

## **3M Scotchcast™**

### **Resin kit LVBD-1/x Series**

### **Inline and Branch joint kit series with 470W Resin**

#### **Application**

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

#### **Features**

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



#### **Kit content**

- Transparent mould body
- Closing rail
- CMP adapter with closure cap
- Scotchcast™ 470W resin bag with CMP
- Pre-cut sealing elements
- Abrasive strip
- Detailed instruction
- Armour connection components



**THORNE &  
DERRICK**  
**INTERNATIONAL**

**Thorne & Derrick**  
+44 (0) 191 410 4292  
[www.powerandcables.com](http://www.powerandcables.com)

## Product Description

3M™ Scotchcast™ resin inline and branch joint kit will be delivered with a two part transparent 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 will be supplied in two-chamber plastic pouches with peelable barrier in the correct stoichiometric proportion. This type of packaging will assure the correct mixing ratio for applying the resin.

The packaging includes a Closed Mix and Pour Delivery System. The integrated pouring spout will be opened while attaching the mixed resin bag to the housing of the joint or by using the supplied opener.

For other information, relevant for the usage of the resin, like Gel-Time, Pot-Life, viscosity, density etc. please refer to the typical properties described in the product data sheet for Scotchcast™ 470W Resin.

The Closed Mixing and Pouring System provides resin mixing and installation without any skin contact. For protection against pollution, a closure cap is applied onto the joint housing. After curing, the remaining resin in the bag can be disposed as household waste.

## Product Selection

KIT REFERENCE	CROSS SECTIONAL AREA (mm <sup>2</sup> )					MAX MAIN CABLE OD (mm)	MAX BRANCH CABLE OD (mm)
	MAIN CABLE	SERVICE BRANCH					
		Two Core	Three Core	Four Core	Five Core		
LVBD-1/3-C*	2.5 - 16	2.5 - 16	2.5 - 16	2.5 - 16	10 - 16	29	22
LVBD-1/4-C*	16 – 35	6 – 35	6 – 35	6 – 35	16 - 25	35	25
LVBD-1/5-C*	35 – 95	10 – 35	10 – 35	10 – 35	n/a	50	30
LVBD-1/6	95 – 120	25 – 50	25 – 50	25 – 50	n/a	58	35
LVBD-1/7	120 – 185	50 – 120	50 – 120	50 – 120	n/a	65	45

\*These kits are complete with connectors

## Testing

Scotchcast™ Resin kit LVBD-1/x series were tested according 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. Your 3M sales representative can arrange for the proper contacts.

## **Regulatory Status**

The 470W Resin is in compliance with EU regulation 1907/2007/EC (REACH)

3M and Scotchcast are trademarks of 3M Company

### **Important Notice**

All statements, technical information and recommendations related to the Seller's products are based on information believed to be reliable, but the accuracy or completeness thereof is not guaranteed. Before utilizing the product, the user should determine the suitability of the product for its intended use. The user assumes all risks and liability whatsoever in connection with such use.

Any statements or recommendations of the Seller which are not contained in the Seller's current publications shall have no force or effect unless contained in an agreement signed by an authorized office of the Seller.

The statements contained herein are made in lieu of all warranties, expressed or implied, including but not limited to the implied warranties of merchantability and fitness for a particular purpose which warranties are hereby expressly disclaimed.

SELLER SHALL NOT BE LIABLE TO THE USER OR ANY OTHER PERSON UNDER ANY LEGAL THEORY; INCLUDING BUT NOT LIMITED TO NEGLIGENCE OR STRICT LIABILITY; FOR ANY INJURY OR FOR ANY DIRECT; INDIRECT; INCIDENTAL OR CONSEQUENTIAL DAMAGES SUSTAINED OR INCURRED BY REASON OF THE USE OF ANY OF THE SELLER'S PRODUCTS.



**THORNE &  
DERRICK**  
**INTERNATIONAL**

**Thorne & Derrick**  
+44 (0) 191 410 4292  
[www.powerandcables.com](http://www.powerandcables.com)