

# Push-Pull Locking Connector Instructions

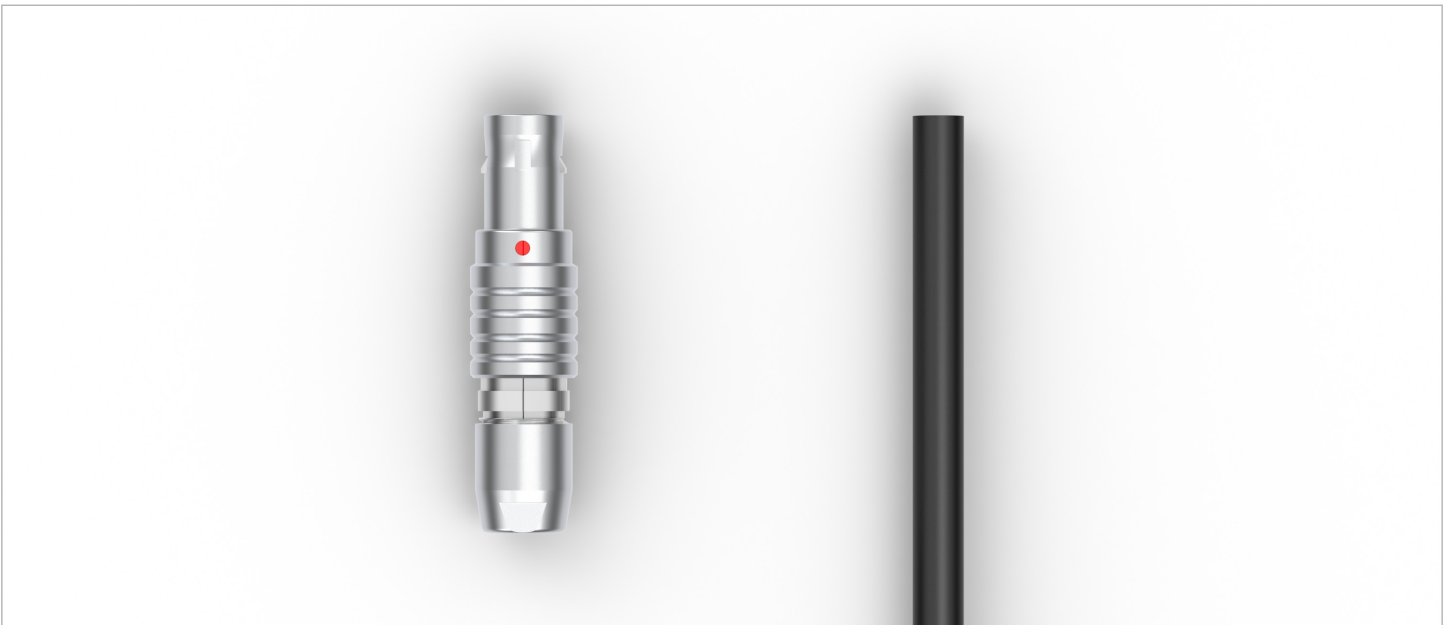
---

For use with Tensility's  
PPL connector series.

# Materials Needed

---

- PPL connector
- Soldering equipment
- Wire (reference specific connector spec for appropriate wire gauge and diameter requirements)



## Internal Components of Connector

Outer Shell



Split Insert Carriers



Internal Connector



Collet



Collet Nut

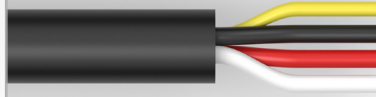


1. Strip 10 mm off from the blunt end of the jacket (13 mm max).

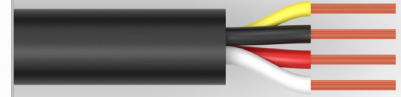


Notes:

If wire has a shield, cut the shield 10 mm to create a blunt cut at jacket face.



2. Strip off 4 mm from all insulators.



3. If using wire with drain, apply heat shrink to drain. Leave 4 mm of the conductor exposed.



4. Align the collet nut so the tapered end is towards the conductors. Then feed wire through collet.

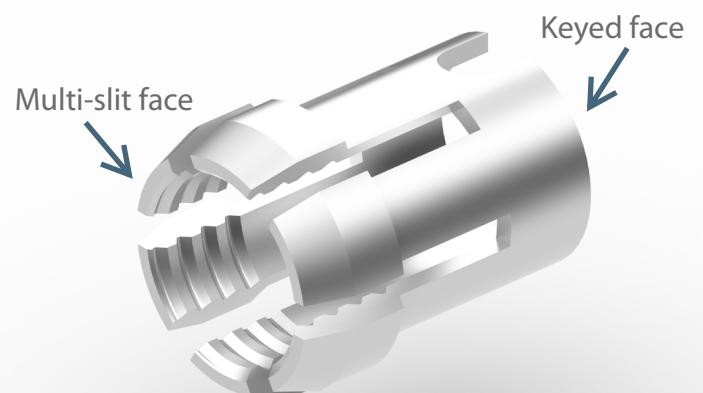


5. Defining the two sides of the collet.

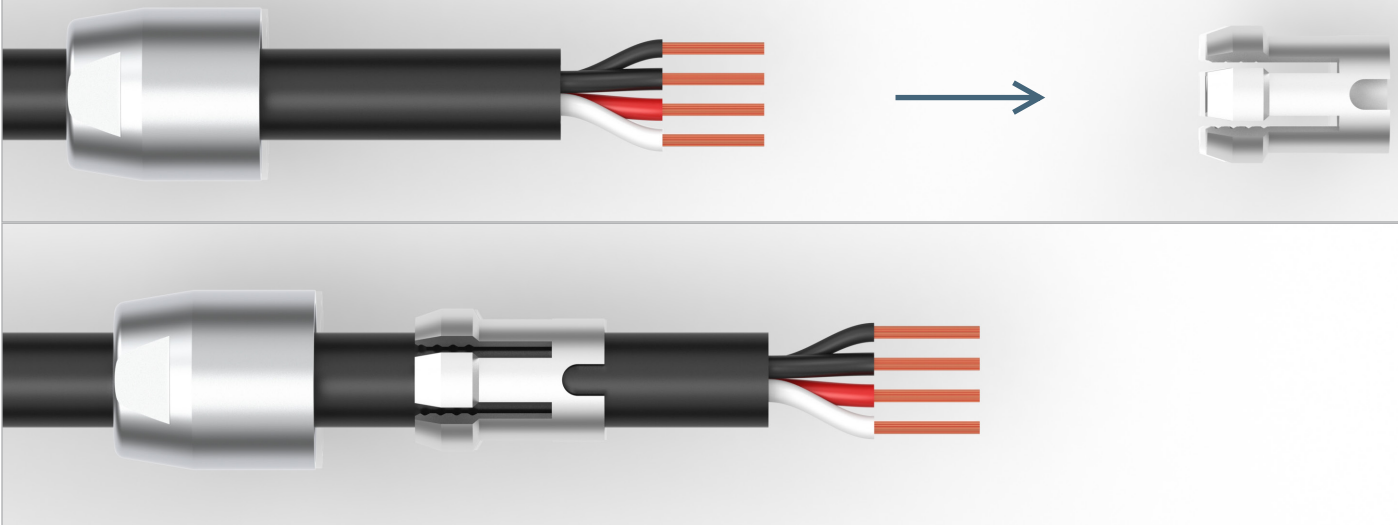
Notes:

The Multi-slit face will grip the outer jacket of the wire.

The Keyed face interfaces with the internal connector.



6. Align the multi-slit face side of the collet towards the wire, then feed wire through collet.

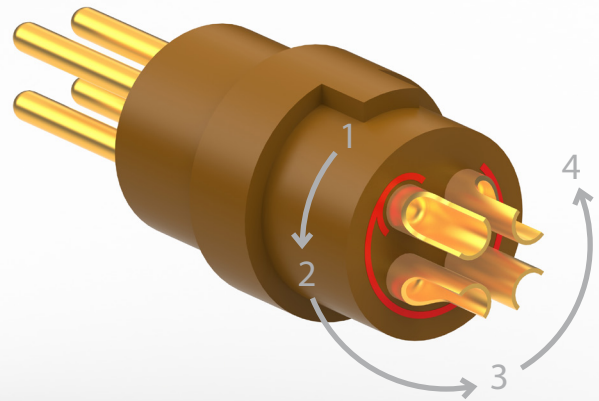


### 7. Reading the Insulator

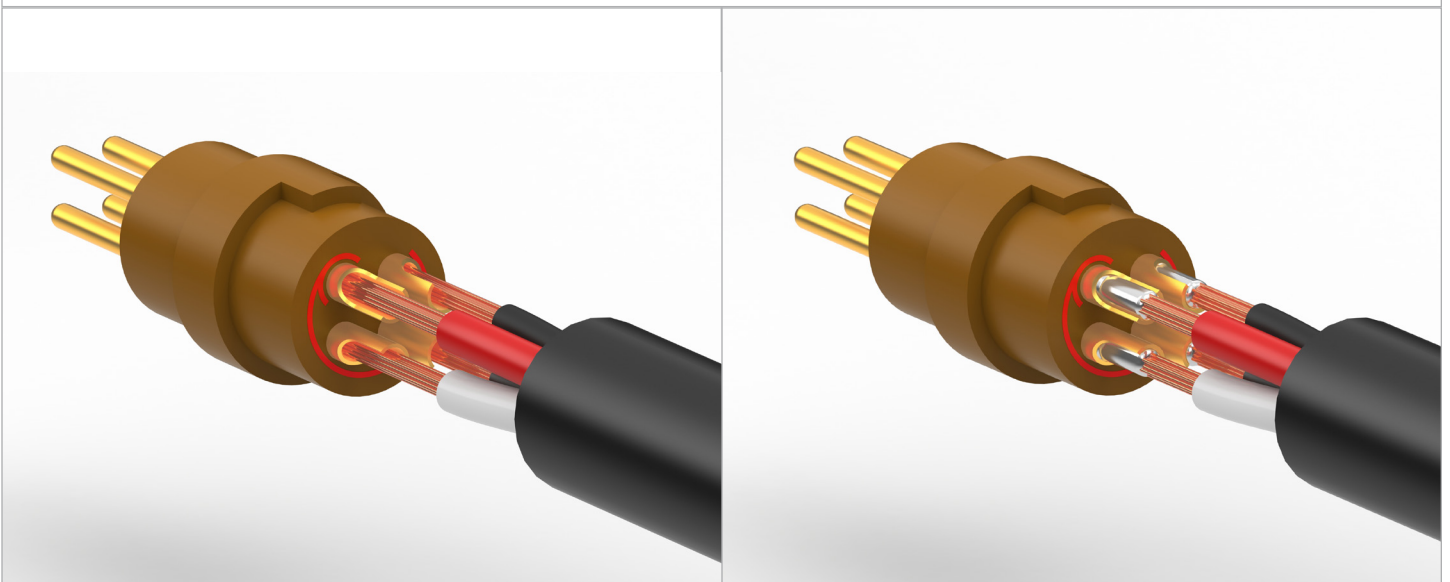
There is a pin numbering guide on the insulator.

Pin numbering starts at 1 where the solder cup has a red semi-circle around it.

- Numbering follows the red line in sequential order

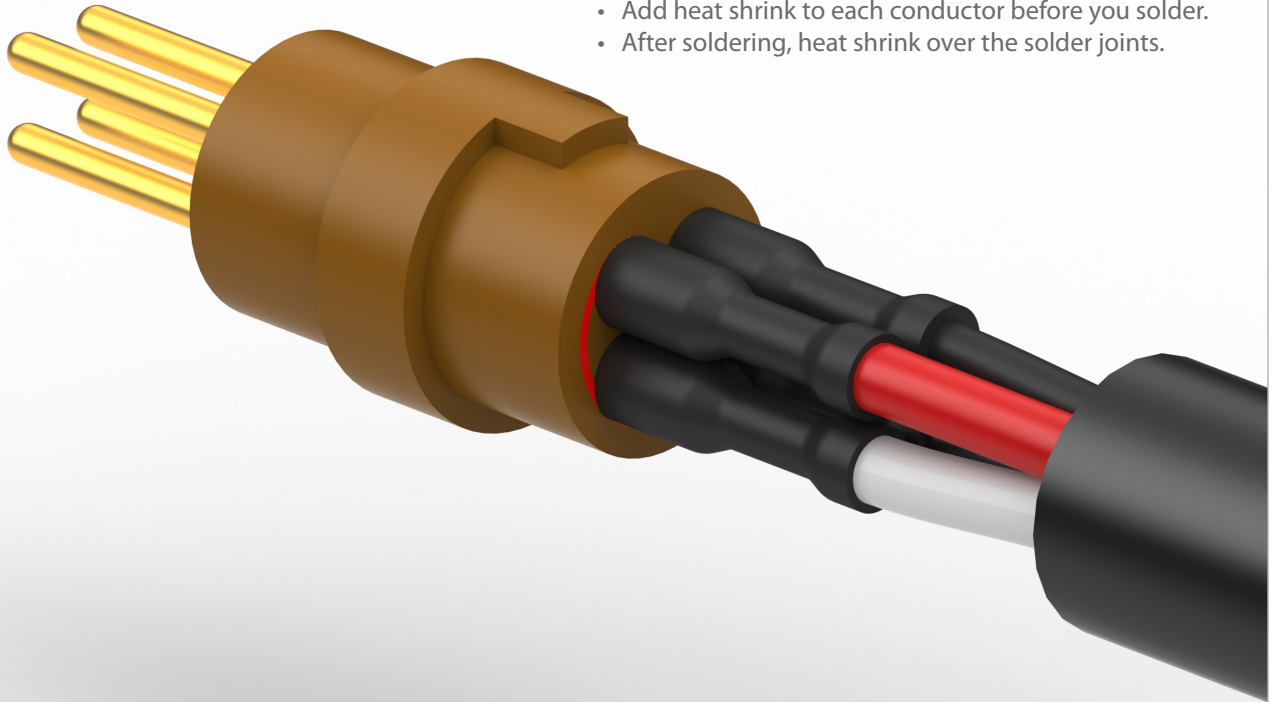


8. Align the internal connector with the solder cups and solder the conductors to their respective cups.



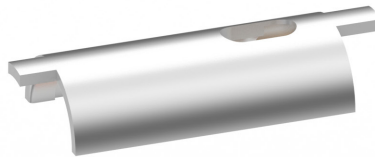
Tip:  
For extra security to prevent a short circuit -

- Add heat shrink to each conductor before you solder.
- After soldering, heat shrink over the solder joints.

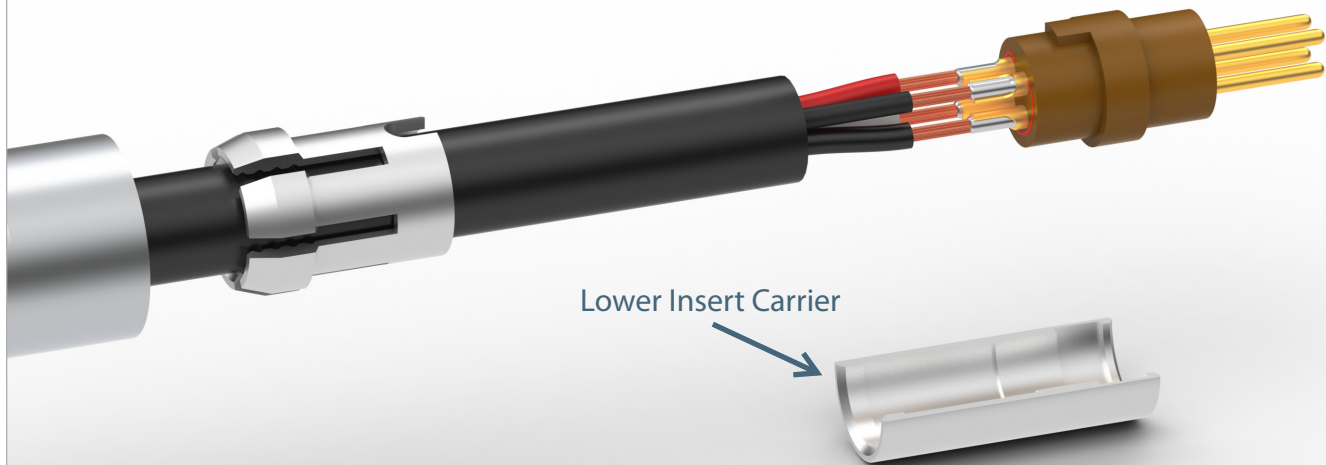


9. Identify both split insert carriers.

Keyed Insert Carrier

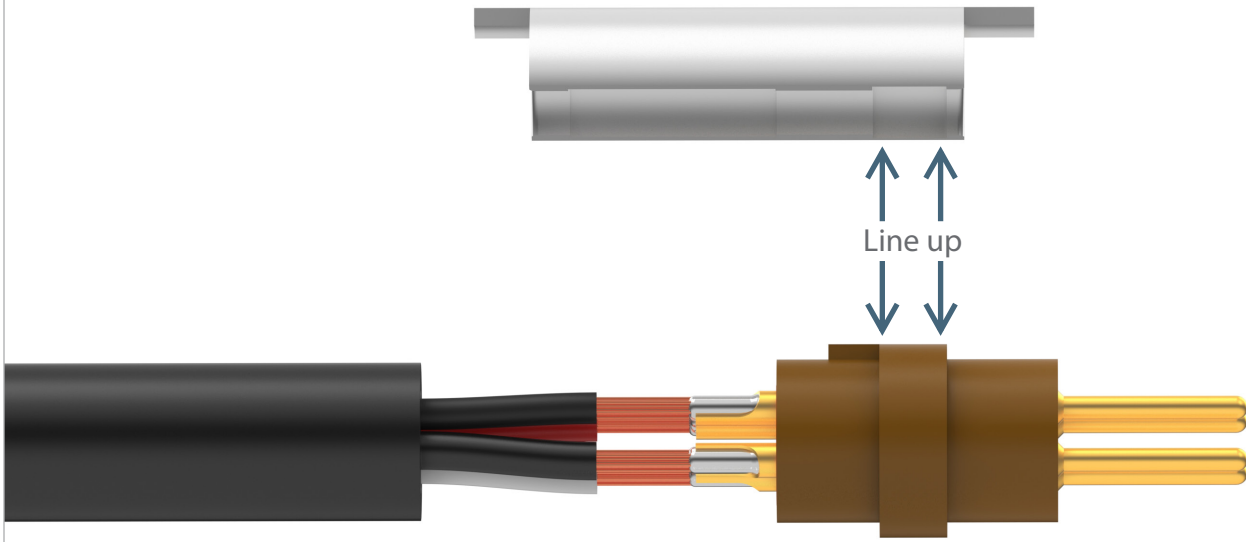


Lower Insert Carrier

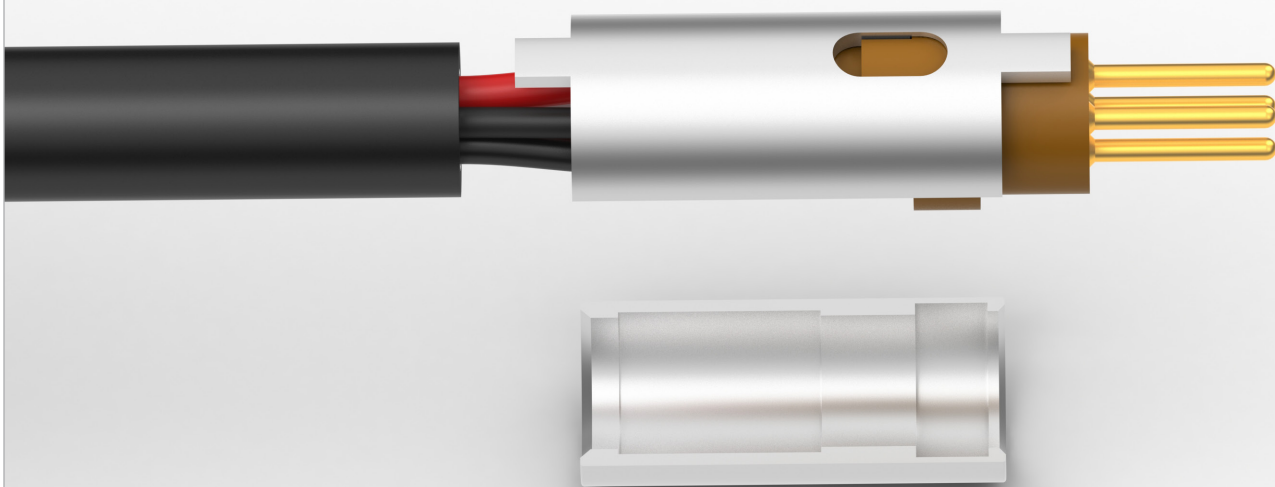


10. Set the keyed carrier insert onto the insulator.

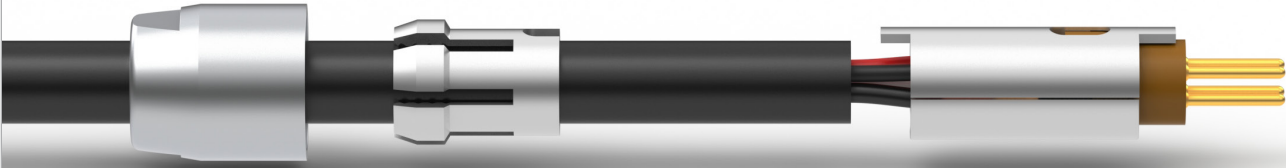
- When placed together, the notch on the insulator should key into the cutout on the insert.



Note: The insert should not cover up the pins.

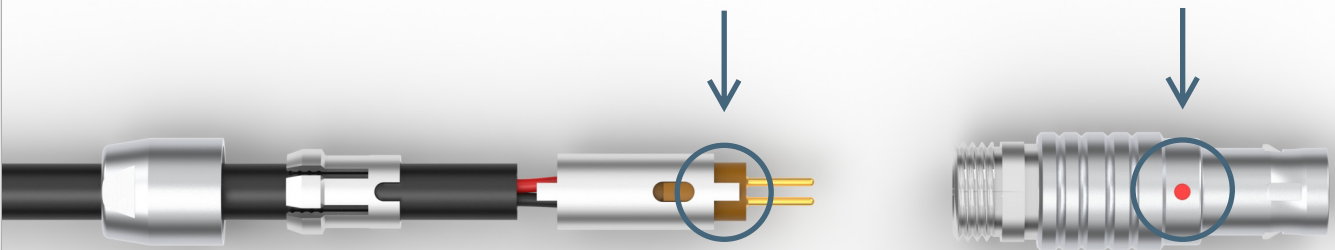


11. Place the lower insert carrier so it lines up with the keyed insert carrier to create a complete shell.



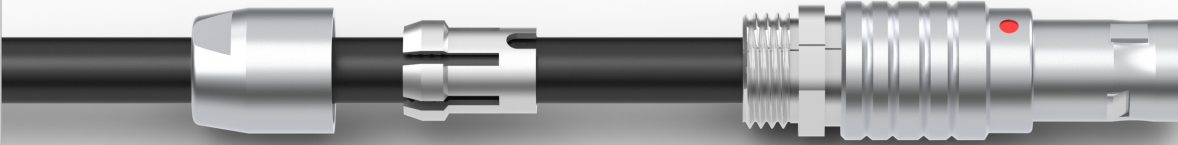
Note:  
Hold the two halves together by hand until inserted in the outer connector shell.

12. Align the outer shell with the wire.



Note:  
There are multiple key and grooves on the connector components. They should all be in line with each other.

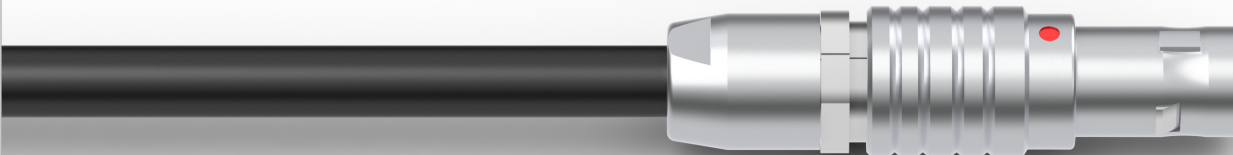
13a. Thread wire through outer shell.



13b. Slide the collet into the outer shell.



14. Screw on the collet nut by hand. Do not over-tighten. Refer to connector spec for maximum torque.



**Tip:**

If you experience resistance when tightening the nut, don't force it. Make sure all the various keys are lined up with the grooves, and then try screwing the nut back on.



## Completed Cable:

