

THIS CABLE JOINT HAS BEEN DESIGNED TO ACCOMMODATE PLASTIC INSULATED CABLES TO PLASTIC INSULATED CABLES, PAPER INSULATED CABLES TO PAPER INSULATED CABLES OR PLASTIC INSULATED CABLES TO PAPER INSULATED CABLES. PREPARE THE CABLES AS PER THE APPROPRIATE TEXT.

INSULATION SEQUENCE

FIG. 1 CABLE PREPARATION

- 1.1 STRAIGHTEN AND SET UP CABLES AT THE JOINT POSITION AND ALLOW THE CABLES TO OVERLAP PRIOR TO JOINTING.
- 1.2 SLIDE THE COPPER SLEEVE OVER ONE OF THE CABLES AND PARK TO ONE SIDE.
- 1.3 PLASTIC INSULATION CABLES WITH LEAD SHEATH REMOVE THE OUTER SHEATH AND ARMOUR WIRES OF THE CABLE FOR A TOTAL DISTANCE OF [A]
- 1.4 REMOVE A FURTHER LENGTH OF CABLE SHEATH ACCORDING TO DISTANCE [B]
- 1.5 REMOVE THE INNER CORROSION PROTECTION AND/OR BEDDING FROM THE LEAD SHEATH.
- 1.6 CLEAN ALL DIRT, OIL, AND GREASE FROM ALL PARTS OF THE LEAD SHEATH AND REMOVE IT UP TO A DISTANCE [C] BEYOND THE ARMOUR WIRES. REMOVE ALL PEAKS OF THE SHEATH AND BALL THE LEAD SHEATH AS SHOWN. AND BELL THE SHEATH END.
- 1.7 REMOVE THE INNER SHEATH FROM THE CONDUCTORS LEAVING 5mm DISTANCE BEYOND THE LEAD SHEATH.
- 1.8 SEAL THE CROUCH WITH SCOTCH 23 TAPE.
- 1.9 STARTING 5mm ONTO THE CORES APPLY ONE HALF LAPPED LAYER OF SCOTCH 2228 TAPE OVER THE INNER SHEATH ENDING 5mm ONTO THE LEAD SHEATH.
- 1.10 CLEAN THE ARMOUR WIRES TO ENSURE A GOOD CONTACT
- MIND PAPER INSULATED CABLES
- 1.11 REMOVE THE OUTER SHEATH AND WIRES OF THE CABLE FOR DISTANCE [A]
- 1.12 REMOVE A FURTHER LENGTH OF CABLE SHEATH FOR A DISTANCE [B]
- NOTE :- FOR JUTE SERVING APPLY TWO LAYERS OF HIGHLY STRETCHED SCOTCH 23 TAPE NEXT TO THE ARMOURING TO BIND ANY LOOSE SERVING.
- 1.13 ENSURE NO LOOSE JUTE SERVING IS ABLE TO EXTEND PAST THE SCOTCH 23 TAPE BINDER.
- 1.14 REMOVE THE INNER CORROSION PROTECTION AND/OR BEDDING FROM THE LEAD SHEATH.
- 1.15 CLEAN ALL DIRT, OIL AND GREASE FROM ALL PARTS OF THE LEAD SHEATH AND REMOVE IT UP TO A DISTANCE [C] BEYOND THE ARMOURING. REMOVE ALL PEAKS OF THE SHEATH AND BELL THE END AS SHOWN.
- 1.16 REMOVE THE BELTING FROM THE CONDUCTORS LEAVING 10mm EXPOSED BEYOND THE LEAD SHEATH.
- 1.17 STARTING 5mm ONTO THE CORES APPLY TWO LAYERS OF HIGHLY STRETCHED (APPROX 100%) SCOTCH 23 TAPE OVER THE BELTING FINISHING AT THE LEAD SHEATH.
- 1.18 SEAL THE CROUCH WITH SCOTCH 23 TAPE.
- 1.19 APPLY TWO HALF LAPPED OF HIGHLY STRETCHED (APPROX 100%) SCOTCH 23 TAPE OVER EACH PAPER INSULATED CORE FROM CABLE END TO CROUCH.
- 1.20 STARTING 5mm ONTO THE LEAD SHEATH APPLY ONE HALF LAPPED LAYER OF SCOTCH 2228 TAPE FINISHING 5mm PAST THE END OF THE BELTING ONTO THE CORES.
- 1.21 CLEAN THE ARMOUR WIRES OR TAPES TO ENSURE A GOOD CONTACT.
- JOINTING
- 1.22 CAREFULLY SPREAD THE CORES APART AND SET THEM IN THEIR IN FINAL POSITION. ENSURE THAT THE INSULATION OF THE CORES IS NOT DAMAGED. CUT THE CORES TO THE CORRECT LENGTHS IN ORDER THAT THE RESPECTIVE CORES OF EACH CABLE CAN BE CONNECTED TOGETHER AT THE JOINT POSITION
- 1.23 REMOVE THE REQUIRED INSULATION FROM THE END OF EACH CORE SO THAT THE CONNECTORS CAN BE FITTED.

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TECHNICAL CENTRE, EASTHAMSTEAD Rd, BRACKNELL, BERKS. RG12 1JE. ENGLAND		Scotchcast® IN LINE JOINT LR20 TO LR81 FOR MULTICORE MIND PAPER OR PLASTIC INSULATED LEAD SHEATHED CABLES TAPE ARMoured OR SWA PVC SHEATHED CABLES 600/1000 V AND 3300 V.			
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 SPLICES AND TERMINATIONS MADE IN CONNECTION WITH THE USE OF DATA OR SUGGESTIONS STATED HEREIN.					
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JOINTING (CONTINUED)

1.24 CONNECT THE CABLE CORES TOGETHER IN THE CORRECT SEQUENCE USING APPROVED COMPRESSION CONNECTORS. NOTE FOR TRANSITION FROM PLASTIC INSULATED CABLE TO PAPER INSULATED CABLES BLOCKED CONNECTOR MUST BE USED.

FIG.2 RE-INSULATION

- ⑨ 2.1 FILL THE AREA BETWEEN THE PRIMARY INSULATION AND CONNECTOR WITH LAYERS OF HIGHLY STRETCHED SCOTCH 23 TAPE. FOR 1000 V APPLY 2 HALF LAPPED LAYERS OF HIGHLY STRETCHED SCOTCH 23 TAPE OVER THE CONNECTOR AND ONTO THE PRIMARY INSULATION AS SHOWN. FOR 3300 V APPLY 5 HALF LAPPED LAYERS OF HIGHLY STRETCHED SCOTCH 23 TAPE OVER THE CONNECTORS AS ABOVE.
- ⑩ 2.2 FIT THE SPIRAL SPACERS OVER EACH CORE.
- 2.3 THOROUGHLY CLEAN AND ROUGHEN THE CABLE SHEATH FOR 75mm BEYOND THE ARMOURING AND REMOVE ANY TEMPORARY BINDINGS.
- FIG.3 EARTH CONTINUITY.
- 3.1 PRESS THE CORES TOGETHER.
- 3.2 SLIDE THE COPPER SLEEVE OVER THE ENTIRE JOINT ENSURING THAT THE SPIRAL SPACERS REMAIN IN POSITION.
- 3.3 FIX THE COPPER SLEEVE TO THE LEAD SHEATH AND THE ARMOUR USING THE CONSTANT FORCE SPRINGS, AND REMOVE EXCESS SLEEVE.
- ① 3.4 NOTE IF TWO OF THE CONSTANT FORCE SPRINGS ARE SMALLER, USE THESE ON THE LEAD SHEATH.
- ② 3.4 OVERTAPE THE CONSTANT FORCE SPRINGS WITH 2 HIGHLY STRETCHED HALF LAPPED LAYERS OF No. 23 TAPE. ENSURE THAT TAPING IS CARRIED OUT IN THE SAME DIRECTION AS THE SPRING WAS APPLIED.
- 3.5 OVERTAPE CONSTANT FORCE SPRINGS AND ARMOURING ONTO CABLE SHEATH WITH SCOTCH No. 2228 TAPE.

FIG.4 MOULD ASSEMBLY : LR2 TO LR6

- ③ 4.1 TRIM THE MOUND EXITS TO FIT THE CABLE BY REMOVING THE NECESSARY STEPPED ENDS OF THE MOUND.
- ④ 4.2 WRAP TWO OR THREE LAYERS OF SCOTCH No. 23 AROUND THE CABLE SHEATHS WHERE THE ENDS OF THE MOUND WILL BE LOCATED
- ④ 4.3 PLACE THE MOUND HALVES CENTRALLY AROUND THE JOINT POSITION, WITH THE POURING HOLE UPPERMOST, AND PRESS THE HALVES OF THE MOUND TOGETHER. THE GROOVE AND TONGUE MUST SNAP TOGETHER AUDIBLY TO ENSURE A SOUND FIXING.
- ⑤ 4.4 SEAL THE TAPERED ENDS OF THE MOUND WITH SCOTCH 23 TAPE, CAREFULLY SET THE JOINT LEVEL.
- ⑥ 4.5 MIX AND POUR SCOTCHCAST RESIN INTO THE JOINT MOUND IN ACCORDANCE WITH THE INSTRUCTIONS CONTAINED IN THE KIT.
- ⑦ 4.6 WHEN THE MOUND IS COMPLETELY FILLED WITH RESIN UP TO TOP OF THE FILLING DOME, PLACE THE TOP CAP INTO POSITION TO CLOSE THE FILLING OPENING OF THE MOUND.

FIG.5 MOUND ASSEMBLY : LR7 TO LR8

- ⑧ 5.1 REMOVE SUFFICIENT RINGS OF THE FLEXIBLE MOUND END CASSETTE SO THAT IT FITS TIGHTLY OVER THE CABLE JACKET.
- ⑨ 5.2 OPEN THE HINGE MOUND AND PUT IT CENTRALLY AROUND THE JOINT.
- ⑩ 5.3 SET CLIPS ON MOUND BODY AT 4 POINTS SHOWN IN THE DRAWING.
- ⑪ 5.4 CLOSE EACH OF THE TWO OUTER MOUND OPENINGS WITH A COVER.
- ⑫ 5.5 MAKE FINAL INSPECTION OF THE FLEXIBLE MOUND END CASSETTE. SEAL ALL GAPS WITH MASTIC SUPPLIED. SUPPORT THE MIDDLE OF THE BODY SO THAT THE MOUND CANNOT BEND WHEN THE RESIN IS POURED.
- ⑬ 5.6 MIX AND POUR THE SCOTCHCAST RESIN ACCORDING TO INSTRUCTIONS SUPPLIED WITH THE KIT.
- ⑭ 5.7 PLACE THE COVER OVER CENTRE OPENING.

NOTE : IT IS RECOMMENDED THAT AT LEAST ONE HOUR SHALL ELAPSE BETWEEN COMPLETION OF FILLING.

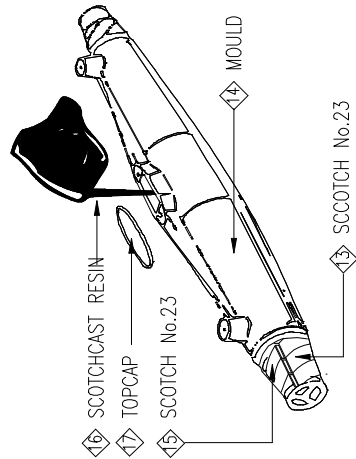


FIG.4

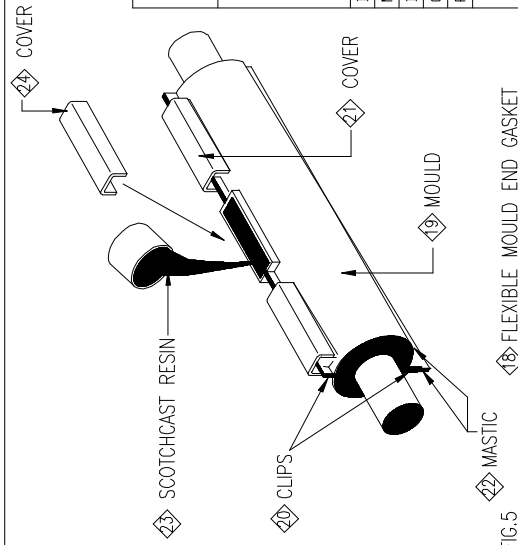


FIG.5

CABLE PREPARATION DIMENSIONS FOR 600/1000v & 3300v				
KIT SIZE LR () xx/xx	MAX CABLE O/D & SIZE	PVC OR PLC 'A'	ARMOUR 'B'	LEAD 'C'
LR20	22	80	20	20
LR21	4 c 6mm ²			
LR30	29	90	25	25
LR31	4 c 16mm ²			
LR32				
LR40	34	110	25	25
LR41	4 c 35mm ²			
LR42				
LR50	41	165	25	25
LR51	4 c 70mm ²			
LR52				
LR60	50	250	30	30
LR61	4 c 120mm ²			
LR62				
LR70	60	300	30	30
LR71	4 c 185mm ²			
LR72				
LR80	76	400	30	30
LR81	4 c 300mm ²			

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LR20 TO LR81
FOR MULTICORE MIND PAPER
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TAPE ARMoured OR SWA PVC
SHEATHED CABLES
600/1000 V AND 3300 V.

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