## **3M** QUICK SPLICE QS200 INLINE JOINT 92-AK6XX-1/C

WITH PST SHRINK TUBE SUITABLE FOR POLYMERIC SINGLE CORE CABLES WITH ARMOUR ACC. TO VDE 0276-620 (IEC 60502-1) 6.35/11kV (12kV)

SELECTION CHART								
KIT No.	DIAMETER OVER CABLE SHEATH MAX. (mm.)	DIAMETER OVER INSULATION E (mm.)	CROSS SECTION  (mm.²)  6.35/11kV  (12kV MAX.)	MAX. DIAMETER OVER CONNECTOR (mm.)	MAX. CONNECTOR LENGTH (mm.)			
92-AK612-1/C	36	14.6 - 28.0	70 – 150	28	110			
92-AK623-1/C	46	19.1 - 38.0	120 - 300	38	220			
92-AK633-1/C	60	28.9 - 44.0	300 - 630	68	300			

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ALL STATEMENTS, TECHNICAL INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED ON TESTS WE BELIEVE TO BE RELIABLE. HOWEVER, SINCE THE CONDITIONS OF USE AND THE APPLICATION ARE BEYOND OUR CONTROL, THE PURCHASER IS RESPONSIBLE FOR THE PERFORMANCE OF THE JOINTS AND TERMINATIONS MADE IN CONNECTION WITH THE USE OF DATA OR SUGGESTIONS STATED HEREIN.

Drawn: E.REES-HAYWARD Des.Eng: J.D.ADDY Cad File: XE-0091-3629-4 Checked:

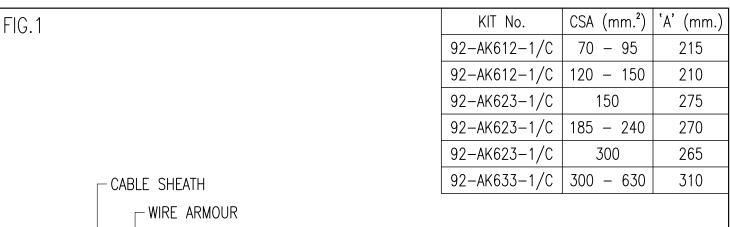
UPDATE TO DN21 17.05.16 MJE RANGE RATIONALISATION 23.08.14 MJE ALUMINIUM PADS ADDED MJE 11.12.12 2 LATEST REQUIREMENT. ERH 16.09.10 RELEASED. 28.05.10 1 ERH ISSUE DESCRIPTION / ECO DATE

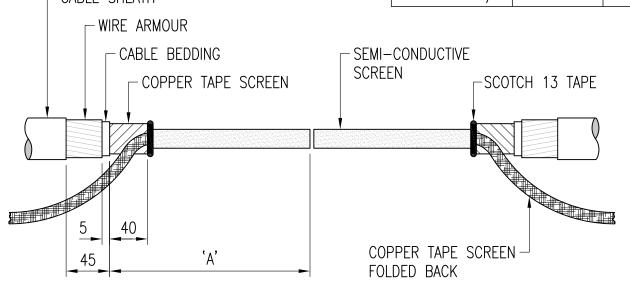
3M QS 200 INLINE JOINT 92-AK6XX-1/C WITH PST SHRINK TUBE SUITABLE FOR POLYMERIC SINGLE CORE CABLES WITH ARMOUR TO VDE 0276-620 6.35/11 (12)kV INSTALLATION INSTRUCTIONS

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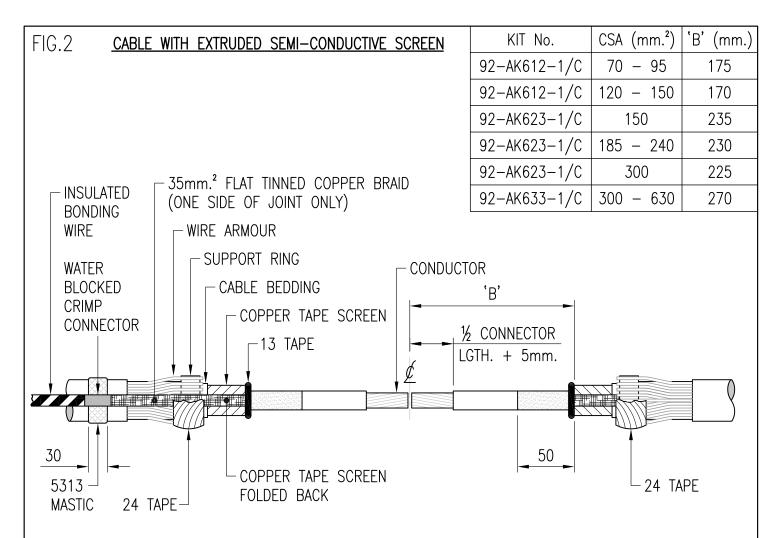
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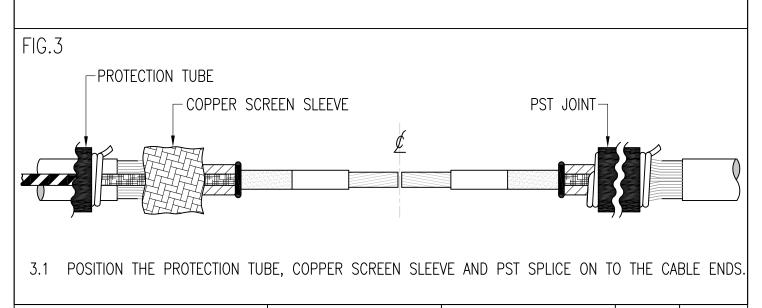


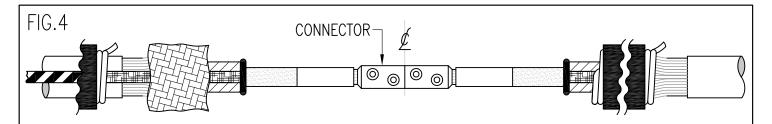


- 1.1 PREPARE CABLES TO DIMENSIONS ABOVE.
- 1.2 UNWRAP COPPER TAPE SCREEN TO DIMENSION SHOWN, BEND SCREENS BACK ENSURING A SMOOTH PROFILE.
- 1.3 BIND ENDS OF COPPER TAPE SCREEN WITH 2 HALF LAPPED LAYERS OF HIGHLY STRETCHED No.13 TAPE.

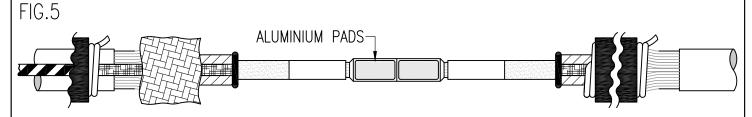


- 2.1 PREPARE CABLES TO DIMENSIONS ABOVE, PLEASE NOTE THAT DIMENSIONS ARE TO THE CENTRELINE OF THE JOINT, AND FOR BLOCKED CONNECTORS THE BLOCK MUST TAKEN INTO ACCOUNT.
- 2.2 FIT SUPPORT RING UNDERNEATH ARMOURS, AND FOLD ARMOURS BACK ON TO RING.
- 2.3 OVERTAPE ARMOURS AND RING WITH 2 LAYERS OF No. 24 TAPE.
- 2.4 LAY COPPER TAPE SCREEN ON TO 24 TAPE, OVER SUPPORT RING AND CUT TO LENGTH.
- 2.5 <u>IF EXTERNAL EARTH REQUIRED, THEN</u> ON ONE SIDE OF THE JOINT ALSO LAY 35mm.<sup>2</sup> FLAT TINNED COPPER BRAID OVER THE SUPPORT RING, AND OVERTAPE WITH 2 LAYERS OF 24 TAPE.
- 2.6 APPLY TWO LAYERS OF 24 TAPE ON THE OTHER SIDE OF THE JOINT, WITH NO FLAT BRAID, TO SECURE COPPER TAPE SCREEN.
- 2.7 <u>IF EXTERNAL EARTH REQUIRED, THEN</u> INSTALL ONE LAYER OF 5313 MASTIC, BELOW THE CRIMP CONNECTOR, AND ANOTHER LAYER OVER THE CRIMP CONNECTOR.

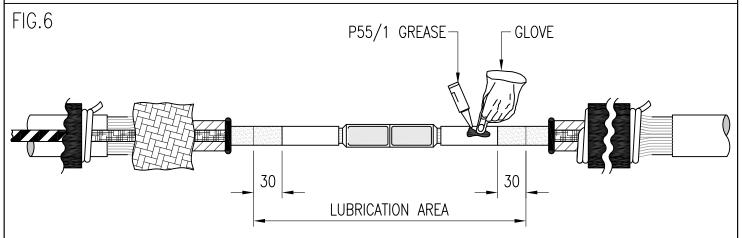




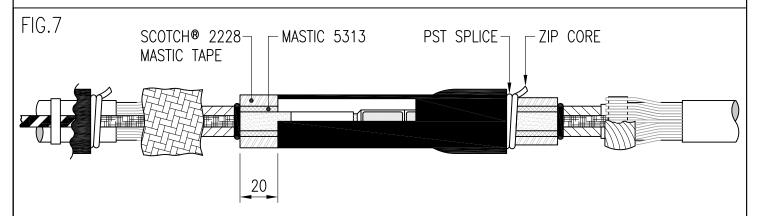
- 4.1 INSTALL THE CONNECTOR ACCORDING TO THE CONNECTOR SUPPLIER'S INSTRUCTIONS. IF NECESSARY REMOVE EXCESS GREASE.
- 4.2 SMOOTH AND CLEAN THE CONNECTOR.



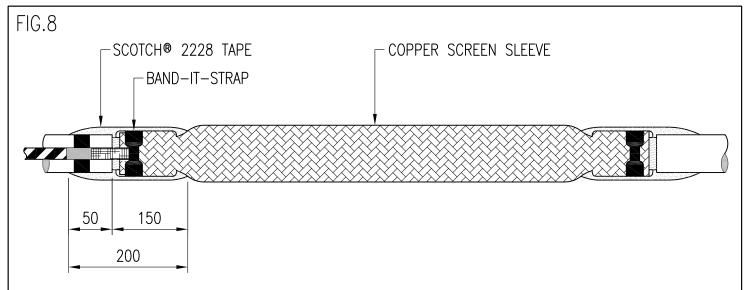
- 5.1 INSTALL THE CONNECTOR PROTECTION CAPS ONTO THE CONNECTOR HOLES.
- 5.2 COVER THE PROTECTION CAPS WITH THE ALUMINIUM PADS. ENSURE THE PADS ARE WRINKLE FREE.



6.1 APPLY P55/1 GREASE ON TO PRIMARY INSULATION, SEMI-CONDUCTIVE SCREEN AND CONNECTOR. LUBRICATE AREA OVER CONNECTOR AT LAST. USE PLASTIC GLOVE PROVIDED IN THE KIT.

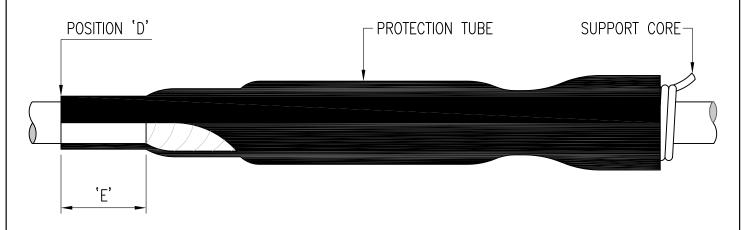


- 7.1 SLIDE THE PST JOINT OVER THE CONNECTOR UP TO POSITION SHOWN.
- 7.2 USING POSITION SHOWN AS A STARTING POINT, SHRINK THE JOINT BODY ON TO THE CORE BY UNWINDING THE SPIRAL. ONCE THE JOINT BODY HAS BEEN SHRUNK FULLY ACROSS THE CONNECTOR, ENSURE THAT THE BODY IS IN POSITION. IF NOT CORRECTLY POSITIONED, MAKE CORRECTION BY DISPLACEMENT.
- 7.3 APPLY ONE LAYER OF MASTIC 5313 BETWEEN THE END OF THE PST AND THE COPPER TAPE SCREEN.
- 7.4 OVERTAPE THE 5313 WITH 2½ LAPPED LAYERS OF SCOTCH® 2228 MASTIC TAPE.



- SLIDE THE COPPER SCREEN SLEEVE OVER THE JOINT AND FIX IT BY MEANS OF A BAND-IT STRAP 8.1 OVER THE 24 TAPE ON THE SUPPORT RING.
- 8.2 COMMENCING 50mm ON TO THE CABLE SHEATH ON EITHER SIDE OF THE JOINT, APPLY 2 HALF LAPPED LAYERS OF 2228 TAPE UP ON TO THE COPPER STOCKING AND BACK AGAIN.

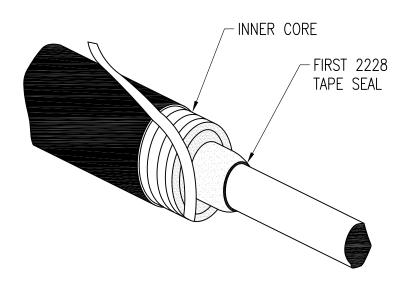
FIG.9	KIT No.	CSA (mm.²)	'E' (mm.)
	92-AK612-1/C	70 – 95	55
	92-AK612-1/C	120 - 150	60
	92-AK623-1/C	150	10
	92-AK623-1/C	185 – 240	10
	92-AK623-1/C	300	55
	92-AK633-1/C	300 - 630	0



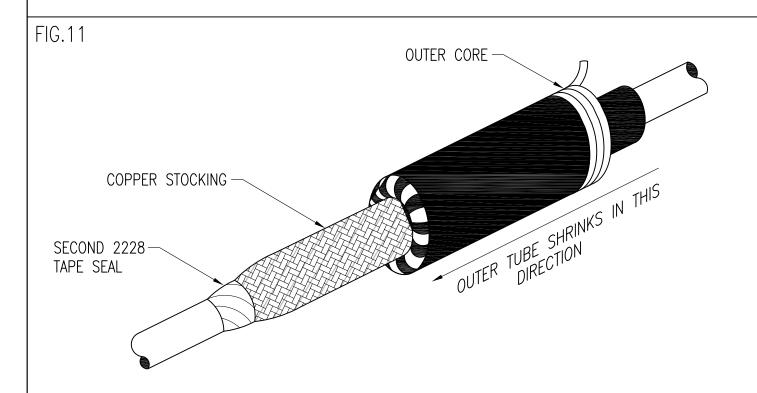
SLIDE THE PROTECTION TUBE OVER THE CONNECTION UP TO POSITION 'E', BEYOND THE 2228 MASTIC, AND PULL OUT THE PLASTIC SPIRAL. THE TUBE THEN BEGINS TO SHRINK FROM THAT POINT OVER THE JOINT BODY.

## FIG. 10

## FOR KIT No. 92-AK633-1/C ONLY



10.1 BEGIN TO INSTALL THE OUTER PROTECTION COLD SHRINK TUBE 50mm BEYOND THE END OF THE FIRST 2228 TAPE 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.



11.1 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.