3M QUICK SPLICE 2000
INLINE SPLICE 94-AP43X-3

SUITABLE FOR 3 CORE POLYMERIC CABLE
WITH INDIVIDUAL COPPER SCREEN,
LEAD SHEATH AND OVERALL WIRE ARMOUR
USING RESIN PRESSURE METHOD
ACC. TO CENELEC HD628 S1 + HD629 S1

KIT No.	DIAMETER OVER INSULATION (mm)	CROSS SECTION (mm^2)	DIAMETER OVER CONNECTOR (mm)	CONNECTOR LENGTH MAX. (mm)
94-AP430-3/C	28.4 - 40.3	120 - 240	23.3 - 40.3	170
94-AP431-3/C	28.4 - 40.3	185 - 300	23.3 - 40.3	170

ISSUE	DESCRIPTION / ECO	BY	DATE
1	FOR RELEASE.	GW	11.05.10

3M QS2000 INLINE SPLICE 94-AP43X-3 SUITABLE FOR POLYMERIC 3 CORE CABLE WITH INDIVIDUAL COPPER SCREEN, LEAD SHEATH AND OVERALL WIRE ARMOUR USING RESIN PRESSURE METHOD INSTALLATION INSTRUCTIONS

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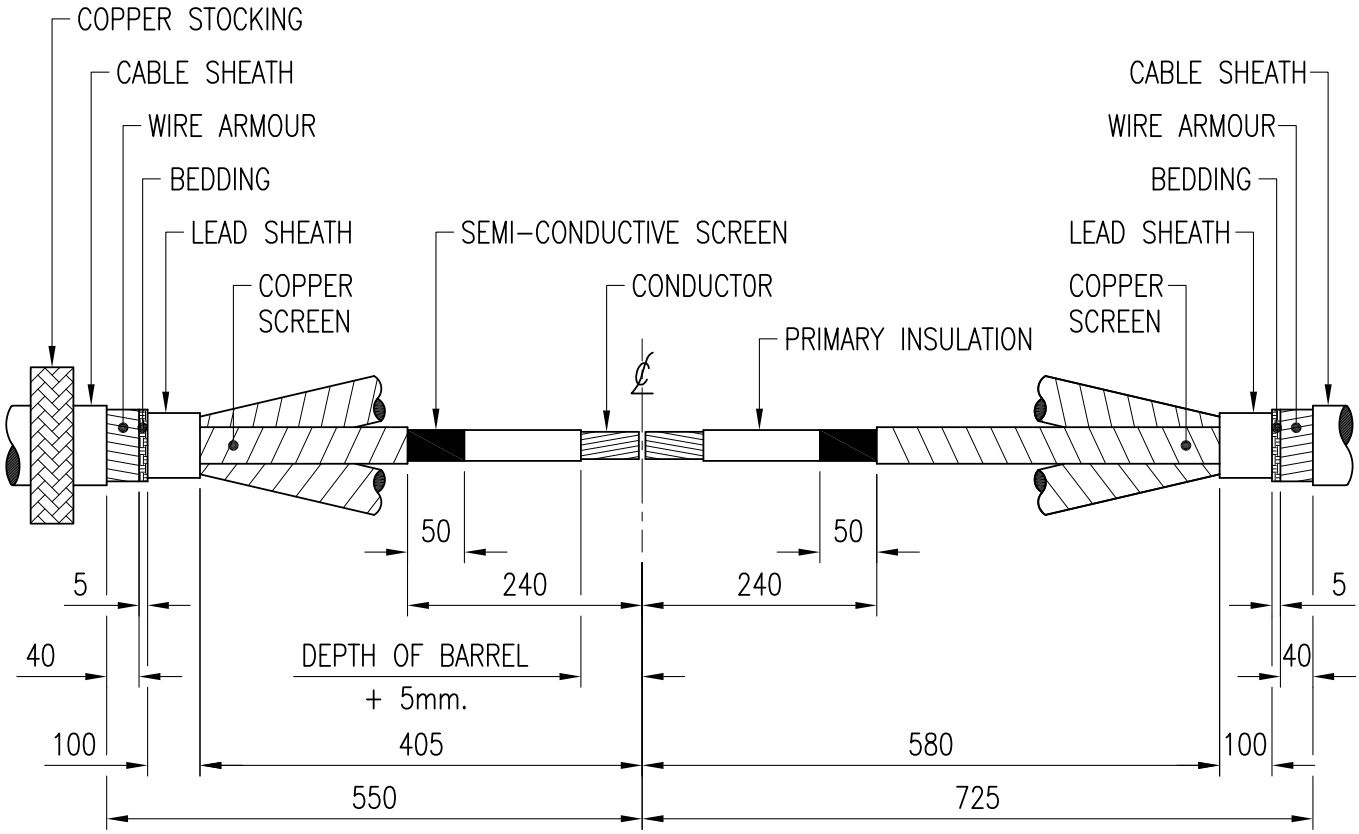
Cad File: XE-0091-3594-0	Checked:

FIG.1



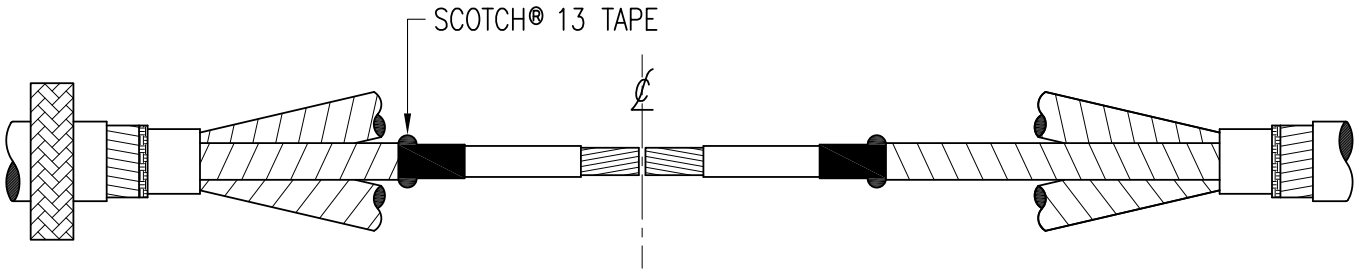
NOTE: ALL DIMENSIONS ARE TO THE "CENTRE OF THE JOINT". WHERE SPLIT AND/OR BLOCKED CONNECTORS ARE USED THE DIMENSIONS OF THE BLOCK IN THE CONNECTOR MUST BE TAKEN INTO ACCOUNT.

1.1 REMOVE CABLE JACKET, LEAD SHEATH, COPPER SCREEN, SEMI-CONDUCTIVE SCREEN ACCORDING TO GIVEN DIMENSIONS.

1.2 PARK THE COPPER STOCKING ON TO THE CABLE.

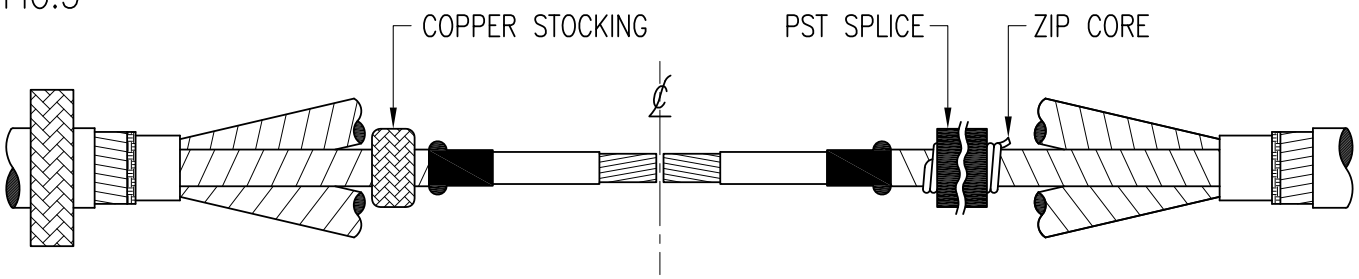
1.3 SET CORES INTO POSITION, THEN REMOVE PRIMARY INSULATION ACCORDING TO DEPTH OF BARREL + 5mm. (ALLOWING FOR THE BLOCK IN THE CONNECTOR).

FIG.2



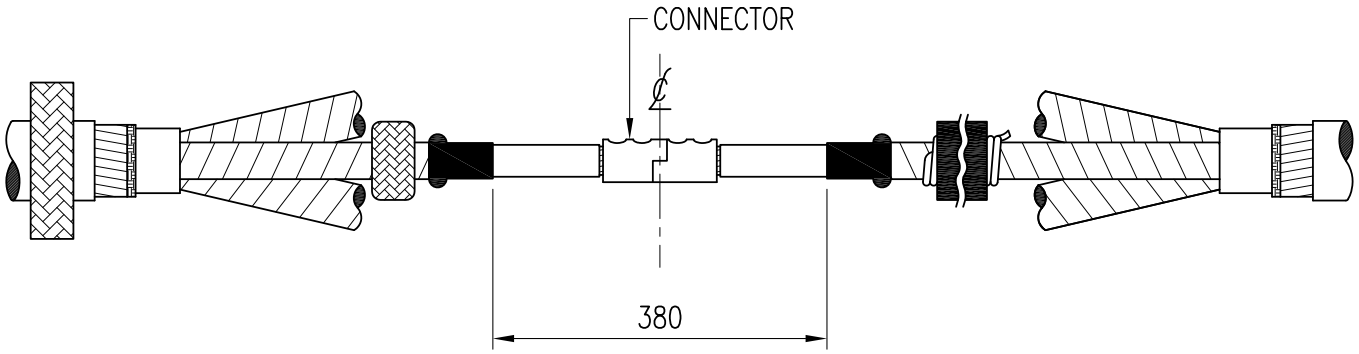
2.1 FIX THE COPPER SCREEN WITH TWO LAYERS OF SCOTCH® 13 TAPE.

FIG.3



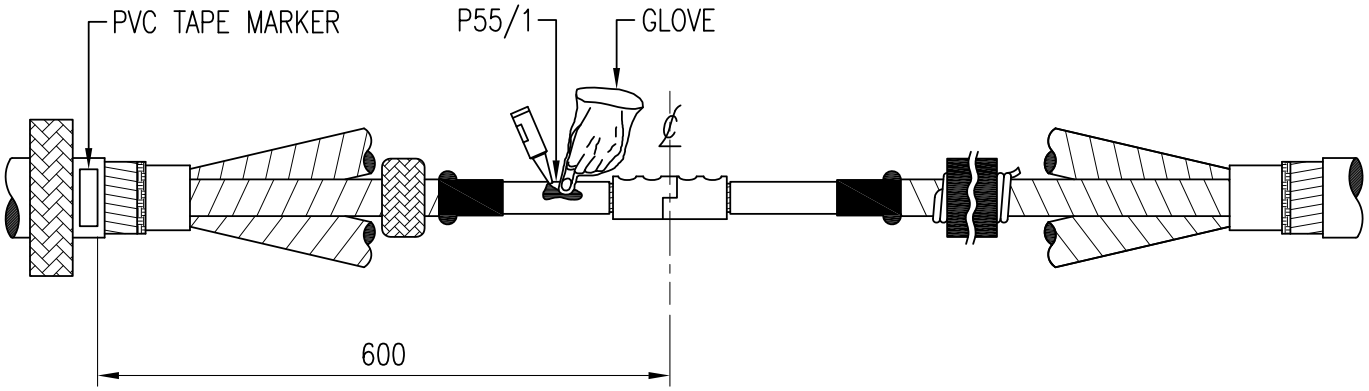
3.1 POSITION THE PST–SPLICE ON TO THE LONG SIDE OF THE CORES.
3.2 POSITION THE SMALL COPPER STOCKINGS, ONE ON TO EACH OF THE CORES.

FIG.4



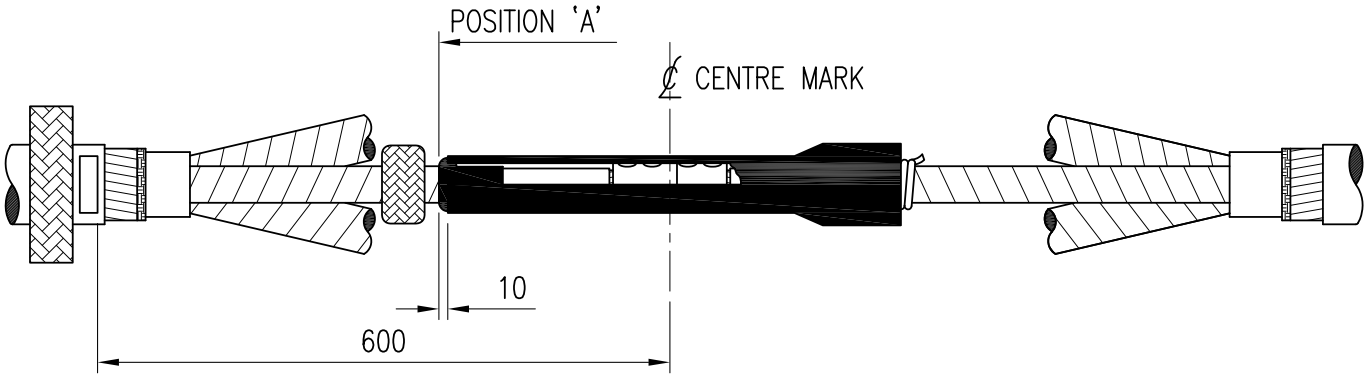
4.1 INSTALL APPROVED CONNECTOR, THEN SMOOTH AND CLEAN THE CONNECTOR.
4.2 CLEAN AND DEGREASE CONNECTOR AND PRIMARY INSULATION.

FIG.5



5.1 APPLY A LIBERAL AMOUNT OF P55/1 OVER THE SEMI–CONDUCTIVE SCREEN, ON TO THE PRIMARY INSULATION AND CONNECTOR USING THE PLASTIC GLOVE PROVIDED.
5.1 PLACE THE PVC MARKER ON THE CABLE SHEATH AT A DISTANCE OF 600mm FROM THE CONNECTOR CENTRE.

FIG.6



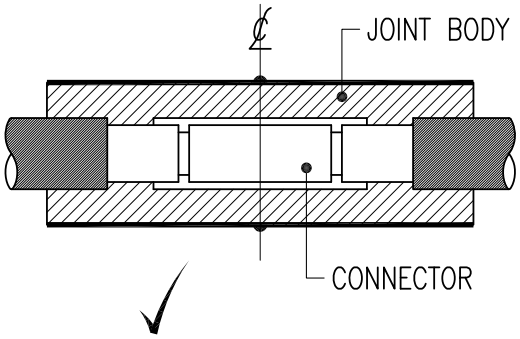
6.1 SLIDE THE PST–SPLICE OVER THE CONNECTOR UP TO POSITION 'A'.

6.2 USING POSITION 'A' AS A START POINT, SHRINK THE QS 2000 SPLICE BODY ON TO THE CORE BY UNWINDING THE SPIRAL.

6.3 ONCE THE BODY HAS BEEN SHRUNK PAST ITS CENTRE MARK, AND BEFORE IT HAS BEEN SHRUNK FULLY ACROSS THE CONNECTOR, ENSURE THAT THE CENTRE MARK OF THE BODY IS CORRECTLY POSITIONED, USING THE PVC TAPE MARKER AT 600mm. IF NOT CORRECTLY POSITIONED, MAKE CORRECTION BY DISPLACEMENT.

*** PLEASE NOTE THAT THE SYMMETRICAL POSITION OF THE SPLICE BODY IS CRITICAL. ***

6.4 COMPLETE OTHER TWO PHASES.



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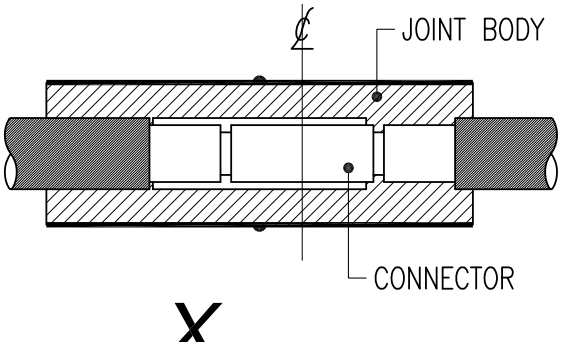
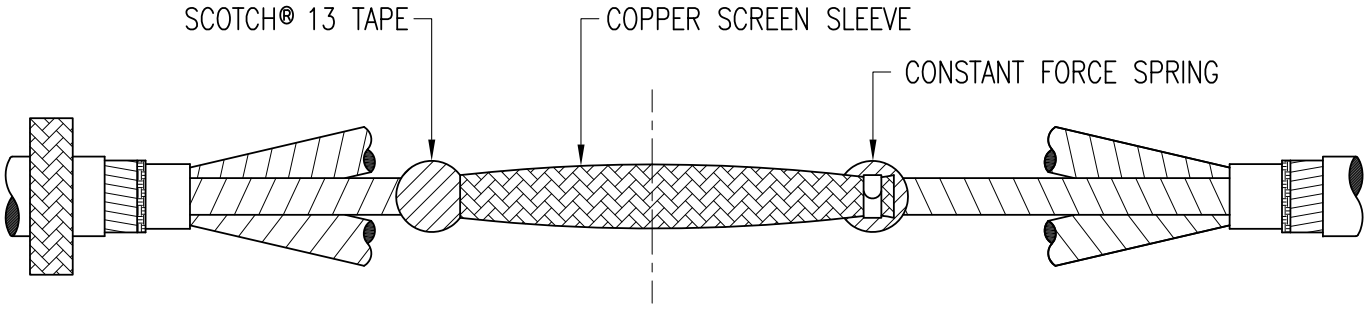
CORRECT ALIGNMENT OF JOINT BODY



X

JOINT WILL FAIL

FIG.7

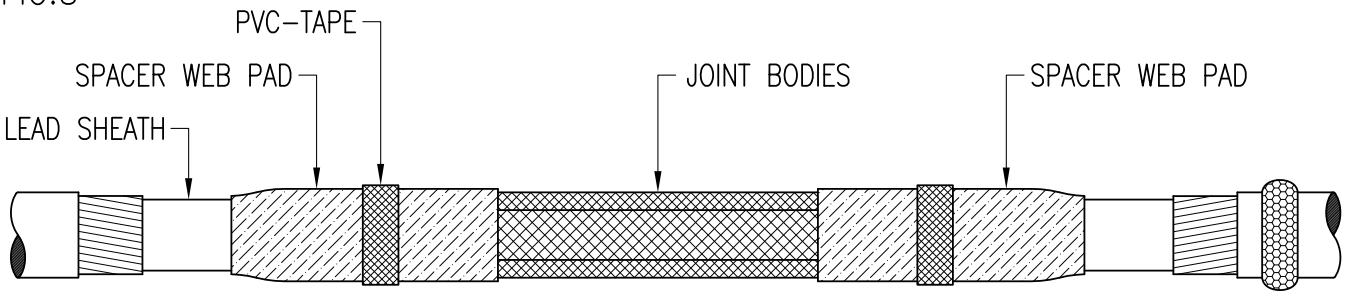


7.1 SLIDE THE COPPER STOCKING OVER THE PST–SPLICE AND FIX BY MEANS OF CONSTANT FORCE SPRINGS ON THE ENDS OF THE COPPER SCREEN. CUT OFF THE REMAINING WIRES OF THE STOCKING.

7.2 OVERWRAP THE CONSTANT FORCE SPRINGS WITH TWO LAYERS OF SCOTCH 13 TAPE.

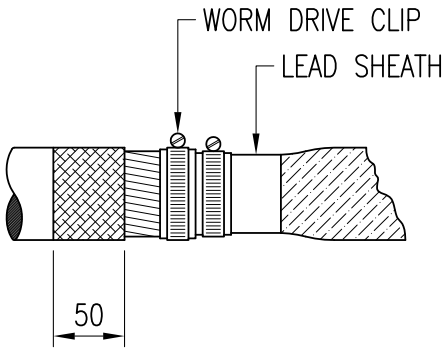
7.3 COMPLETE FOR OTHER CORES.

FIG.8



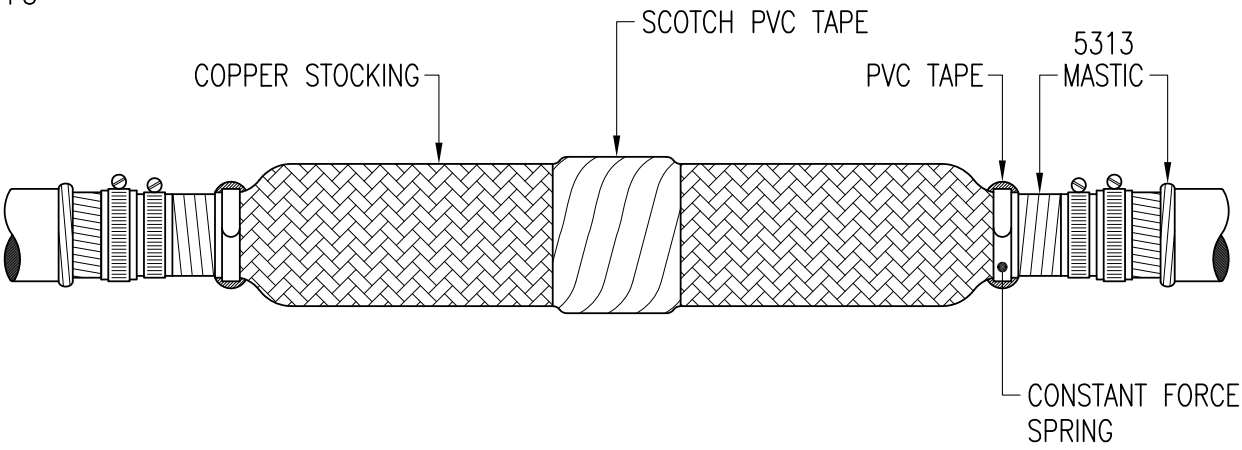
8.1 APPLY THE SPACER WEB PAD, BETWEEN THE LEAD SHEATH OF THE CABLE AND THE PST AND HOLD IN PLACE WITH TAPE OR STRING.

FIG.9



9.1 APPLY A BEDDING OF 5 LAYERS OF 50mm. WIDE COPPER SCREEN TAPE BETWEEN SWA AND LEAD SHEATH.
9.2 ATTACH WORM DRIVE CLIPS, AT END OF SWA AND OVER LEAD SHEATH, SECURING THE COPPER SCREEN TAPE.
9.3 ABRAID CABLE SHEATHS FOR A MINIMUM OF 50mm. BEYOND THE SHEATH OFF POSITION.

FIG.10



10.1 INSTALL COPPER STOCKING OVER COMPLETE JOINT AND SECURE WITH A CONSTANT FORCE SPRING ON THE LEAD SHEATH.

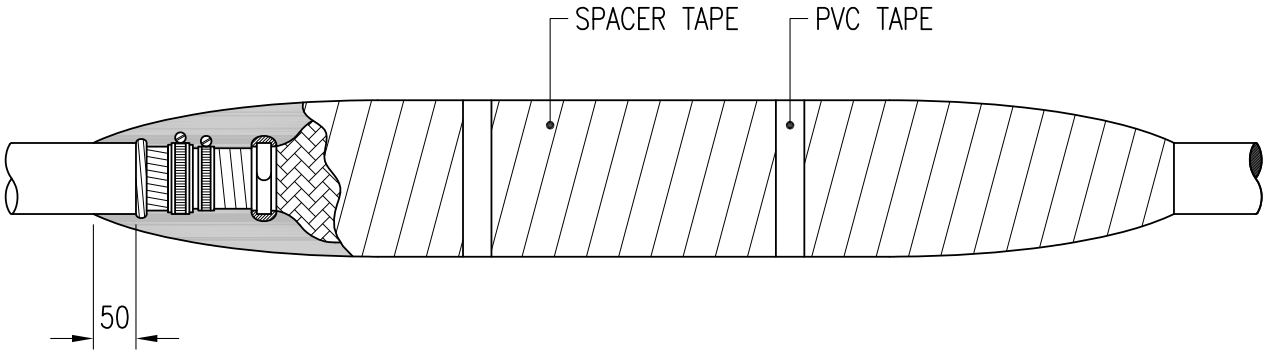
10.2 OVERTAPE THE CONSTANT FORCE SPRING WITH PVC TAPE, APPLIED IN THE SAME DIRECTION AS THE SPRING.

10.3 APPLY 2 LAYERS OF 5313 MASTIC, FILLING THE GAP BETWEEN THE CONSTANT FORCE SPRING AND THE WORMDRIVE CLIP ON THE LEAD SHEATH, AS A MOISTURE SEAL.

10.4 WRAP ONE HALF LAYER OF SCOTCH PVC TAPE AROUND THE COPPER STOCKING, OVER THE SPLICE BODIES, ENSURING GOOD CONTACT OF THE COPPER STOCKING TO THE 3 SPLICE BODIES.

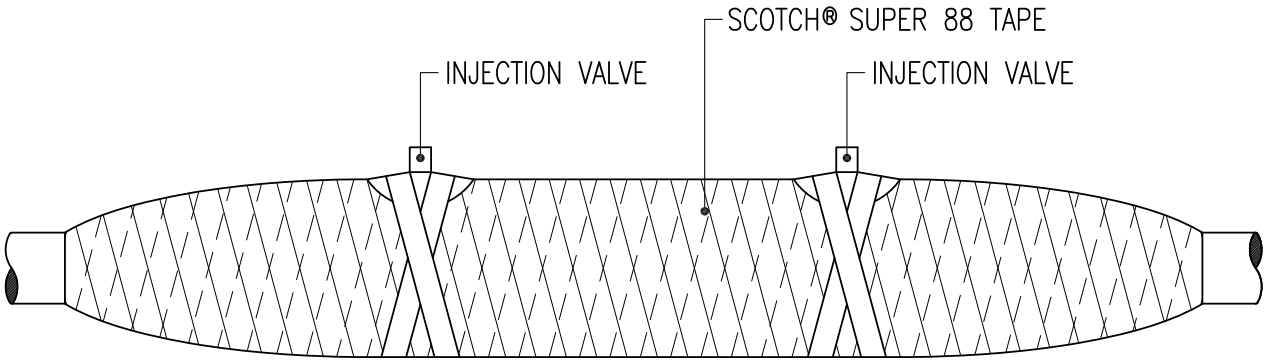
10.5 APPLY A LAYER OF MASTIC AT BOTH ENDS OF THE JOINT BETWEEN THE SHEATH AND ARMOUR, AS SHOWN.

FIG.11



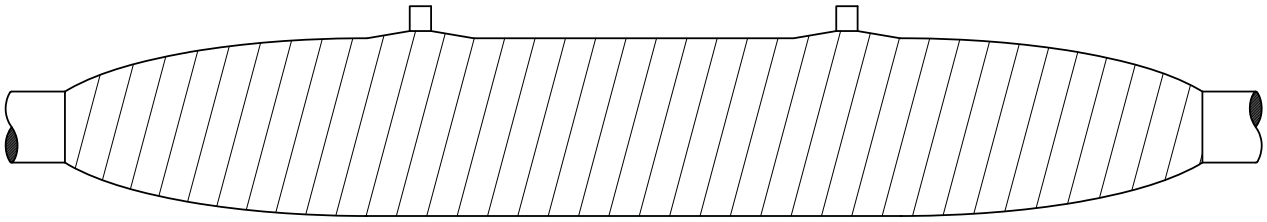
11.1 APPLY TWO HALF LAPPED LAYERS OF P3F SPACER TAPE, BUILD UP ANY IRREGULAR PROFILES WITH THE P3F SPACER TAPE.

FIG.12



12.1 COVER THE SPACER TAPE WITH 2 HALF–LAPPED LAYERS OF SCOTCH® SUPER 88 TAPE USING THE SAME ROTATION DIRECTION AS THE SPACER TAPE. START TAPING IN THE MIDDLE OF THE JOINT TOWARDS THE ENDS, ENDING ON THE CABLE JACKET, WITH HIGH TENSION OF THE TAPE.
12.2 INCLUDE THE INJECTION VALVES DURING TAPING, PLACE THE VALVES, ONE AT EACH END OF THE SPLICE BODIES, ENSURE TIGHT FIT.

FIG.13



13.1 COVER THE SCOTCH® SUPER 88 TAPE WITH 2 HALF LAPPED LAYERS OF P4 RESTRICTING TAPE.
13.2 INJECT THE SCOTCHCAST® RESIN INTO THE JOINT, USING THE ADDITIONAL ENCLOSED INSTRUCTION.