

Technical Data Sheet Implosive Connectors / Full Tension Joints



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Design and area of use

FULL TENSION JOINTS



Implosive Connectors is the trading name of:

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

Full Tension 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. An aluminum filler tube with the outside diameter equal to the conductor diameter is typically used over the steel sleeve. Steel conductors spliced with a steel sleeve pre-wrapped with an implosive charge.

Full Tension Joints applied to the connection of electrical Overhead lines.

Implosive Connectors can also be used to:

- Anchor of the steel wires
- Fasten backstay for antenna- and high-voltage masts.

Technical data

Explosive	Pentrite (PETN)
Charge weight	0,06-1,86 kgs
Detonation Velocity	Ca 6900 m/s
Diameter of Conductors	7,32-56,7 mms
Type of Conductors	ACSR-, steel- 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 joint is specifically designed to be pulled through the stringing blocks. Stringing charts which show the maximum line angle through which the joint may be pulled, are available for standard conductor types.

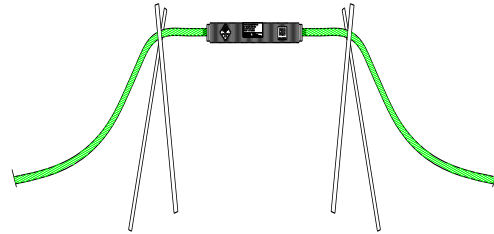
Application and Security Regulations

- 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

- Put the conductor ends, connected with the joint, on the rack approx 1 m above the ground. A simple rack may be used.
- 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 joint.
- After detonation remove remains of the PVC



hose, and the joint is finished.

Full Tension Joint

Type	Dimensions mm		Net weight kg		Gross weight kg		Qty per box
	Cond.dia	Length	Joint	Box	Joint	Box	
ACSR Conductor	12,33-56,7	460-1500	1,15-21,6	6,9-33,6	1,95-6,8	11,7-40,6	1-6
Steel Conductor	7,32-25,7	300-800	0,7-14,2	4,2-31,2	1,53-6,4	9,2-38,2	2-6
Alum. Conductor	12,7-43	300-700	0,7-4,5	4,2-27	1,53-5,7	9,2-34	6

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.

Approval and classification

Notified Body	CE 0812 (PvTT Finland)
EC Type Examination Certificate	PVTT 218/10
Proper shipping name	Implosive connectors
UN-number	0443
Transport class	1.2 D

Destruction of Full Tension Joint

Refer to national laws and regulations.

Responsible company

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