ELE-3COP-531

Title – Potting Procedure for Heat Shrink Moulded Parts

Before starting work please read this document carefully and note the guidance given.

1 Purpose and Scope

This COP describes the procedure to be used when potting a heat shrink moulded shape with sealant to provide additional protection from moisture. The instructions in this document take preference over IPC/WHMA requirements, as do the drawing and any customer documentation.

It is good working practice that where trained operators have not installed this product for over 6 months, a sample installation should be carried out by the operator to refresh installation practice. Performance of the sample can be checked using the inspection standards described within this document.

2 Performance Objective

This code of practice is produced to support operators already trained in the installation of heat shrinkable and harnessing products. It identifies the procedure to be used when potting a heat shrink moulded shape with sealant to provide additional protection from moisture. Most of the TE bulbous boots and transitions can be ordered with moulding ports for this purpose under the modification suffix (-00)

3 Materials and Equipment:

Appropriate Potting Medium.
Degreasing Agent isopropyl alcohol or isopropanol (IPA) impregnated tissue wipe.
Heavy duty tissues.
Safety Glasses.
50ml Syringe
Plug 002A11-3 (Supplied with moulded part under -00 suffix)
Riser 204A711-3 (Supplied with moulded part under -00 suffix)

4 Health and Safety

Adhere to local Codes and Regulations relating to Safe Working practices. For the U.K. adhere to requirements of the Health and Safety at Work Act 1974 and subsequent amendments.

The installation should be carried out in a well ventilated area.
Always wear heat resistant safety gloves when handling hot plastics and adhesives.
The use of suitable protective gloves and barrier cream is recommended when using solvents.
Avoid prolonged repeated skin contact with solvents and always wash hands after using solvents.
Care should be taken to wear safety glasses when using and handling chemical solvents. If eyes do become contaminated, flush with water and obtain medical assistance immediately.
Always ensure all equipment is calibrated before use.

5 Procedure

Note.
Users should evaluate the chosen potting medium/sealant to ensure compatibility with required mechanical, electrical and environmental specifications of their application and the moulded part material.

5.1
Ensure the heat shrink moulded part to be potted is correctly installed as per the relevant Code of Practice. Best results will be obtained if 10% unresolved recovery (grip) for all outlets of the moulded parts is available. Please check for compliance with this requirement before assembly. Unresolved recovery is defined as the difference between the installed diameter and the fully shrunk (recovered) diameter as given on the SCD expressed as a percentage of the fully shrunk diameter. For example a moulded part fully shrunk with a diameter of 10mm and an installed diameter of 11mm has a 10% unresolved recovery.

5.2
Proper mixing and correct proportions of the potting medium are extremely important and users must ensure the manufacturer's guidelines are followed.

5.3
Ensure all areas are cleaned with solvents prior to use. The surface should be free from contaminants such as oil, grease and dirt.

5.4
Transfer the mixed potting medium into a 50ml syringe until 75% full. Invert syringe to allow the air to escape.

5.5
Fit riser into hole as shown in Figure 1 (this also applies to straight moulded parts and transitions) and inject the potting medium into the moulded part. Continue injecting the potting compound until the riser is completely full. Remove any excess potting medium from surface of heat shrink moulded part.

5.6
Remove nozzle and insert plug. Allow to cure as per potting mediums manufacturer's recommendations.

5.7
Cut off Riser with a sharp knife flush with the surface of the moulded part. See Figure 2.

Fig. 1

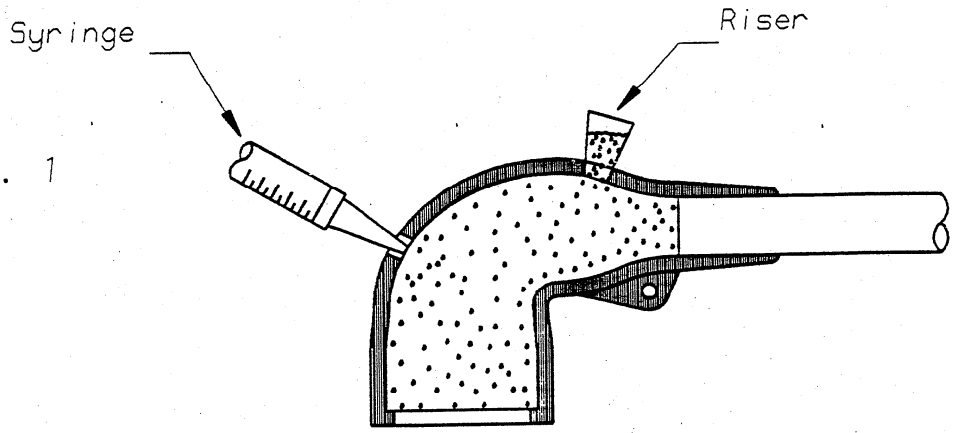
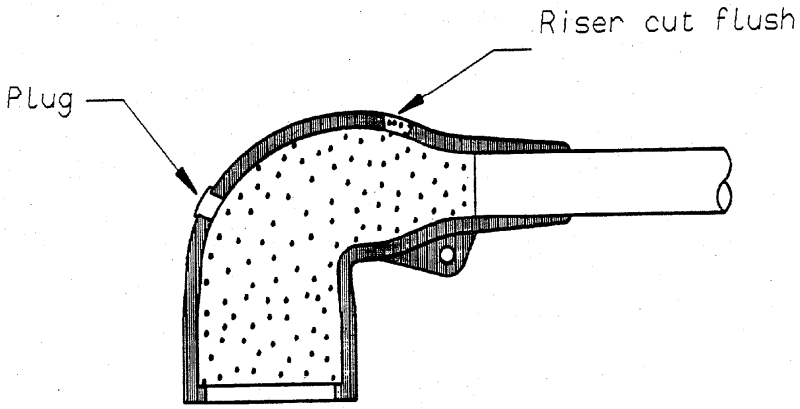


Fig. 2



6 Inspection Requirements

There should be no separation between the moulded part and the cable jacket at the adhesive bond line.
The Moulded Part must be free from fingerprints, scorch marks and excess potting medium.

7 Visual Standards

No visual standard currently available.

Rev No	CR No	Date	Raised	Approved
1	Initial	18/03/93	Mick Nicholls	Neil Dorricott
2	Visual Identity	13/07/06	John Cronin	Neil Dorricott
3	CR09-DM-018	07/06/11	Paul Newman	Neil Dorricott