

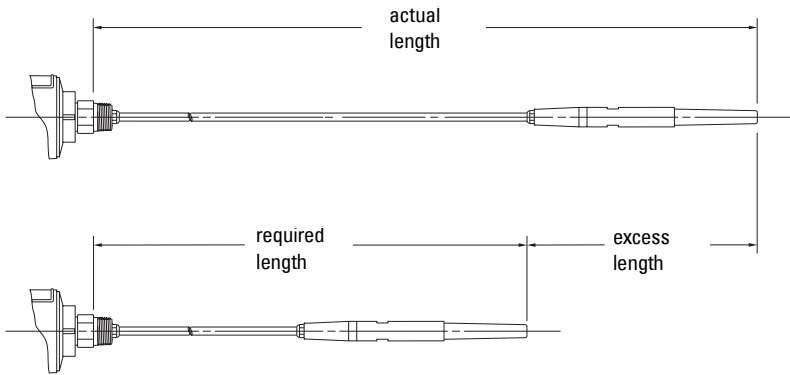
# Appendix C: shortening the cable

**CAUTION:** Possible only with the general purpose configuration; please verify against product nameplate.

## Preparation

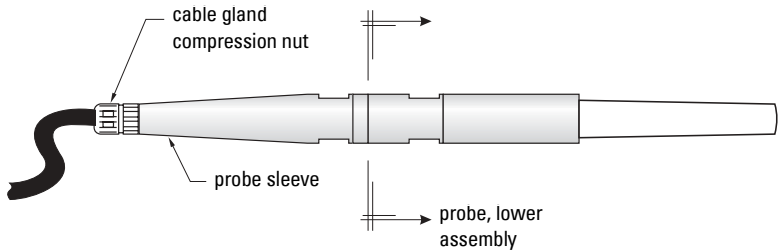
Determine the required cable length, and subtract that amount from the actual length, to find the excess length to cut off.

For example: 10 m (actual length) minus 9 m (required length) = 1 m (excess)

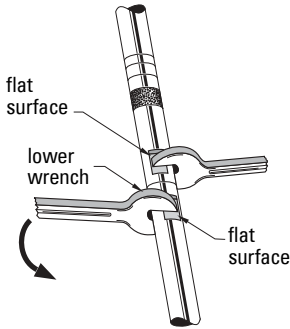


## Steps

1. Unscrew the cable gland compression nut to relieve the sealing cone and release the cable.

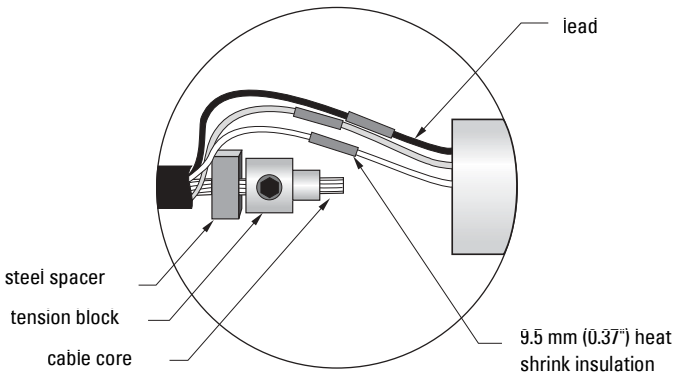


- Unscrew the probe sleeve from the lower assembly using two 17 mm (0.67") wrenches across the flat surfaces, as shown below.



- Place two wrenches on the flat surfaces of the probe as shown: hold the probe sleeve still, and turn the lower wrench counter-clockwise to loosen the probe lower assembly.
- Remove the lower assembly by turning the threaded electrode end counter-clockwise: this exposes the three leads, the tension block, and the steel spacer.

- Remove the heat shrink insulation covering the solder connections.



- Unsolder the connections.

**Note:** Do not cut the connections to the probe leads, as this can render them too short to work with later.

- Remove the tension block, and save it for re-use in step 7.
- Calculate the excess cable, then add back an allowance of 75 mm (3") for making the connections:

For example, 1000 mm	= excess
less <u>75 mm</u>	= allowance for connections
925 mm	= excess cable to be removed

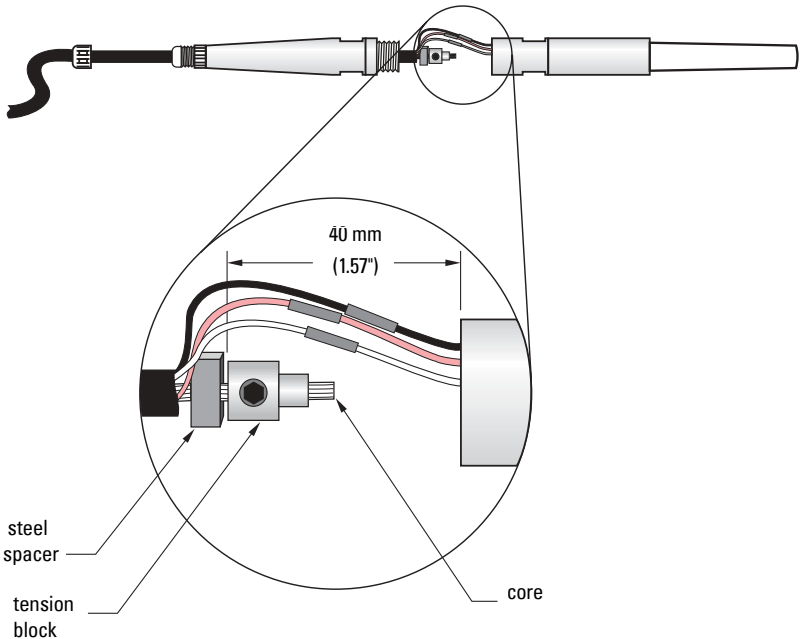
- Cut off the excess cable.

8. Remove approximately 75 mm (3") of cable jacket, shield, and filler strands.
9. Cut off the excess cable core, making sure the cut is clean and square
10. Replace the steel spacer and tension block, then shorten the leads to approximately 40 mm (1.6").
11. Prepare the leads for soldering, and if heat shrink is used to insulate splices, remember to slip on the heat shrink before soldering the leads.

The type of cable supplied depends on whether your instrument is analog or digital. To simplify correct connection, white heat shrink has been applied to the orange wire in the digital cable.

Cable type		Lead colors	
<b>ditigal</b>	red	black	white (heat shrink over orange)
<b>analog</b>	red	black	white

12. Make the solder connections and position the heat shrink to completely insulate each solder connection before shrinking it.



13. Remove any excess cable core, if necessary.

14. Apply PTFE type tape/sealant to all threads.
15. Add a pre-twist to the wires before screwing the probe sleeve and lower probe assembly together: hold the probe sleeve still, and gently turn the lower probe assembly counter-clockwise about 5 full turns. This avoids the wires being broken when the probe and probe sleeve are assembled.
16. Screw the lower probe assembly clockwise into the probe sleeve, and tighten it with a 17 mm (0.67") wrench.
17. Check that the instrument is operating correctly, using the test procedure on page 18.