GLASS EXPANSION
Quality By Design

Using Your Helix CT Fitting

INS-0011

Disclaimer: Glass Expansion supplies products to customers with the assumption that only qualified individuals who are properly trained in the appropriate procedures will use our products. It is our customer's entire responsibility to safely store, handle and use the products ordered from Glass Expansion. We assume the requisitioner to be experienced, competent, safety conscious professionals. Glass Expansion assumes no liability for any damage or injuries -physical, emotional or mental, arising out of persons incorrectly or inappropriately using or handling our products. We also assume no liability for any damage to an instrument or product from incorrect installation, handling or use of the product by the user.

Ordering Information

Helix CT Locking Screw with Seal

Part Number: 70-803-1439

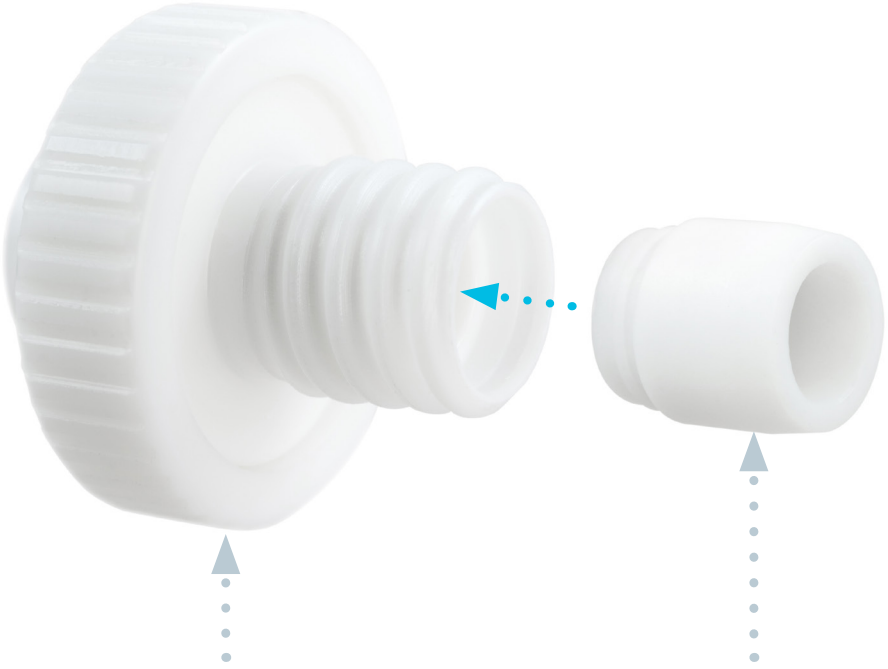
Helix CT Seal (Pkt. 4)

Part Number: 70-803-1456

The Helix CT is a consumable item that will need to be replaced overtime.
To order replacement parts visit: www.geicp.com

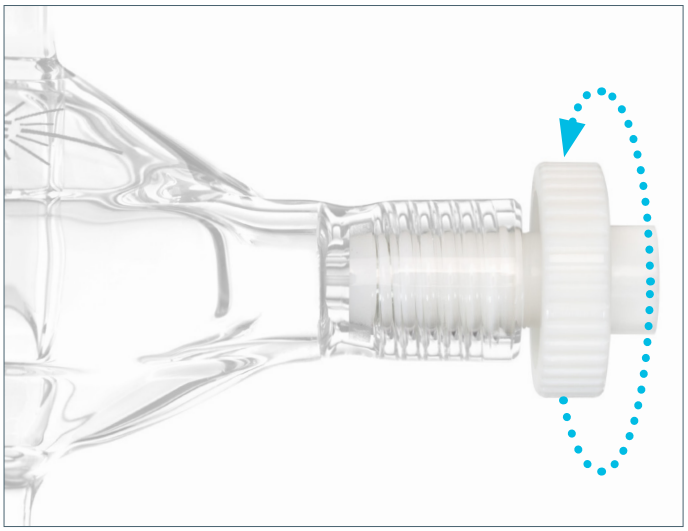
Assembling the Helix CT

Push the Helix CT Seal into the Locking Screw until it clicks into place.



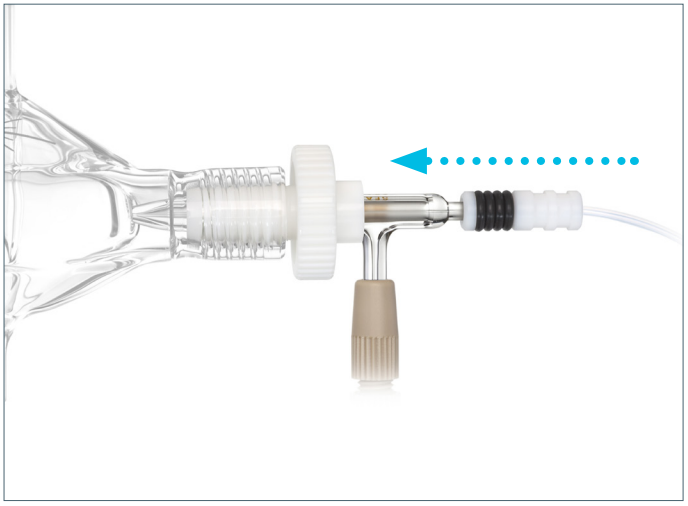
Helix CT Locking Screw Helix CT Seal

Inserting & Removing the Nebulizer



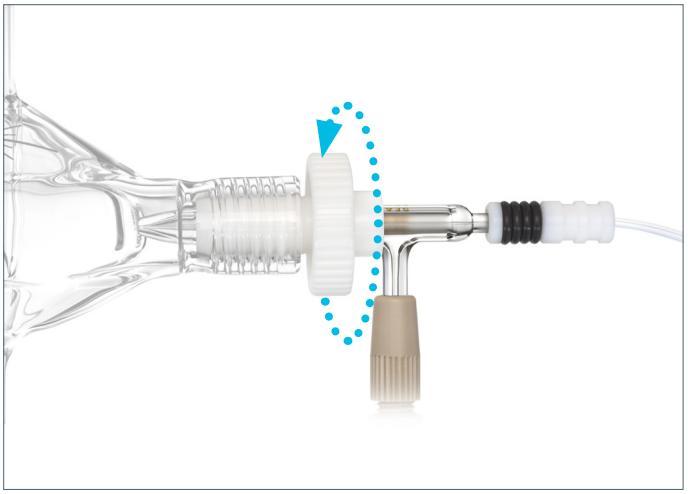
Step 1:

Begin screwing-in your Helix CT fitting (clockwise) until you feel tiny resistance once it reaches the taper seal - do not tighten.



Step 2:

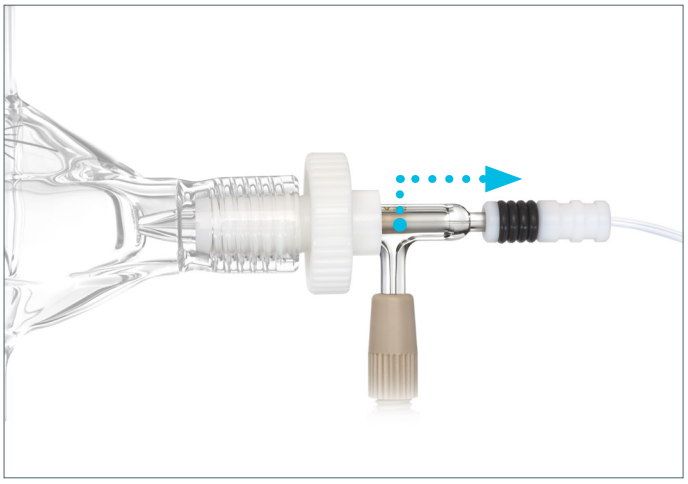
Insert the nebulizer to the end of its travel in the Helix CT fitting.



Step 3:

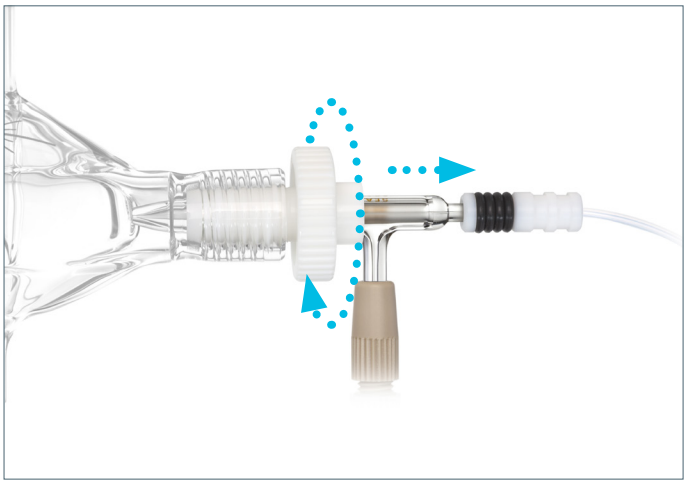
Tighten the nebulizer in place and seal the spray chamber by turning the knurled knob of the Helix CT further clockwise by hand until the ratchet mechanism clicks.

Inserting & Removing the Nebulizer (continued)



Step 4:

Check that the nebulizer is secure by gently pulling on the nebulizer where indicated above.



Step 5:

To remove the nebulizer, first loosen the fitting of the Helix by turning the Locking Screw counter-clockwise 1/2 turn, then slide the nebulizer straight out.

Care and Maintenance of Glass Spray Chambers

HF (hydrofluoric acid) should not be used with glass or quartz. Using any amount of HF will damage the product. Our spray chambers are supplied clean and ready to use. Avoid touching any internal surfaces of the spray chamber as this may damage its wetting properties.

If you notice a degradation in performance (such as poorer precision or detection limits), then clean the spray chamber with Fluka ‘RBS-25’. In the first instance, aspirating a 2.5% Fluka solution for 15 minutes will probably be sufficient to recover the performance. However, if this is not effective, the spray chamber should be soaked overnight in a 25% Fluka solution.

Care and Maintenance of PEEK Chambers

It is good practice to always start and finish use of a spray chamber by nebulizing a mildly acidic blank solution for several minutes. This ensures that the sample deposits or crystals don’t form inside a spray chamber when the solvent inside the chamber dries out. Don’t use metal or ceramic brushes or scraping tools.

If you notice a degradation in performance (such as poorer precision or detection limits), then clean the spray chamber with Fluka ‘RBS-25’. In the first instance, aspirating a 2.5% Fluka solution for 15 minutes will probably be sufficient to recover the performance. However, if this is not effective, the spray chamber should be soaked overnight in a 25% Fluka solution.

Care and Maintenance of Inert Spray Chambers

The PTFE and PFA spray chambers have an internal surface that is specially treated to ensure that it wets evenly and provides consistent drainage. The treatment turns the surface a characteristic brown colour. It should be noted that the treatment actually changes the molecular structure of the PTFE and PFA. It is not a coating and it does not introduce any potential contaminants.

While the surface treatment is long lasting, it may degrade after prolonged use. The lifetime of the treated surface depends on the type of samples used and could range from several months to several years. To ensure that you get the best performance from your PTFE and PFA spray chambers, we recommend the following:

- Do not use H_2O_2 for cleaning the spray chambers as this will accelerate the degradation of the surface.
- Do not make physical contact with the chamber interior surface with any instrument, including your hands or a brush.
- Do not be concerned if the brown colour fades over time. This is normal and does not necessarily lead to a degradation in performance.
- If you notice a degradation in performance (such as poorer precision or detection limits), then clean the spray chamber with Fluka 'RBS-25'. In the first instance, aspirating a 2.5% Fluka solution for 15 minutes will probably be sufficient to recover the performance. However, if this is not effective, the spray chamber should be soaked overnight in a 25% Fluka solution.
- Eventually the surface may degrade to the point where it does not recover after soaking in Fluka. At this point the spray chamber needs to be returned to your supplier where the surface can be re-treated for a nominal cost.
- **IMPORTANT NOTE:** The internal surface of this spray chamber has been specially treated to ensure proper drainage. It is clean, free of contaminants and completely inert. Touching, scratching or damaging the surface in anyway may result in poor performance.

For more information please visit **www.geicp.com** or contact one of our offices below.

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