



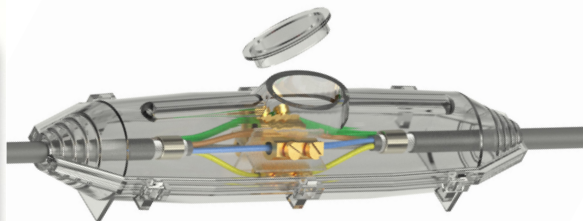
# Things to know Resin Joint Kits

## Technical Breakdown

Resin cable joint kits (sometimes called cast-resin or injection-resin cable joints) are assemblies used to join or repair power or signal cables by encapsulating the joint area in a resin compound. The kit typically includes a moulded transparent shell, a two-part resin (polyurethane, epoxy or hybrid), connectors, sealing tape, and earthing or bonding components. Mechanical support and containment of the resin is provided by the shell, allowing voids to be filled, expressing moisture. The resin also provides dielectric insulation and environmental protection.

Resin cable joint kits offer a robust, moisture-resistant and electrically reliable way to connect or repair cable systems, whether power, signal or data infrastructures. The reliability and operational success of the joint depends on selecting the correct joint paying particular attention to voltage class, conductor size, shell design and resin quality and meticulous installation practices along with adherence to standards.

Our joint kits offer straight solutions for cables of 1.5mm up to 400mm in 2, 3 or 4 core combinations and branch solutions for 1.5mm up to 70mm cable again 2, 3 or 4 core. How do they work – with the cable ends prepared, being stripped, cleaned and the connectors in place. The joint is placed and arranged in the shell, the resin is mixed and poured into the shell. The resin then cures to form a solid mass that supports the cable resists moisture and ingress, maintaining the insulation barrier. The transparent shell allows visual inspection of the resin fill and cure process.



**How to Choose** - Careful consideration should be taken when selecting a joint kit. Low, Medium and High voltage applications all have different requirements including dielectric stress, creepage distances, resin performance. Make sure the kit is rated for the voltage class of your cables.

Cable type, size and insulation materials are all factors that will influence the kit selection as well as whether the cables are armoured or unarmoured as different earth bonding may be required, the shell must physically accommodate the outside diameter of the cable's insulation.

**Best Practices** - Try to work in dry clean conditions as contamination may affect the resin adhesion or curing process. Properly clean, degrease and abrade surfaces to ensure good bonding. Before, mixing and pouring the resin, support the joint shell and associated components to make sure all is spaced and aligned properly.

Pouring the resin slowly prevents trapping air in the Joint. Do not disturb the joint while curing, use ambient temperature control if the environment is cooler or hotter than normal. Visually inspect for voids, delamination, or resin shrinkage. Check mechanical strain relief, anchoring and cable bending radius. Perform electrical tests (insulation resistance, partial discharge, continuity) as needed.

### Q Is there earth continuity for armoured SWA cables?

**A** Yes - our resin joint kits maintain full earth continuity for SWA cables. Each kit includes an insulated copper braid and constant earth springs, which securely clamp onto the cable's armour wires. This ensures a reliable, low-resistance connection between both cable ends before encapsulating with resin for long-term protection.

### Q Are connectors included in the joint kits?

**A** Yes - each joint kit includes four mechanical connectors, allowing easy termination of up to four-core cables. These connectors are designed for quick, secure installation without the need for any special crimping tools, making the jointing process faster and more convenient on-site.