



## Instruction Leaflet

# ST Hot Melt Connector Assembly

### Components required

Item	RS stock no.
ST Hot Melt connector	181-7635
ST Hot Melt holders	267-8065
Multipurpose oven	201-1125
Hot Melt cooling stand	267-8116
Hot melt polishing puck	267-8122
Hot melt polishing film	267-8144
Hot melt polishing pad	267-8138
Isopropyl alcohol(IPA)	567-890*

Cable stripping/cutting/scribe tools - see **RS** catalogue Tools-Cable/Connector preparation section. Lint free cleaning tissue/cloth-see **RS** catalogue Cleaning/Contact Treatment section.

### General

#### Warning/Recommendations

**Note:** Carefully follow safety, health and disposal information - see **RS** materials safety sheet CP0010/1.

Safety glasses should be worn when working with optical fibres. Use a safe receptacle for discarded fibres.

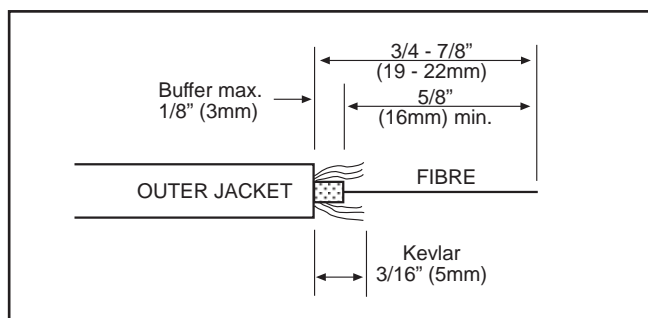
Do not touch any part of the heating block of the oven during operation.

All polishing should be done on the soft polishing pad as described in this instruction.

#### Oven/Connector preparation

1. Connect the oven to the mains supply, switch on and set the temperature to 250deg C. Allow the oven to heat up and reach temperature.
2. Ensure the cooling stand is assembled ready.
3. Remove the connector from its sealed pack and load the main body into the connector holder. Latch the connector bayonet fitting into the holder.
4. With the oven at set temperature load the holder with connector into one of the positions in the heating block.
5. Allow to heat for 2 minutes minimum, 5 minutes maximum.

#### Cable preparation and connector assembly



6. Using 3mm sheath dia. 125 micron fibre cable, slide the strain relief boot on then strip and prepare as in figure 1:-
  - 6a. Cut and remove outer jacket.
  - 6b. Hold Kevlar strands to one side and remove buffer in 2 to 3 bites.
  - 6c. Clean fibre with IPA.
  - 6d. Cut the Kevlar to length and evenly distribute the strands around the buffer.
7. Remove the holder with connector from the oven and insert the fibre into the connector so that it protrudes through the end of the connector ferrule. Ensure that the Kevlar strands are guided straight into the back of the connector.
8. Secure the cable into the top of the wire holder and place the holder into the cooling stand.
9. After 3 to 4 minutes the connector will be ready for scoring and polishing.

#### Scoring and polishing

10. When cool, remove the connector from the holder.
11. With a scribe tool score the fibre just above the adhesive bead.
12. Remove the excess fibre and dispose into a safe container.
13. Secure the strain relief onto the back of the connector.
14. Place the polishing film (shiny side down) onto the polishing pad.
15. Fit the connector ferrule into the polishing puck and gently place onto the film.
16. Holding both the connector and the puck perform figure 8 movements, applying gentle pressure to the connector.
17. Inspect the ferrule end to see if all the adhesive has been removed. Continue polishing using fresh areas of film until the ferrule end is clear.
18. Clean the ferrule with IPA and examine the fibre using a suitable view scope. Perform additional polishing as necessary.
19. Finally clean the ferrule completely with IPA. Ensure the connector dust cap is clear then fit over the ferrule for immediate protection and storage.

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