

Technical Data Sheet Implosive Connectors / Full Tension Repair Joints



NO: TD Full Tension Repair Joints - no
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Design and area of use

FULL TENSION REPAIR JOINTS



Implosive Connectors is the trading name of:

- Full Tension Joints
- Dead-Ends
- Jumper Terminals
- Full Tension Repair Joints

Full Tension Repair Joint consists of an aluminum sleeve pre-wrapped with an implosive charge. On applications with ACSR conductors a steel sleeve is included to grip the steel core. Steel conductors are spliced with a special steel joint.

Full Tension Repair Joints is used for replacement of defective joints on electrical Overhead lines.

Technical data

Explosive	Pentrite (PETN)
Charge weight	0,17-2,7 kg
Detonation Velocity	Ca 6900 m/s
Diameter of Conductors	12,7-50,65 mm
Type of Conductors	ACSR- and aluminum conductors
Min. strength detonator for safe initiation	Detonator no. 8
Min/max user temperature	From +30°C to +60°C

Special features

The work is performed fast, possibly in the air and without the need of additional conductor.

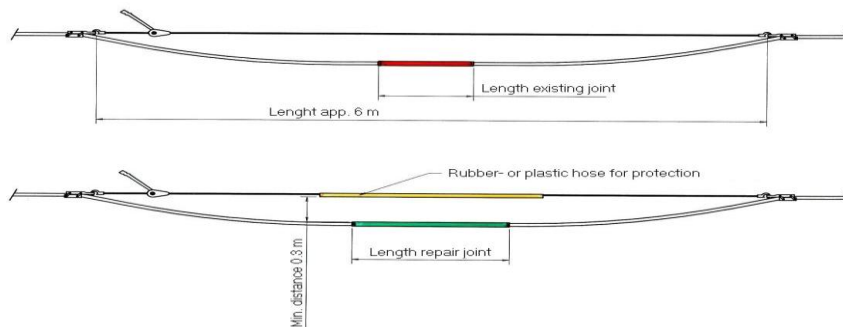
Application and Security Regulations

- Detonating cord must only be cut with a sharp knife or other tool specifically designed for such purpose, preferably under laid by a soft material, e.g. wood.
- Detonating cord must be initiated by a detonator (strength No. 8) or an igniter.
- Wet PETN has low sensitivity; interruption in detonation may occur.
- Dry PETN is very sensitive to impacts and blows; unintentional detonation may occur.
- In case of spillage or if remainders of detonating cord are found after blasting, these must be collected and treated as explosives.
- Safety distance min. 50 m away from the fitting.

Detonation

- When cutting out an old connector, always cut the conductor at least 100 mms from the end of the old connector.
- Check the conductor visually for any signs of corrosion, overheating, filling compound from the old joint and grease spread to the aluminum strands as described in INSTRUCTION MANUAL FOR RAUFOSS EXPLOSIVE COMPRESSION FITTINGS. Damaged conductor should be cut away.
- If the part that has to be cut out of the old joint is so long that a repair joint may not be used, at least 30 m of new conductor has to be used, centric to the old joint.

- It is of utmost importance that the fitting is correctly installed. Inaccuracy may cause reduced gripping length, and reduced holding power.
- Tape the detonator to the explosive charge. Check that the detonator is placed correctly, parallel to the conductor, and taped tight against the explosive, as shown in THE SPECIAL MANUAL; PART 3, DETONATION 2
- Do the blasting of the Repair Joint.
- After detonation remove remains of the PVC house, and the Repair Joint is finished.



Full Tension Repair Joint							
Type	Dimensions mm		Net weight kg		Gross weight kg		Qty per box
	Cond.dia	Length	Joint	Box	Joint	Box	
ACSR Conductor	14,58-50,65	1080-2650	1,8-47	5,4-64,5	7,8-27,6	23,4-82,8	1-3
Alum. Conductor	12,7-40,5	830-1700	1,68-18	5,04-54	5,8-59	7,68-24	1-3

Storage Conditions	
Shelf life	20 years from date of production marked on joint and box. Extension of shelf life after testing.
Humidity	Dry and airy.

(PvTT Finland)	
EC Type Examination Certificate	PvTT 220-10
Proper shipping name	Implosive connectors
UN-number	0443
Transport class	1.2 D

Approval and Classification	
Notified Body	0812

Destruction of Full Tension Repair Joints
Refer to national laws and regulations.

Responsible company

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