

USER MANUAL

H303-MINI



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1. XY Stage Compatibility

1 Physik Instrumente: P-7371SL/2SL/5SL.

2 Ludl 99A600

3 It fits in any MW plate holder

2. Components & Dimensions

The Chamber is comprised of the following three **Main Components**:

BL3-CABLE-G: Cable for connecting the Chamber's Base & Lid to the Temperature Control Unit.

Chamber Lid: Heated Glass Lid with Indium Tin Oxide (ITO) conductive coating and an embedded temperature sensor.

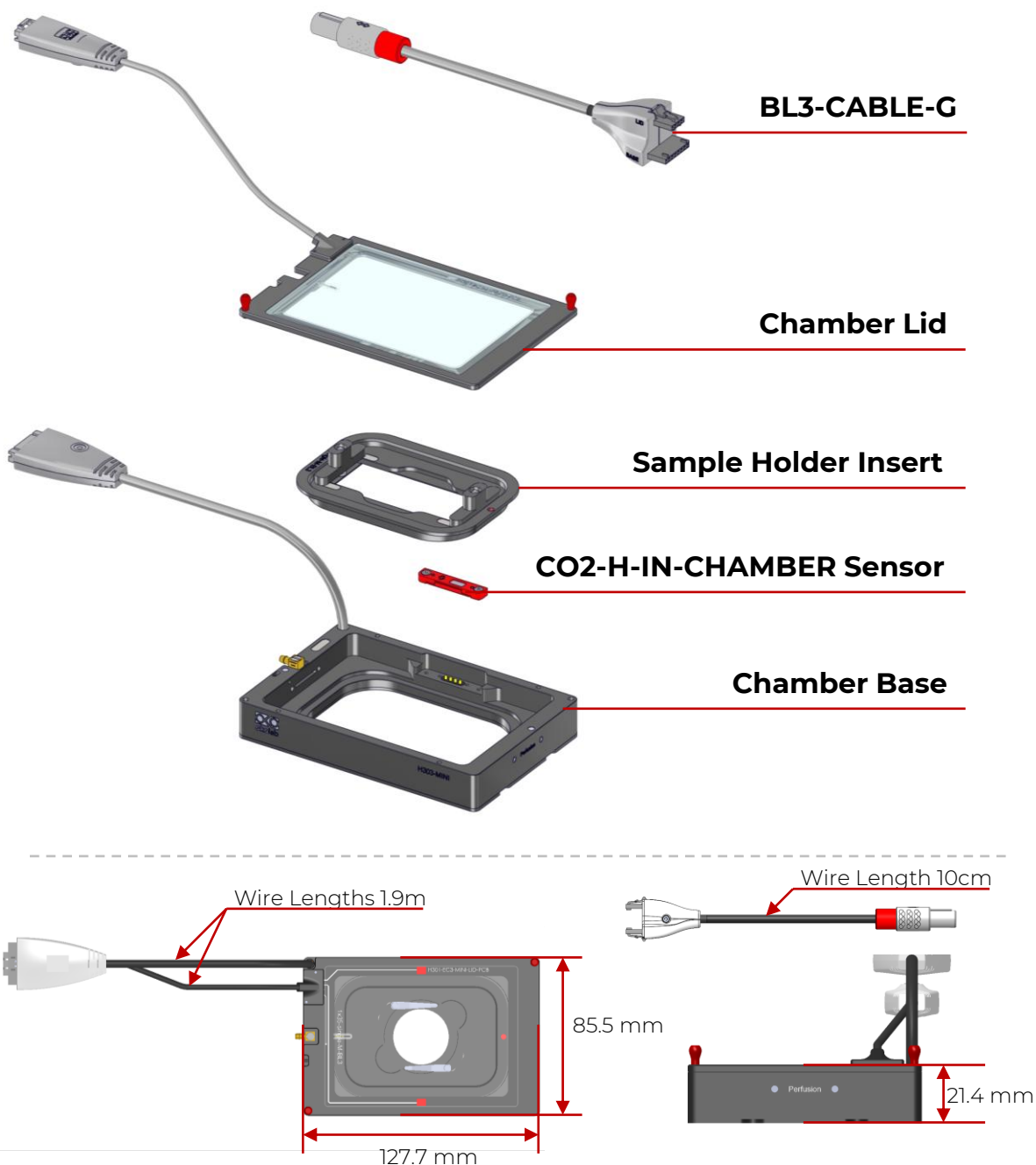
Chamber Base: Chamber main body with an embedded temperature sensor.

The image below illustrates the components and the overall dimensions of the Chamber.

Components Sold Separately:

Sample Holder Insert (necessary component): : Inserts designed to house different sample holders such as 35mm petri dishes, chamber slides etc.

CO2-H-IN-CHAMBER Sensor (optional component): A miniature CO2 and humidity sensor that can be embedded inside the H303-Chamber, ensuring a real time monitoring of your sample. Continuous CO2 and Humidity feedback enhances control accuracy and assure a total sample protection.



3. Available Sample Holder inserts



4. Gas Connector Configurations

The H303-MINI has two configurations of the Gas Connector port. If the standard Gas Connector port hinders the Chamber's insertion into your Piezo stage, then you can opt for a replacement straight connector.



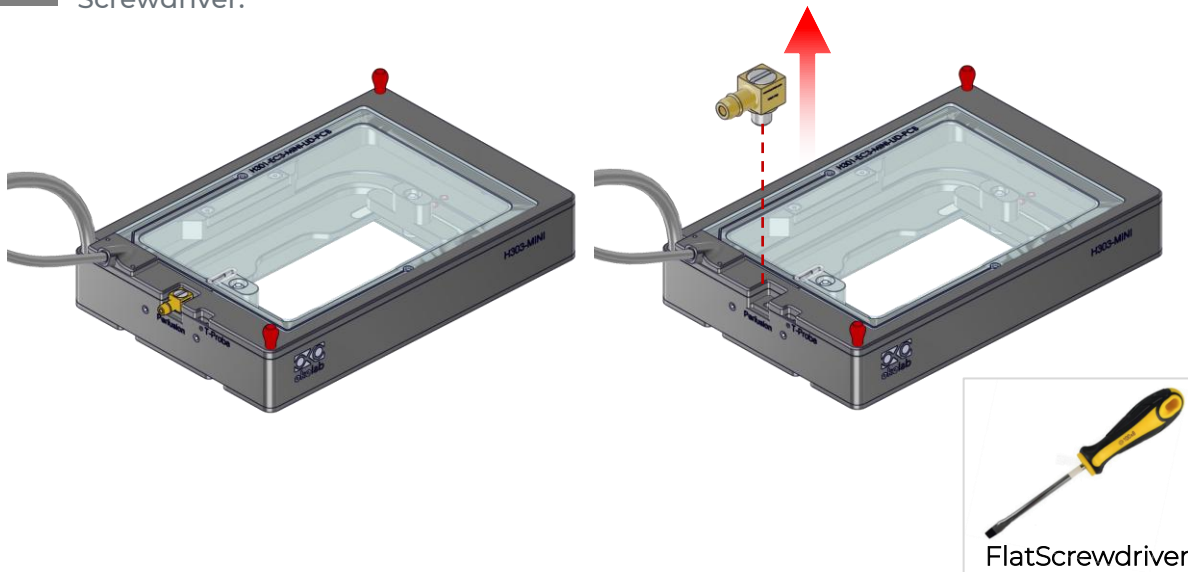
Standard Elbow
Connector



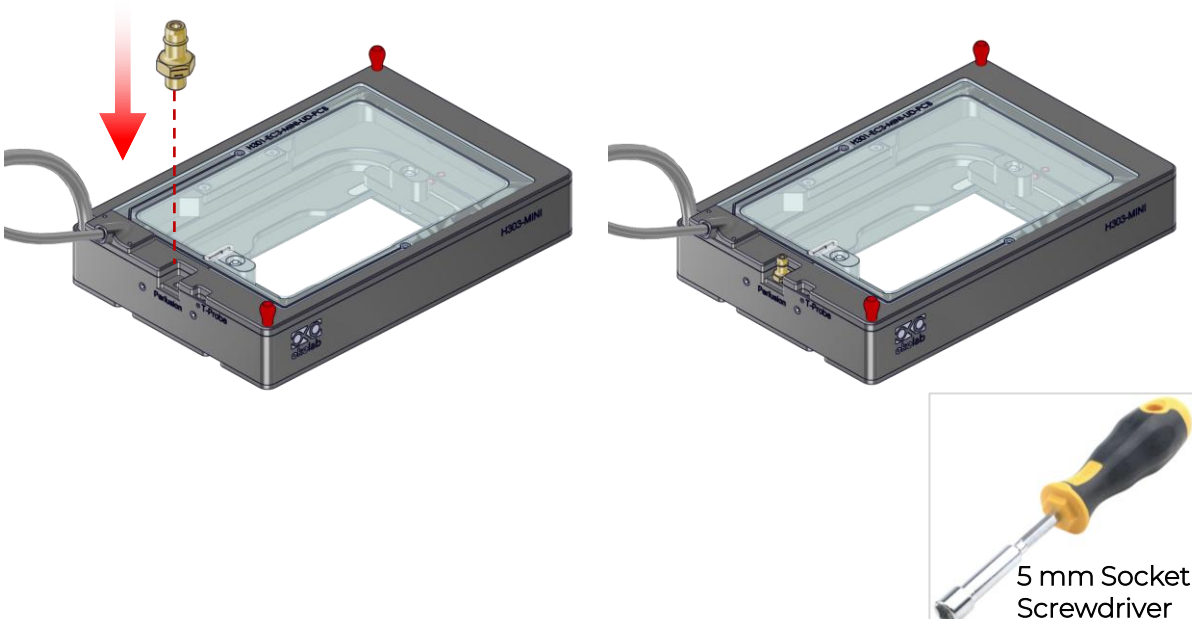
Replacement
Straight Connector

Follow the steps below to replace the Standard Elbow connector with the Replacement Straight Connector:

- 1 Unscrew and Remove the Standard Elbow Connector using a Flathead Screwdriver.



- 2 Insert and fasten the Replacement Straight Connector using a 5mm Socket Screwdriver (Not provided).



5. Mounting the Chamber on to the Stage

The H303MINI fits on the XY Stage without any screws. To fix the chamber on the stage, follow the steps below:

- Place the chamber on the stage
- Slide it in below of the springs until it snaps into the housing.

1



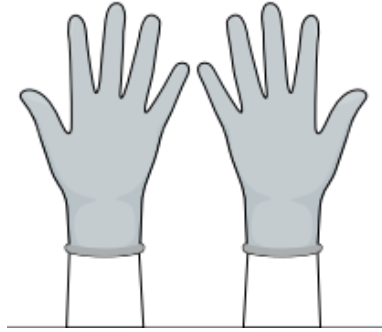
2



6. Mounting the CO2-H-IN-CHAMBER Sensor

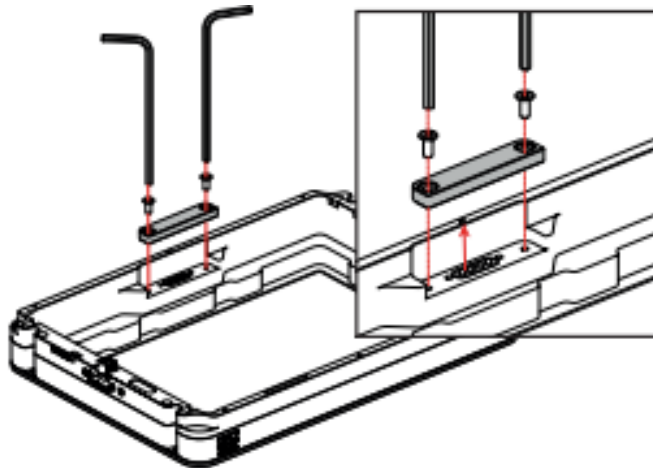
The H303-MINI is compatible with the CO2-H-IN-CHAMBER SENSOR (optional) for in chamber closed loop control on CO2 and Humidity.

To manage the CO2-H-IN-CHAMBER SENSOR please wear the antistatic gloves.

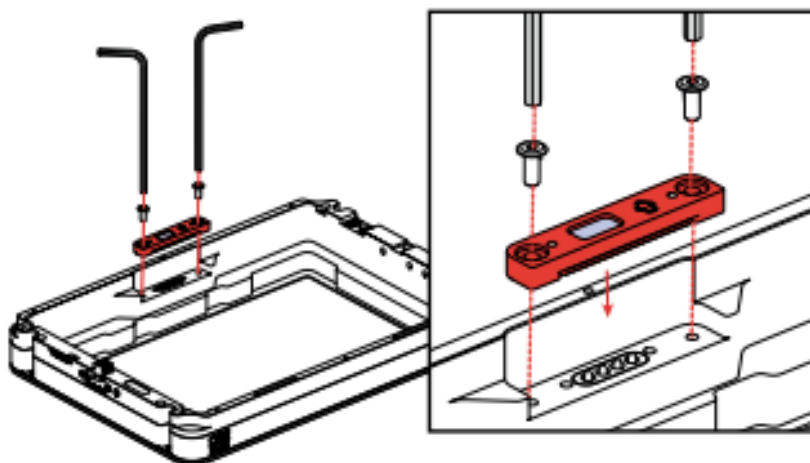


To mount the CO2-H-IN-CHAMBER SENSOR into the chamber, please follow the steps below:

- 1** Remove the cap by using the hexagonal key. Re-place the cap in dedicated slot every time the sensor isn't mounted on.



- 2** Install the CO2-H-IN-CHAMBER Sensor inside the chamber by using the hexagonal key.



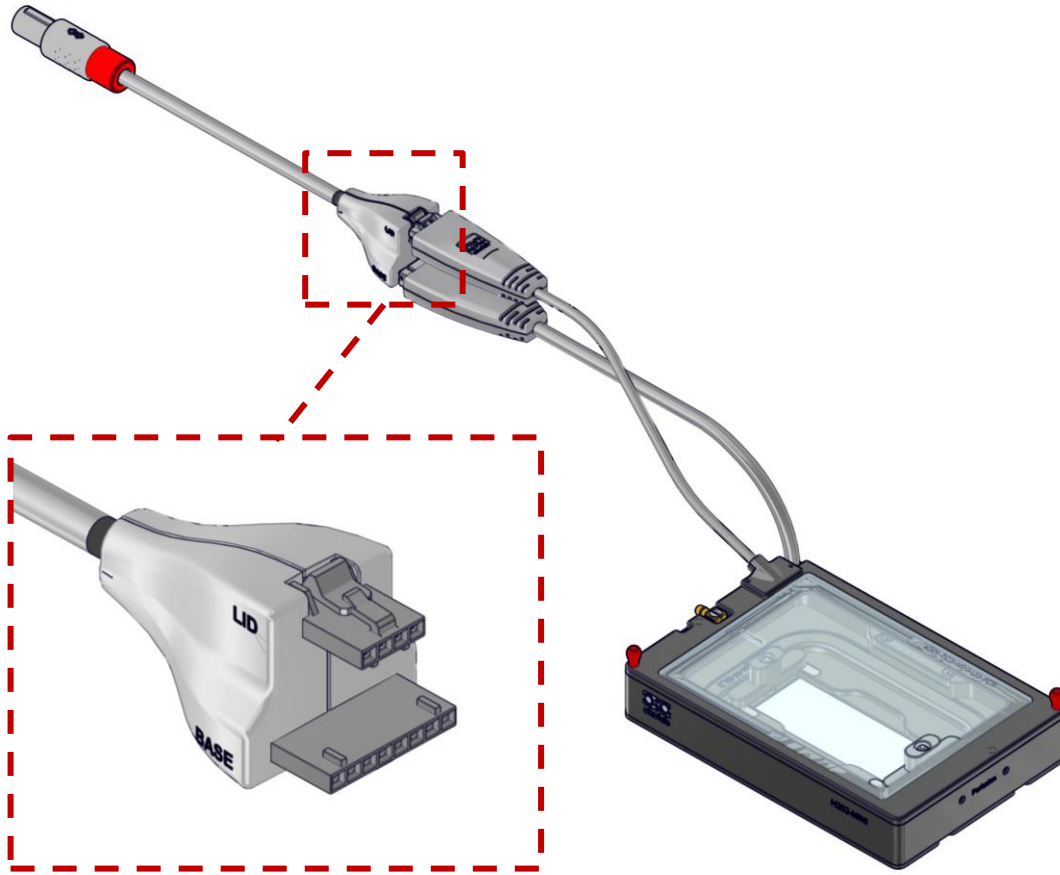
1.27 mm Allen key.

7. Chamber Connections

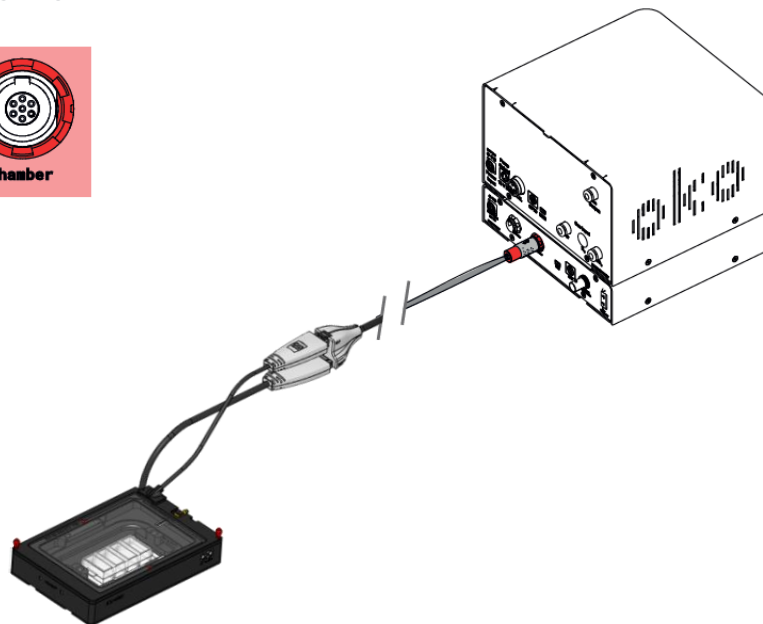
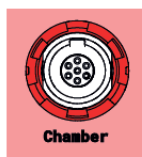
7.1 Electrical Connection

Connection to the Temperature Control Unit:

Connect the Top Stage chamber's Base and Lid cables to the BL3-CABLE-G, with the Lid and Base connection ports labelled.



Connect the Top Stage chamber cable to the port labelled 'Chamber' on the rear panel of the H303-T-UNIT-BL

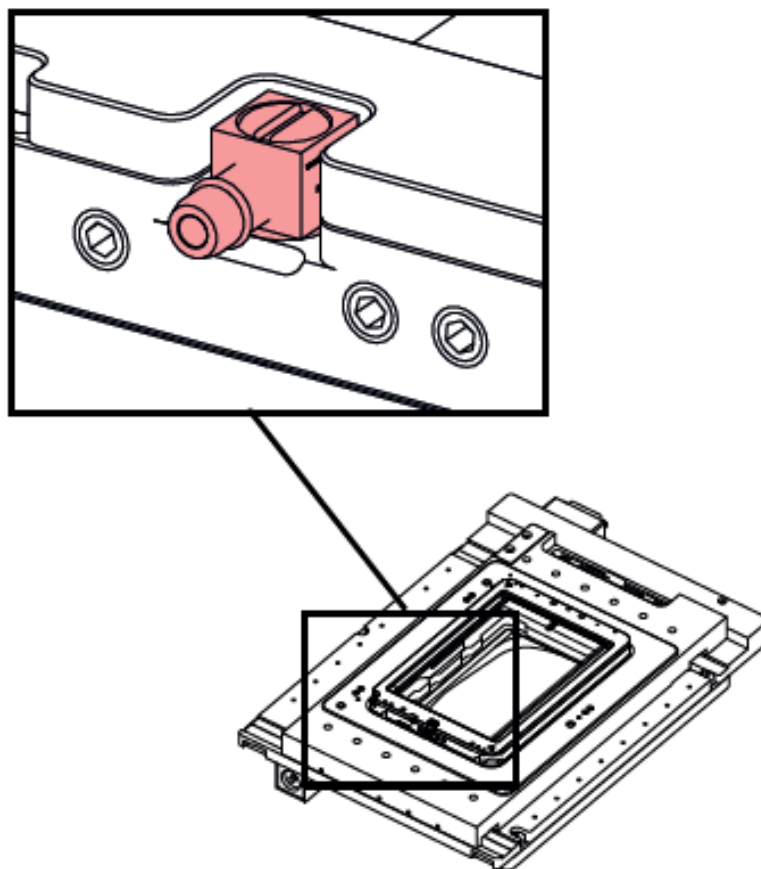


7. Chamber Connections

7.2 Gas Connection

Connection to the Gas Supply:

Connect the Gas Output tube from the Gas control unit or the Heated Tube from the HM-ACTIVE module to the Gas input connector of the chamber.



8. Sample Holder Insert Usage

8.1 Working with Petri Dishes- Magnetic Locks & Spacing Rings

Magnetic locks prevent movement of 35 and 60 mm dishes inside the sample holder. The image below illustrates the available magnetic locks for 35 and 60 mm dishes. Threaded magnetic posts allow adjusting holder's height.



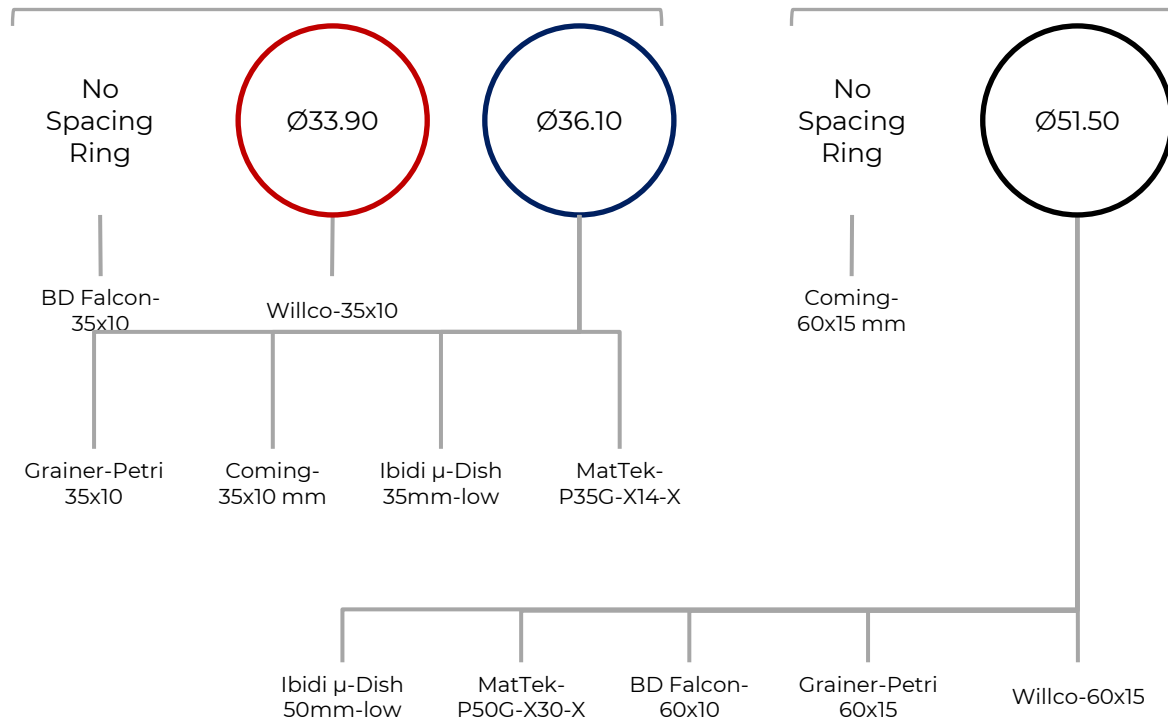
Spacing rings accounting for variability in dish diameter from one manufacturer to another are also included. Figure below shows how to position the ring.

NOTE: Spacing rings do not block the petri inside its accommodation, but they are designed to center the petri with respect to the observation circular window.



Ring Selection for 35mm Dishes

Ring Selection for 60mm Dishes

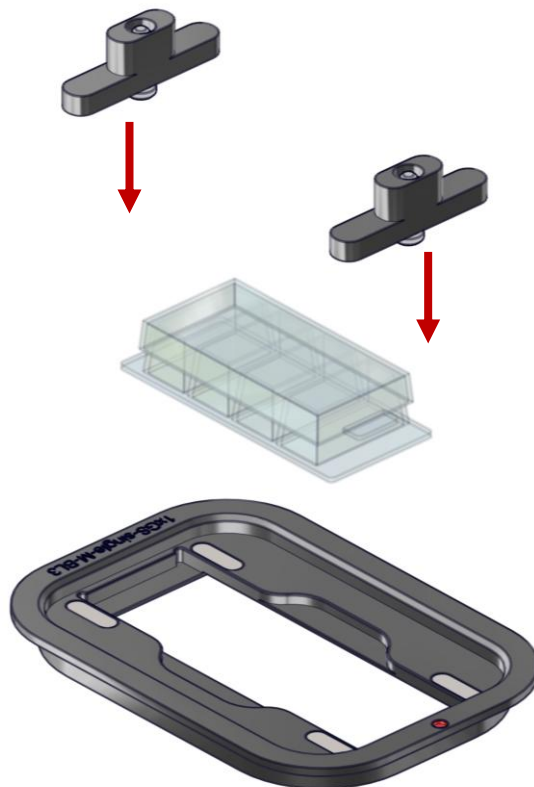


8. Sample Holder Insert Usage

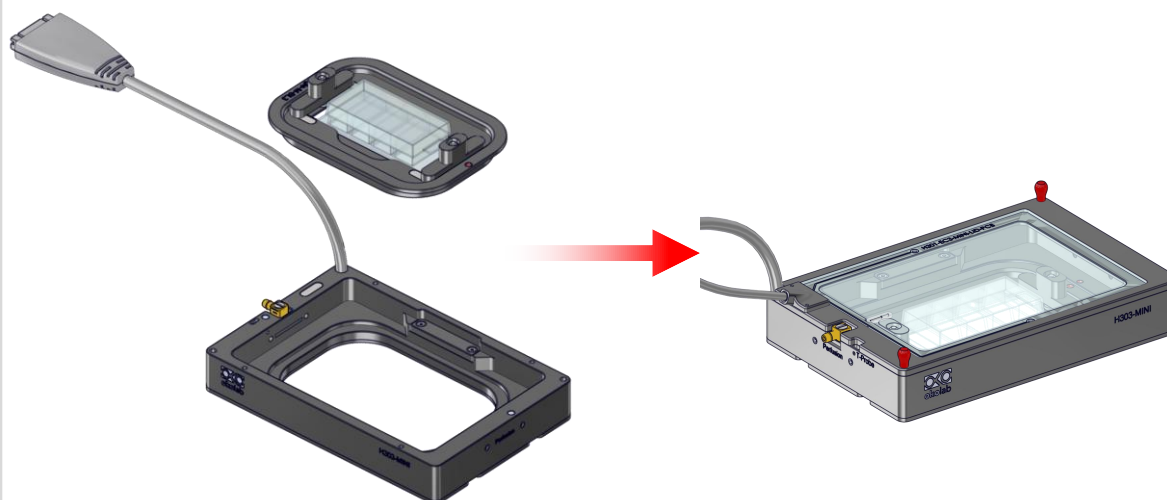
8.2 Working with Chamber Slides- Magnetic Locks

The Magnetic locks prevent movement of the chamber slides inside of the sample holder.

NOTE: Magnetic locks are included with sample holder.

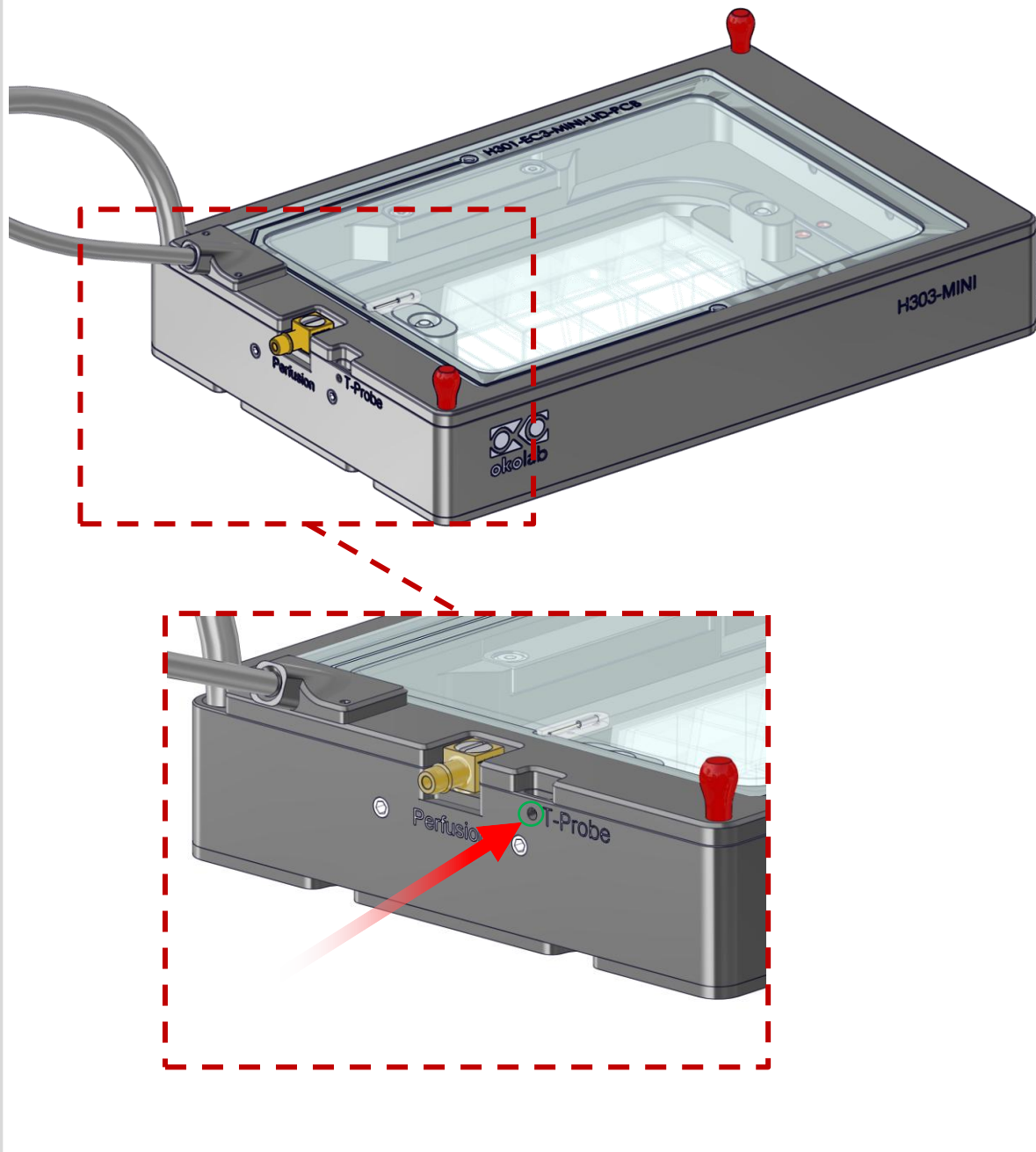


To insert the sample holder into the Chamber simply insert it vertically into the chamber and close the lid after placing it inside.



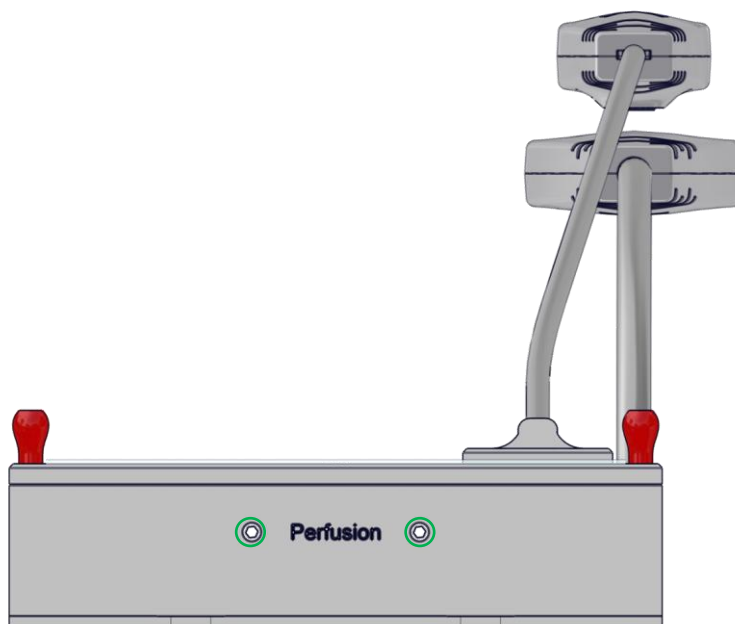
9. Insertion of T Sensor into the Chamber

Insert the Sample Feedback Temperature Sensor through the dedicated opening (labelled as 'T Probe') located on the H303-MINI as illustrated below:

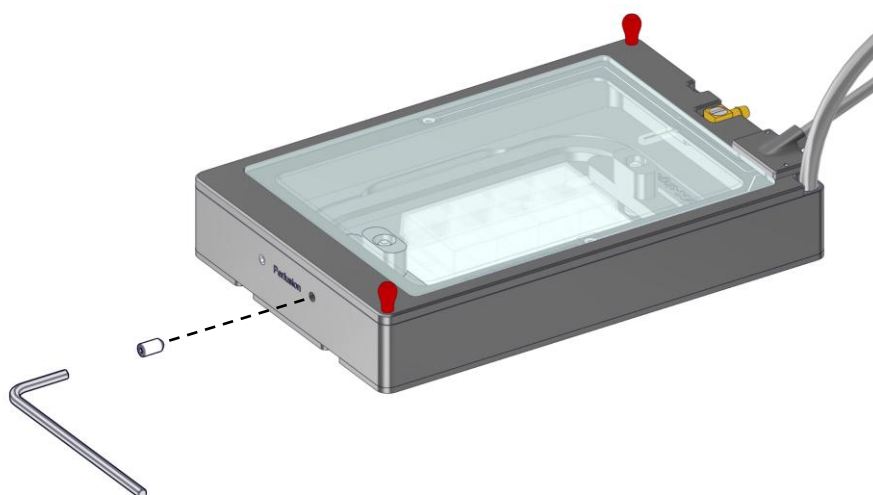


10. Working with Perfusion

The H303-K-Frame consists of 4 holes provided on the shorter edge of the chamber. These holes have been designed to remain closed, if you wish to utilize any of the 4 holes you can simply, Remove small screws with a 1.5 mm Allen key.



2 holes available on opposite edges



1.5 mm Allen key for opening the perfusion holes.

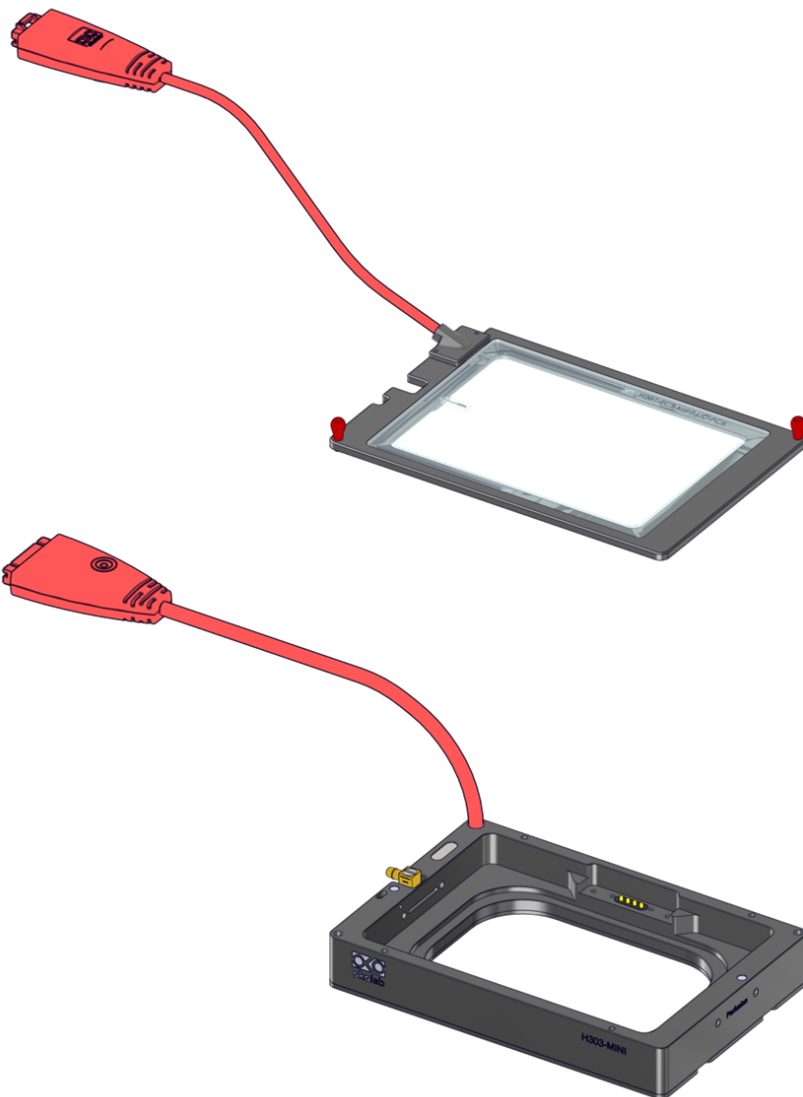
11. Chamber Handling & Cleaning

When cleaning the Lid's Glass, avoid spraying liquid directly on the glass, rather dampen a microfiber cloth and use it to clean the glass.



11. Chamber Handling & Cleaning

- 2 During the cleaning of the Chamber Base, It's crucial to isolate the wire to avoid any mishaps that could damage them. Keep the wire away from the cleaning solution and focus on cleaning the plate surface effectively.



12. Support

To contact one of our engineers please see below, contact us through the live chat on www.oko-lab.com. You can request a remote support session anytime, also via video chat. You can reach out to us on the following emails:

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