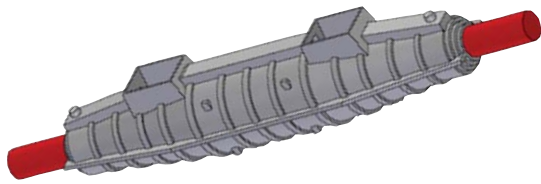


# MEDIUM VOLTAGE for Polymeric cable up to 24 kV

## Characteristics



## ELASPEED™ JOINT

Three core steel wire armoured cables EJ-3XA series, using resin encapsulation for added mechanical strength & moisture protection

> The range of ELASPEED™ cold applied joints has a wide range of applications including both single and three core polymeric and paper cables.

The cold applied technology has been developed to ensure that the accessories aren't the weak link in your system. The Elasppeed™ cable joint is manufactured in the same way as cable. It starts its life as an extruded dielectric cable, manufactured to the highest standards in the cable industry. The Elasppeed™ core, constructed from ethylene propylene rubber (EPR) insulation, is manufactured in a vertical extruder to ensure complete concentricity to the tightest tolerance possible. It is then tested as a cable to ensure long and trouble free operation under a wide variety of applications. The Elasppeed™ joint has the highest physical and dielectric properties and it utilises the Eprotenax™ insulation system.

> **Cold Applied Technology** - Elasppeed™ joints utilise cold applied technology over the connector position – widely recognised as the leading edge technology for cable accessories. Cold application ensures concentric joint recovery, even in tight installation spaces. Elasppeed™ joints recover to give consistent insulation wall thickness and provide constant radial pressure.

> **Self Eject Carrier** - The Elasppeed™ joint bodies utilise the new two-part self eject carrier. This construction eliminates the possibility of locking or breaking of the spiral carrier around the connector during unwinding. It also allows the body to be easily centralised and removes the need to grease the cable core thus reducing the risk of contamination. Jointing of three core cables is also made easier because the need to unwind the spiral between the cores is removed.

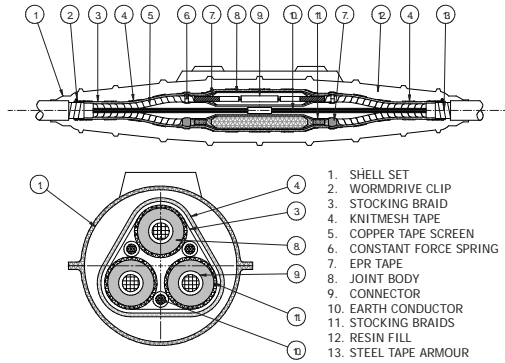
> **Reliability and Repeatability** - Elasppeed™ joints are reliable because they always shrink uniformly. No matter how many joints must be installed the last joint will be as reliable as the first.

> **Resin Encapsulation** - Low Density two part resin is used to provide added mechanical strength and water protection.

## Features & Benefits

- > No special tools required.
- > Joint body recovers to uniform wall thickness every time.
- > All layers are EPR based rubbers, which remain live on cables, ensuring constant radial pressure.
- > Joint can be re-centralised during shrinking.
- > No mastic required over connector on 'Faraday Cage' joints on 24 kV (Um). Joint bodies supplied on Self-eject carrier.
- > Two part resin advantages:
  - Internal & external seals
  - Tested under 5m head of water
  - Not tool dependant (gas torch)
  - High mechanical strength – will survive many impacts
  - Chemical bond to sheath and cores – will survive ground subsidence – sheath locked in place
  - Cores locked in place – less risk of 'pulled ferrules'

## Three Core, Armoured ELASPEED™ Joint



Max System Voltage (Um) kV	Conductor Size (mm <sup>2</sup> )		Kit reference
12	95	185	EJ-3XA-A-12
12	185	300	EJ-3XA-B-12
24*	50	95	EJ-3XA-A-12
24*	95	240	EJ-3XA-B-12

\* = ADDITIONAL CENTRALISING SLEEVES ARE REQUIRED FOR 24 kV CABLES.

### Key Benefits of Bicon™ Mechanical Connectors

- > Type Tested to BS EN 61238.
- > All connectors have centralised bore:
  - Reduced step on to the cable insulation.
  - Reduced strain on the joint body.
- > Jigsaw profile on split connectors:
  - The two connector halves are interlocked.
  - Enhanced tensile performance.
- > Range-taking shear bolts to suit size transitions.
- > Centralising sleeves:
  - Allow size transitions across a large cross sectional area.
  - Ensures centralised conductor.

### Applications

EJ-3XA series of ELASPEED™ joints are suitable for use with a wide range of polymeric medium voltage cables including:

- > Three core polymeric insulation (PE, XLPE, EPR etc)
- > Copper conductors (95 – 300mm<sup>2</sup>)
- > Semi-conducting screen either extruded or taped
- > Copper tape screened cores
- > Galvanised steel wire armours
- > Insulation voltage up to 24 kV (Um)

### Typical Assembly Procedures:



Joint body in position



Joint body shrunk down



Cracking of self eject carrier



Removal of carrier



Outer stocking braid in position



Pouring of polyurethane resin

### Packing

EJ-3XA series of Elasppeed™ joints are supplied as a complete kit, containing all the necessary components to complete the joint.

### Standards

Generally meet the requirements of BS 7888 – C 33 001 – DIN 57 278 -- IEEE 404 – IEC 60502-4 – CENELEC HD 629-1 – ENEL DJ 4853 – C 33 050-A1

Quality Accreditation – Certified to ISO 9001

Environmental Accreditation – Certified to ISO 14001

Occupational Health & Safety Accreditation – Certified to OHSAS 18001

### Other Products

The range of ELASPEED™ cold applied joints has a wide range of applications including both single and three core polymeric and paper cables. Details available on request.