

## Quick Reference Guide

### Raychem Low Voltage Resin Joints

The Raychem PXE and BV product family forms part of a large and growing range of Low Voltage filled joints from TE Connectivity. These straight joints cater for all common types and sizes of power distribution and control cables.

The Raychem range of Low Voltage resin joints are based on TE Connectivity's proven RAPID and GUROFLEX filler material technology, coupled with a range of clear, robust, snap-together joint shells.



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### Resin Joints for Unarmoured Power and Control Cables up to 1kV

### PXE

#### PXE

Raychem PXE Joints are the entry level LV resin joint, available with a selection of two RAPID filler materials. Each kit includes; clear polypropylene joint shells, a volume appropriate satchel of two-part RAPID resin in a double-chamber pack for enclosed mixing, core separator, abrasive cloth tape, sealant tape, and a picture-based installation instruction.

#### Simple installation

Installation is straightforward, as per the accompanying photographs which illustrate an overview of the key steps.

The joint shells are trimmed to suit the cable size; the cable ends are prepared according to the instruction pictures; conductor connectors are fitted; the core separator is placed between the connectors; the joint shell is snapped closed over the joint and the ends are sealed; the filler material is mixed and poured. The cable can be energised immediately after installation.

#### Proven performance

The PXE straight joints have been fully type tested to the European standard EN 50393.

#### RAPID resin

The function of a casting material is to insulate and protect electrical connections in underground cable joints and to prevent water ingress from outside the joint or from within the cable.

RAPID 4300 and RAPID 6000 are two-component, polyurethane-type casting resins. Both are hydrophobic, elastic polyurethane resins with excellent insulation properties which are well suited for all cable jointing systems.

Contrary to some competitor offerings, PXE joints do not rely on the use of sand as a filler, and thus present no risk of introducing moisture into the joint.

#### How is RAPID used?

Preparation of RAPID systems starts

immediately before the casting process. The two components are mixed in a double chamber bag to initiate the cross-linking process.

#### What is the difference between RAPID 4300 and RAPID 6000?

Both resin types consist of part A - a mixture of polyols, fillers and special additives - and part B - the hardener.

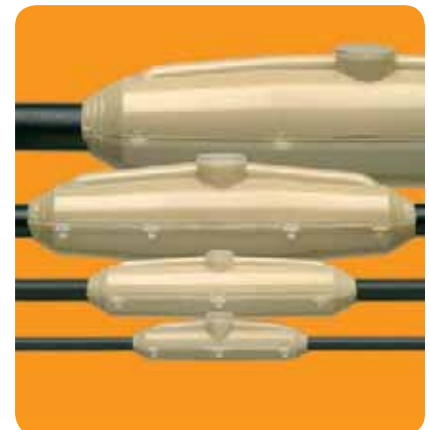
RAPID 4300 is equivalent to most competitor offerings which use an MDI (Methylene diphenyl diisocyanate) based hardener. The isocyanate is classified as a hazardous material and is labelled "danger" in accordance with local regulations.

RAPID 6000 is considered a far safer polyurethane which uses a HDI (Hexamethylene diisocyanate) hardener. It is free of the carcinogenic classification associated with other polyurethane resins, so is marked as "warning" in accordance with local regulation.

#### Why is RAPID 4300 / RAPID 6000 unique?

Their outstanding properties include excellent hydrolytic stability and impressive hydrophobic characteristics.

Foaming problems during curing are avoided, even in a relatively high humidity environment. This ensures long-term stability under service conditions. Furthermore, RAPID systems have an excellent curing profile at various temperatures, which allows easy handling and curing, summer and winter alike. Permanent elasticity ensures long term stability and accommodation of cable movement. As a result of the cross-linking reaction, the resin bonds strongly to functional parts, preventing the creation of voids between hardened resin and cable insulation, which in turn offers excellent mechanical protection to the joint.



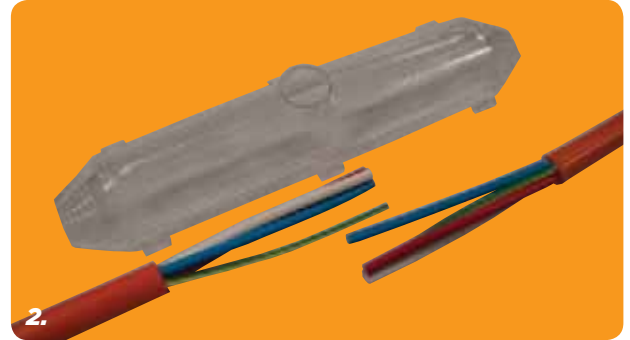
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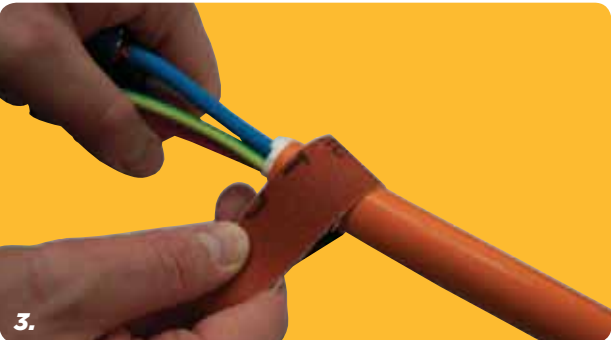
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1. Using a hacksaw, cut the ends of the shell to the appropriate size for your cable.



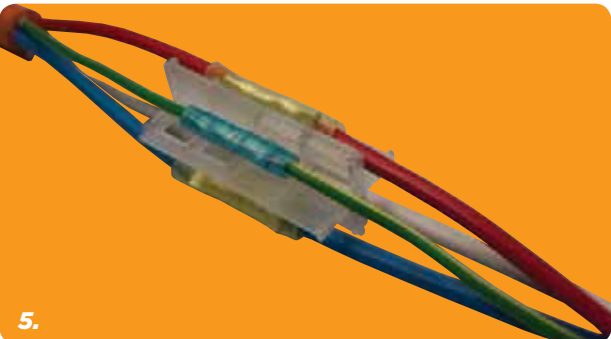
2. Cut and strip the cable according to the dimensions in the installation instruction supplied in the kit.



3. Abrade the cable to the dimensions in the installation instruction and clean with the supplied cleaning wipe.



4. Crimp the cables together.



5. Insert the core separator.



6. Use the supplied tape to seal the ends of the shell.



7. Mix the two parts of the resin together thoroughly.



8. Pour the RAPID 4300 or RAPID 6000 into the shell until it is filled.