

3MQTIII 11kV SINGLE CORE INDOOR OR
OUTDOOR TERMINATIONS XLPE INSULATED,
COPPER TAPE SCREENED, ARMoured CABLE,
AND/OR LEAD SHEATHED CABLE, WITH OR WITHOUT
A COPPER TAPE SCREEN.

KIT REF.	92-EP623-1 92-EP623-2	92-EP633-1 92-EP633-2	92-EP643-1 92-EP643-2	92-EP653-1 92-EP653-2
RANGE CSA (mm ²)	50-95	120-150	185-400	500-630
INSULATION DIAMETER(mm)	16.3-27.4	20.5-38.9	21.1-38.9	26.7-45.7
MAX LUG DIA(mm)	30	39	39	45

7	UPDATED	RS	20.12.22
6	UPDATED	MJE	22.02.21
5	UPDATED	MJE	03.01.14
4	UPDATED	ERH	15.08.05
3	UPDATED	JP	23.05.05
2	UPDATED	RG	16.10.02
1	RELEASED	RG	23.02.01
ISSUE	DESCRIPTION / ECO	BY	DATE

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3M CENTRE, CAIN ROAD, BRACKNELL
BERKS. RG12 8HT, ENGLAND

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AND THE APPLICATION ARE BEYOND OUR CONTROL THE PURCHASER IS RESPONSIBLE FOR THE
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DATA OR SUGGESTIONS STATED HEREIN.

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CAD FILE : 2749-1	RELEASED :

INSTALLATION INSTRUCTIONS

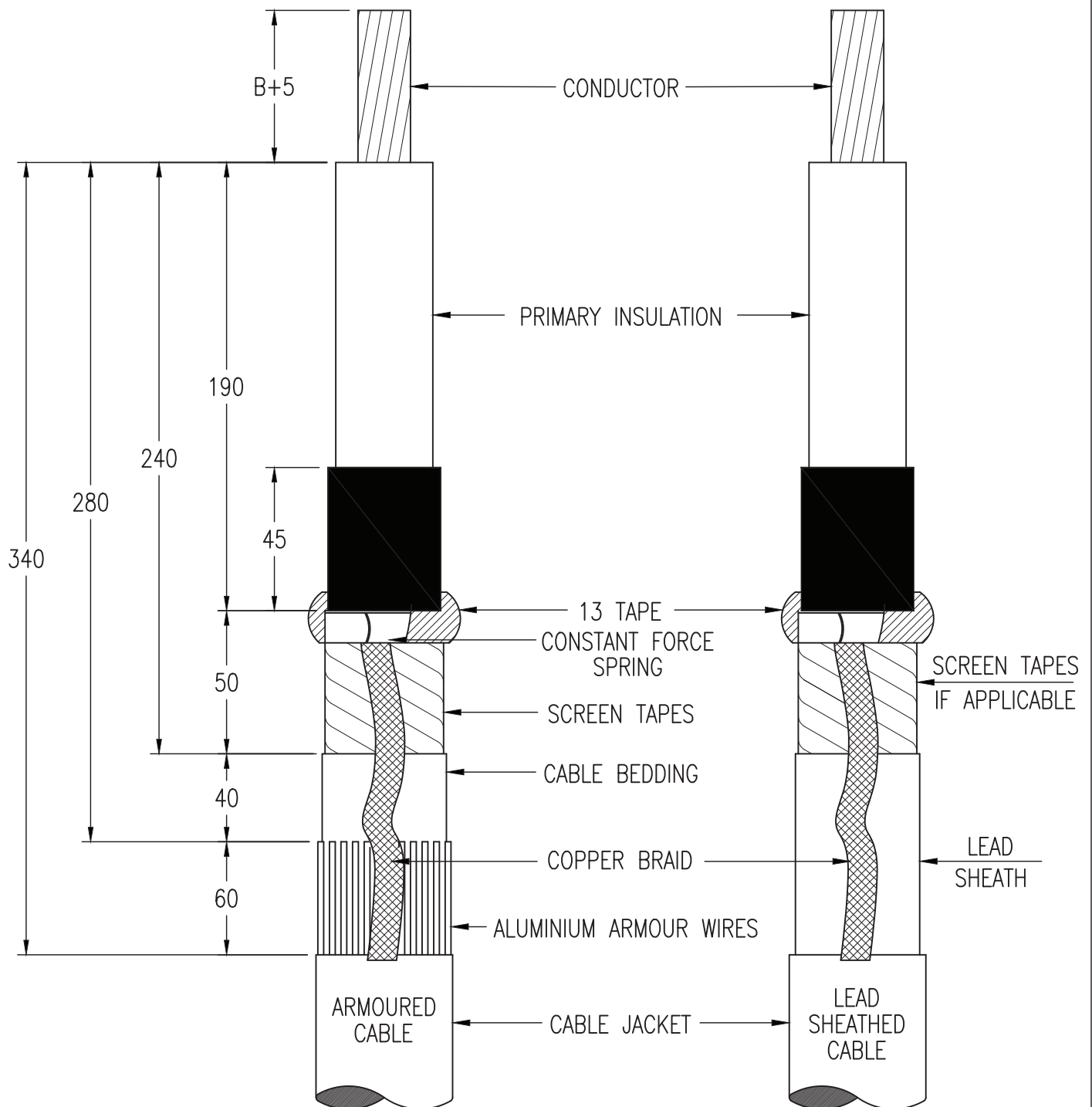
3M ELECTRICAL PRODUCTS

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SHEET
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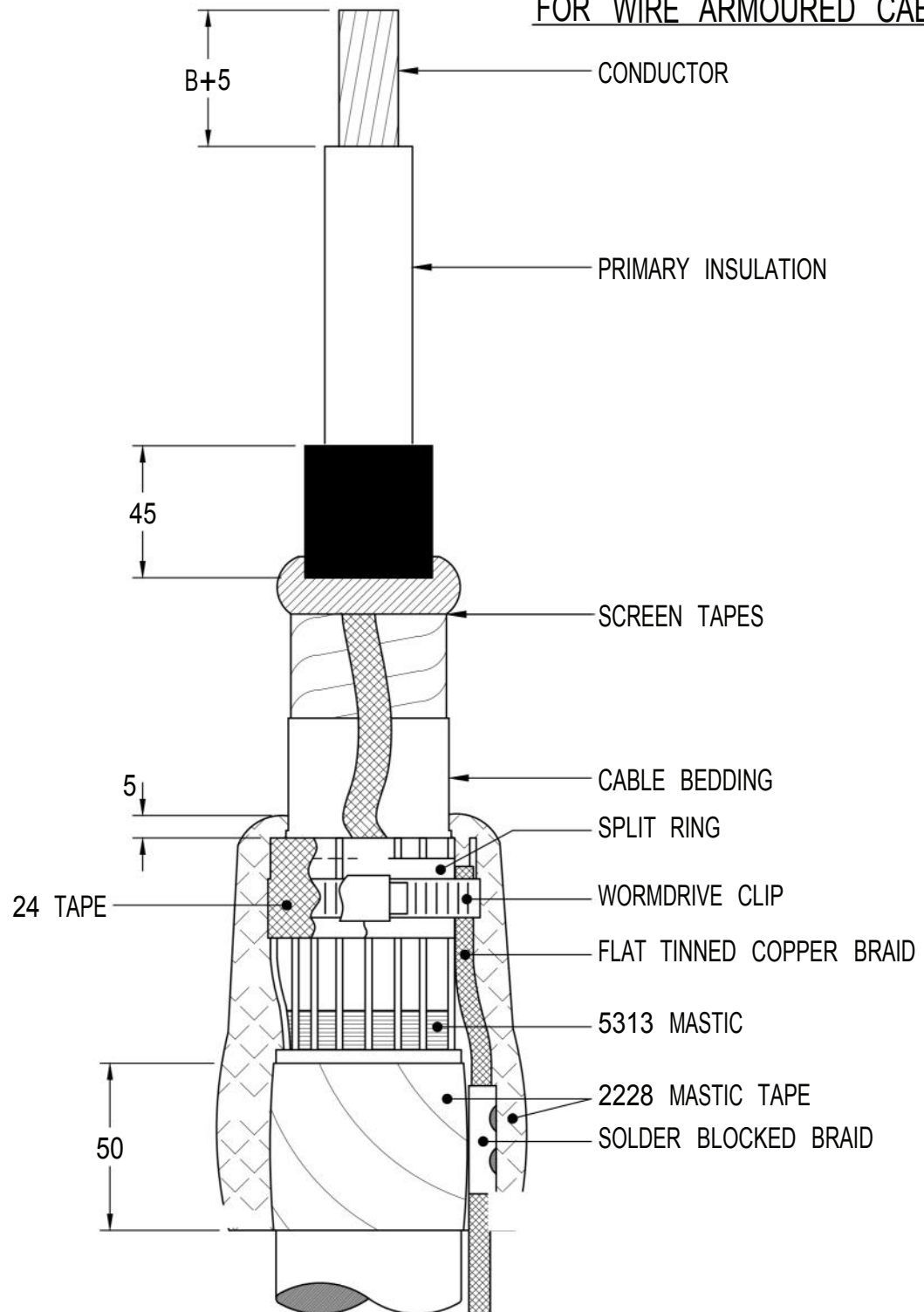
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FIG.1



- 1.1 THOROUGHLY CLEAN CABLE JACKET FOR A DISTANCE OF 500mm FROM THE END OF THE CABLE, TO REMOVE ANY GRAPHITE COATING.
- 1.2 REMOVE THE CABLE JACKET AS ABOVE, (B = INTERNAL DEPTH OF LUG BARREL).
- 1.3 PREPARE CABLE AS PER DIMENSIONS ABOVE.
- 1.4 UNWIND THE COPPER TAPE (IF APPLICABLE) LEAVING 50mm IN FRONT OF THE CABLE BEDDING/ LEAD SHEATH, AND ENSURE A SMOOTH PROFILE.
- 1.5 ATTACH COPPER BRAID TO COPPER SCREEN TAPES USING THE CONSTANT FORCE SPRING, OVERTAPE CONSTANT FORCE SPRING WITH 2 HALF LAPPED LAYERS OF SCOTCH 13 TAPE, APPLIED IN THE SAME DIRECTION OF THE SPRING.
- 1.6 REMOVE THE SEMI-CON OUTER CABLE SCREEN, LEAVING 45mm IN FRONT OF THE COPPER TAPE SCREEN.
- 1.7 REMOVE THE PRIMARY INSULATION FOR B+5mm (B = DEPTH OF LUG BARREL)

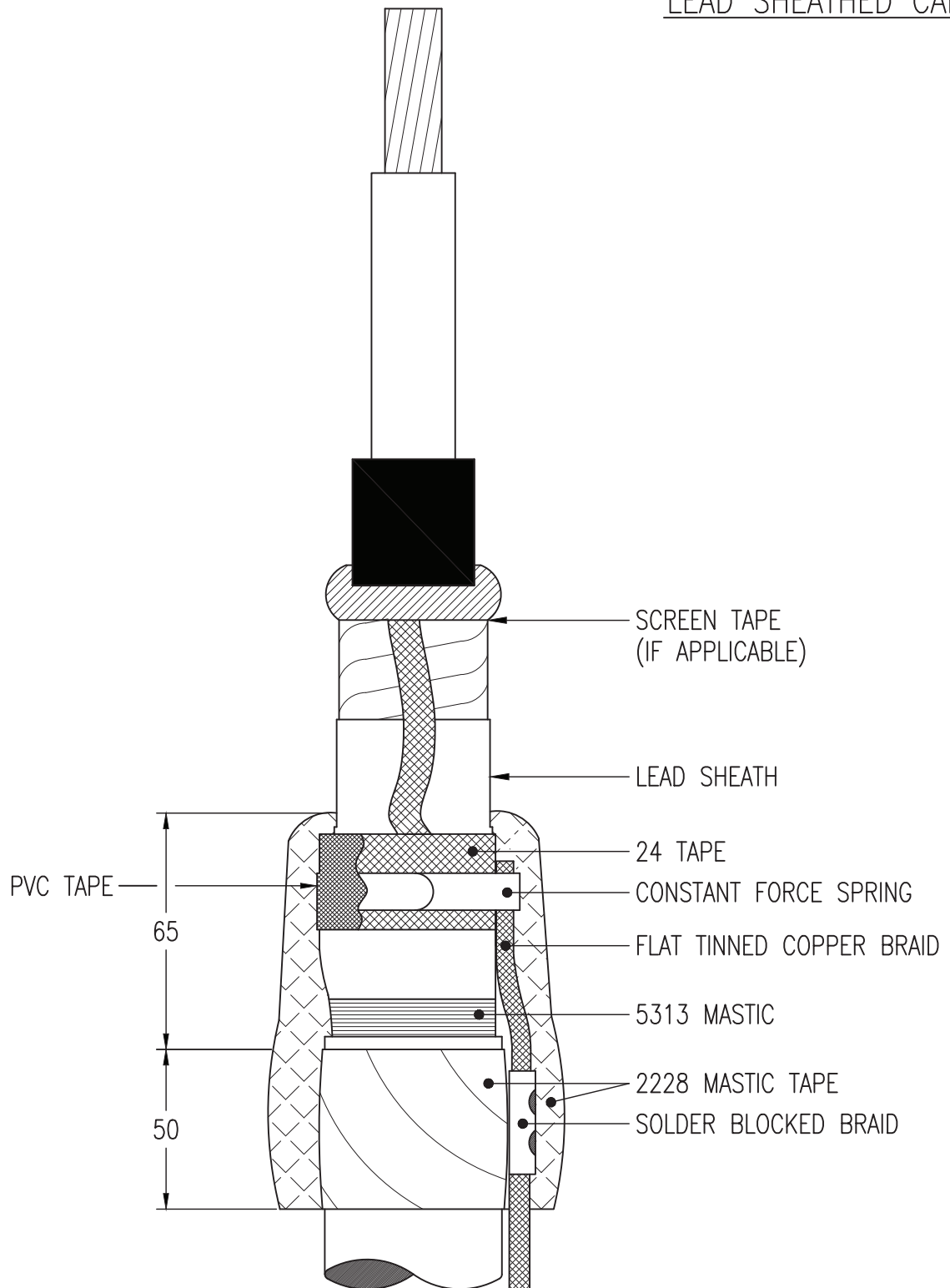
FIG.2

FOR WIRE ARMoured CABLES

- 2.1 APPLY A LAYER OF 2228 MASTIC TAPE ON TO CABLE JACKET AT TERMINATION OF CABLE JACKET.
- 2.2 LIFT ALUMINIUM WIRES UP AND INSTALL A LAYER OF 5313 MASTIC BELOW ARMOURS.
- 2.3 INSTALL SPLIT RING UNDER WIRE ARMOURS.
- 2.4 OVERTAPE ARMOURS AND SUPPORT RINGS WITH 2 LAYERS OF No. 24 TAPE.
- 2.5 LAY COPPER TAPE SCREEN ON TO No. 24 TAPE, OVER SUPPORT RING AND CUT TO LENGTH.
- 2.6 LAY SOLDER BLOCKED BRAID UP ON TO ARMOURS AND CONNECT BRAID TO WIRE ARMOURS AND SCREEN TAPE USING THE WORMDRIVE CLIP. POSITION SOLDER BLOCK ON 2228 TAPE AND TRIM ANY EXTRA BRAID IN LINE WITH END OF ARMOURS.
- 2.7 OVERTAPE THE WORMDRIVE CLIP WITH TWO HALF LAPPED LAYERS OF PVC TAPE.
- 2.8 OVERTAPE ARMOUR AREA WITH ANOTHER HALF LAPPED LAYER OF 2228 TAPE. OVERLAP ON TO CABLE BEDDING BY 5mm.

IMPORTANT: ENSURE THAT THE OUTER LAYER OF 2228 TAPE IS AT LEAST 37MM IN DIAMETER FOR 92-EP623-1 AND 92-EP633-1, AND AT LEAST 55MM IN DIAMETER FOR 92-EP643-1 AND 92-EP653-1

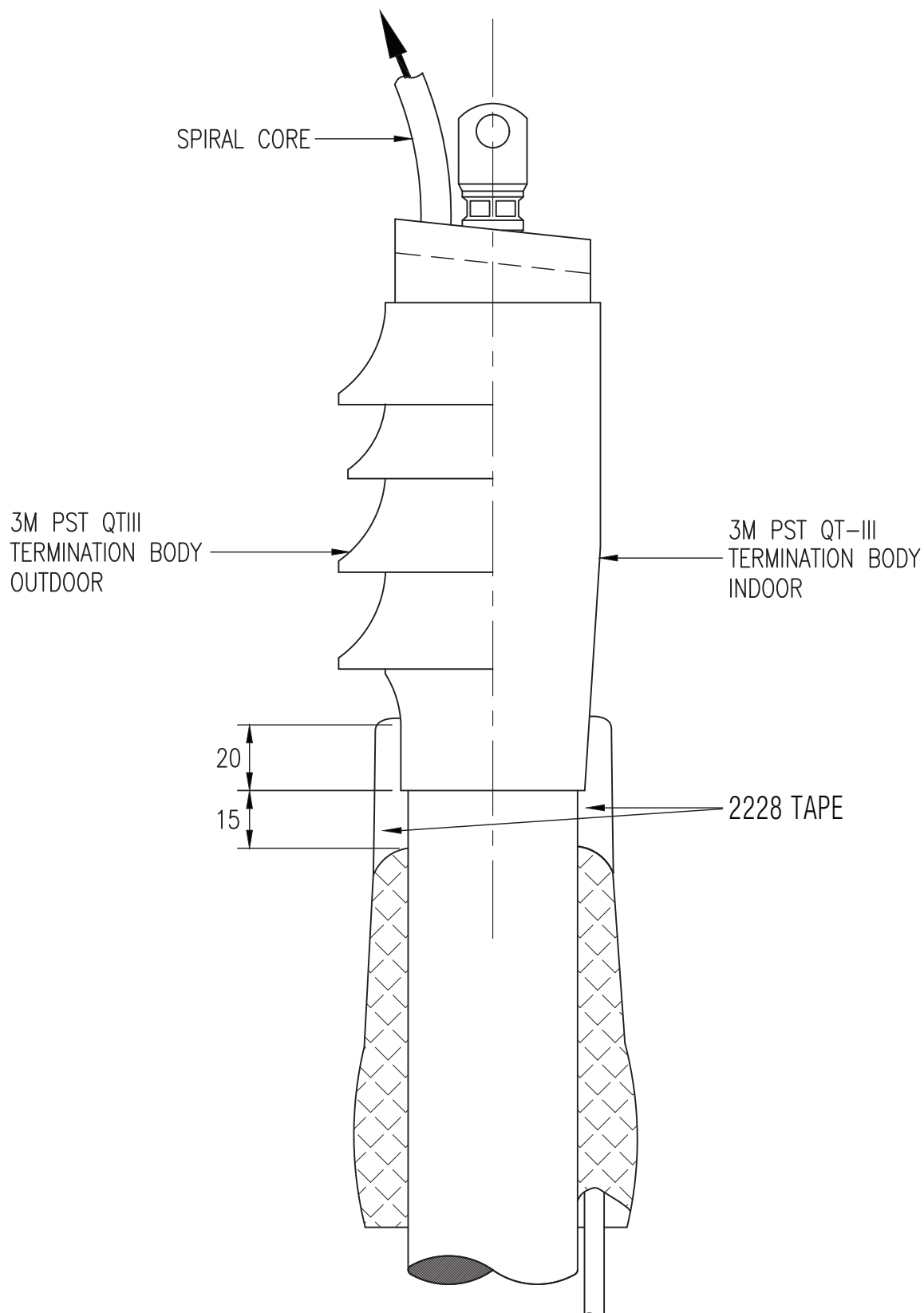
FIG.3

LEAD SHEATHED CABLE

- 3.1 APPLY A LAYER OF 2228 MASTIC TAPE ON TO CABLE JACKET AT TERMINATION OF CABLE JACKET.
- 3.2 INSTALL A LAYER OF 5313 MASTIC TAPE ON TO THE LEAD SHEATH, AT THE END OF THE CABLE JACKET.
- 3.3 5mm BEYOND THE 5313 MASTIC, WRAP 3 LAYERS OF 24 TAPE ON TO THE LEAD SHEATH.
- 3.4 ATTACH THE COPPER SCREEN TAPE (IF APPLICABLE) AND THE FLAT TINNED COPPER BRAID BY MEANS OF A CONSTANT FORCE SPRING APPLIED DIRECT ON THE BEDDING OF SCOTCH 24 TAPE.
- 3.5 TIGHTEN SPRING AND OVERTAPE WITH HIGHLY STRETCHED PVC TAPE, APPLIED IN THE SAME DIRECTION AS THE SPRING.
- 3.6 OVERTAPE THE AREA WITH ANOTHER HALF LAPPED LAYER OF 2228 TAPE, COMMENCING 50mm OVER THE EXISTING 2228 TAPE, ON THE CABLE JACKET FOR A FURTHER 65mm AS PER FIG.3.

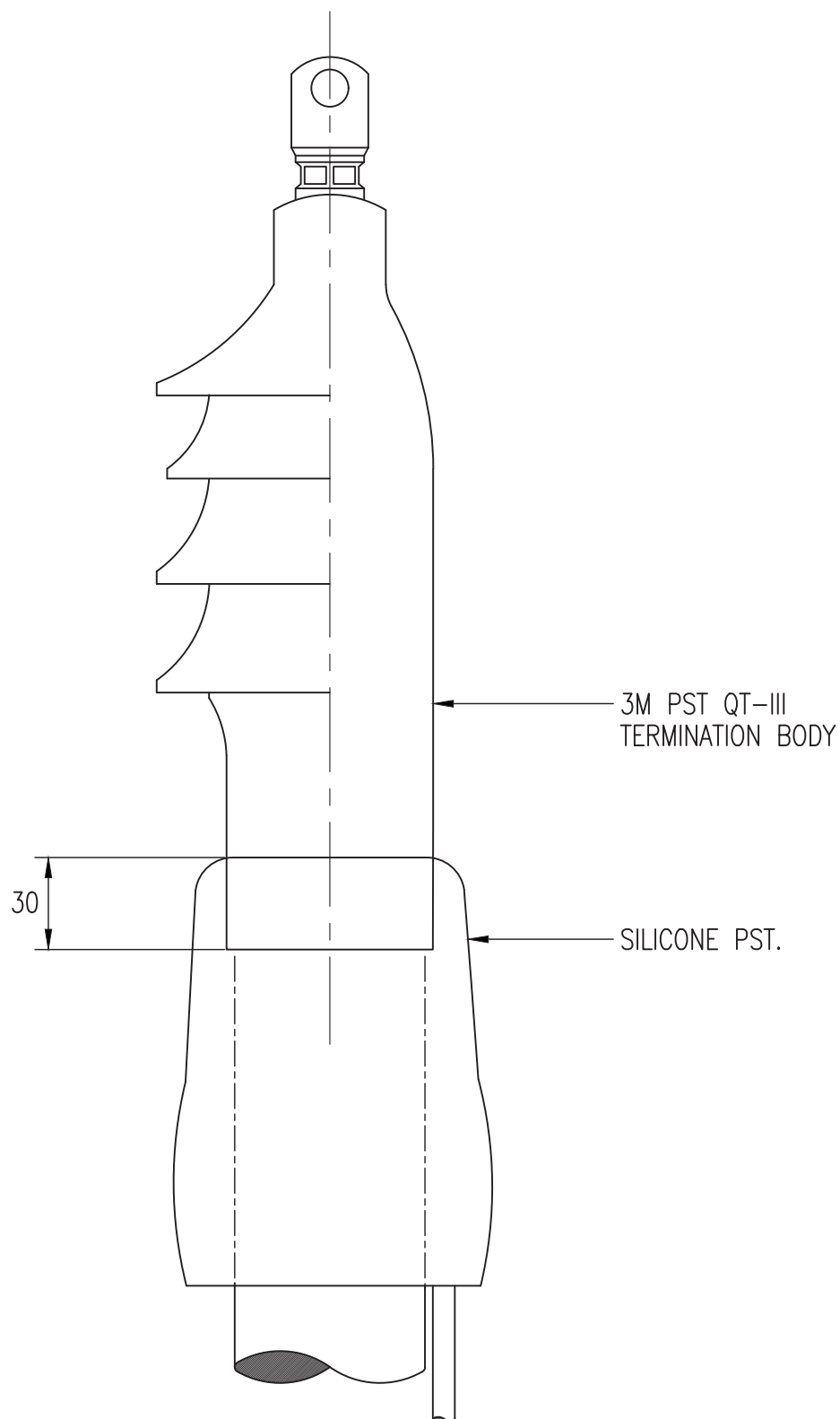
IMPORTANT: ENSURE THAT THE OUTER LAYER OF 2228 TAPE IS AT LEAST 37MM IN DIAMETER FOR 92-EP623-1 AND 92-EP633-1, AND AT LEAST 55MM IN DIAMETER FOR 92-EP643-1 AND 92-EP653-1

FIG.4



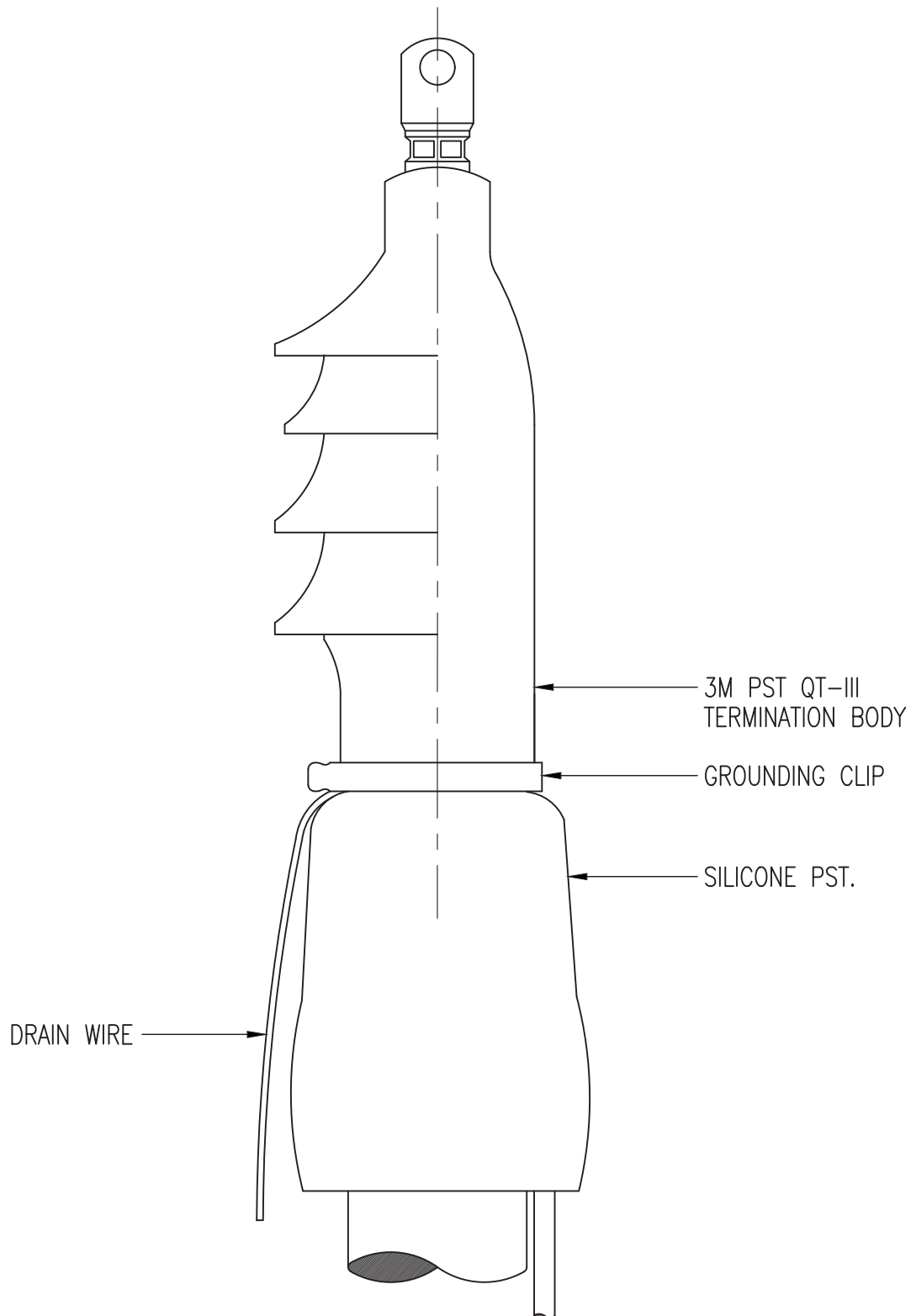
- 4.1 IF THE PALM OF THE LUG WILL FIT THROUGH THE QTIII TERMINATION, INSTALL THE LUG NOW, CLEAN AND DEGREASE, AND CONTINUE THE INSTALLATION, LEAVING OUT INSTRUCTION 4.4, IF NOT, FOLLOW ALL INSTALLATION INSTRUCTIONS.
- 4.2 REMOVE THE RED SHIPPING CORE FROM THE QTIII TERMINATION.
- 4.3 SLIDE THE TERMINATION OVER THE CABLE END.
- 4.4 INSTALL THE LUG, CLEAN AND DEGREASE.
- 4.5 INSTALL QTIII AT A POINT 20mm ON TO THE CABLE BEDDING.
- 4.6 **INSTALL A LAYER OF 2228 TAPE ONTO THE QTIII TERMINATION AS SHOWN ABOVE, ENSURING A DIAMETER OF AT LEAST 37MM FOR 92-EP623-1 AND 92-EP633-1, AND AT LEAST 55MM FOR 92-EP643-1 AND 92-EP653-1**

FIG.5



- 5.1 INSTALL SILICONE PST, COMMENCE SHRINKING 30mm. ON TO THE QTIII BODY.
- 5.2 CAREFULLY TRIM OFF ANY EXCESS PST FROM THE BOTTOM OF THE TERMINATION IF REQUIRED. ENSURE THE PST COVERS THE 2228 TAPE.

FIG.6

FOR OUTDOOR TERMINATIONS ONLY

6.1 INSTALL GROUNDING CLIP AND CONNECT DRAIN WIRE.