



Raychem Transition Joint System LJTM up to 1 kV
Including New Mechanical Shear Bolt Connectors

Raychem
from TE Connectivity

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General

The new Raychem LJTM product line of low voltage transition joints up to 1 kV combines the characteristics of the well-known, long-term tested and reliable Raychem heat shrink technology with the advantages of mechanical shear bolt connectors.

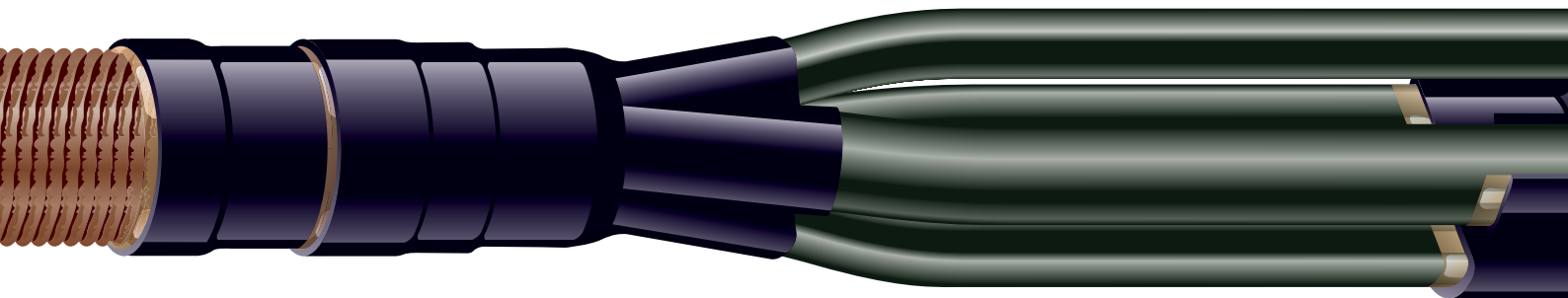
The joints are designed on the basis of the guidelines of the new DIN 47640 standard, effective for low voltage inline joints and defining the compatibility between low voltage heat shrink tubing and mechanical connectors. The requirements of the standard are met by using the advanced Raychem WCSM insulation sleeves with larger application range and the new developed Raychem BSLB mechanical shear bolt connectors.

Features & Benefits

- Standardized LV jointing system, with focus on high range-taking
- Fixed application ranges, with clear allocation for selection of mechanical connectors
- Joints designed to meet modern requirements for LV accessories and to cover all relevant customer specifications for LV transition joints
- Use of the advanced Raychem WCSM insulation sleeves allows unrestricted use of mechanical shear bolt connectors
- Wall thickness of the insulation sleeves optimized to ensure mechanical and electrical strength over connectors
- Shear-torque-controlled more reliable mechanical connectors
- No shelf-life issues with main components
- Easy and fast installation

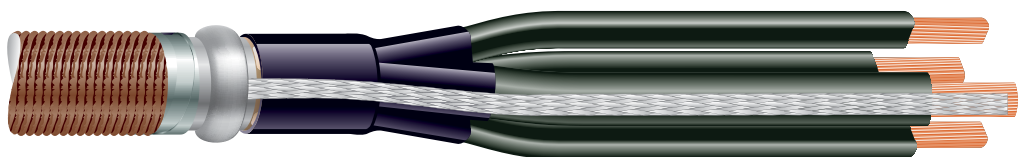
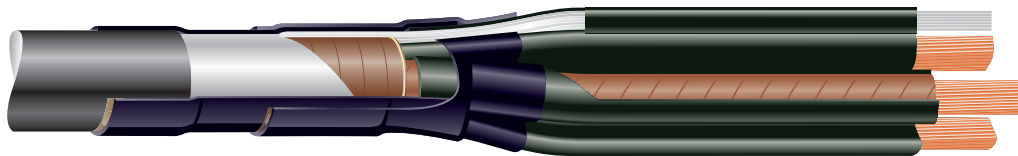
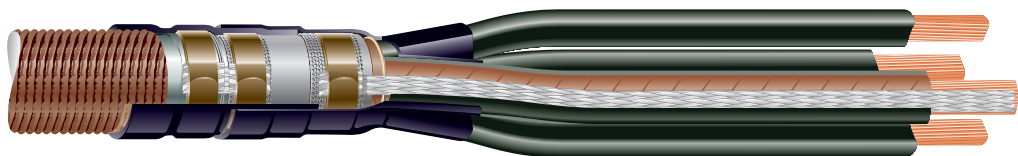
All joint components combine excellent electrical performance, mechanical strength and moisture sealing to provide the main functions required for low voltage products.

The new Raychem LJTM product line passed the required type tests in accordance with:
EN50393 - Test requirements on cable accessories for applications on energy power cables of rated voltages up to 0.6/1(1.2) kV



Raychem LJTM joints allow connections from 4-core unarmored plastic insulated cables to 4-core paper insulated cables with lead sheath or to 3-core paper insulated cables with aluminum sheath.

The standardized and optimized design of the joints results in the strong advantage that fewer joints have to be used for a variety of cable constructions and cross-sections.



BSLB - Mechanical shear bolt connectors - Features & Benefits

- Bodies and shear off bolts made of high strength Aluminum alloy
- Cross-grooved conductor channels for improved long term contact performance
- Bodies, with rounded edges, completely electro-tinned
- Bolts with outer hexagonal head, waxed for better installation, not removable
- Unique design with round bores and milled notches to allow easy installation of sector-shaped conductors without rounding

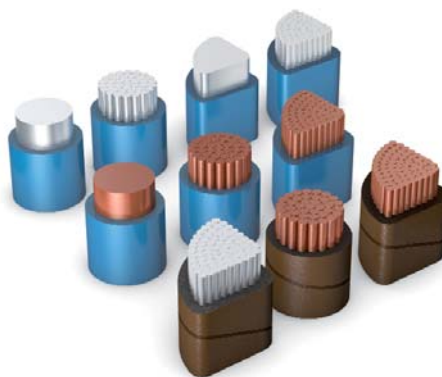
The new BSL product line has passed all required type tests in accordance with: IEC-61238-1, class A Test requirements on connectors for use on energy power cables

The split-V product line has passed all required type tests in accordance with: BS4579, Part 1 & Part 3, and Engineering recommendation C79.



Mechanical shear bolt connectors - General advantages

- Designed for high range taking
- Application independent from conductor materials and constructions
- Easier and safer installation of the mechanical connectors improved network reliability
- Fast installation using standard spanners, ratchets or electrical torque wrenches



Cordless impact wrench

For the installation of mechanical connectors a cordless impact wrench is available. For more details see brochure EPP 1297.

Ordering information

Raychem LJTM transition joint kits are currently available for connections from of polymeric insulated cables without armour to 4-core paper insulated cables with lead sheath or to 3-core paper insulated cables with aluminum sheath.

There are four kits available covering the applications on both cables with lead or aluminium sheath. Each joint covers a large range of cable sizes and is supplied as a complete set, including the new BSLB (blocked) mechanical shear bolt connectors and all other required heat shrink components.

The components required for the connection of the metal sheath of the paper cables are contained in the kit content.

The joint application ranges, defined in the selection table are defined by the maximum application limits of the heat shrinkable components and the design limits for the mechanical connectors.

Due to different conductor and cable dimensions the minimum and maximum application range may be extendable or have to be limited. Please contact your local TE sales representative.

Standard kits available**Application ranges (mm²)**

Kit name	Polymeric cable	Paper cable with lead sheath
LJTM-4X/010-050	4x 10-50	4x 10-35
LJTM-4X/035-095	4x 35-95	4x 25-70
LJTM-4X/035-150	4x 35-150	4x 35-120
LJTM-4X/095-240	4x 95-240	4x 95-185
LJTM-4X/185-300*	4x 185-300	4x 185-300

Note: The application range for paper cables with lead sheath needs to be reduced by one cross-section, to insert the earth braid connecting the lead sheath and the neutral core into the mechanical connector.

Joints for crimp connectors are available on request.

Joints for armoured cable types are available on request.

* LJTM-4X/185-300 Kit contains split-V connectors, for more information, please contact the local TE sales team.

For further information on these new Raychem products from TE Connectivity, please contact the local TE sales team.

As one of the leaders in heat-shrinkable materials and one of the largest cable accessories makers, we additionally offer customer training, service and technical assistance to meet the demands of the growing world of energy.

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