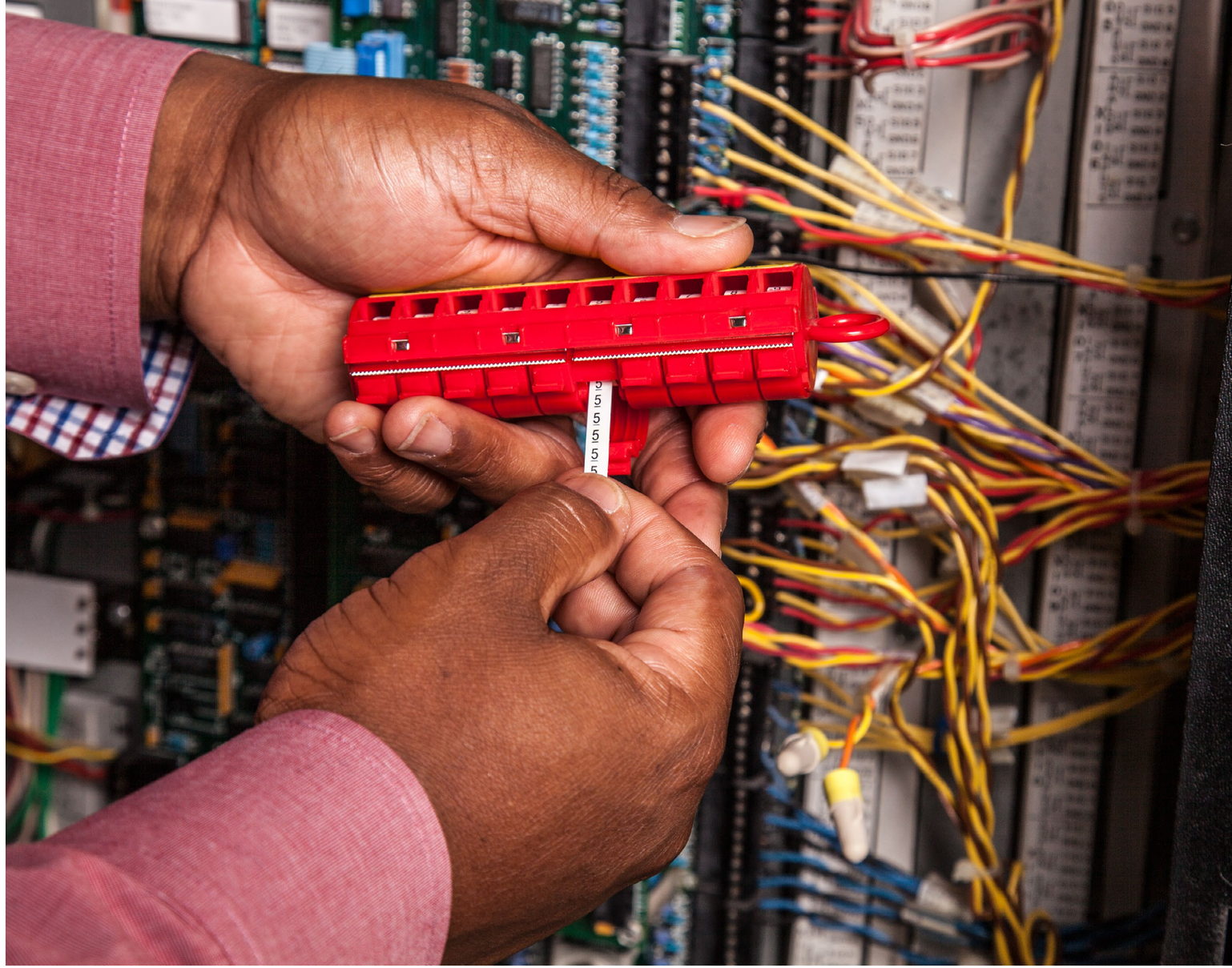
3M™ ScotchCode™ Wire Markers

Applications:

- Easily identify wires for maintenance and repair
- Common uses: electrical and control panels, telecom and communication, automotive, marine, safety and security, switches and outlets

Product Highlights:

- Multiple sizes and form factors for a variety of applications
- Tag material resists solvents, oil and water
- Convenient, pre-printed or write-on labels; refillable dispensers
- Comply with local, state and federal construction and building codes



For product details, visit 3M.com/wireID.

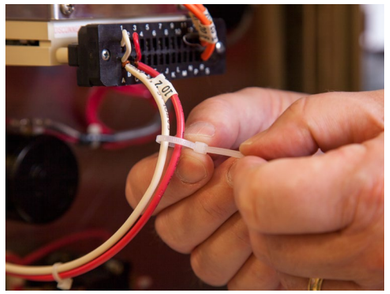
3M™ Cable Ties

Applications:

- Manage, bundle or secure cable in a variety of applications and sizes
- Common uses: data center, cable trays, control panels, HVAC

Product Highlights:

- Majority made in USA
- Plenum-rated for use in air-handling spaces
- Available in a range of lengths (4" to 48") and tensile strengths (18 lbs to 175 lbs)
- Operating temperature ranges from -40°F (-40°C) to 185°F (85°C)
- Available in natural, red and black
- Black ties provide UV resistance for outdoor applications
- UL Listed



Gloves

Your hands are everything. Protect them with the technology and craftsmanship you can trust. Featuring General Use, Winter and Cut Resistant varieties, 3M Comfort Grip Gloves provide the dexterity of bare hands with added protection and gripping power, even in wet and oily conditions.

3M™ Comfort Grip Gloves

Applications:

- Help protect hands during assembly and install, while maintaining dexterity
- Common uses for 3M Comfort Grip General Use and Winter Gloves: general material handling and handling small parts; electrical component assembly; carpentry, plumbing, roofing, and irrigation
- Common uses for 3M Comfort Grip Cut Resistant Gloves: handling abrasive or sharp materials; forming, bending or machining sharp parts; cable pulling and wire handling; cable preparation
- Common uses for 3M Gripping Material Work Gloves: factory and maintenance work, heavy equipment operation, outdoor construction

Product Highlights:

- A range of glove options for general and cut-resistant applications
- Lightweight, designed for comfort (“second skin” feel) and breathability
- Palm coating provides gripping power, even in wet or oily conditions
- Help prevent hand abrasions and cuts during cable splicing, conduit handling, metal stamping and fabrication (Cut Resistant Gloves)

For product details, visit 3M.com/gloves.

Aerosols

Whether insulating, sealing or protecting, 3M™ Aerosols offer the right product for the right application. 3M products are user-friendly and formulated for top performance.

3M™ Aerosols

Applications:

- Insulating spray: use for touch-up insulating jobs on winding wire for motor wiring and small magnetic coils
- Zinc spray: add protective layer to generation, transmission and distribution equipment, outdoor boxes, towers, and other metal and galvanized surfaces

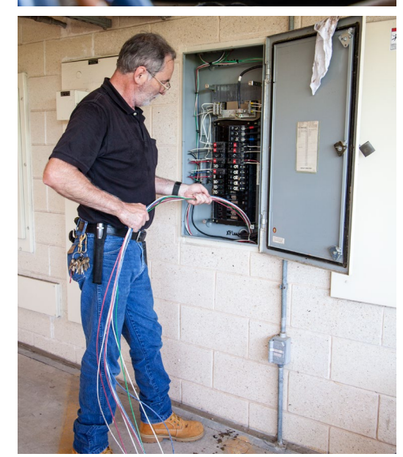
Product Highlights:

- Help protect surfaces against weather, moisture, corrosion, oil, alkalis and acids
- Insulating spray: available in clear and red (highly visible) sprays (1601 and 1602-R)
- Zinc spray: galvanize metal surfaces to aid in corrosion protection; quick-drying; 97% pure zinc formula (16-501)
- Made in the USA

For product details, visit 3M.com/aerosols.

Wire Pulling Lubricants

Friction makes pulling wire tough, and can cause cable jacket damage. Professionals count on 3M™ Wire Pulling Lubricants for their reliability through high pulling forces, extreme temperature changes, wet weather and the damaging effects of time.



3M™ Wire Pulling Lubricants

Applications:

- Aid in cable pulling during initial construction, retrofitting systems and building additions
- Use for pulling normal building wire, medium voltage cables and fiber optic cables

Product Highlights:

- Provide maximum tension reduction for long and multiple bend pulls and pulls in hot environments
- Compatible with a broader range of cable jackets
- Easy-to-apply spray option for light pulling (WLS)
- Clear option prevents staining and mess (WLC)
- Winter-grade formula for low temperatures (WLW)
- Wax-based formula for moisture and high temperatures (WLX)
- Available in various sizes for big and small projects
- Made in the USA

For product details, visit 3M.com/lubricants.

Time-tested, efficient, and scalable for all sizes of projects, look to 3M products for comprehensive electrical solutions for all your project needs. Let our sales representatives walk you through our complete product lines for your commercial or industrial worksites.

Attach business card here

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As of December 2015 the information in this brochure is accurate, to 3M's knowledge and belief, which may be based on information provided by third party suppliers to 3M.

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