

3M Electrical Markets Division  
3M™ Scotchcast™ Cable Joints



Speed  
Safety  
Reliability

3M™ Scotchcast™  
LV Cable Joints



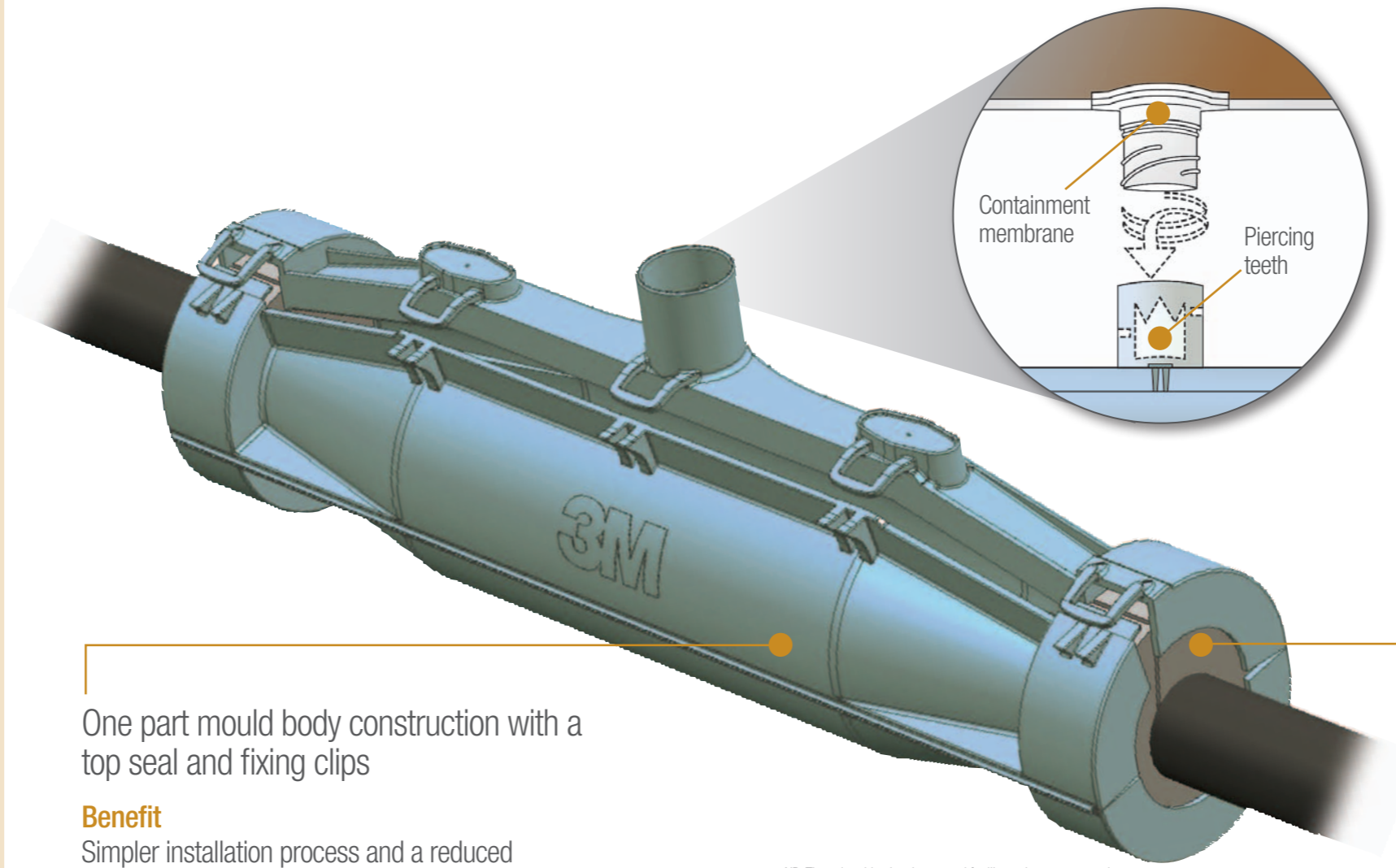
### 3M™ Electrical Markets Division

The success of 3M is founded on listening to the customer's needs and applying technology to offer a solution. With hundreds of technology platforms 3M has an ongoing commitment to research and development.

Within the Electrical Markets Division this method of working has not only led to the development of the first ever vinyl insulation tape, but also the conception of many resin jointing techniques as we know them today through the introduction of 3M™ Scotchcast™ Resin Bags & Joints more than 35 years ago. Our commitment to innovation in this area has now led to the development of a new generation of LV resin jointing products that are unique in the electrical contracting sector. These products are designed to make the installation process simpler and safer; saving time and money for the contractor while maintaining the level of quality and reliability our customers have come to expect from 3M. We strive to be the chosen supplier not only because of our innovative and efficient products, but also due to our commitment to service and support for your business.

#### 3M™ Scotchcast™ LV Resin Jointing Kits

Our new design of mould body and resin delivery system is the key difference in comparison to the conventional technique used in applications such as street lighting, service and pilot/telecom cable jointing. The key benefits of the design innovations are illustrated in the diagram on the right.



Fully integrated resin delivery system

#### Benefit

This innovative design significantly reduces the chances of resin wastage, skin contact and vapour inhalation

One part mould body construction with a top seal and fixing clips

#### Benefit

Simpler installation process and a reduced chance of resin leakage - no need for extra taping

Range taking foam seals at each end of the mould body

#### Benefit

Sawing and taping the ends of the resin mould can be eliminated

NB: The colour blue has been used for illustrative purposes only. For actual colour of joint shell, please refer to the table below.

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#### Earthing Method

To avoid awkward manipulation of armour wires while trying to fit worm drive clips over support rings, we have chosen to use constant force springs as our preferred earthing method - a quick and easy solution requiring the minimum of fuss and no extra tooling.

#### Standard Range

This range of products is designed for general purpose street lighting and service cable jointing.

#### Premium Range

This range of products is designed for more specialist applications where a high level of humidity is present.

Kit Type	Resin	Resin Mould	Power	Telecom
Standard	#470W	Translucent	✓	✓
Premium	#40A	Transparent	✓	✗

Our power cable joints are available in both armoured and un-armoured configurations while our pilot/telecom cable joints are only available in an armoured configuration. Please refer to our separate selection guide for more details.

## 3M™ Scotchcast™ LV Resin Bags

Our innovative new resin bag is designed to eliminate almost any chance of skin contact and reduce vapour inhalation from the resin itself. Furthermore, it gives the user superb control over the resin mixing and pouring process; avoiding unnecessary spills and wastage.

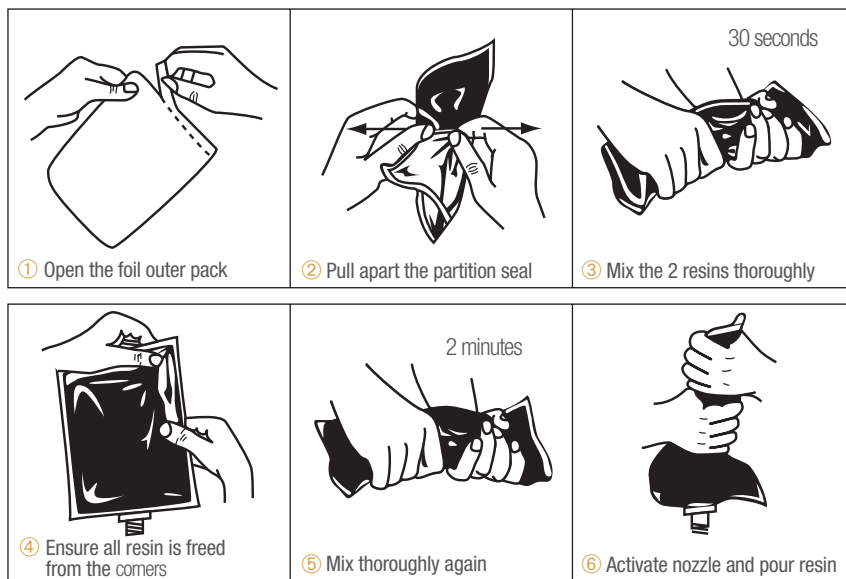
### Our Resin Range

It is the quality of our resins for which we are best known and the foundation on which many of our customers keep choosing 3M time and time again. When it comes to peace of mind and confidence in a job well done then second best just isn't enough. Alongside the development of a new joint mould body and resin delivery system, we have also re-developed our resin compounds to comply with EU environmental and user safety regulation changes. You will find a table below that show how these new resin products compare:

	# 470W Standard	# 40A Premium
Type	Polyetherurethane	Polyetherurethane
Form	2 Part	2 Part
Density (g/cm <sup>3</sup> )	1.16	1.07
Viscosity at 23°C (Pas)	0.9	0.9
Hardness (Shore D)	59	57
Elongation at break (%)	90	50
Pot life at 23°C (min)	20	20
Dielectric strength (kV/mm)	20	24
Exotherme Reaction (°C) - Temp 40°C	90	95



### How the new resin bags work...



### Helping Contractors Make the Change Product Training and Demonstration

We take training seriously and have a long track record of working closely with our customers to give them the best 3M product training possible. Of course, the design of our products helps to ensure consistently high installation quality. We recognise that the right installation techniques mean that work is carried out more accurately, safely and quickly. Most importantly, training helps joints and terminations to last longer with reduced failure risk, giving you a better return on your investment.

Product Demonstrations	Product Installation Training	Utility Approved Product Installation Training
Fully demonstrate and install 3M products into pre-prepared cables	3M product installation training and cable preparation requirements.	We can recommend the correct company for training



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Quote Ref: LVJL

[www.3M.co.uk/electrical](http://www.3M.co.uk/electrical)