

# 3M<sup>™</sup> Scotchcast<sup>™</sup> Resin Kits LVI-3/x-IC Series Inline Joint kits with Resin 1402FR

# **Technical datasheet**



### **Product Description**

3M™ Scotchcast™ resin joint kit series LVI-3/x-IC are designed to be used for multi core or multi pair polymeric, armoured, low voltage control and instrumentation cables up to 0.6/1.0 (1.2)kV. Also suitable for 1.9/3.3 (3.6)kV cables. The joints also accommodate lead sheathed cable.

LVI-3/x-IC kits include the 3M™ Scotchcast™ 1402FR Polyurethane Resin, delivered in a two-chamber plastic pouch with aluminium guard bag for protection against humidity. The kits include a two-part transparent mould shell for simple handling and easy control of the connector distances inside the body.

#### **Applications**

The application incorporates electrical insulation and mechanical protection of joints with compression or mechanical connectors. They can be used indoors and outdoors in underground and submerged applications.

# Type Test

3M™ Scotchcast™ resin joint kits LVI-3/x-IC passed the Type Test according to EN 50393 Table 3: Type I Joint, Sequence A1 Test Report

# **Product Features**

- Resin 1402FR supplied in a transparent two chamber plastic pouch with integrated Closed Mixing and Pouring (CMP) system.
  Halogen Free, flame retardant, and chemical resistant.
- Operating temperature: -40°C to +110°C continuous use, 130°C overload.
- Two-part mould shell with snap fit closing for quick and easy handling.
- Transparent mould shell for easy control of connector distances in the joint.
- Flame retardant (UL94 V0), halogen free mould shell.
- Spacer web included to ensure spacing between connectors and the mould shell.
- Closure cap to prevent any pollution.
- Armour connection components and detailed instructions included.

#### Selection Guide for common cable types\*

# PE Insulated Armoured Multi-pair Cables, 0.9mm<sup>2</sup>

Kit Reference	Number of pairs	Cable diameter (mm)
LVI-3/2-IC	1 – 2	14 – 30
LVI-3/3-IC	5	23 – 35
LVI-3/4-IC	10	28 – 47
LVI-3/5-IC	15 – 20	33 – 55
LVI-3/6-IC	30 – 50	45 – 70

# PVC Insulated Armoured Multi-core Cables, 1.5 – 2.5mm<sup>2</sup>

Kit Reference	Number of Cores	Cable diameter (mm)
LVI-3/2-IC	2 – 6	14 – 30
LVI-3/3-IC	7 – 12	23 – 35
LVI-3/4-IC	14 – 21	28 – 47
LVI-3/5-IC	24 – 37	33 – 55

<sup>\*</sup>other cable combinations can be selected by matching to the cable diameter, allowing room for the chosen connectors.

## **Installation & Handling**

Keep resin bags at 10°C or warmer before mixing. In cooler ambient conditions keep resin bags in a warmer area until ready to mix. The resin is delivered in a two-chamber pouch with an integrated spout and aluminium guard bag for protection against humidity. The reopenable seam and integrated spout with a membrane provides a Closed, Mixing and Pouring system.

The two halves of the mould shell can be adapted to the required cable diameter by cutting the marked areas at the ends.

After opening the seam of the two-chamber pouch, the two resin components can be mixed. To pour the resin into the mould body, connect the spout with the included 'key' by turning it 180° in order to open the membrane, before pouring into the mould shell. To provide resin handling without skin contact, disposable gloves meeting EN394 are included.

For protection against pollution, apply the closure cap onto the dome. After curing, the remaining resin in the pouch can be disposed as house waste.

For other information, relevant for the usage of the resin, like gel-time, pot-life, viscosity, density etc. please see the relevant resin data sheet

### Shelf Life & Storage

3M™ Scotchcast™ Resin 1402FR Resin has a 36 month shelf life from date of production when stored between 5°C and 40°C and < 75% relative humidity in the originally sealed guard bag. The expiry date is stated on the guard bag and on the carton label. Storage beyond the date specified on the label does not necessarily mean that the product is no longer usable. In this case, it is the responsibility of the user to determine the applicability of the resin.

# 3M<sup>™</sup> Scotchcast<sup>™</sup> Resin Kits LVI-3/x-IC Series

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