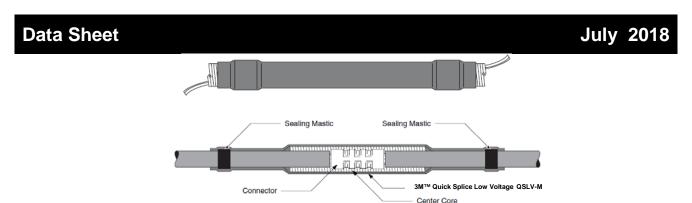
# 3M<sup>™</sup> Cold Shrink Quick Splice Low Voltage QSLV-M Series



Product Series	Cable Size Range (AWG or kcmil)*	Cable Insulation O.D. Range Inches (mm)	Max Connector O.D. Inches (mm)	Max Connector Length Inches (mm)
QSLV-M-8-2/0	8 - 2/0	0.20 – 0.75 (5 – 19)	0.687 (17)	2.5 (63)
QSLV-M-2-500	2 - 500	0.40 - 1.60 (10 - 41)	1.500 (38)	4.25 (108)

<sup>\*</sup>Insulator may be used on cable sizes outside of the recommended range, provided both cables are within the insulation O.D. range and the connector meets the dimensional requirements shown above.

### **Description**

3M™ Cold Shrink Quick Splice Low Voltage QSLV-M are open-ended tubular rubber sleeves with sealing mastic on each end which are factory expanded and assembled onto a unique three-core system. Two cores, one on each end, are removed after the 3M QSLV-M insulator has been centered over an inline connector, allowing the ends of the tube to shrink and form a water-resistant seal. The third, center segment of the core remains inside the cold shrink tube, acting as a support structure. Sizing of the cores and tube, along with the sealing mastic on each end, is designed to accommodate the variance in connectors and connector crimping techniques and final dimensions without degrading the seal and insulating characteristics of the EPDM rubber tube, while making core removal easy. Two diameter sizes will cover a range of 1000 volt or less cable from 8 AWG through 500 kcmil, copper and aluminum conductors with crimped connectors.

In aerial applications where intense UV radiation will be common and visual inspection is not possible, it is recommended to overwrap the tubing with Scotch® Super 33+™ Vinyl Electrical Tape or Scotch® Self-Fusing Silicone Rubber Electrical Tape 70.

- Simple hand installation, no tools required
- No heat source, eg. heat guns or torches
- Accommodates wide range of cable sizes, including street lighting
- Excellent wet electrical properties
- · Good thermal stability during storage and shipping
- Seals tight, retains resiliency and pressure, even after years of aging and exposure
- Resists acids and alkalies
- Water resistant. Meets water seal requirements of ANSI C119.1

### Agency Approvals & Self Certifications

RoHS 2011/65/EU

"RoHS 2011/65/EU" means that the product or part does not contain any of the substances in excess of the maximum concentration values ("MCVs") in EU RoHS Directive 2011/65/EU. The MCVs are by weight in homogeneous materials. This information represents 3M's knowledge and belief, which may be based in whole or in part on information provided by third party suppliers to 3M.



#### **EHS**

### **ACAUTION**

Working around energized systems may cause serious injury or death. Installation should be performed by personnel familiar with good safety practice in handling electrical equipment. De-energize and ground all electrical systems

 3M Cold Shrink Removable Core is a mixed polymer and recyclable with waste



 Read all Health Hazard, Precautionary and First Aid statements found in the Safety Data Sheet (SDS) and/or product label prior to handling or use.

### **Applications**

- Primary electrical insulation for 8 AWG–500 kcmil solid dielectric (rubber and plastic) insulated wire and cable splicing rated to 1000 volts, direct bury or submersible.
- Insulation of secondary splices, copper or aluminum conductors.
- · Dig-in repairs.
- · Sheath repairs.
- Insulation of inline conductor transition connectors and set-screw or oversized connectors.

## Typical Operating Range

The live memory action of the specially formulated EPDM material promotes a permanent, durable environmental seal and insulation, with typical operating range from -40° to 194°F (-40° to 90°C).

### Typical Physical And Electrical Properties

Not for specifications. Values are typical, not to be considered minimum or maximum. Properties measured at room temperature 73°F (~23°C) unless otherwise stated.

#### **EPDM Rubber**

Physical Property (Test Method)	Typical Value US units (metric)
Color	Black
<b>300% Modulus</b> (ASTM D 412-87)	480 psi (3,3 MPa)
Ultimate Tensile (ASTM D 412-87)	1400 psi (9,6 MPa)
Ultimate Elongation (ASTM D 412-87)	750%
Die C Tear (ASTM G-21)	150 pli (26,3 KN/m)
Moisture Absorption - 7 days in H <sub>2</sub> O	Wt. Gain 1.8%

Electrical Property (Test Method)	Typical Value US units (metric)
Dielectric Strength (ASTM D 149-75)	365 v/mil (14,3 Kv/mm)
<b>7 days in H<sub>2</sub>O, 90°C</b> (194°F)	282 v/mil (11,1 Kv/mil)

### 3M™ Cold Shrink Quick Splice Low Voltage QSLV-M Series

Shelf Life & Storage	This product has a 5-year shelf life from date of manufacture when stored in a humidity controlled storage (10°C/50°F to 27°C/80°F and <75% relative humidity).
Availability	Please contact your local distributor; available from 3M.com/electrical [Where to Buy] or call 1.800.245.3573.

3M Super 33+ and Scotch are trademarks of 3M Company.

### **Important Notice**

All statements, technical information, and recommendations related to 3M's products are based on information believed to be reliable, but the accuracy or completeness is not guaranteed. Before using this product, you must evaluate it and determine if it is suitable for your intended application. You assume all risks and liability associated with such use. Any statements related to the product, which are not contained in 3M's current publications, or any contrary statements contained on your purchase order, shall have no force or effect unless expressly agreed upon, in writing, by an authorized officer of 3M.

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