

Mounting instructions for Triaxial Plugs

245-CON-TRIAX-HQ with cable 310-PEEK50-TRIAX and 312-PTFE-TRIAX

This document describes the connection of the triaxial connector 245-CON-TRIAX-HQ to the 50 Ohm PEEK insulated triaxial cable 310-PEEK50-TRIAX and the PTFE insulated version 312-PTFE-TRIAX

As vacuum applications are often very specific, modifications of the procedure shown here might be required.

The plug consists of 6 parts (from left to right):

Cap, collet, outer shield, inner cap, pin-assembly, housing

1) Recommended stripping lengths of cable:

A= 4mm B= 4mm(=A) C= 7mm D= 8mm E= 10mm

2) For PTFE cable only: Drill out the collet to 3.8mm \varnothing

3) Put cap, collet and outer shield over the cable. See photo for correct orientation.
Open the two shields

4) For PTFE cable only: Put a ~3mm long PTFE hose over middle insulation. Use either a part of the stripped insulation material or a piece of PTFE shrink hose

5) Put the inner cap over the cable and solder the inner contact to the centre pin. Clean solder area. Rotate the inner cap to close the shield

6) Solder the inner shield to the end of the inner shield cap.
Clean solder area

7) For PTFE cable only. Slide the insulation over the solder area.

8) push the outer shield over the connector until it touches the ring on the pin assembly.

9) Push the collet against the outer shield, insert the assembly into the housing and close it by screwing on the cap. (SW7 and SW8). Use enough torque to fix the cable with the collet.

Recommended tools:

- 1) Wire stripper 321-STRIP10 and 321-STRIP04 and / or special coaxial wire stripper
- 2) Drill 3.8mm \varnothing (for PTFE cable version)
- 3) UHV Solder and flux 315-LF-SOLDER
- 4)
- 5) Solder iron

