

# 3M<sup>™</sup> Scotchcast<sup>™</sup> Resin Kits 92-NBA 0 GS up to 92-NBA 7

Inline Joint Kit Series with Resin 40

# 1. Product description

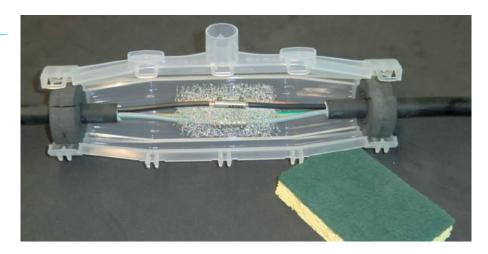
3M™ Scotchcast™ resin joint kits 92-NBA x are designed to be used for 1-core up to 5-core non shielded, polymeric, low voltage energy cables up to 0.6/1 (1.2) kV.

3M™ Scotchcast™ resin inline joint kits contain a one-part transparent mould body for simple and easy handling and so distances inside the body can be checked easily. Also included is 3M™ Scotchcast™ 40 Polyurethane resin, delivered in a two-chamber bag with an integrated spout and aluminium guard bag for protection against humidity.

All necessary dimensions, like application range and cable preparation are provided in the detailed instructions.

# 2. Applications

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



# 3. Typical properties

# 3.1 Rated Voltage $U_0/U(U_{max})$

0.6/1(1.2) kV

### 3.2 Type Test

3M<sup>™</sup> Scotchcast<sup>™</sup> resin joint kits 92-NBA 0 to 92-NBA 7 passed the Type Test according to EN 50393 Table 3: Type I Joint, Sequence A1

## 4. User Information

#### 4.1 Features

- Resin 40 comes in two transparent chamber bags with an integrated Closed Mixing and Pouring (CMP) system.
- One-part mould body with a snap fit closing system for quick and easy handling.
- Transparent mould body for easy control of connector distances in the joint.
- ▶ Web spacer for 4-core cable application to ensure the distance between connectors for sizes NBA 1 up to NBA 4.
- Pre-cut foam sealing elements to provide reliable sealing to the mould body without tooling for all cable application diameters.
- ▶ Abrasive sponge to clean and roughen the cable jacket.
- ► Closure cap to prevent any pollution.
- Detailed instruction drawing.

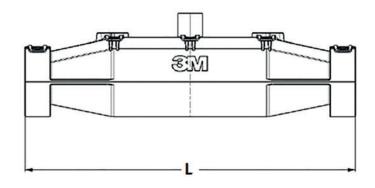
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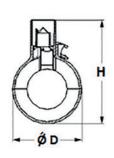
## 4.2 Selection Guide

Application range [mm²]												
Body size	Cu		AL		1000		(Amm					
	4x	5x	4x	5x	4x	5x	<del>₹</del> 11110					
92-NBA 0	1.5 - 4	1.5 - 2.5	-	-	-	-	4 - 16					
92-NBA 1	1.5 - 10	1.5 - 6	-	-	1.5 - 6	-	10 - 22					
92-NBA 2	6 - 16	2.5 - 10	-	-	-	-	12 - 25					
92-NBA 3	16 - 25	6 - 16	-	-	6 - 16	1.5 - 6	13 - 32					
92-NBA 4	25 - 50	16 - 35	16 - 35	16 - 25	-	10 - 16	18 - 36					
92-NBA 5	50 - 95	25 - 50	35 - 70	25 - 50	16 - 35	-	19 - 45					
92-NBA 6	70 - 120	-	70 - 120	-	50 - 70	25 - 35	27 - 54					
92-NBA 7	120 - 240	-	95 - 240	-	95 - 185	35 - 50	29 - 64					

# 4.3 Dimensions and Resin Volumes

Body size	Length L [mm]	Diameter D [mm]	Height H [mm]	Type of resin	Resin identification	Number of resin bags
NB-A0	148	32	65	Polyurethane	Scotchcast 40	1 × 90 ml
NB-A1	178	36	69	Polyurethane	Scotchcast 40	1 × 135 ml
NB-A2	230	38	71	Polyurethane	Scotchcast 40	1 × 200 ml
NB-A3	270	55	85	Polyurethane	Scotchcast 40	1 × 370 ml
NB-A4	319	63	100	Polyurethane	Scotchcast 40	1×680 ml
NB-A5	369	76	115	Polyurethane	Scotchcast 40	1 × 1375 ml
NB-A6	479	101	144	Polyurethane	Scotchcast 40	2 × 1375 ml
NB-A7	643	130	177	Polyurethane	Scotchcast 40	3 × 2200 ml





## 4.4 Handling

Keep resin bags at 5°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 bag with an integrated spout and an 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 must be connected with the dome by turning it 180°. While turning, the membrane will cut open to pour the resin.

The Closed Mixing and Pouring system provides resin handling without any skin contact. The two foam sealing elements can be adapted to the required cable diameter by removing the pre-cut adapter rings.

A web spacer ensures the minimum required distance to each connector for 3-core and 4-core cables.

For protection against pollution, a closure cap is applied onto the dome. After curing, the remaining resin in the bag 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.

## 4.5 Shelf Life and Storage

3M™ Scotchcast™ 40 Resin has a 36 month shelf life from date of production, stated on the label, when stored in a humidity controlled area (10°C to 40°C and < 70% relative humidity) and in the originally sealed guard bag.

Additionally, the expiring date is stated on the guard bag and the carton label.

## 5. Additional information

To request additional product information, see address below.

## Important notice

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Values presented have been determined by standard test methods and are average values not meant to be used for specification purposes.

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**Electrical Markets Division** 

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