

Scotchcast[™] Resin Kits 92-NBA 0 GS up to 92-NBA 7 GS

Inline Joint Kit Series with Resin 4 GS





1. Product Description

 $3M^{TM}$ ScotchcastTM resin joint kits 92-NBA x GS are designed to be used for 1-core up to 5-core non shielded, polymeric, low voltage energy cables up to 0.6/1.0(1.2) kV.

92-NBA x GS kit series include the ScotchcastTM 4GS Epoxy resin with Colour mixing indicator, delivered in two chamber plastic pouch with integrated spout and aluminium Guard Bag for protection against humidity. The kits further include a one part transparent mould body for simple handling and easy control of connector distances inside the body.

2. Applications

The application incorporates electrical insulation and mechanical protection of joints with compression or mechanical connectors. They can be used for indoor and outdoor, underground and submerged applications.

3M Deutschland GmbH Carl-Schurz-Str.1 41453 Neuss Germany Reference: AABBDD58304#EN_03

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3. Typical Properties

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

0,6/1(1,2) kV

3.2 Type Test

The Scotchcast[™] resin joint kits 92-NBA 0 GS to 92-NBA 7 GS passed the Type Test according to EN 50393 Table 3: Type I Joint, Sequence A1

4. User Information

4.1 Features

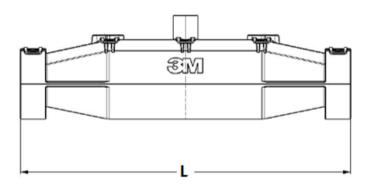
- Resin 4GS in transparent two chamber plastic pouch with integrated Closed Mixing and Pouring (CMP) system.
- CMR-, Isocyanate-, Halogen- and SVHC- free, REACH and RoHS compliant resin formulation with Colour mixing indicator.
- Strong adhesion of resin to metals and different plastics.
- Enhanced water and humidity resistance during resin curing.
- · Great resistance of resin to humidity whilst in storage.
- Operating Temperature: -40 °C to +110 °C Continuous use, 130 °C overload.
- One part Mould Body with 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 available for the 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 drawings.

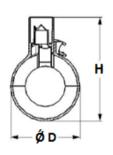
4.2 Selection Guide

Application Range [mm ²]										
Body Size	Cu		AL		1000					
	4 x	5 x	4 x	5 x	4 x	5 x	j mm			
92-NBA 0 GS	1.5 - 4	1.5 - 2.5	-	-	-	-	4 - 16			
92-NBA 1 GS	1.5 - 10	1.5 - 6	-	-	1.5 - 6	-	10 - 22			
92-NBA 2 GS	6 - 16	2.5 - 10			-		12 - 25			
92-NBA 3 GS	16 - 25	6 - 16	•	-	6 - 16	1.5 - 6	13 - 32			
92-NBA 4 GS	25 - 50	16 - 35	16 - 35	16 - 25	-	10 - 16	18 - 36			
92-NBA 5 GS	50 - 95	25 - 50	35 - 70	25 - 50	16 - 35	-	19 - 45			
92-NBA 6 GS	70 - 120	50 - 95	70 - 120	50 - 95	50 - 70	25 - 35	27 - 54			
92-NBA 7 GS	120 - 240	95 - 150	95 - 240	95 - 150	95 - 185	35 - 50	29 - 64			

4.3 Dimensions and Resin Volumes

Body	Length	Diameter	Height	Type of	Resin	Number of
size	L [mm]	D (mm)	H [mm]	Resin	Identification	Resin Bags
NB-A0	148	32	65	Ероху	Scotchcast 4GS	1 x 90ml
NB-A1	178	36	69	Ероху	Scotchcast 4GS	1 x 135ml
NB-A2	230	38	71	Ероху	Scotchcast 4GS	1 x 200ml
NB-A3	270	55	85	Ероху	Scotchcast 4GS	1 x 370ml
NB-A4	319	63	100	Ероху	Scotchcast 4GS	1 x 680ml
NB-A5	369	76	115	Ероху	Scotchcast 4GS	1 x 1375ml
NB-A6	479	101	144	Ероху	Scotchcast 4GS	2 x 1375ml
NB-A7	643	130	177	Ероху	Scotchcast 4GS	3 x 2200ml





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4.4 Handling

Keep resin bags at 10° C or warmer before mixing. In cooler ambient conditions keep resin bags in warmer area until ready to mix.

The resin is delivered in a two chamber pouch 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 opening the seam of the two chamber pouch, the two resin components can be mixed. Sufficient mixing is indicated by the resin turning to a homogenous green colour (changing to darker green when fully cured). Note that colour gradation can change depending on storage conditions and application temperature.

To pour the resin into the mould body, connect the spout with the dome turning it by 180° in order to open the membrane.

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

The delivered 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. It can be applied for 3-core and 4-core cables.

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.

4.5 Shelf Life and Storage

3M™ Scotchcast™ Resin 4GS 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 expiring date is stated on the Guard Bag and on the carton label. Storage at elevated temperatures can result in bleaching of the blue colorant and deviations of the mixed color gradation from the color code printed on the packaging. This has no influence on all other resin characteristics. 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.

5. Additional Information

To request additional product information, see address below.

Important Notice

All statements, technical information and recommendations contained in this document are based upon tests or experience that 3M believes are reliable. However, many factors beyond 3M's control can affect the use and performance of a 3M product in a particular application, including the conditions under which the product is used and the time and environmental conditions in which the product is expected to perform. Since these factors are uniquely within the user's knowledge and control, it is essential that the user evaluates the 3M product to determine whether it is fit for a particular purpose and suitable for the user's method or application.

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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