

3M™ Scotchcast™ LVI-1/x Series Inline Resin Joint Kit with 470W

Application

3M Scotchcast™ resin joint kits LVI-1/x are designed to be used for multi core armoured polymeric low voltage energy cables. The application incorporates electrical insulation and mechanical protection of joints for use with either compression or mechanical connectors. They can be used for indoor and outdoor, underground and submerged applications.

The LVI-1/x joints are also suitable for transition jointing with the use of additional components.

Features

- Resin 470W in transparent two chamber bags with integrated Closed Mixing and Pouring (CMP) system.
- One part translucent Mould Body with Snap Fit closing system for quick and easy handling.
- Pre cut foam sealing elements to provide reliable sealing to the Mould Body without tooling for all cable application diameters.
- Closure cap to prevent any pollution.



Kit content

- Translucent mould body with closure cap
- Scotchcast™ 470W resin bag with CMP
- Pre-cut sealing elements
- Scotch™ 23 Tape
- Armour connection components
- Connectors (sizes 2 and 3 only)
- Detailed instruction

Product Description

3M™ Scotchcast™ LVI-1/x resin inline joint kit will be delivered with a one part translucent mould body for simple and easy handling. Distances inside the body can be checked easily.

All necessary dimensions, like application range, cable preparation are given in the detailed instruction. The two foam sealing elements can be adapted to the required cable diameter by removing the pre-cut adapter rings. The resin 470W is delivered in two chamber bag with integrated spout and aluminium Guard Bag for protection against humidity.

The re-openable seam and integrated spout with a membrane provides a Closed, Mixing and Pouring system. After the seam of the two chamber bag is opened, the resin components can be mixed. To pour the resin into the mould body, the spout is connected with the dome by turning 180°. While turning, the membrane is cut open to pour the resin.

The Closed Mixing and Pouring System provides resin handling without any skin contact.

For protection against pollution, a closure cap is applied onto the dome.
After curing, the remaining resin in the bag can be disposed as household waste.

Product Selection (standard polymeric cables)

Kit Ref	Cross Sectional Area (mm²)				Max Cable OD (mm)
	S/Core	2 Core	3 Core	4 Core	
LVI-1/2-C	N/A	1.5 - 6	1.5 - 6	1.5 - 6	25
LVI-1/3-C	N/A	10 - 25	10	10	32
LVI-1/3	50 - 70	N/A	N/A	N/A	32
LVI-1/4	95 - 150	35	16 - 25	16 - 25	36
LVI-1/5	185 - 240	50 - 70	35 - 50	35 - 50	45
LVI-1/6	300 - 630	95 - 150	70 - 95	70	54
LVI-1/7	800 - 1000	185 - 240	120 - 185	95 - 150	64
LVI-1/8	N/A	300 - 400	240 - 400	185 - 300	90
CONNECTORS INCLUDED					

Product Selection (transition jointing, polymeric to PILC cables)

Kit Ref	Cross Sectional Area (mm²)				Max Cable OD (mm)	Additional Parts Required		
	S/Core	2 Core	3 Core	4 Core		CFS (Qty 1)	2228 Tape 25mm RI	23 Tape (Qty 1)
LVI-1/2-C	N/A	1.5-6	1.5-6	1.5-6	25	P60	Qty 1	19mm x 1.5m
LVI-1/3	50-70	10-25	10	10	32	P60	Qty 1	19mm x 1.5m
LVI-1/4	95-150	35	16-25	16-25	36	P62	Qty 1	19mm x 1.5m
LVI-1/5	185-240	50-70	35-50	35-50	45	P62	Qty 1	19mm x 9m
LVI-1/6	300-630	95-150	70-95	70	54	P63	Qty 2	19mm x 9m
LVI-1/7	800-1000	185-240	120-185	95-150	64	P64	Qty 2	19mm x 9m
LVI-1/8	N/A	300-400	240-400	185-300	77	P65	Qty 2	19mm x 9m
CONNECTORS INCLUDED								

Testing

Scotchcast™ Resin Kit Series LVI-1/x was tested according to EN50393 Table 3 / I / A1

Type of Test according to EN50393 Table 3 / I / A1	Results
AC Voltage Withstand Test in air 4kV AC/ 1 min	passed
Insulation Resistance Test in air 1kV DC	> 10.000MΩ
Heat Cycle in air 63 cycles: 5h/3h	passed
Heat Cycle in water 63 cycles: 5h/3h	passed
AC Voltage Withstand Test in water 4kV AC/ 1 min	passed
Insulation Resistance Test in water 1kV DC	> 10.000MΩ

Storage

3M™ Scotchcast™ Resin 470W has a shelf life of at least 36 months when stored between 10°C and 40°C with a humidity level < 75 % in the originally sealed bag.

The expiration date of each product appears on the product label.

Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case however, it is the responsibility of the user to determine applicability of the resin.

Safety and Handling

3M provides its customers with a product specific Material Safety Data Sheet (MSDS) to cover potential health effects, safe handling, storage, use and disposal information. 3M strongly encourages its customers to review the MSDS on its products prior to their use.

Product Stewardship

3M has a fundamental concern for all who make, distribute and use its products, and for the environment in which we live. This concern is the basis of our philosophy and policies by which we assess the health and environmental information on our products and then take the appropriate steps to protect employee, the public health and the environment.

Customer Notice

3M encourages its customers and potential users of 3M products to review their applications for such products from the standpoint of human health and environmental quality. To help ensure that 3M products are not used in ways for which they were not intended or tested. 3M personnel are available to assist customers in dealing with ecological and product safety considerations.

Regulatory Status

3M™ Scotchcast™ LVI-1/x series, and Scotchcast™ 470W are compliant with EU regulation 1907/2007/EC (REACH)

Important Notice: 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. 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.

Warranty; Limited Remedy; Limited Liability. This product will be free from defects in material and manufacture at the time of purchase. 3M MAKES NO OTHER WARRANTIES INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE. If this product is defective within the warranty period stated above, your exclusive remedy shall be, at 3M's option, to replace or repair the 3M product or refund the purchase price of the 3M product. Except where prohibited by law, 3M will not be liable for any loss or damage arising from this 3M product, whether direct, indirect, special, incidental or consequential regardless of the legal theory asserted.



Electrical Markets Division

3M UK PLC, 3M Centre, Cain Rd,
Bracknell RG12 8HT, United Kingdom
0870 609 4639
www.3M.co.uk/electrical

Electrical Markets Division

3M Ireland Ltd, The Iveagh Building, The
Park, Carrickmines, Dublin 18, Ireland
1 800 812 732
www.3M.co.uk/electrical

3M and is a trademarks of the 3M
company.

© 3M 2019. All rights reserved.

Issue 8

