

# COMPAX

CKM 24 kV 50-150

CKM 24 kV 95-240

Medium Voltage  
Straight-through Joint



**ELECTROPAR**  
NEW ZEALAND

The connection you can count on.

- Easy, reliable, quick to assemble
- Solution for a wide range of cross-section
- Only standard tool required
- Unlimited shelf-life
- Type tested according to CENELEC HD 629.1

Systems For Professionals

**CELLPACK**

Electrical Products



## Perfect connection

### Profit gained by innovation

Reliable cable joints are indispensable for good working and high quality electrical distribution network. They must exhibit the same operational reliability as the cable itself. Due to the high costs incurred by energy producers for their medium voltage networks, shut off time has to be avoided wherever possible. Therefore it is of utmost importance to energy producers that cable joints are **reliable, quick and easy to install**. Innovative solutions are in demand, particularly for medium voltage networks where installation defects result in high costs which must be reduced drastically.

The CKM plug-in straight-through joint is the result of more than five years of intensive development work at Cellpack. It represents the perfect joint system for the medium voltage cable range.

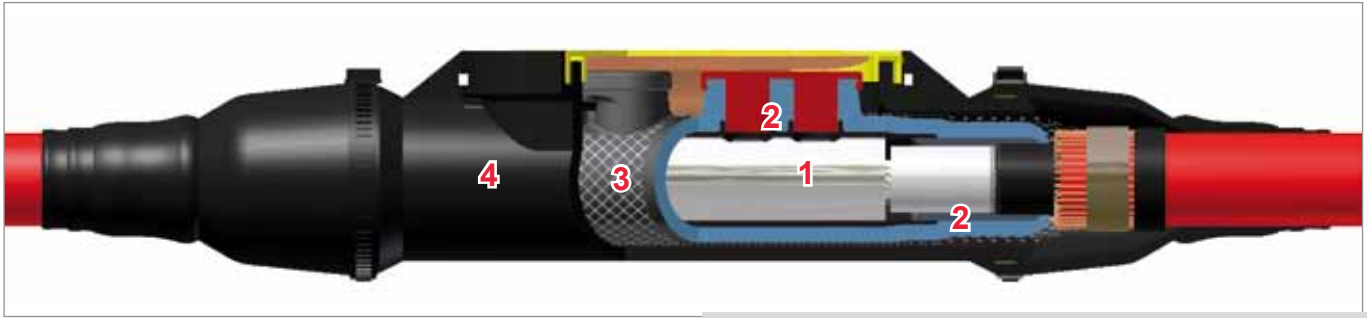
This joint was developed for connections made with plastic-insulated medium voltage cables. Its system components are harmoniously matched to one another ensuring that assembly is very **easy, reliable** and can be done **quickly**. The **integration concept** for this type of joint permits the majority of installation steps (formerly performed at the construction site) to be accomplished in advance, under controlled conditions, at the Cellpack factory where every element can be tested electrically. **Only a few installation steps** are performed on-site by the installer himself.

### Your advantages

- Highest operational security
- Easy, reliable, quick to assemble
- Only standard tool required
- Can be assembled even in tight spaces
- Solution for a wide range of cross-section
- Mechanically robust
- Unlimited shelf-life
- Individually electrically tested

### Your profit

- Reduced costs for assembly, inventory and transport
- Reduced operational costs for the cable network
- Network reliability



- 1 Integrated shear bolt connector
- 2 Integrated field control
- 3 Integrated shield for screening continuity
- 4 Integrated, robust outer protection

## Proven system

### Insulation materials

The insulating materials used in the CKM joint possess outstanding electrical and mechanical characteristics. They are manufactured from high voltage stable silicon rubber under a controlled injection moulding process. The individual material components have been subjected to years of extensive research, both electrical as well as mechanical, and have exhibited proven performance in actual applications for decades.

### Integrated screw connector

Only the CKM joint has the proven shear bolt connector system built into its splice body. This shear bolt connector is designed to ensure a reliable connection for copper conductors as well as aluminium conductors over the entire range of cross-sections. Its contact screws have been designed in that way a single conventional tool is necessary for assembly throughout the entire cross-section range.

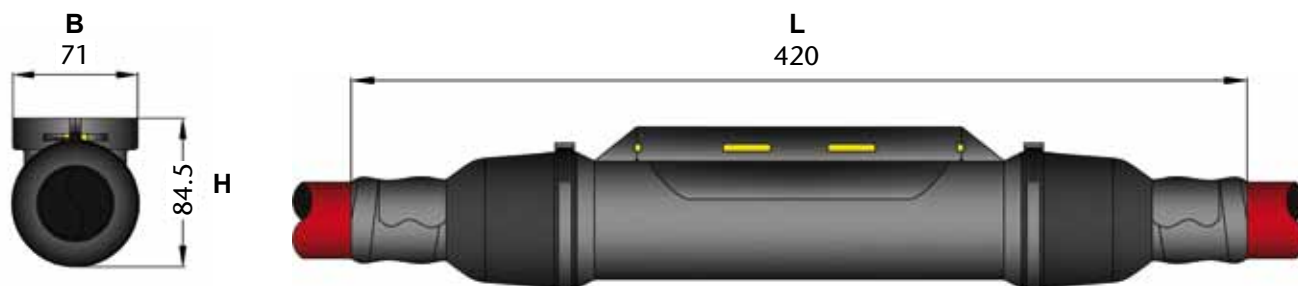
### Integrated field control

Cellpack's refractive field control system, used and proven millions of times around the world, is already integrated into the CKM joint's insulated body. Therefore the possibility of installation defects is reduced drastically.



## Compax straight-through joint CKM 24kV 95-240 mm<sup>2</sup>

for plastic-insulated single-core cables



### Application

The CKM type straight-through joint is suitable for all plastic-insulated single-core cables (PE, VPE, EPR), different conductive layers (graphitized, pull-off or peel-off) and shield designs (wire or tape shield), up to a maximum network voltage of 24 kV.

### Voltage level

- $U_0/U (U_m)$  6/10 (12) – 12/20 (24) kV

### Features

- Easy, reliable, quick to install
- Solution for entire cross-section range
- Few components
- Integrated field control
- Integrated shear bolt connector
- Integrated cable shield continuity
- Inherently robust outer body
- Compact and space-saving
- Unlimited shelf-life
- Optimised packaging – saves on transport and storage costs

### Tests

- CENELEC HD 629. 1 – type tested

### Delivery

- Joint body, prefabricated and electrically tested
- Ancillary components and small parts needed to product the connection
- Illustrated installation manual

Technische Daten	50-150 mm <sup>2</sup>	95-240 mm <sup>2</sup>
Cross-section range		
• Al	50 – 150	95 – 240
• Cu	50 – 120	95 – 185
Voltage level $U/U_0 (U_m)$	12,7/22 (24)kV	12,7/22 (24)kV
AC voltage, 5 min.	57 kV	57 kV
DC voltage, 15 min.	76 kV	76 kV
Partial discharge at $2 \cdot U_0$	< 10 pC	< 10 pC
BIL voltage +/-	125 kV	125 kV
L (overall length)	420 mm	420 mm
B (width)	71 mm	71 mm
H (height)	84.5 mm	84.5 mm

### Order data

Type	Q mm <sup>2</sup>	min. Ø mm	max. Ø mm	Art.-No.
CKM 24kV 50-150	50-150 (AL) 50-120 (Cu)	15.1	28.5	252101
CKM 24kV 95-240	95-240 (AL) 95-185 (Cu)	19.9	32.6	251713

Q = Nominal cross-section

Ø = Insulated diameter around conductor after removal of the outer conductive layer