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1. XY Stage Compatibility

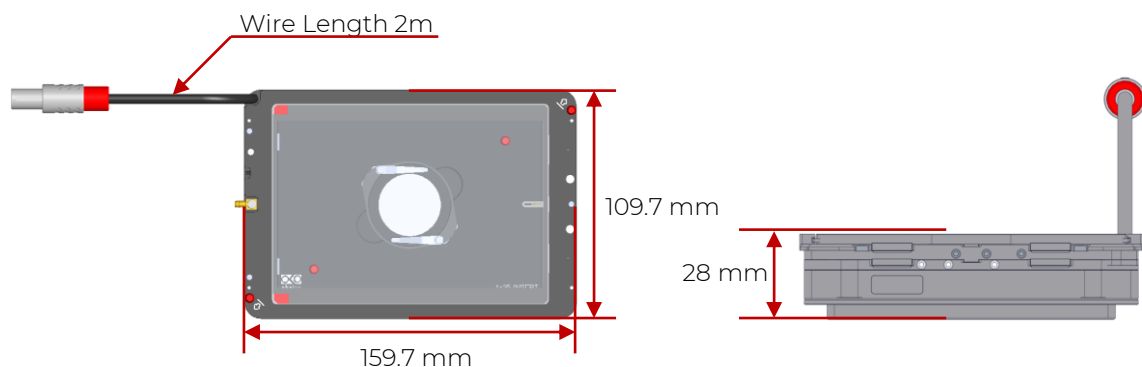
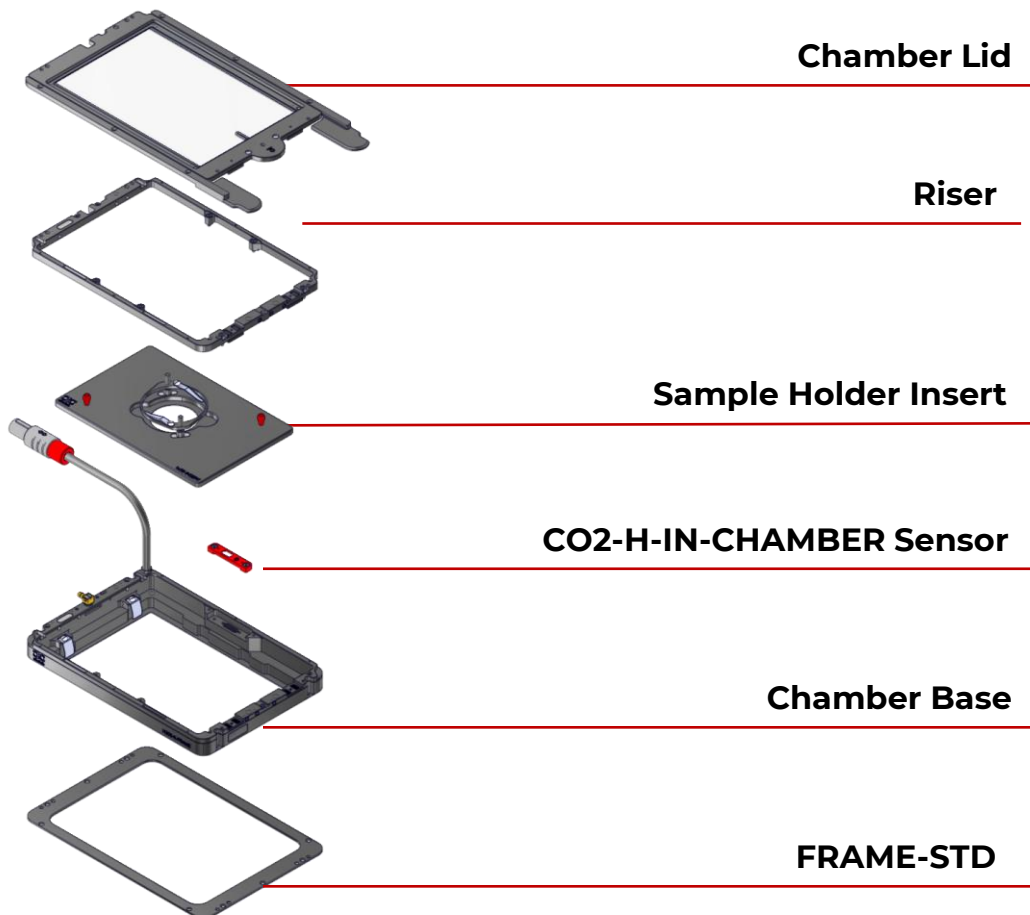
- 1 ASI: All models, including z-piezo.
- 2 Leica: All models with 160 x 110 opening
- 3 Ludl: All models with 160 x 110 opening
- 4 Marzhauser: All models
- 5 Olympus: All models with 160 x 110 opening
- 6 Prior H107
- 7 Zeiss: All models with 160 x 110 opening

2. Components & Dimensions

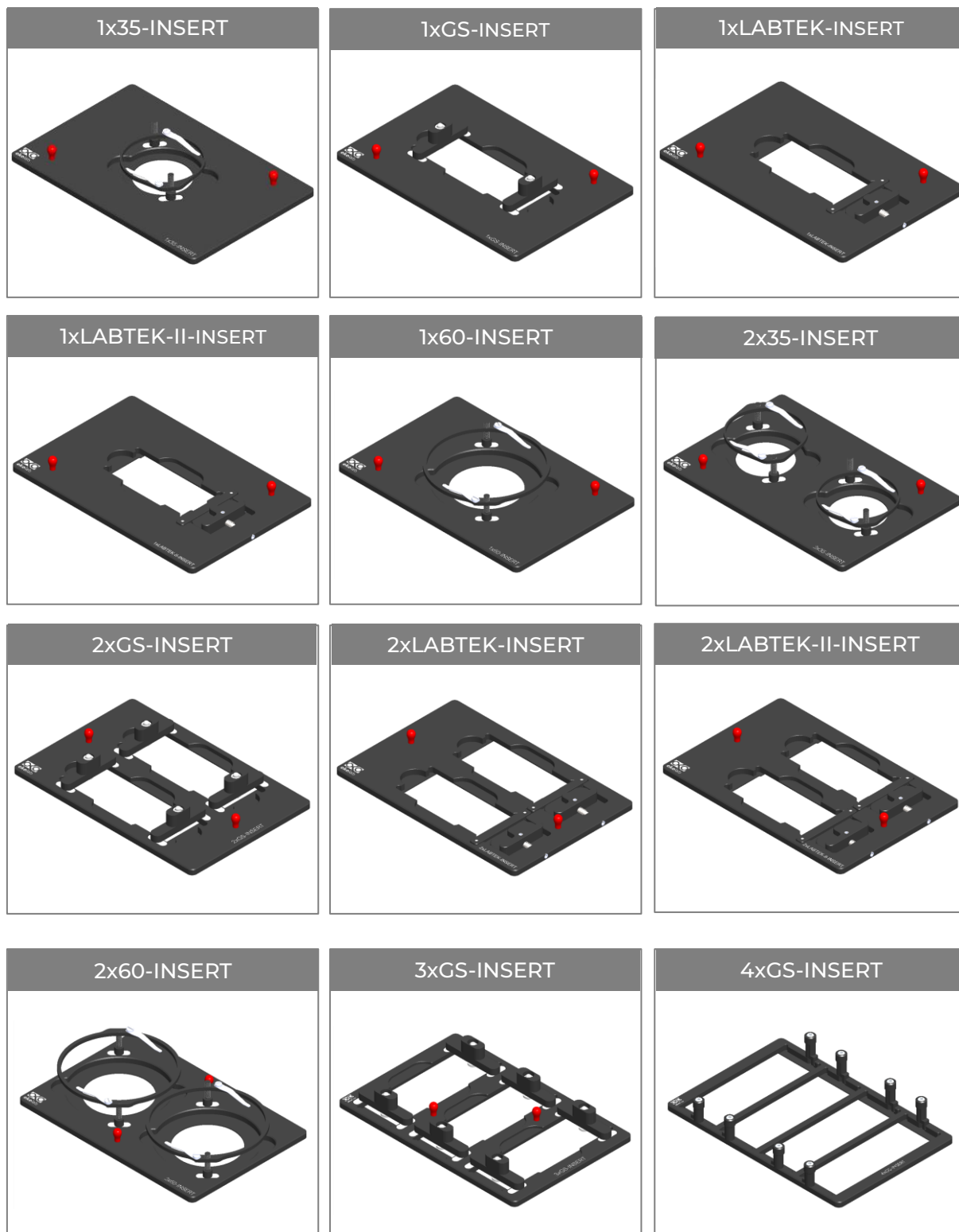
The Chamber is comprised of the following six main components:

- **Chamber Lid:** Heated Glass Lid with Indium Tin Oxide (ITO) conductive coating and an embedded temperature sensor.
- **Riser:** it elevates the base to accommodate the multiwell plates thicker than 16mm.
- **Sample Holder Insert** (optional): Inserts designed to house different sample holders such as 35mm petri dishes, chamber slides etc.
- **CO₂-H-IN-CHAMBER Sensor** (optional): 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.
- **Chamber Base:** Chamber main body with an embedded temperature sensor.
- **FRAME-STD:** bottom frame to fix the chambers on Ludl, Marzhauser, Prior, Nikon stages

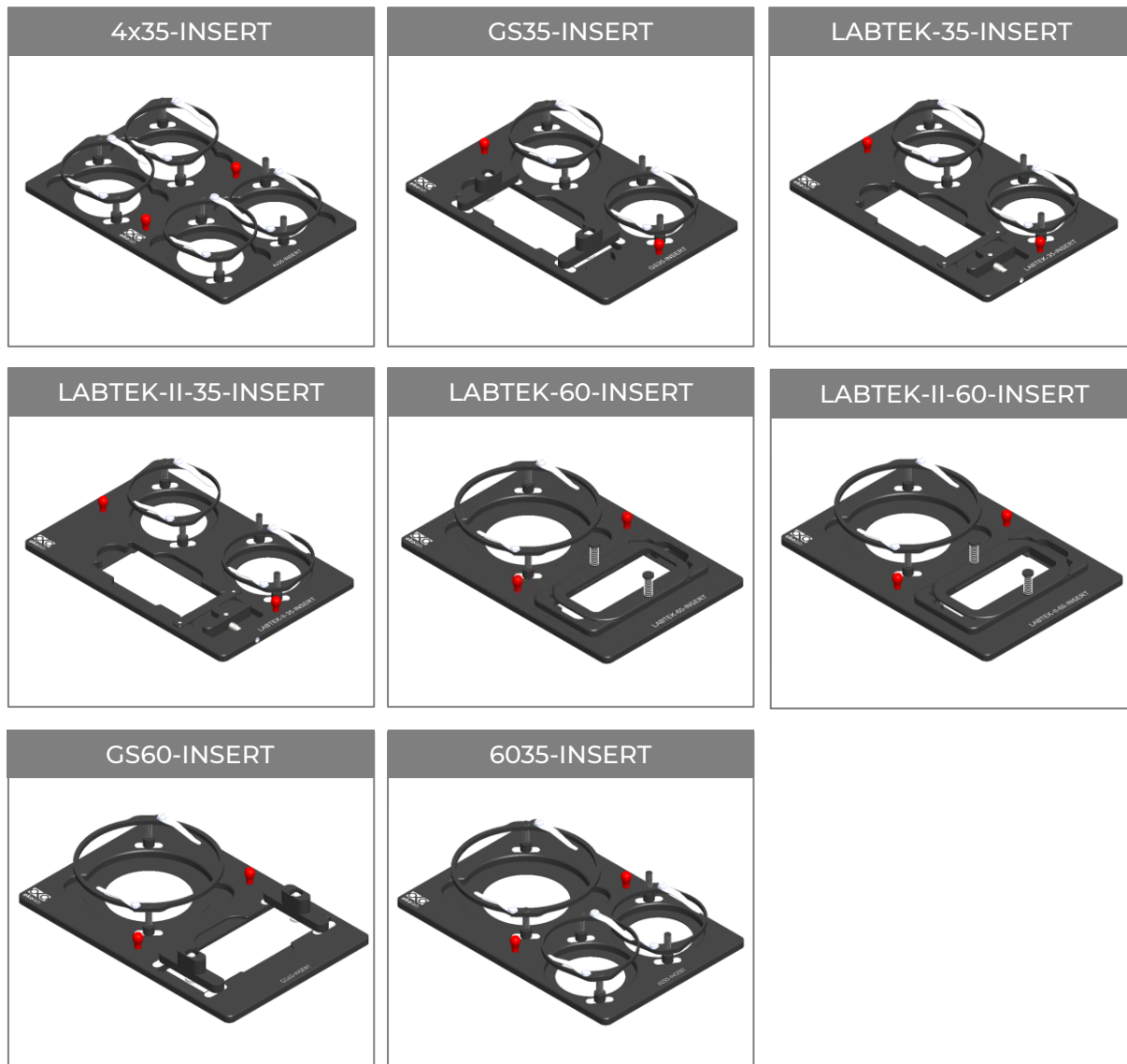
The image below illustrates the components and the overall dimensions of the Chamber.



3. Available Sample Holder inserts



3. Available Sample Holder inserts

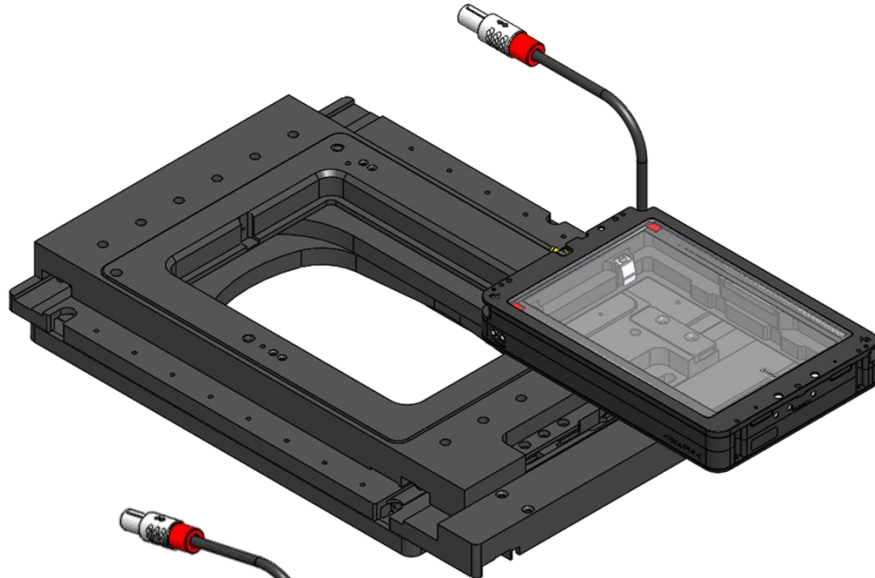


4. Mounting the Chamber on to the Stage

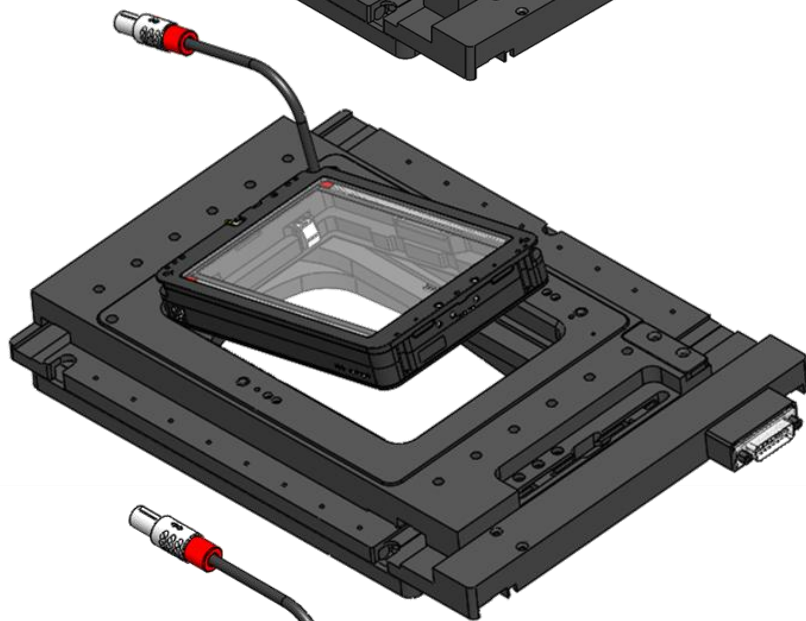
The H303-K-FRAME fits on the XY Stage without any screws. To fix the chamber on the stage, follow the steps below:

- Place the chamber on the stage
- Incline the chamber and,
- Slide it in direction of the springs until it snaps into the housing.

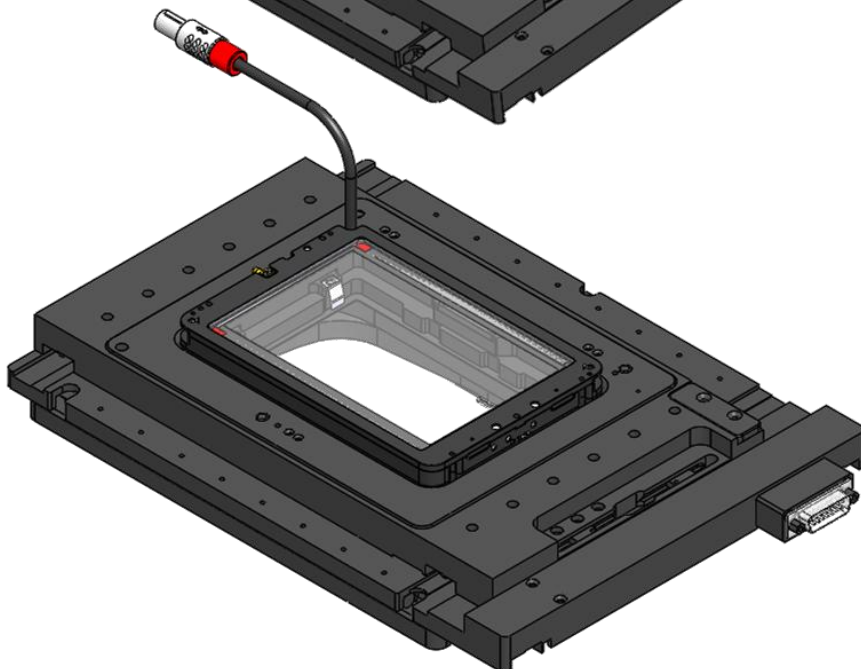
1



2



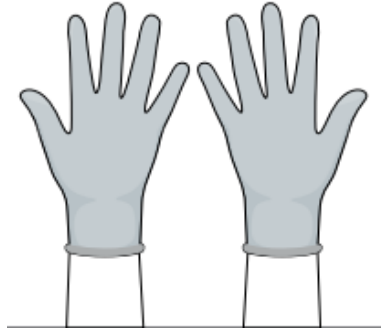
3



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

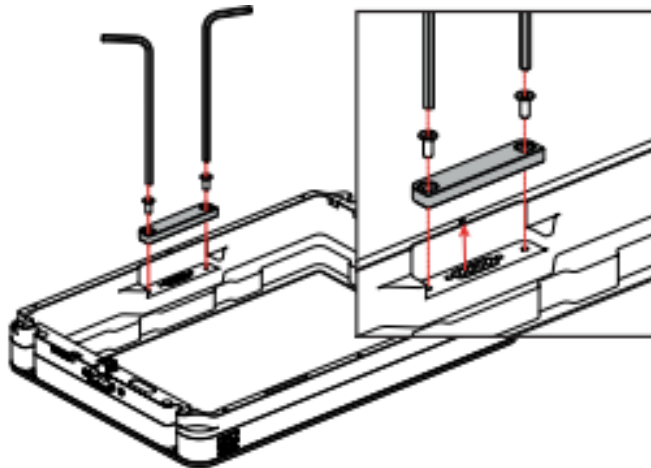
The H303-K-FRAME is compatible with the CO2-H-IN-CHAMBER SENSOR (optional) for in chamber closed loop control on CO2 and Humidity.

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

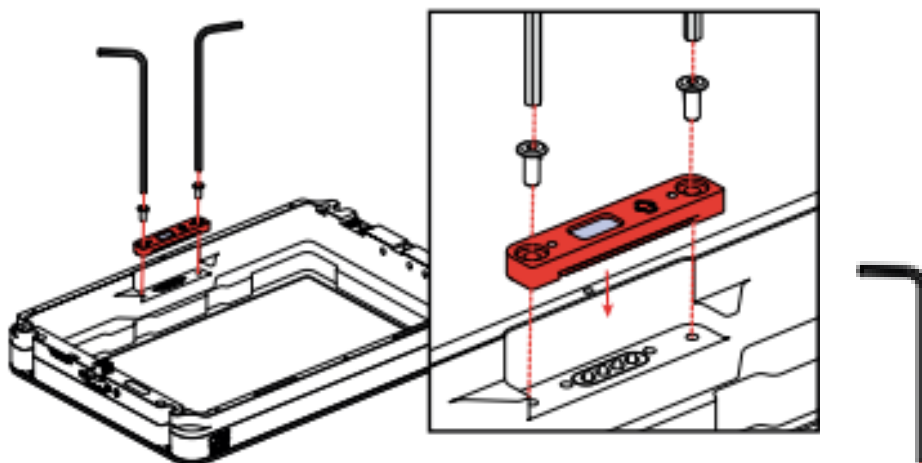


To mount the CO2-H-IN-CHAMBER SENSOR into the chamber, please follow the steps below:

- 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.

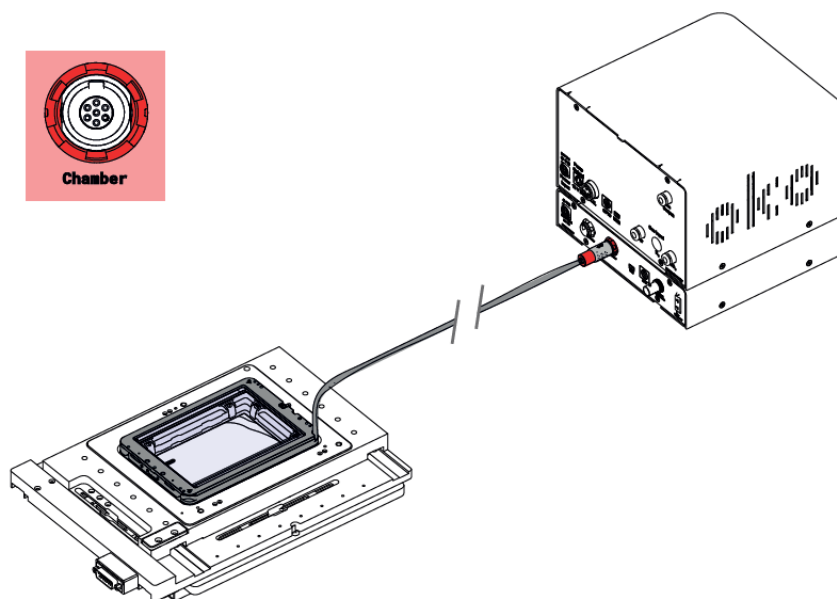


1.27 mm Allen key.

6. Chamber Connections

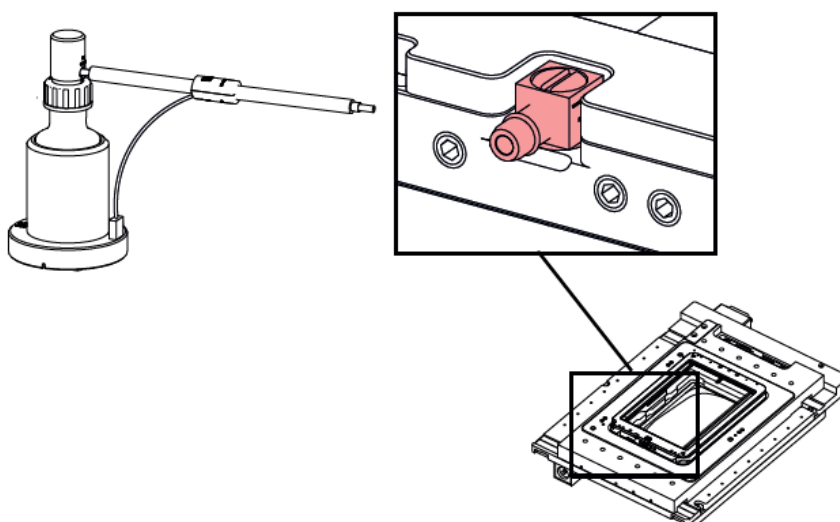
Connection to the Temperature Control Unit:

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



Connection to the Gas Supply:

Connect the Heated Tube from the HM-ACTIVE module to the Gas input connector of the chamber.



7. Sample Holder Insert Usage

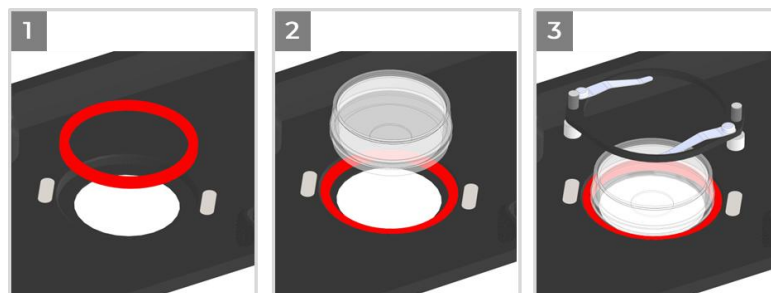
7.1 Working with Petri Dishes- Magnetic Locks & Spacing Rings

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.



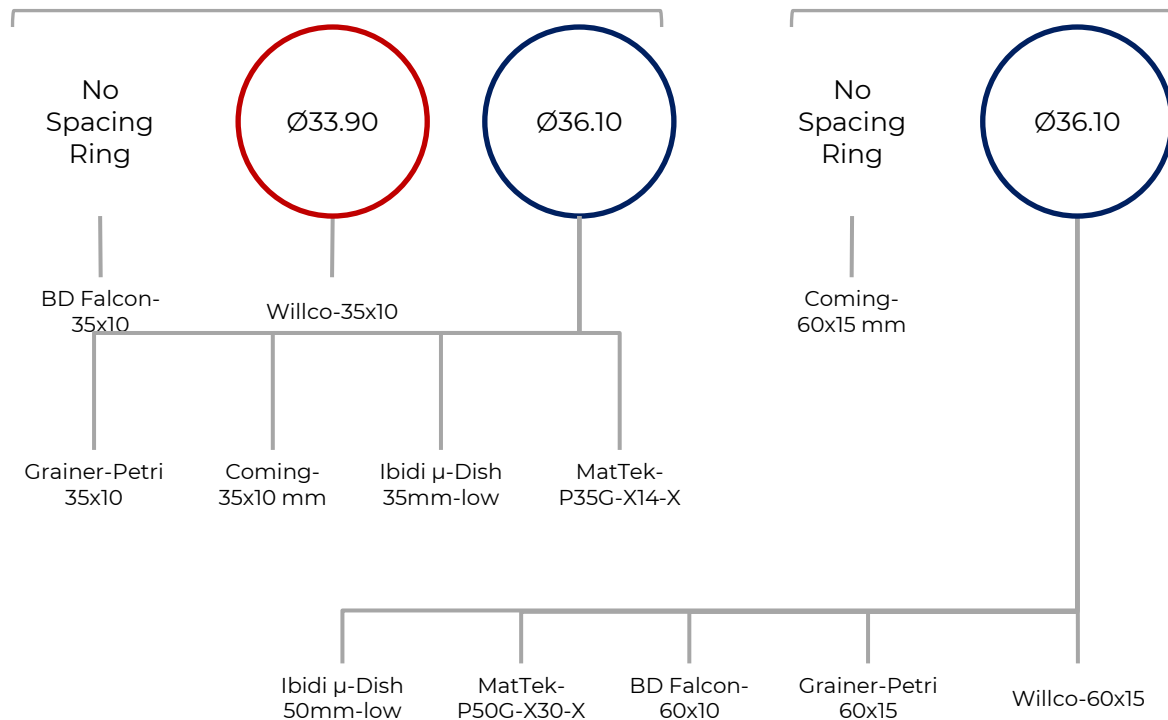
Spacing rings accounting for variability in dish diameter from one manufacturer to another are also included. Figure below shows how to position the ring.

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

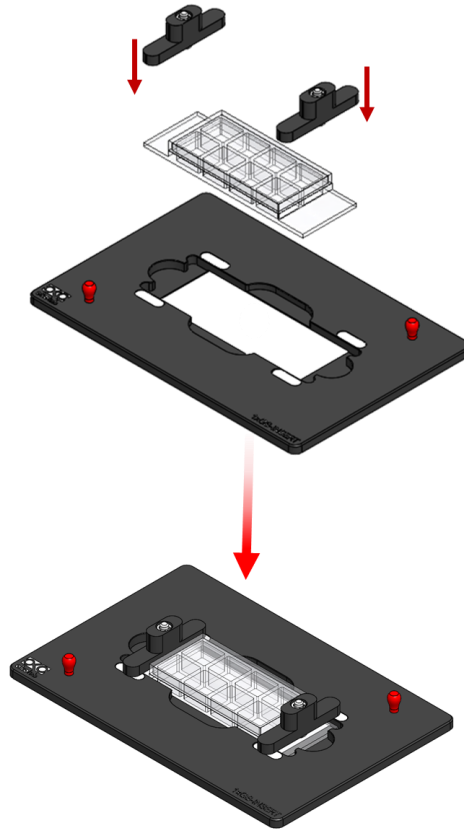


7. Sample Holder Insert Usage

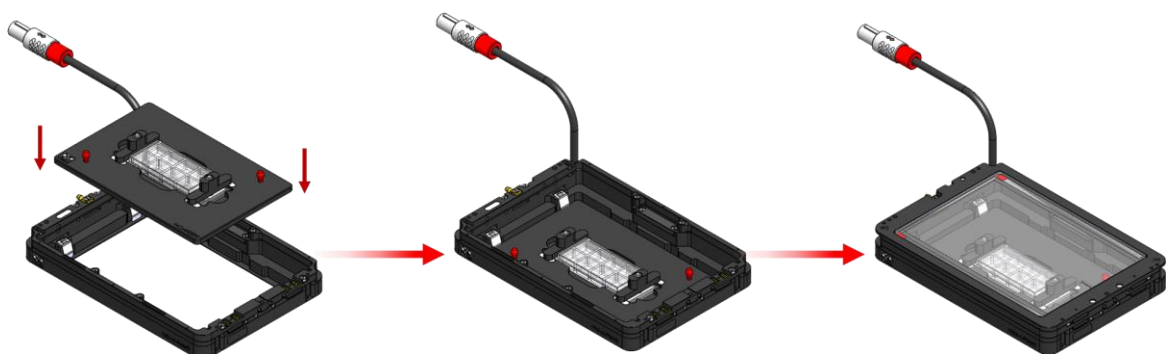
7.2 Working with Chamber Slider- Magnetic Locks

The Magnetic locks prevent movement of 1"x 3" and 1"x 2" chamber slides inside of the sample holder.

NOTE: Magnetic locks are included with sample holder.



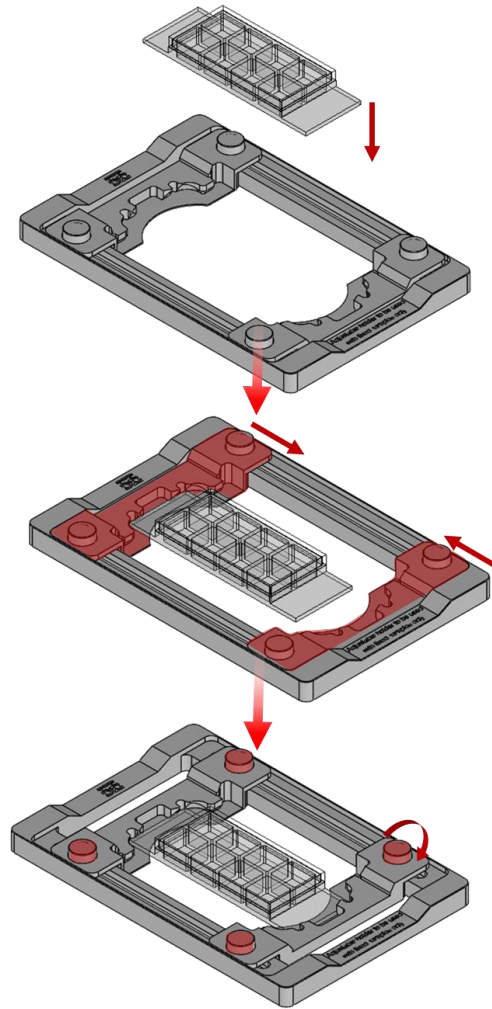
To insert the sample holder into the Chamber simply insert it vertically into the chamber and close the lid after placing it inside.



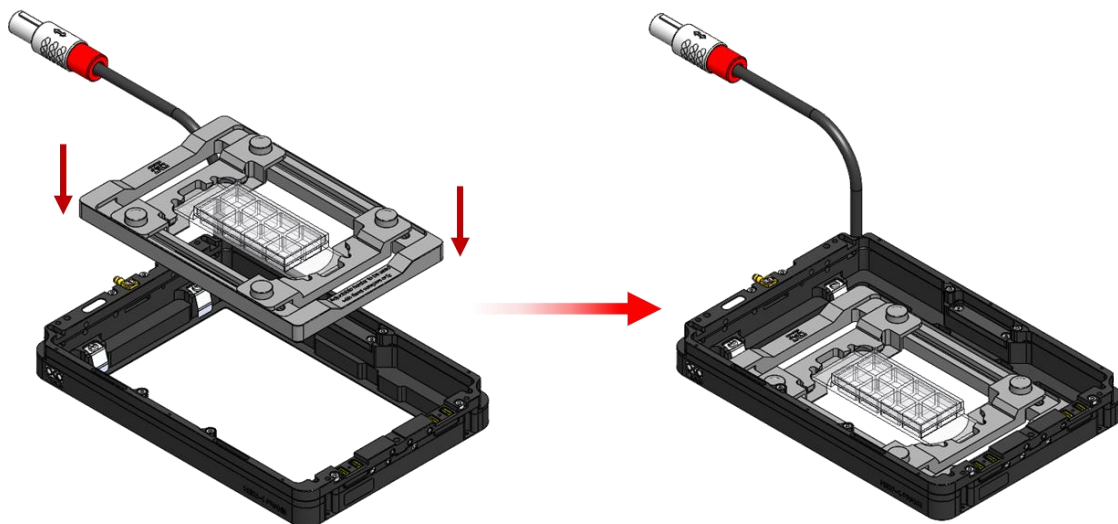
7. Sample Holder Insert Usage

7.3 Working with Fixed Samples

When working with fixed samples, you can utilize the Adjustable Grey Universal Sample Holder with the sample mounted on it in the following way. This adjustable holder can fit directly into the H303-K-Frame chamber and you may simply take out the current Sample Holder Insert and replace it with this adjustable holder rather than taking out the entire chamber from the stage.

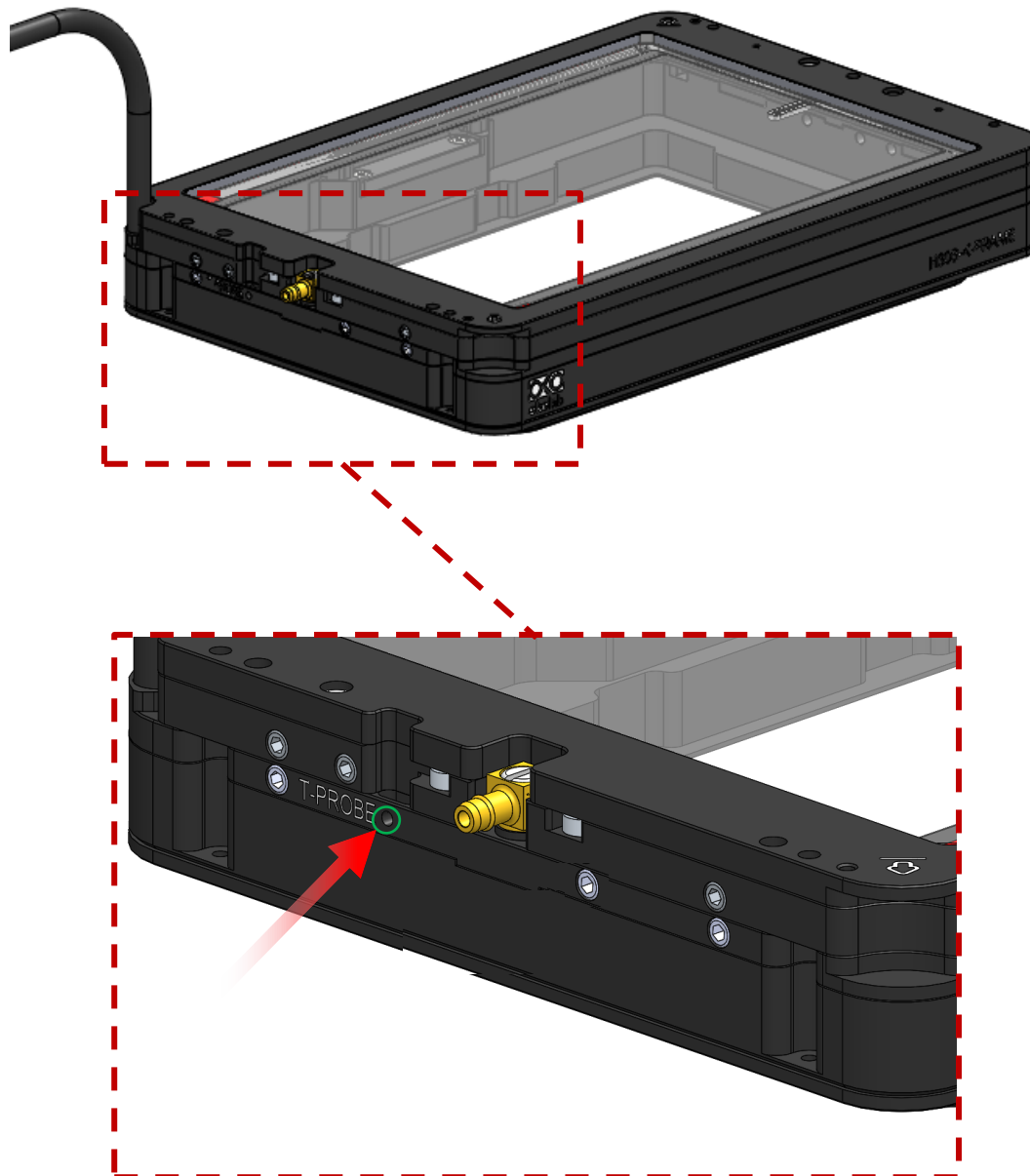


To insert the fixed sample holder into the Chamber simply insert it vertically into the chamber.



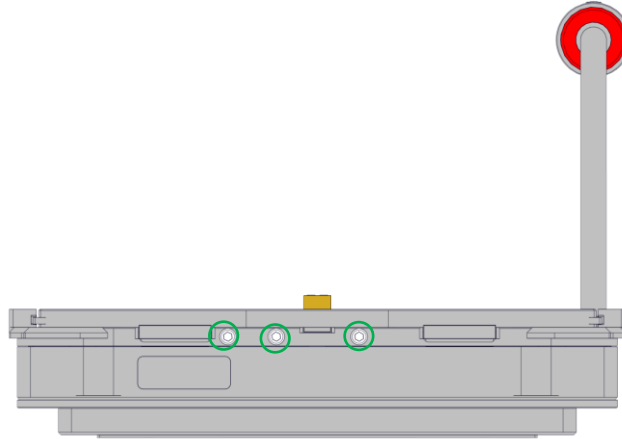
8. Insertion of T Sensor into the Chamber

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

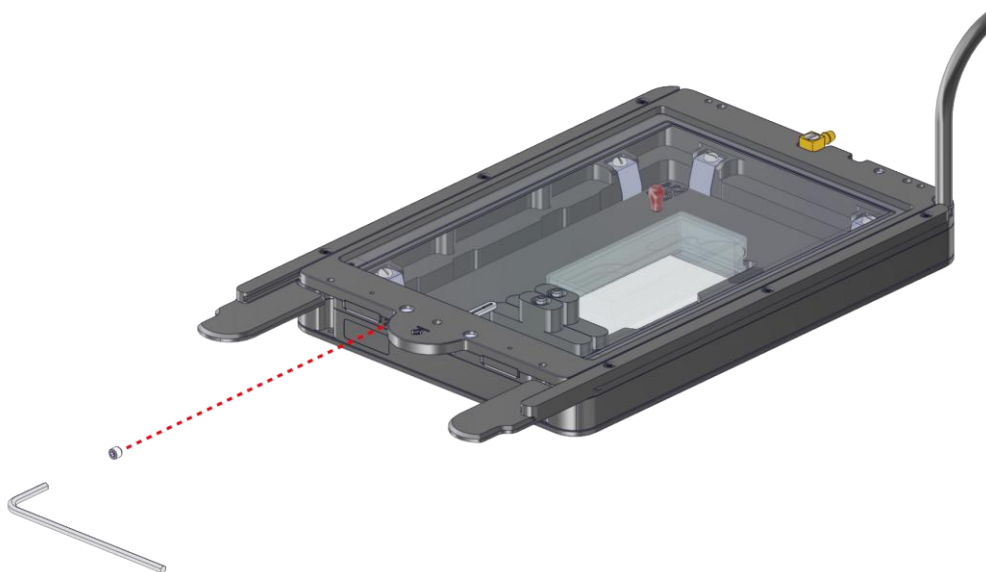


9. Working with Perfusion

The H303-K-Frame consists of 6 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 6 holes you can simply, Remove small screws with a 1.5 mm Allen key.



3 holes available on opposite edges



1.5 mm Allen key for opening the perfusion holes.

10. Working with Stage Adapters

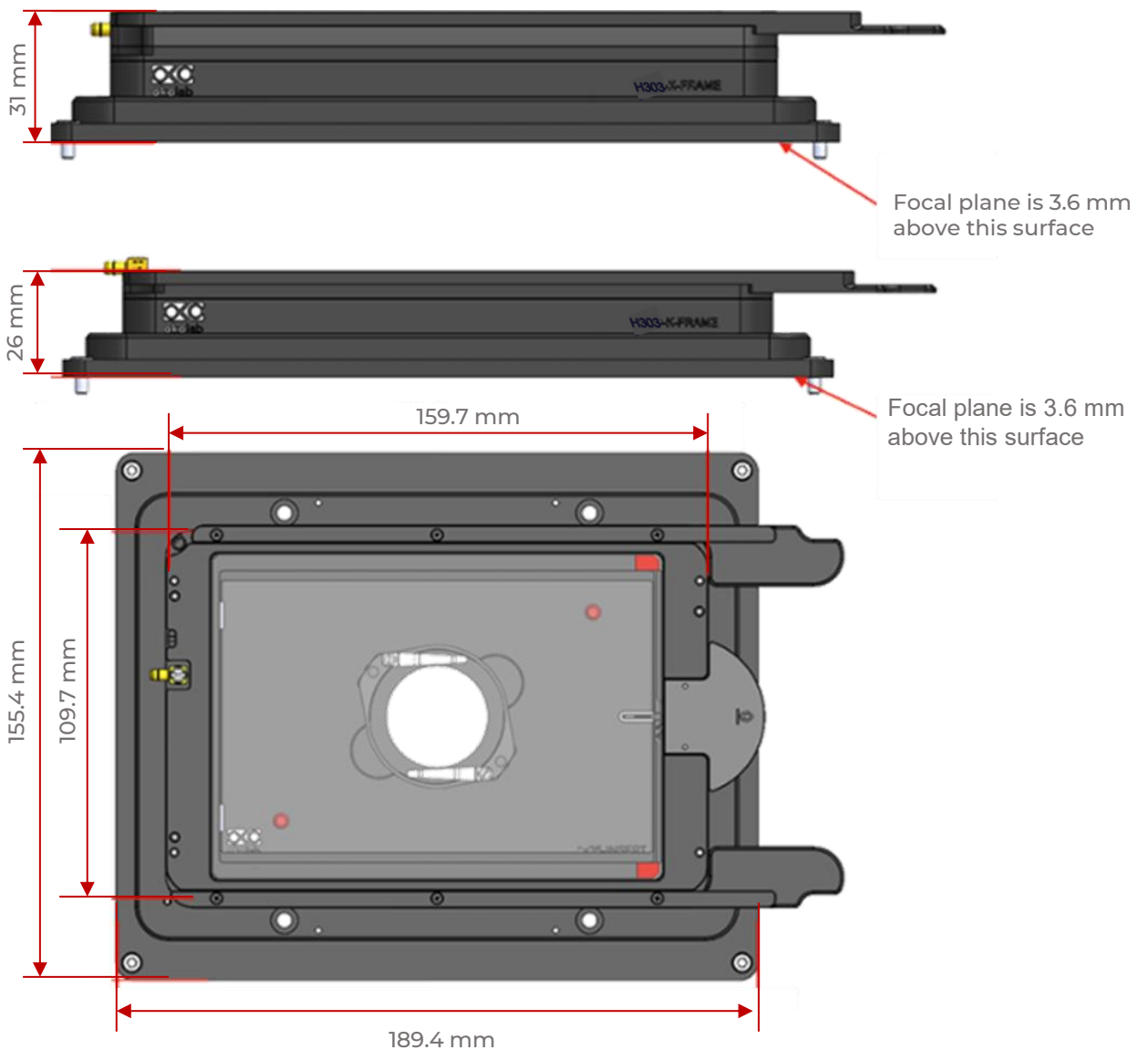
10.1 Working with SVR-PA

It is possible to purchase dedicated adapters to ensure compatibility of the chambers with alternative stage configurations.

- **SVR-PA:** stage adapter to fit K-FRAME chambers into IX3-SVR, IX3-SVL, GX-SVR, GX-SFR, IX3-SSU and IX5-SSA stages



The overall dimensions of the chamber are:



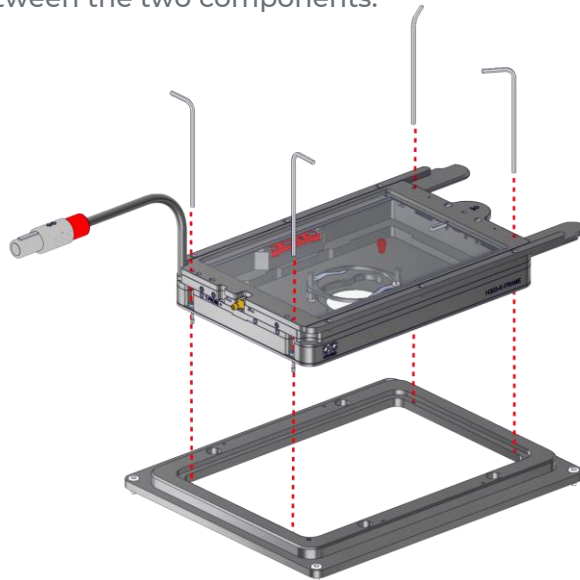
10. Working with Stage Adapters

10.1 Working with SVR-PA

- 1 To mount H303-K-FRAME on SVR-PA please incline the chamber and slide it in direction of the springs until it snaps into the housing.

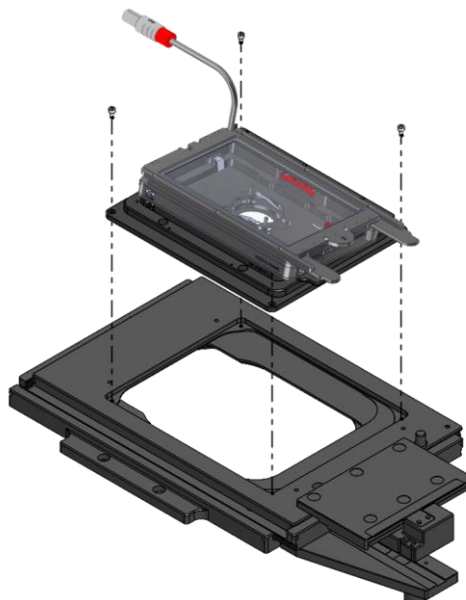


- 2 Then tighten the 4 M2 captive screws (Threaded length 2.5mm; Overall stem length 6mm) to securely fasten the adapter to the chamber, ensuring proper contact between the two components.



1.5 mm Allen key.

- 3 To mount the adapter on your stage please screw the 4 M3X6 screws.



10. Working with Stage Adapters

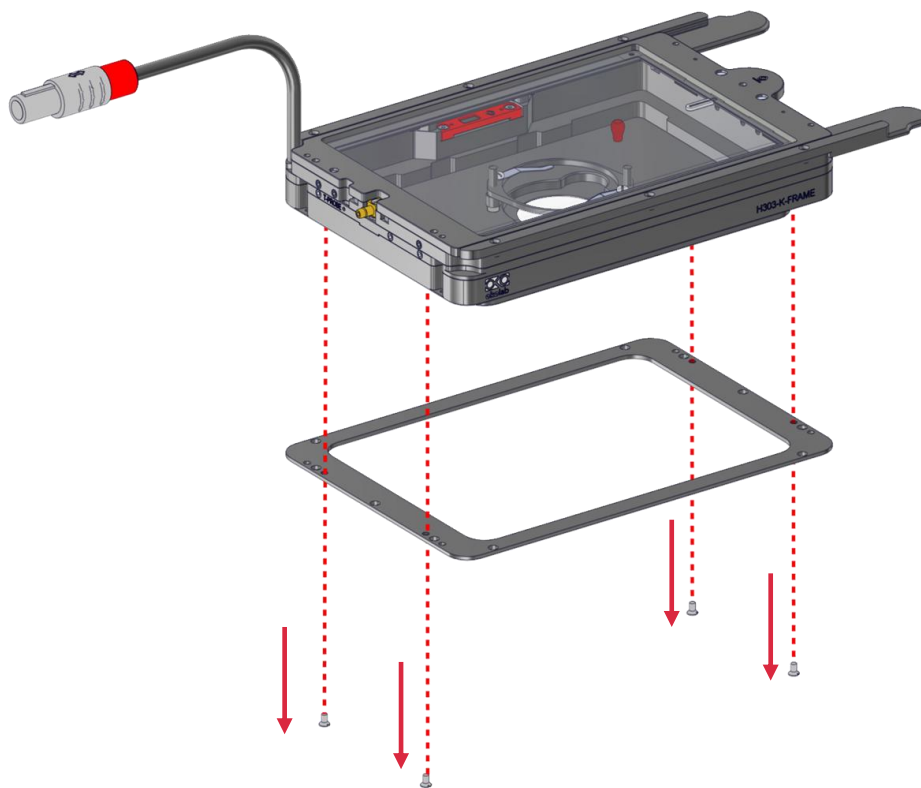
10.2 Working with FRAME-ZLXXX-OSSU

- **FRAME-ZLXXX-OSSU:** frame adapter to fit K-FRAME chambers into MCL Nano-ZLX00-IX5 and -OSSU piezo



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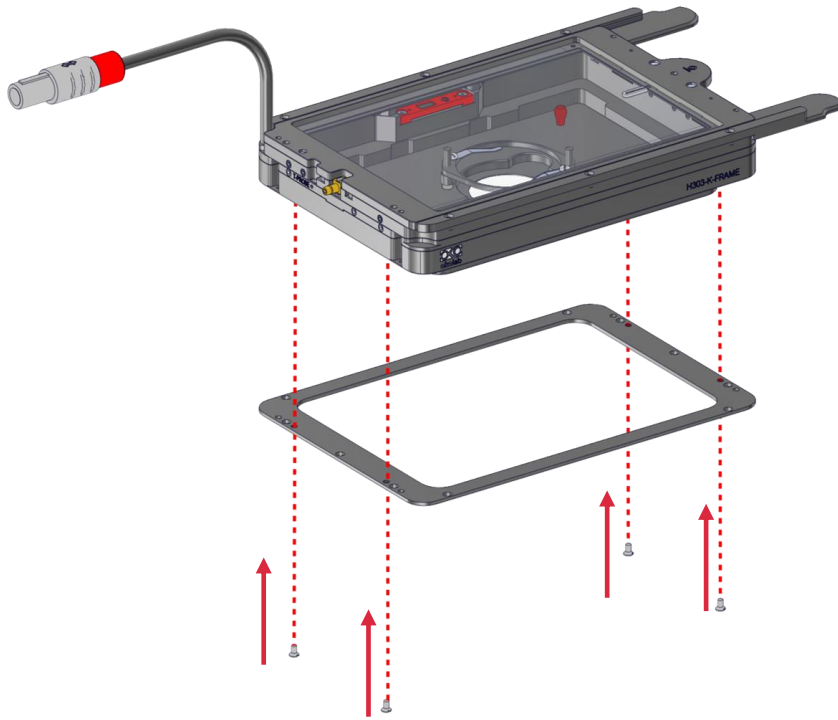
To mount FRAME-ZLXXX-OSSU frame adapter please remove the FRAME-STD by unscrewing the M2X4 screws on the bottom of the base.



10. Working with Stage Adapters

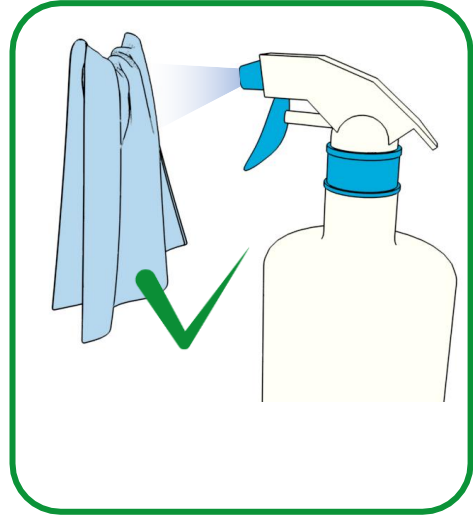
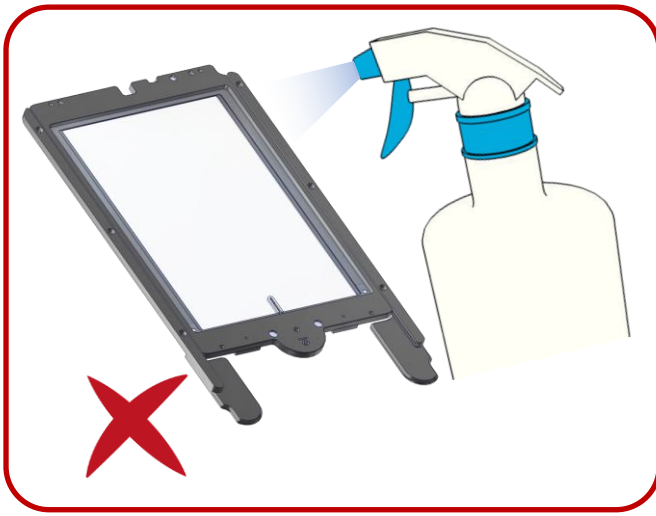
10.2 Working with FRAME-ZLXXX-OSSU

- 2 Then mount the FRAME-ZLXXX-OSSU by screwing the M2X4 screws on the bottom of the base.

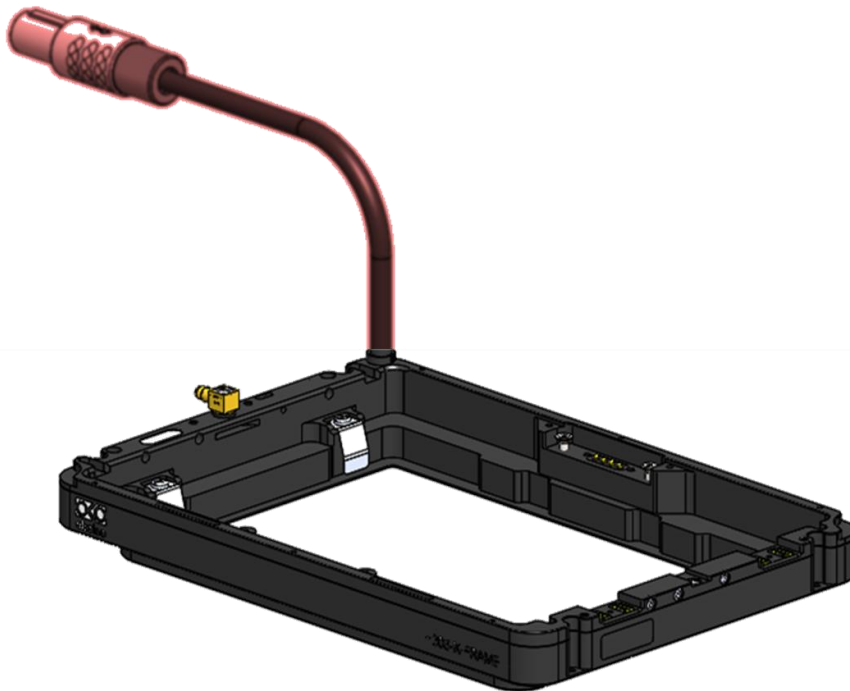


11. Chamber Handling & Cleaning

- 1 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.



- 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:

For TECHNICAL SUPPORT: support@oko-lab.com

Phone +39 081 308 9987
Fax: +39 081 876 4410
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