

# Using a High-Pressure ReactIR™ Probe Adapter

This Quick Reference provides step-by-step instructions on how to integrate your ReactIR™ FiberConduit™ probe into a high-pressure ReactIR adapter. METTLER TOLEDO offers the following four sizes of adapters, two for each probe diameter:

For 3/8" NPT Fitting:

14474406 6.35mm or 14474404 9.5mm probe

For 1/2" NPT Fitting:

14474405 6.35mm or 14474403 9.5mm probe

**NOTE:** The adapter and probe shown in this document are a representative example.

## I. Preparing the Adapter

The high-pressure adapter assembly includes a cap at the tube end that reveals component part of the adapter. Before inserting a ReactIR FiberConduit probe, you must disassemble the adapter assembly.

1. Unscrew the two sections of the adaptor assembly and lay out the internal components.
2. Remove the o-ring (component #2), taking special care to avoid damaging it.
3. Pay close attention to the numbered order and orientation of the five adaptor components. Numbers in the following image will be referenced in this document in the steps to insert the probe and reassemble the adapter:



1 = Adapter body, 2 = O-ring, 3 = Collet, 4 = Cone washer, 5 = Nut

4. Using Teflon tape, cover the NPT threads on the small end of the adapter body.



5. Screw adapter body into reactor cover and tighten with a wrench.



## II. Inserting ReactIR AgX FiberConduit Probe

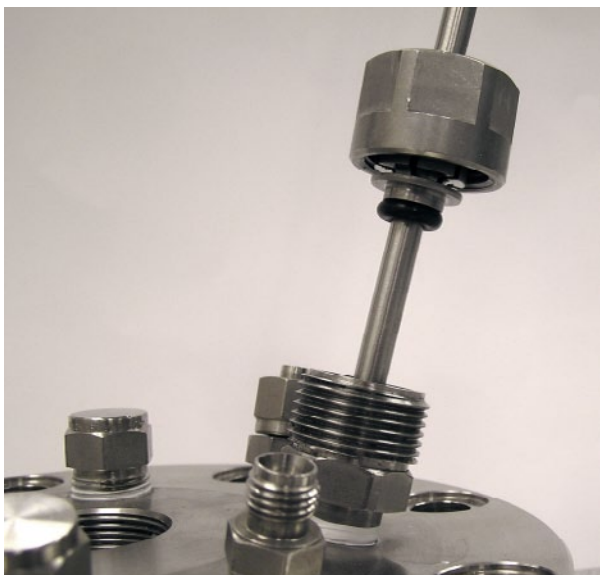
**IMPORTANT!** Make sure to position the concave side of the cone washer (component #4) to cover the collet (component #3) as you insert the probe.

1. Slide the probe tip through the remaining components of the adapter on the probe tube in the order shown and listed below.

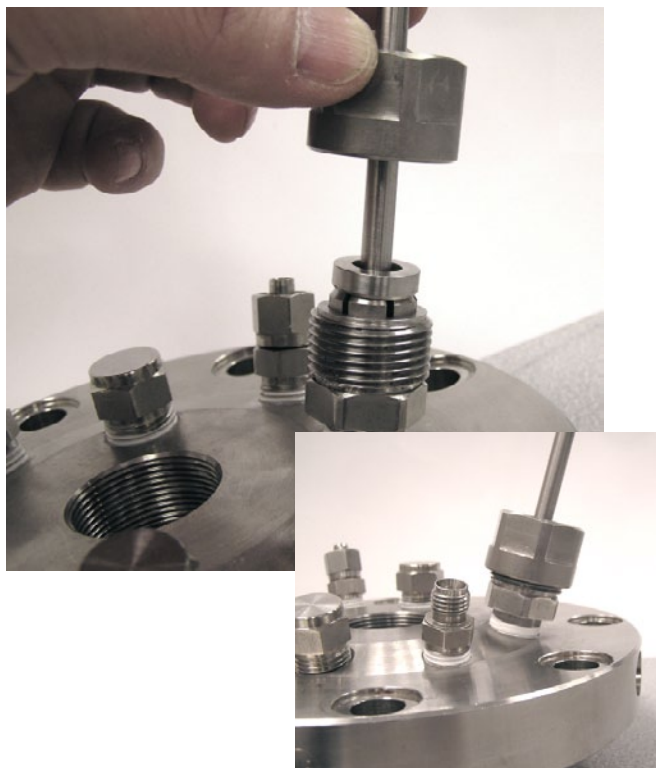


- 5 Nut
- 4 Cone washer—concave side facing collet
- 3 Collet
- 2 O-ring

- Slide the probe with the adapter components into the adapter body that has already been secured to the reactor cover.



- Hand-tighten the nut. You will feel slight resistance as the o-ring slides into the seat.



- Using two wrenches, place one on the adapter body and one on the adapter nut to do the final tightening.

Minimum: **20 ft-lbf (27.2 N-m)**  
(No maximum)



The ReactIR FiberConduit probe is now ready for use.

### III. Changing the Adapter Position

- Using two wrenches, place one on the adapter body and one on the adapter nut.



- Release the nut until the probe can slide.
- Reposition the probe, as needed.
- Using two wrenches, tighten the nut to secure the probe in the new position.

The ReactIR FiberConduit probe is now ready for use.

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