



GENERAL INSTRUCTION FOR 6.35/11(12) kV STRAIGHT JOINTS, THREE CORE POLYMERIC CABLES, WITH COPPER TAPE SCREENS WITH ARMOUR.

ML	Diameter over		grerou coequiuse	подпина соед	terure.
КОМПЛЕКТ Н3С9511E.	insulation mm MM 19-30	Cross section mm ²	Diameter over connector mm	Connector length max mm	BM
H3C18511E H3C24011E H3C30011F	19-30	95-240	30	135	
713C30011F	23-44	300	33	180	





<u>General Instructions:</u> <u>VERY IMPORTANT PLEASE READ BEFORE STARTING TO JOINT.</u>

Before shrinking one tube onto another or onto polymeric insulation or before applying any mastic, clean and degrease the underlying surfaces. Where any of these surfaces are semi conducting or stress controlling take care not to drag any carbon particles onto any insulating components. Metal sheaths of cables should always be scraped /abraded and degreased before applying any earth bonds or mastics. Plastic cable sheaths should be abraded and degreased for at least 100 mm beyond the sheath cut as this area forms the primary external water seal.

The reliability of the jointing system relies on cleanliness and dimensional accuracy, always check the stripping diagram and keep the joint assembly as clean as possible.

Overlap the cores by at least 100 mm.

Mark the centre line of the connection on all cables. DO NOT cut the cores to length until you have established whether you need to cross cores!

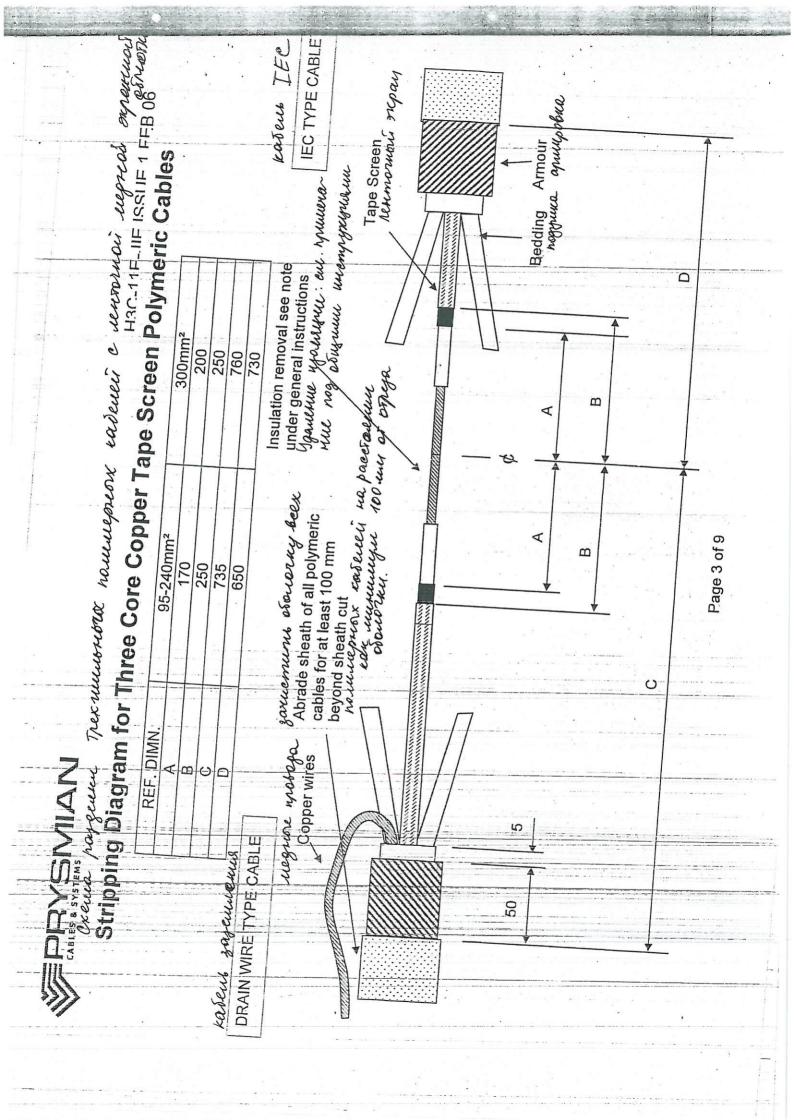
After fitting; tap all roll springs with a light hammer or similar instrument and 'hand tighten' by manually rolling the spring.

Protect all roll springs with a few turns of No 23 tape, applies in the direction of the roll; this prevents resin penetrating the spring and isolating any earth connection.

Fitting ferules; for compression connectors; measure the length of the connector and remove the insulation for half the connector length plus 5 mm. For water blocked connectors measure the depth of barrel plus 5 mm from the insulation removal position and cut off any excess conductor.

NB; THE JOINT BODIES ARE DESIGNED FOR SYMMETRICAL APPLICATION EITHER SIDE OF THE CENTRE LINE OF THE FERULE.

Before stripping the cable cores; set the cores, including any cross, and mark the centre line on all cores. All screen cuts should be measured from these marks.





H3C-11E-JIE ISSUE 1 FEB 06

a) Arrange the cables for jointing.

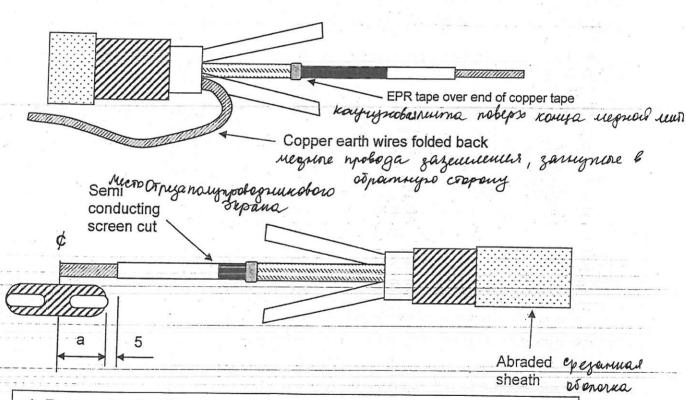
b) Set the cores and check the distance between sheath cuts matches the sum of the strip lengths

c) Mark the connection centre line on all cable cores and strip the cables as

shown on the stripping diagram.

If the cable does not have any copper wires you must use the separate earth bonding kit with copper braids and roll springs to bond the copper tapes to the armours.

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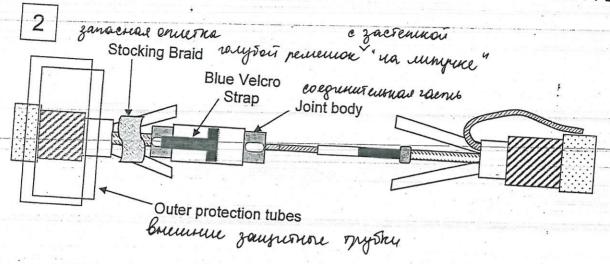


- a) Remove the sheath.
- b) Remove the armours leaving a wire binder in place.
- c) Remove the bedding.
- d) Remove any fillers.
- e) Fold the copper wires back without over bending them and tape them to the sheath, do not cut to length yet.
- f) Remove the copper tape screen and bind the end with a few turns of EPR tape.
- g) Remove the semi-conducting screen.
- h) REMOVING THE INSULATION FOR FITTING THE CONNECTOR.

For compression connectors remove the insulation for half the connector, (a), length plus 5 mm.



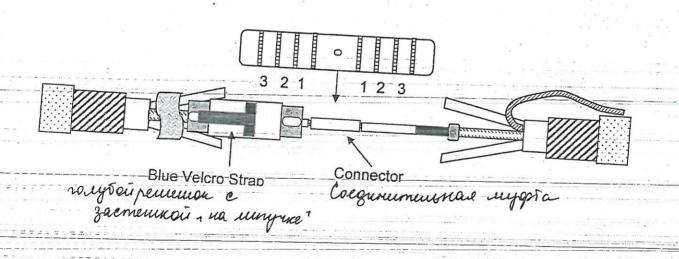
H3C-11E-JIE ISSUE 1 FEB 06

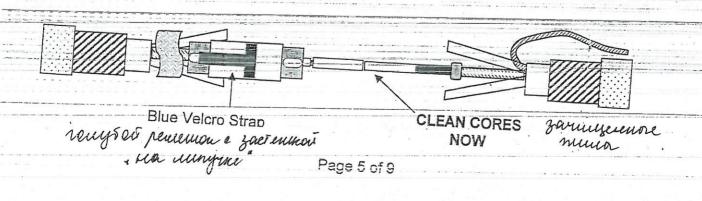


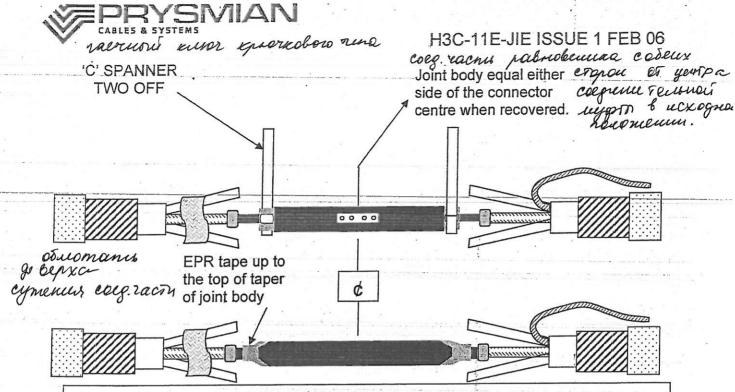
a) Slide the two outer protection tubes over the cables.

b) Slide stocking braid over the core to be connected.

- c) Park the joint body on the first core to be connected; (long side of joint) crossed core should be jointed first, with the crossing done on the short side of the joint.
- Note: joint body should be fitted with blue 'Velcro' straps facing towards long 3 side of joint







a) Complete one core at a time, starting with the crossed core.

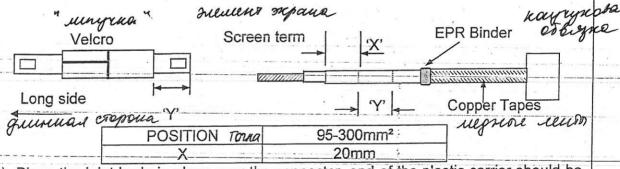
b) Fit the connector equally either side of the centre line of the joint; follow the compression sequence shown above.

c) Clean the cores to be jointed leave the connector until last.

d) Mark on the core screen two positions on the short side of the joint.

1) See table below for landing position, 'X'

2) From the above landing guide mark a second position equal to the distance the plastic carrier is protruding from the moulding, 'Y'



e) Place the joint body in place over the connector, end of the plastic carrier should be positioned over guide position 'Y'.

f) Fit the two 'C' spanners in the slots of the body. These should be positioned so as when held, the jointer can push one spanner and pull the other.

g) With one twisting movement 'Break' the carrier of the body. Approximately 1/3 of the body will shrink down onto the core, check that the end of the moulding is positioned at 'X' (adjust if necessary)

h) Release the Velcro strips to allow the remaining joint body to shrink down. (recheck dimensions).

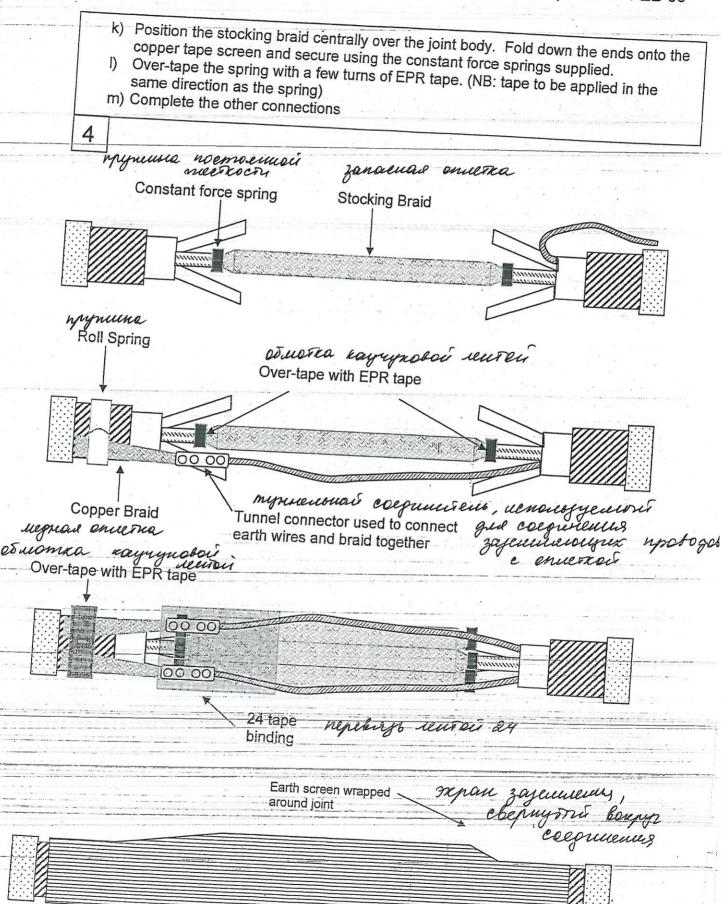
i) Remove the two carriers, which have now been released onto the cores. This can best be achieved by tapping with a hammer.

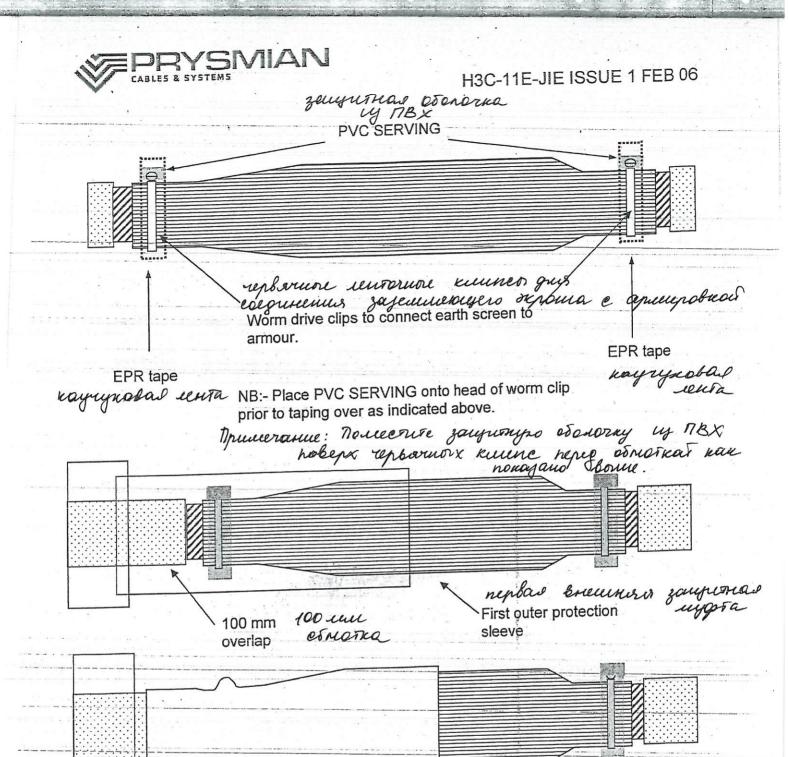
j) Apply 3 half lap layers of EPR tape with 50% stretch commencing 10mm onto the core screen and terminating at the end of the taper on the joint body.

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H3C-11E-JIE ISSUE 1 FEB 06

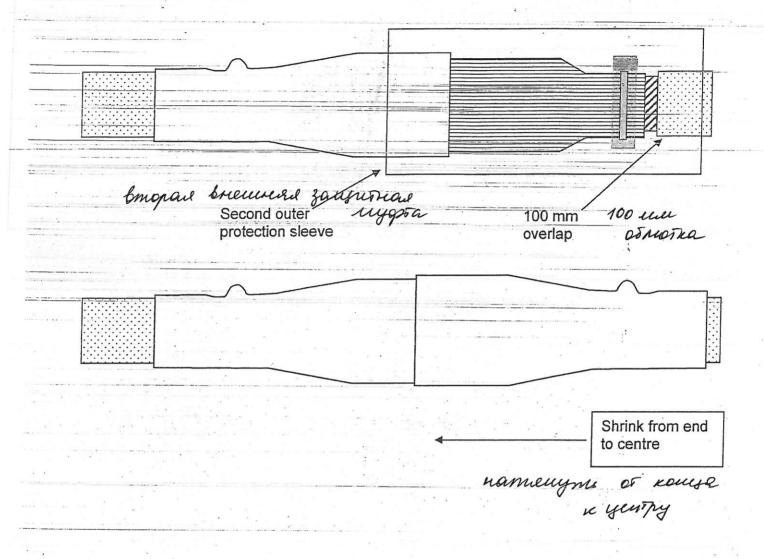




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Shrink end to





- a) Attached 3 short lengths of copper braid to the cable armour using a roll spring. Over tape roll spring with EPR Tape.
- b) Connect the copper earth wires and the copper braid together using a tunnel connector.
- c) Bind the earth wires and join; bodies together using a binding of 24 tape, tinned copper bandage anound the centre of the joint.
- d) Wrap the earth cage around the joint and secure to the armours using the worm crive clips, (over-tape clips with EPR tape).
- e) Slide the first outer protect on sleeve over the joint overlapping the sheath by 100 mm.
- f) Shrink the sleeve into r a se starting at the sheath and working towards the centre.
- g) Slide the second outer p otection sleeve over the joint overlapping the sheath by 100 mm.
- h) Shrink the speeve into place starting at the sheath and working towards the sheath.