3M COLDSHRINK QS III INLINE SPLICING KIT 95–AC645–1–240/C & 95–AC645–1–400/C

WITH COLDSHRINK JACKETING TUBE SUITABLE FOR
120 TO 400 mm² POLYMERIC SINGLE CORE CABLE WITH
COPPER WIRE SCREEN ACC. TO IEC 60840 26/45 kV

KIT REF.		95–AC645–1–240/C	95–AC645–1–400/C
DIAMETER OVER CABLE JACKET MAX.	(mm.)	69.0	69.0
DIAMETER OVER PRIMARY INSULATION 'E'	(mm.)	31.5 – 53.0	31.5 – 53.0
CROSS SECTION	(mm.²)	120 – 240	185 – 400
DIAMETER OVER CONNECTOR	(mm.)	22.1 – 53.0	22.1 – 53.0
CONNECTOR LENGTH MAX.	(mm.)	210	210

FOR CABLES REQUIRING EXTERNAL EARTH CONNECTION– ADDITIONAL COMPONENTS REQUIRED (NOT SUPPLIED WITHIN THE KIT).
BRANCH TYPE SCREEN CONNECTOR: MB 18/1 (MANUFACTURER SICAME).
INSULATED CABLE : TYPE 6491X H07V–R 95mm² BLACK PVC COVERED, TO REQUIRED LENGTH, SCOTCHSEAL 2229 MASTIC :25MM ROLL.

IMPORTANT NOTICE

CROSS SECTIONAL AREA IS STATED AS A GUIDE ONLY. PLEASE SELECT THE KIT BASED UPON THE PRIMARY INSULATION DIAMETER OF THE CABLE, ALSO TAKING INTO ACCOUNT THE CHOSEN CONNECTOR DIMENSIONS.

ISSUE	DESCRIPTION / ECO	BY	DATE
6	FIG 7a added – LATEST REQUIREMENT	MJE	06.07.17
5	LATEST REQUIREMENT.	GW	15.02.17
4	LATEST REQUIREMENT.	MJE	25.08.12
3	LATEST REQUIREMENT.	ERH	04.04.12
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Cad File: XE–0091–3148–5	Checked:

3M COLDSHRINK QSIII INLINE SPLICING KIT
95–AC645–1–240/C & 95–AC645–1–400/C
WITH COLDSHRINK JACKETING TUBE SUITABLE FOR
120 – 400 mm² POLYMERIC SINGLE CORE CABLE
WITH Cu WIRE SCREEN–INSTALLATION INSTRUCTIONS

BEFORE STARTING:-

CHECK TO ENSURE THAT THE KIT YOU ARE GOING TO USE FITS THE CABLE.

REFER TO THE KIT LABEL AND THE TITLE OF THE INSTALLATION INSTRUCTION.

COMPONENTS OR WORKING STEPS MAY HAVE BEEN UPDATED SINCE YOU LAST INSTALLED THIS PRODUCT. CHECK KIT CONTENTS FOR ANY MISSING COMPONENTS. REPORT ALL MISSING ITEMS. DO NOT START WITH INCOMPLETE MATERIALS.

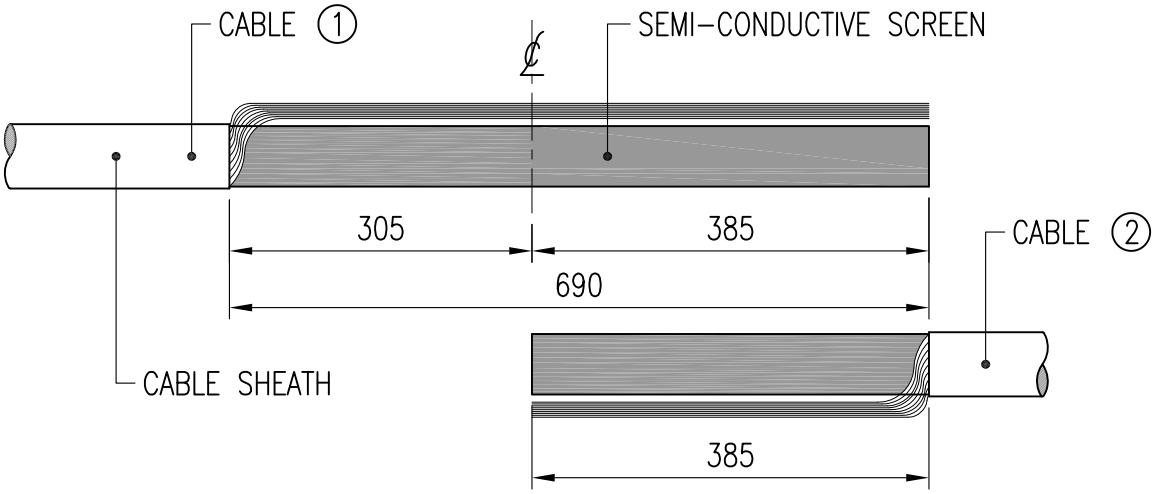
CAREFULLY READ AND FOLLOW THE STEPS IN THE INSTALLATION INSTRUCTION.

GENERAL INSTRUCTIONS:-

IF A SOLVENT IS USED FOLLOW THE MANUFACTURER'S INSTRUCTIONS.

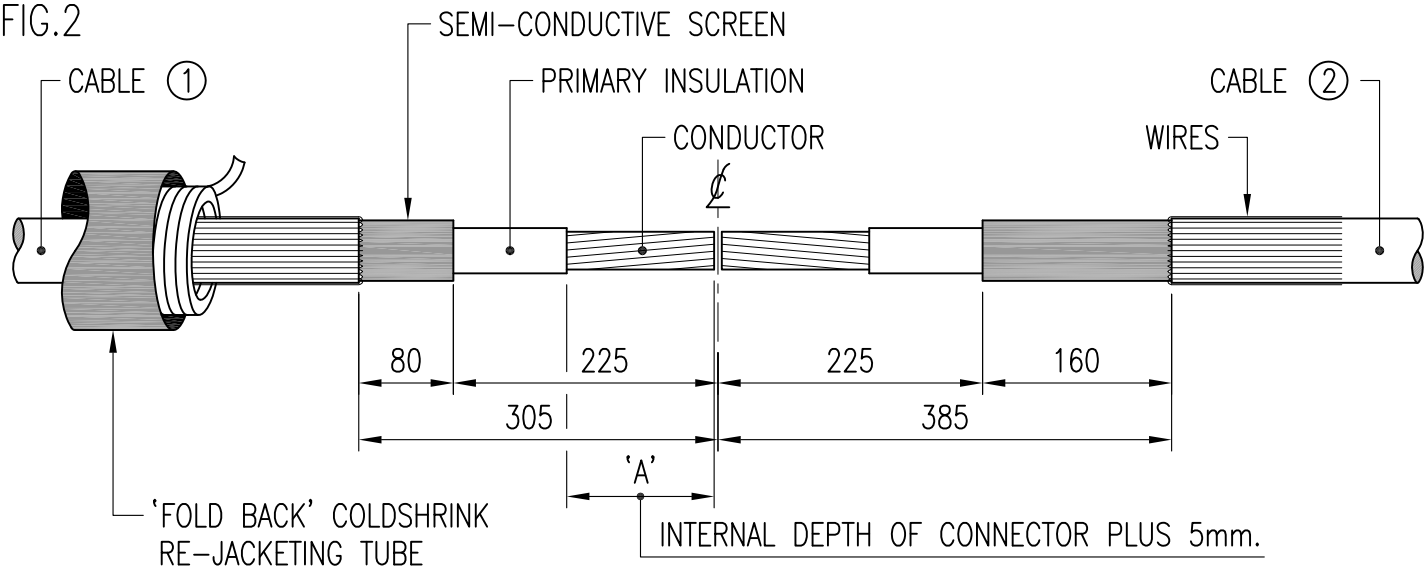
KEEP THE WORK AREA CLEAN AND TIDY.

FIG.1



1.1 SET CABLES INTO POSITION AND ENSURE OVERLAP. REMOVE CABLE SHEATHS AS FIG.1. CLEAN AND ABRAID CABLE SHEATH FOR A FURTHER 250mm.

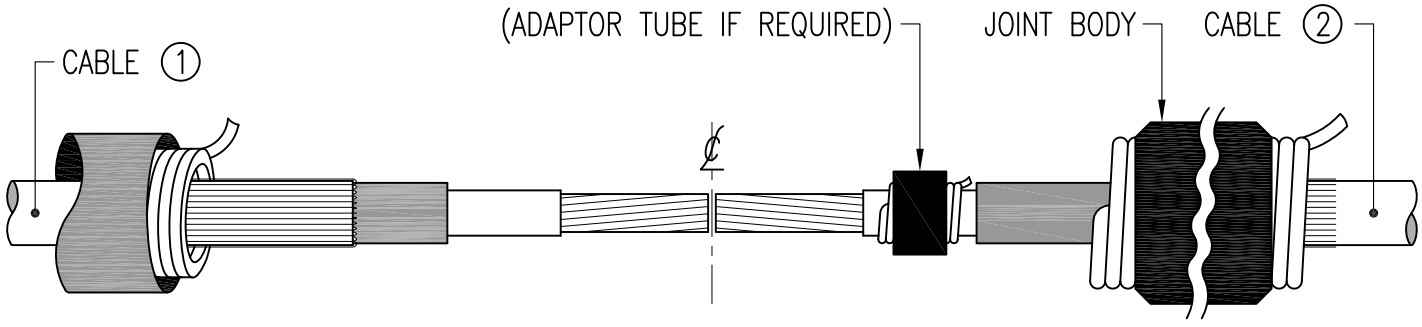
FIG.2



2.1 CUT CORES TO LENGTH AS PER FIG.2.
2.2 CAREFULLY BEND BACK COPPER SCREEN WIRES ON TO CABLE SHEATH AND SECURE WITH PVC TAPE.
2.3 PARK COLDSHRINK 'FOLD BACK' RE-JACKETING TUBE ON TO CABLE 1.
2.4 REMOVE BONDED SEMI-CONDUCTING LAYER TO DIMENSIONS AS PER FIG.2.
2.5 REMOVE PRIMARY INSULATION FOR INTERNAL DEPTH OF CONNECTOR PLUS 5mm.

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.

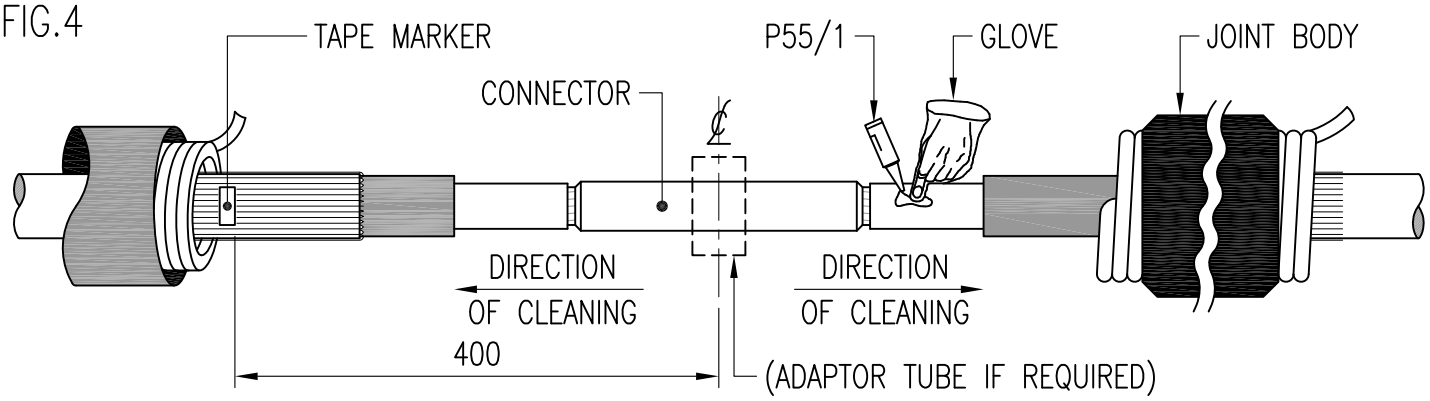
FIG.3



3.1 POSITION THE JOINT BODY ON TO CABLE ②.

NOTE: FOR CONNECTORS BELOW 27.2mm IN DIAMETER, PARK ADAPTOR TUBE ON CORE AT THIS POINT.

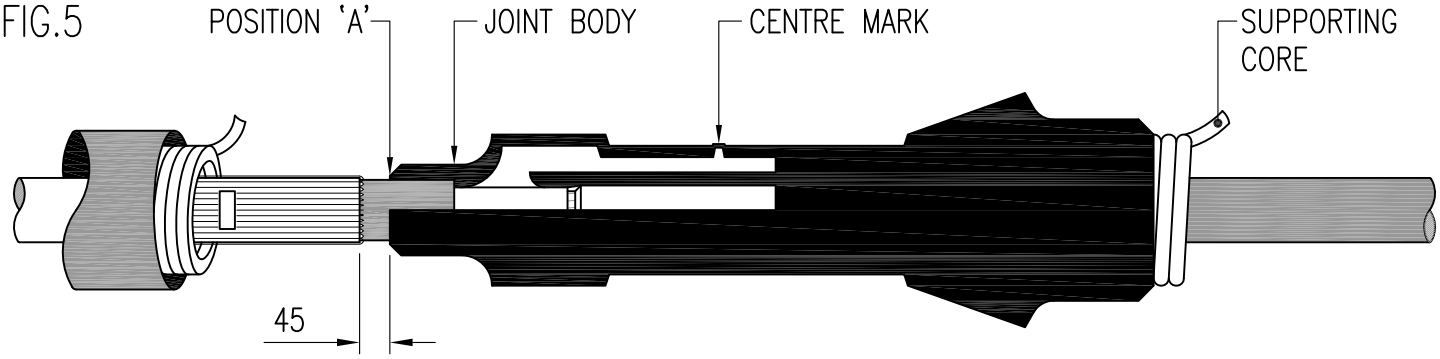
FIG.4



4.1 CLEAN ALL INSULATION ONLY IN THE DIRECTION SHOWN.
4.2 INSTALL THE CONNECTOR ACCORDING TO THE MANUFACTURER'S INSTRUCTIONS. CLEAN, DEBURR AND DEGREASE THE CONNECTOR.
4.3 APPLY A MARKING TAPE ON THE CABLE JACKET 400mm. FROM THE CENTRE OF THE CONNECTOR.
4.4 APPLY P55/1 GREASE OVER THE SEMI-CONDUCTIVE SCREENS, THE PRIMARY INSULATION AND THE CONNECTOR USING THE PLASTIC GLOVE PROVIDED.

NOTE: FOR CONNECTORS BELOW 27.2mm IN DIAMETER, INSTALL ADAPTOR TUBE OVER THE CENTRE OF THE CONNECTOR AT THIS POINT.

FIG.5

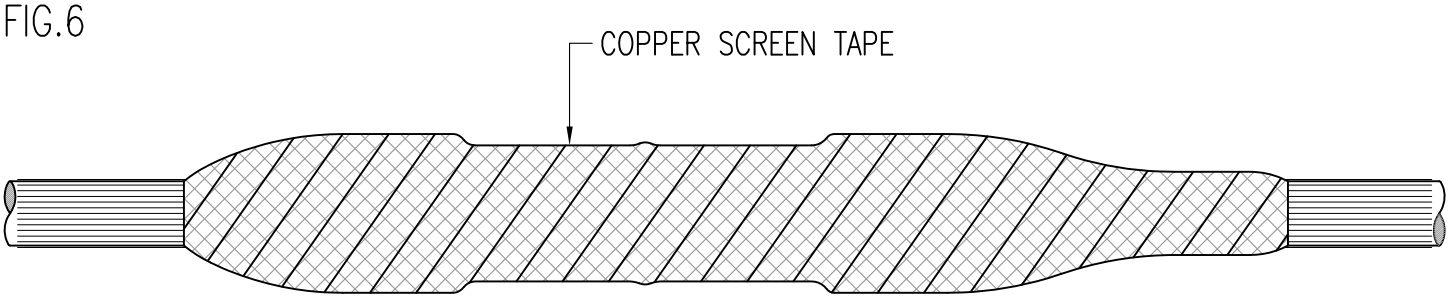


5.1 SLIDE THE JOINT BODY OVER THE CONNECTION UNTIL POSITION 'A'.
5.2 USING POSITION 'A' AS A STARTING POINT, SHRINK THE BODY ON TO THE CORE BY UNWINDING THE SPIRAL. ONCE THE BODY HAS BEEN SHRUNK PAST ITS CENTRE MARK, AND BEFORE IT HAS BEEN SHRUNK FULLY ACROSS THE CONNECTOR, ENSURE THE BODY IS IN POSITION USING THE PVC TAPE AND CENTRE MARK. IF NOT CORRECTLY POSITIONED, MAKE CORRECTION BY DISPLACEMENT.

** PLEASE NOTE: THE SYMMETRICAL POSITION OF THE JOINT BODY IS CRITICAL. **

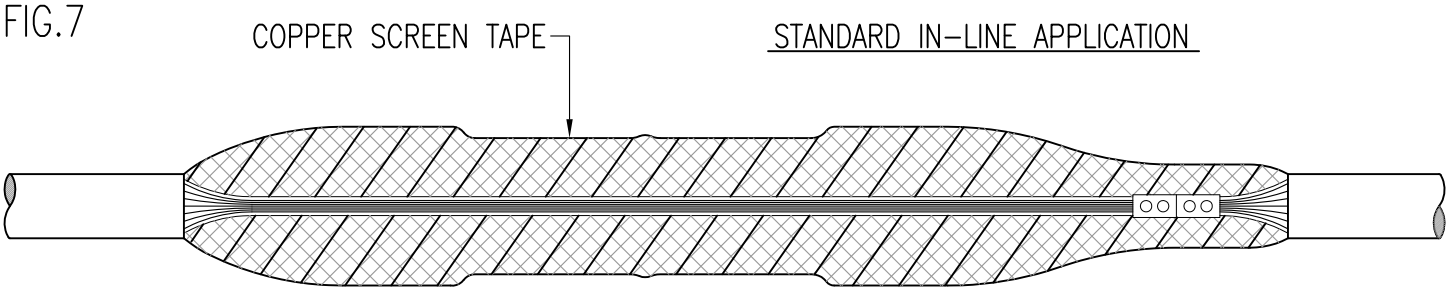
5.3 REMOVE MARKING TAPE.

FIG.6



6.1 APPLY ONE HALF-LAPPED LAYER OF 50mm WIDE COPPER SCREEN TAPE OVER THE SPLICE BODY.

FIG.7



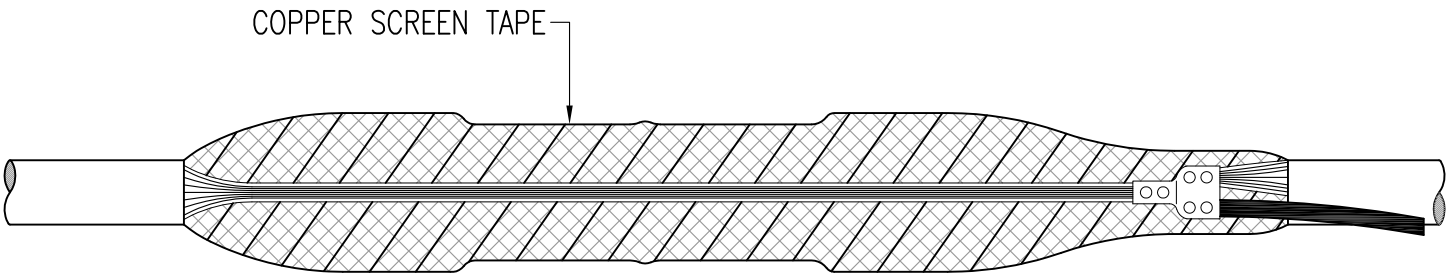
7.1 LAY THE WIRES NEATLY ACROSS THE JOINT AND CONNECT IN THE OVERSTRIP AREA USING THE SUPPLIED CONNECTOR.

7.2 APPLY ONE HALF-LAPPED LAYER OF 2228 TAPE OVER THE CONNECTOR.

NOTE: IF THE JOINT REQUIRES AN EXTERNAL EARTH CONNECTION ,FOLLOW FIG 7a BELOW

FIG.7a

FOR USE WHEN THE JOINT REQUIRES AN EXTERNAL EARTH CONNECTION

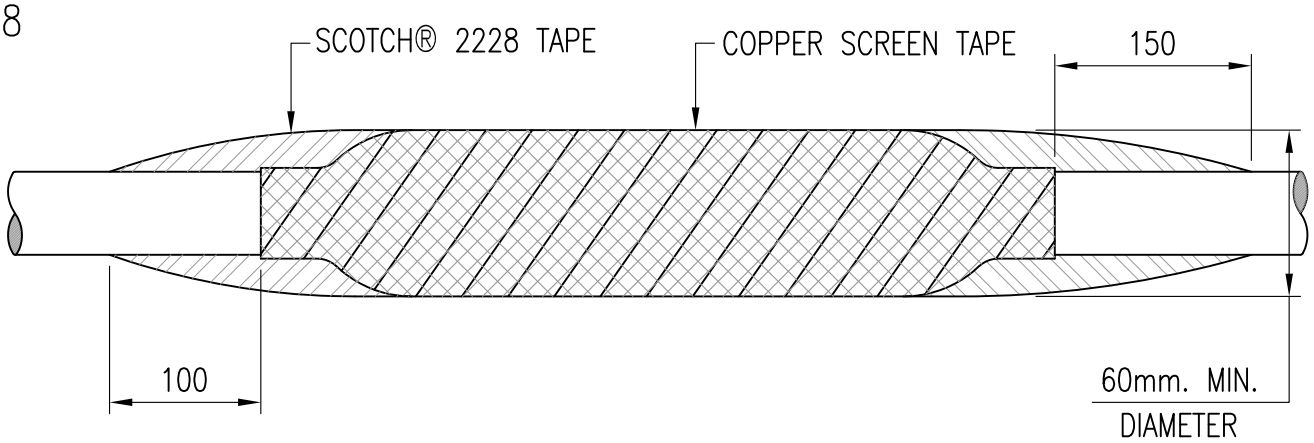


7a.1 LAY THE WIRES NEATLY ACROSS THE JOINT AND CONNECT IN THE OVERSTRIP AREA USING THE REPLACEMENT BRANCH CONNECTOR AND EXTERNAL EARTH CABLE DESCRIBED ON PAGE 1 OF THIS DRAWING.

7a.2 COVER THE CONNECTOR USING SCOTCHSEAL 2229 MASTIC, TAKING CARE TO SEAL BETWEEN THE. EARTH CABLE AND THE SCREEN WIRES.

7a.3 APPLY ONE HALF LAPPED LAYER OF 2228 TAPE OVER THE CONNECTION AREA.

FIG.8

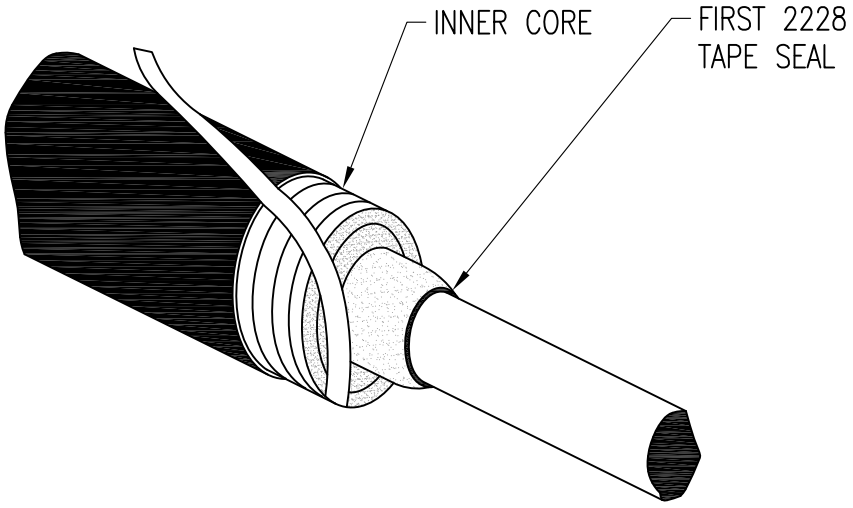


8.1 OVERTAPE JOINT AND COPPER SCREEN WIRES WITH ANOTHER HALF LAPPED LAYER OF 50mm WIDE COPPER SCREEN TAPE.

8.2 WRAP THE SCOTCH® 2228 TAPE, STARTING 100mm ON THE CABLE SHEATH AND OVER THE COPPER SCREEN TAPE UP ON TO THE JOINT BODY ACCORDING TO ILLUSTRATION. ENSURE MINIMUM DIAMETER 60mm OVER THE SCOTCH® 2228 TAPE JOINT.

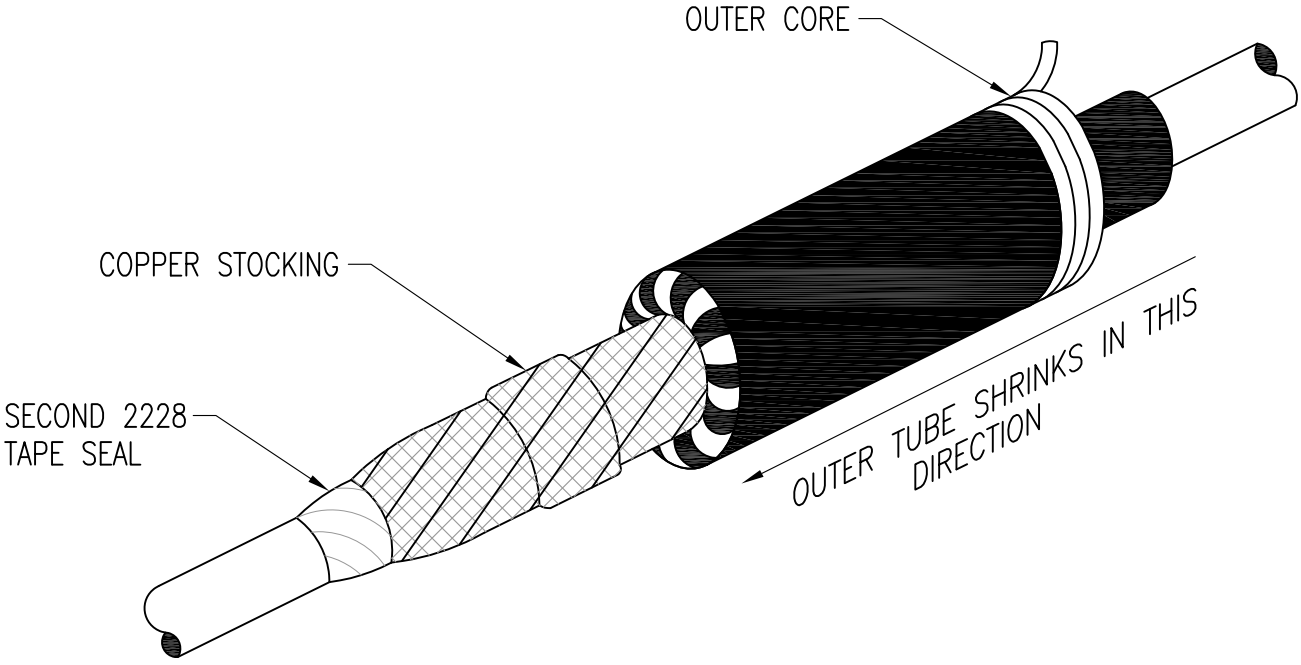
8.3 REPEAT FOR THE OTHER SIDE (WITH THE SCREEN CONNECTOR) BUT WRAP FOR 150mm.

FIG.9



9.1 BEGIN TO INSTALL THE OUTER PROTECTION COLD SHRINK TUBE 50mm BEYOND THE END OF THE FIRST 2228 TAPE, (AT THE OPPOSITE END TO THE SCREEN CONNECTOR), AND SLOWLY PULLING AND UNWINDING THE INNER CORE COUNTERCLOCKWISE TOWARD THE JOINT BODY. THE OUTER CORE SHOULD REMAIN RELATIVELY STATIONARY WHILE UNWINDING THE INNER CORE. IF THE OUTER CORE BEGINS TO MOVE TOWARDS THE FIRST 2228 TAPE SEAL, GENTLY PULL THE OUTER CORE AND PROTECTION TUBE TOWARDS THE SECOND 2228 TAPE AND CONTINUE UNWINDING THE INNER CORE.

FIG.10



10.1 CONTINUE TO INSTALL THE COLD SHRINK TUBE OVER THE SECOND 2228 TAPE SEAL ON THE OTHER SIDE OF THE JOINT BY SLOWLY PULLING AND UNWINDING THE OUTER CORE COUNTER CLOCKWISE. THIS PORTION OF THE COLDSHRINK TUBE INSTALLS DIFFERENTLY THAN TYPICAL COLDSHRINK PRODUCTS IN THAT AS THE TUBE SHRINKS, THE END ROLLS UNDER. THE TUBE MIGHT NEED A SLIGHT PUSH TO GET OVER THE SECOND 2228 TAPE SEAL.