

H201-LG-DLS

Compatible with the following XY stages

- LEICA super Z Galvo stage (SP5/SP8)

Compatible with the following Okolab Controllers

- H201-T-BL-PLUS
- UNO-STAGE-TOP-INCUBATOR
- H401-T-DUAL

Vers. 01.16

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1. Components and dimensions

H201-LG-DLS includes the following components:

- **Chamber base** with embedded temperature sensor
- **Chamber body**, it owns 12 holes for the insertion of perfusion tubing up to 2.0 mm
- **Objective adapter**, it fits HC APO L 10x/0.3 W or Leica HC FLUOTAR L 25x/0.95 W.
- **Sample Holder**, it allows the Petri to be hold in the chamber.
- **Lid**, it features a magnetic system allowing to lift and release the Lid surrounding the objective, together with it.
- **Total chamber weight, 130g.**

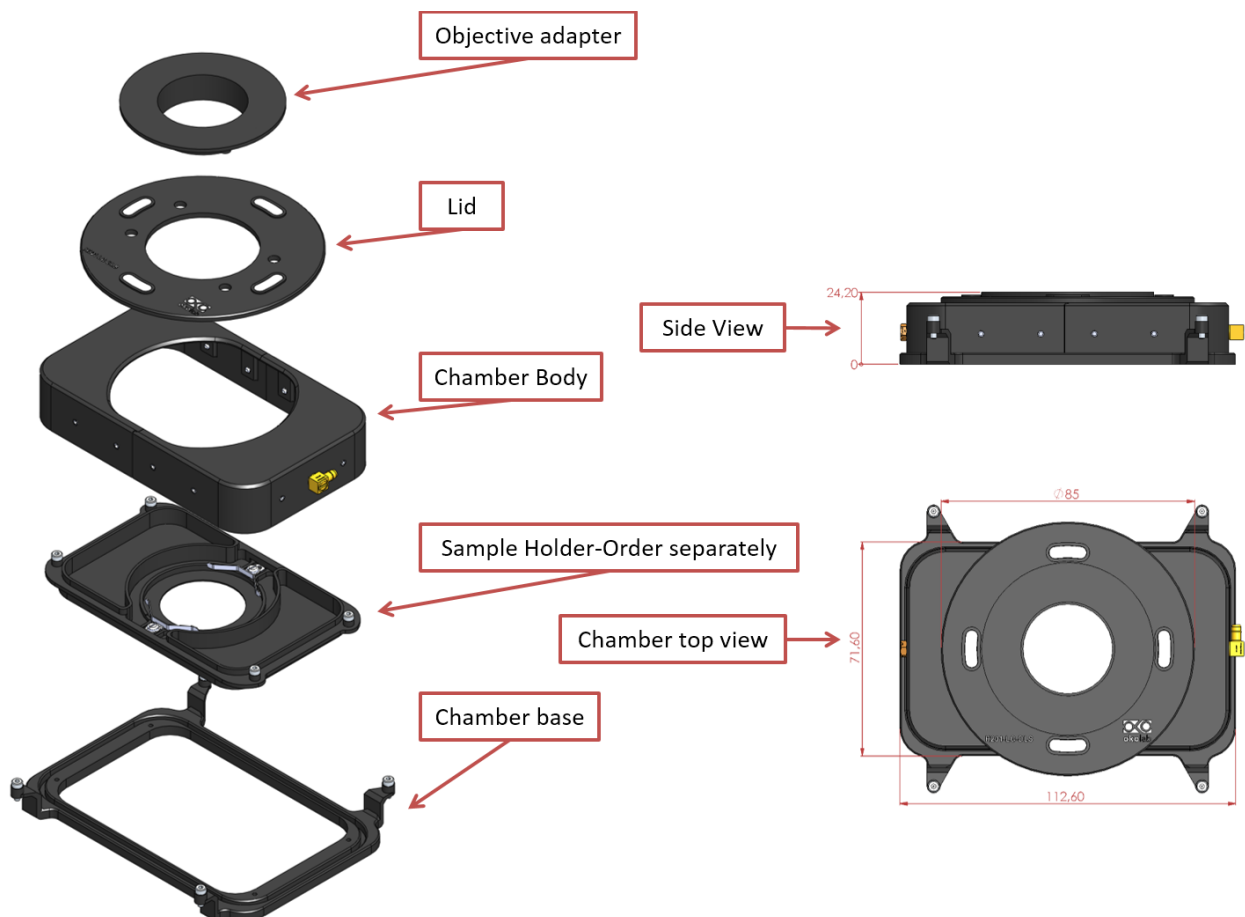


Figure 1. H201-LG-DLS Components and Dimensions.

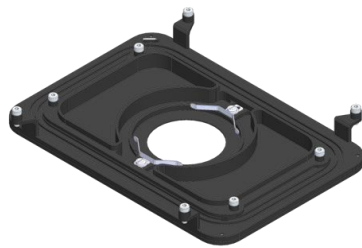
2. Sample Holders

2.1 Available Sample Holders

The following sample holders are available.

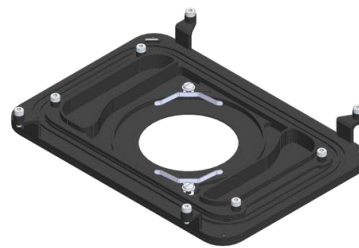
NOTE: Please contact info@oko-lab.com if you cannot find the sample holder you are looking for. We are constantly adding new inserts to the list.

1x35-DLS	#1 35mm Petri-dish
1x60-DLS	#1 60mm Petri-dish



1x35-DLS

For #1 35mm Petri-dish holder



1x60-DLS

For #1 60mm Petri-dish holder

Figure 2. Available sample holders.

3. Insertion of the Sample Feedback Temperature Sensor

Insert the Sample Feedback Temperature Sensor through the dedicated opening located in the H201-LG-DLS main body (see

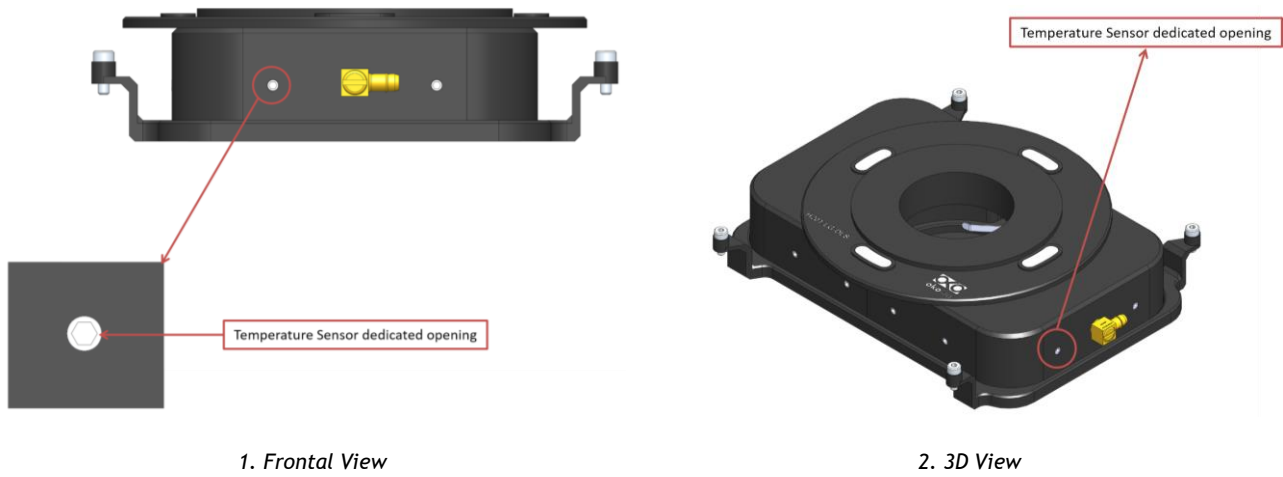


Figure 3, Frontal and 3D views).

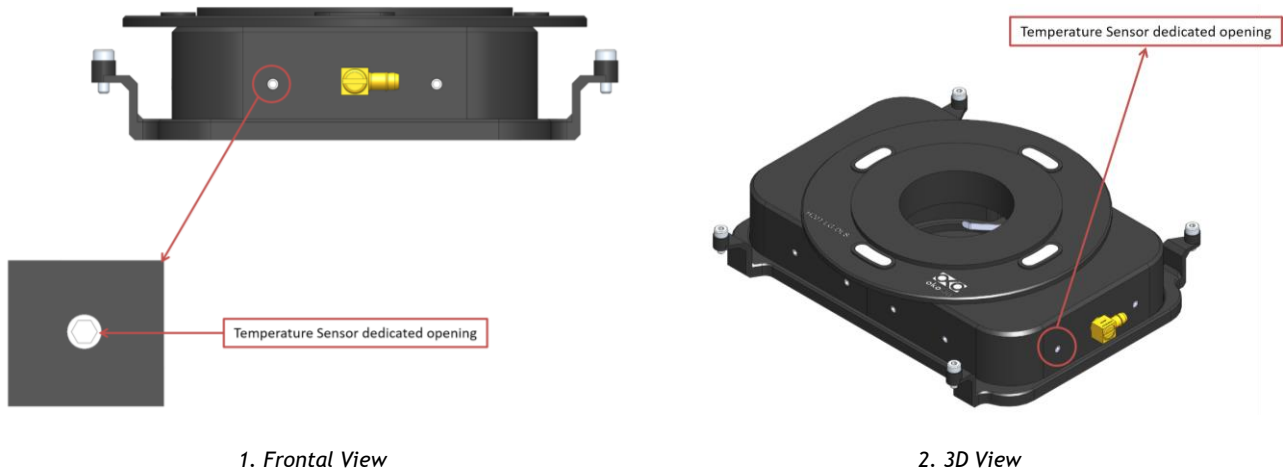


Figure 3. Insertion of the temperature sensor inside the chamber.

4. Changing the Microscope Pillar Cover

The H201-LG-DLS is equipped with a magnetic Lid which directly holds into the provided Okolab Microscope Pillar Cover. To install Okolab Microscope Pillar Cover follow the instructions as shown in Figure 4.

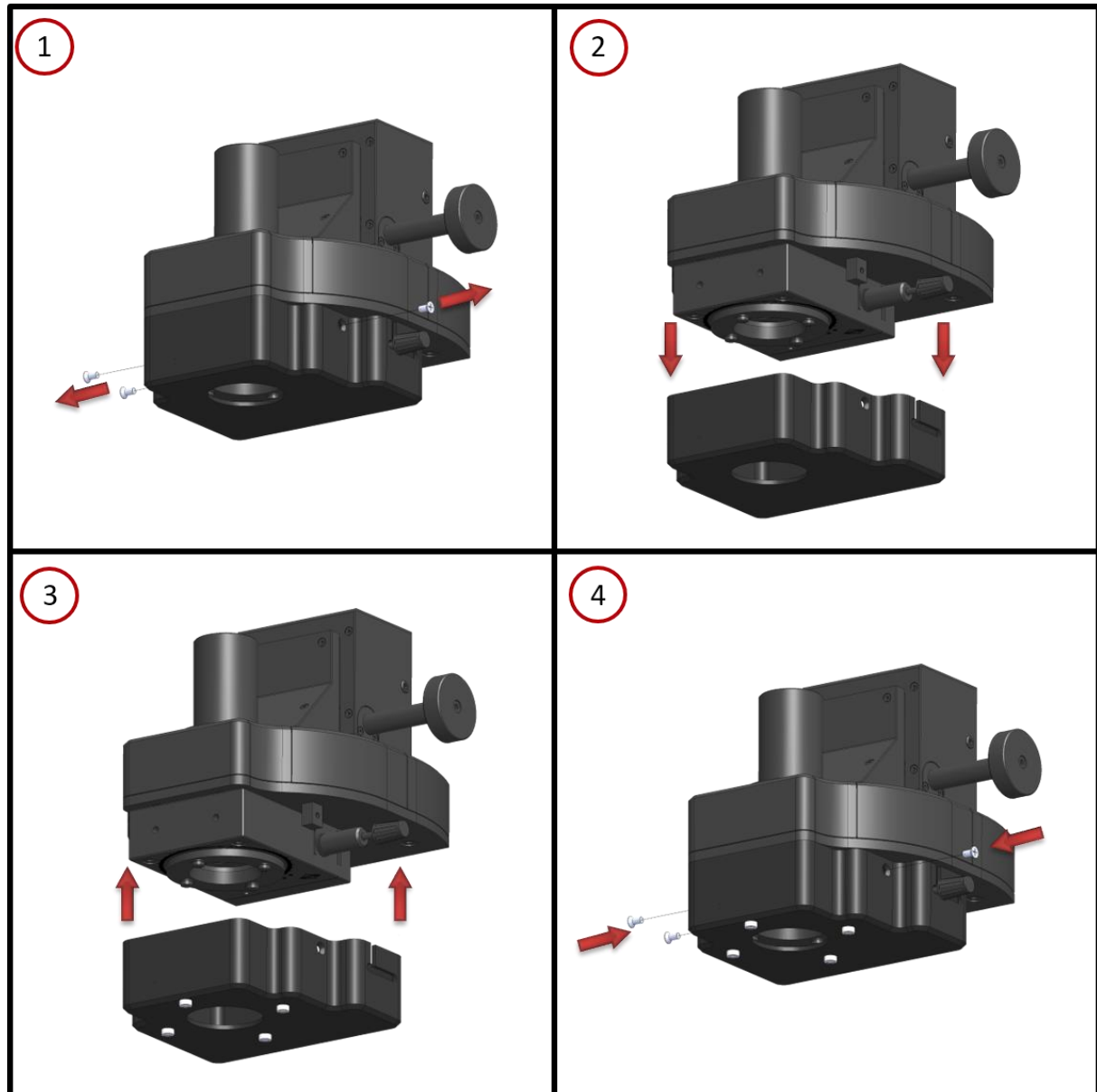


Figure 4. Changing the Microscope Pillar Cover

5. Removing and Inserting the Lid

The H201-LG-DLS is equipped with a magnetic Lid which directly holds into the provided microscope pillar cover.

If you want to access the specimen or you want to remove the sample holder, you should remove the Lid first; to remove it follow the steps shown in the images of and listed below:

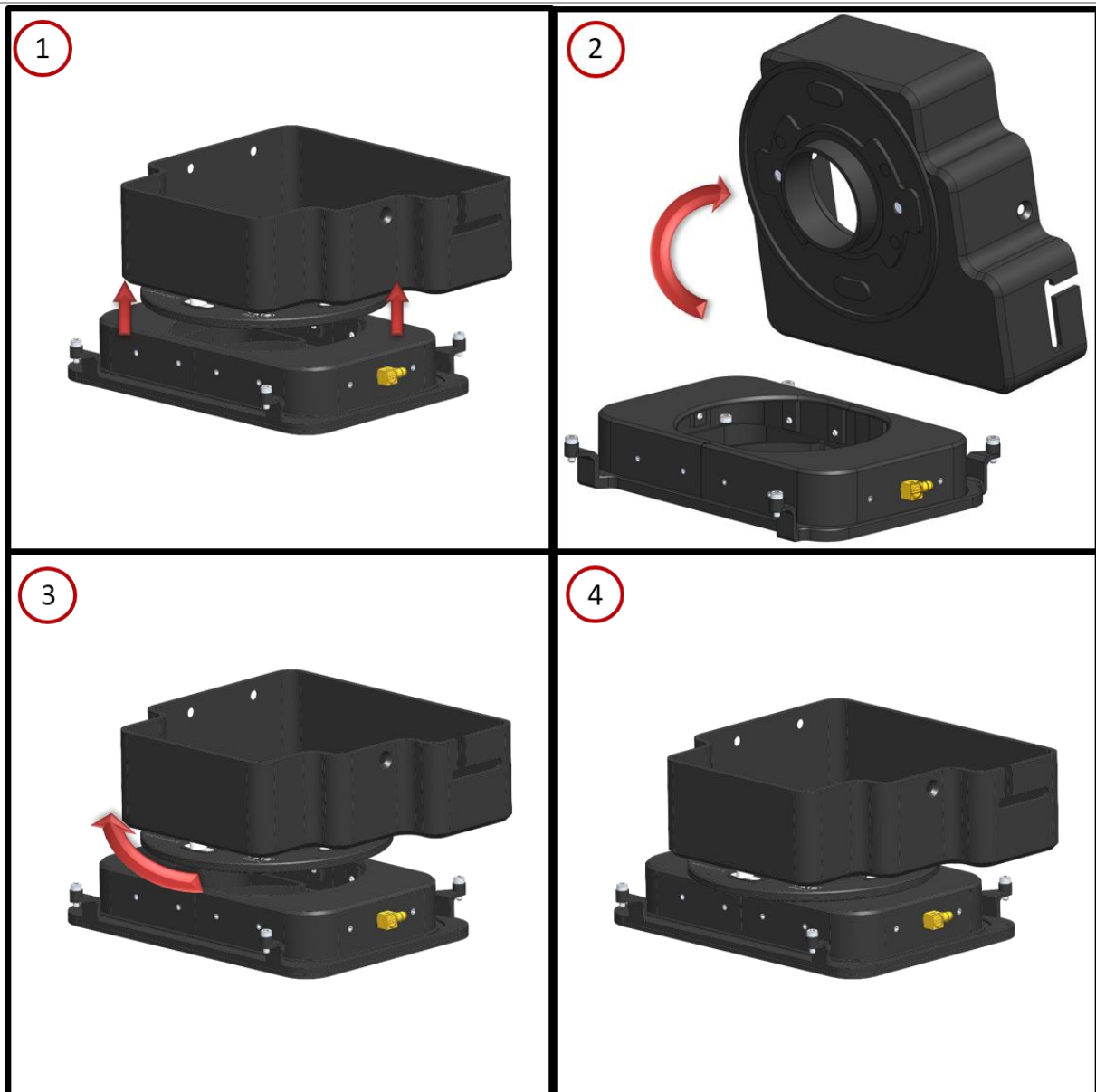


Figure 5. Removing and Inserting the Lid.

6. Insertion of Sample Holder into Chamber

Sample holders fit into the chamber base and are held in place by captive screws embedded the holder. Screw the sample holder using a 1.5 mm Allen key, don't care about the orientation since the sample holder is symmetric, as illustrated in Figure 6.

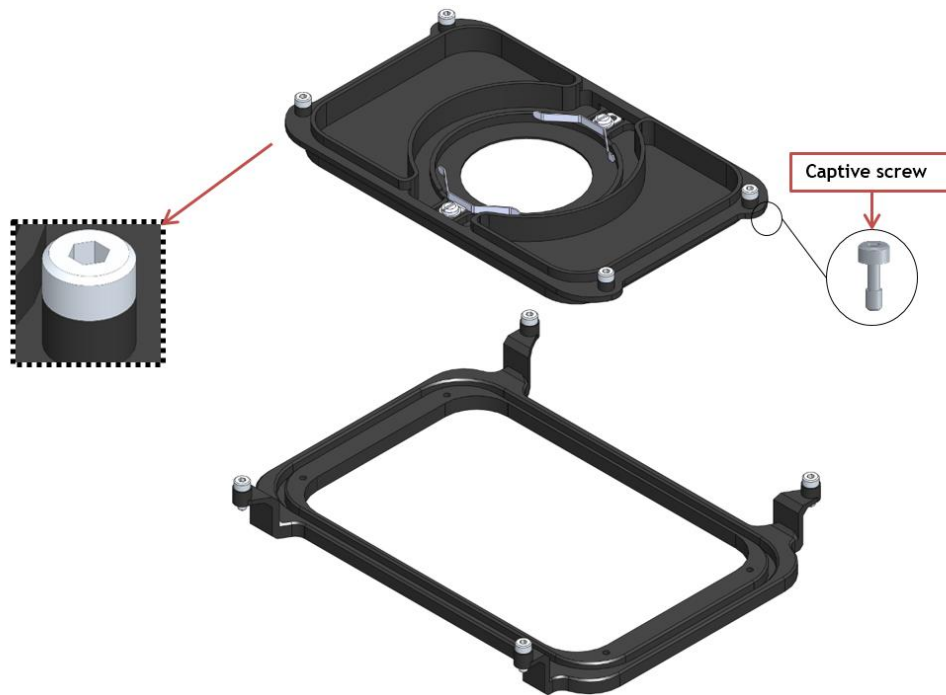


Figure 6. Introduction of the Specimen Holder inside the Chamber Base.

If you want to change the sample holder follow the steps shown in the images of Figure 7 and listed below:

1. Remove the chamber body by lifting it from the workspace, as shown in Figure 7 Image 1 and 2
2. Unscrew the sample holder captive screws using a 1.5 mm Allen key
3. Lift and replace the sample holder, as shown in Figure 7 Image 4

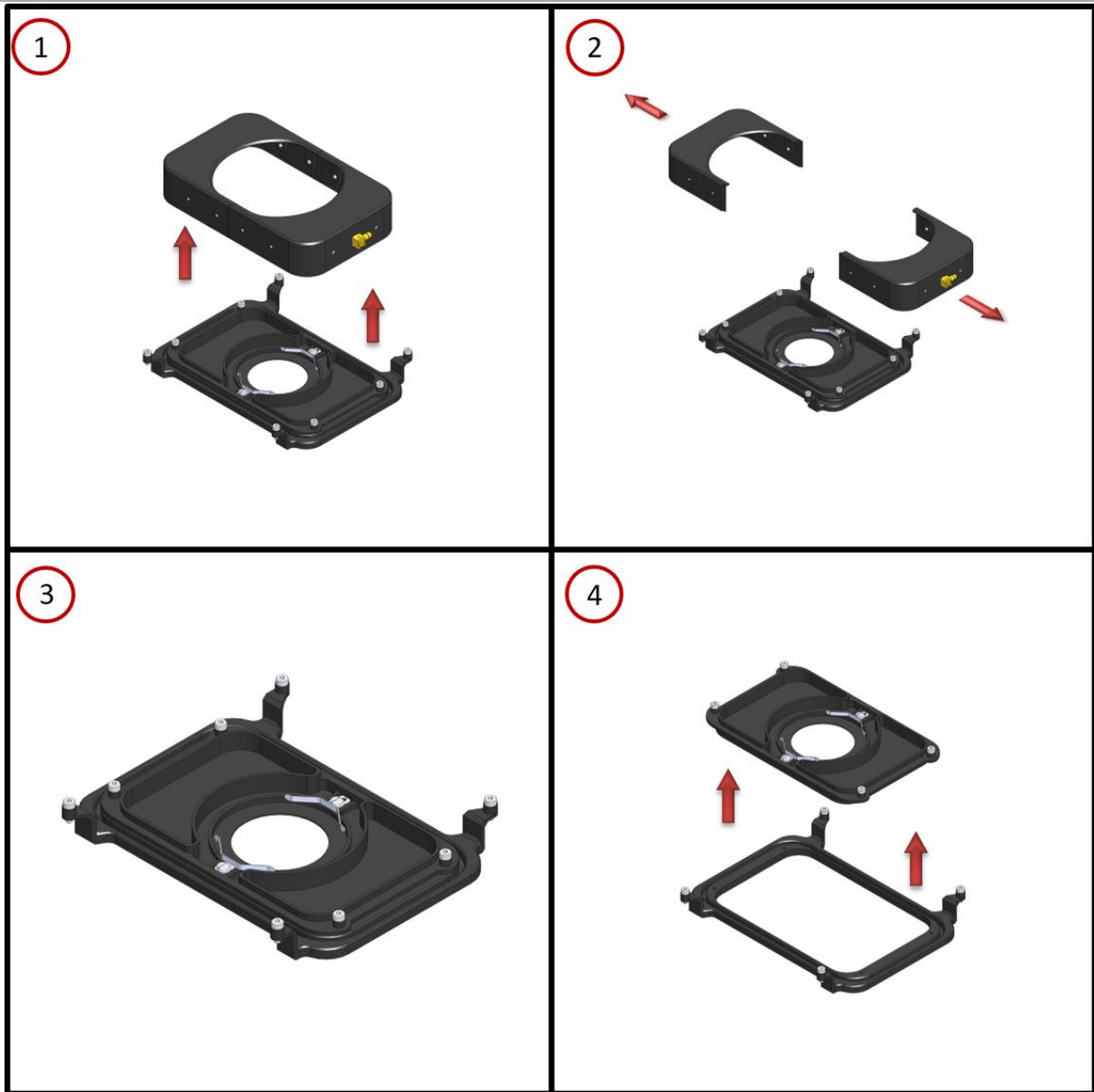


Figure 7. Introduction of the Specimen Holder inside the Chamber Base.

7. Working with 35 or 60 mm Petri Dishes

Flat springs prevent movement of 35 and 60 mm dishes inside of the sample holder (See Figure 8 and Figure 9). To place the Petri, please follow the steps below:

1. Slightly loose the sample holder screws denoted as A in Image 1 of Figure 8 and Figure 9, using a flat head screwdriver, in order to have the locks released
2. Place the Petri in its holder as in Image 2 1 of Figure 8 and Figure 9
3. Block the sample holder screws denoted as B in Image 1 of Figure 8 and Figure 9, using a flat head screwdriver, in order to have Petri locked in position

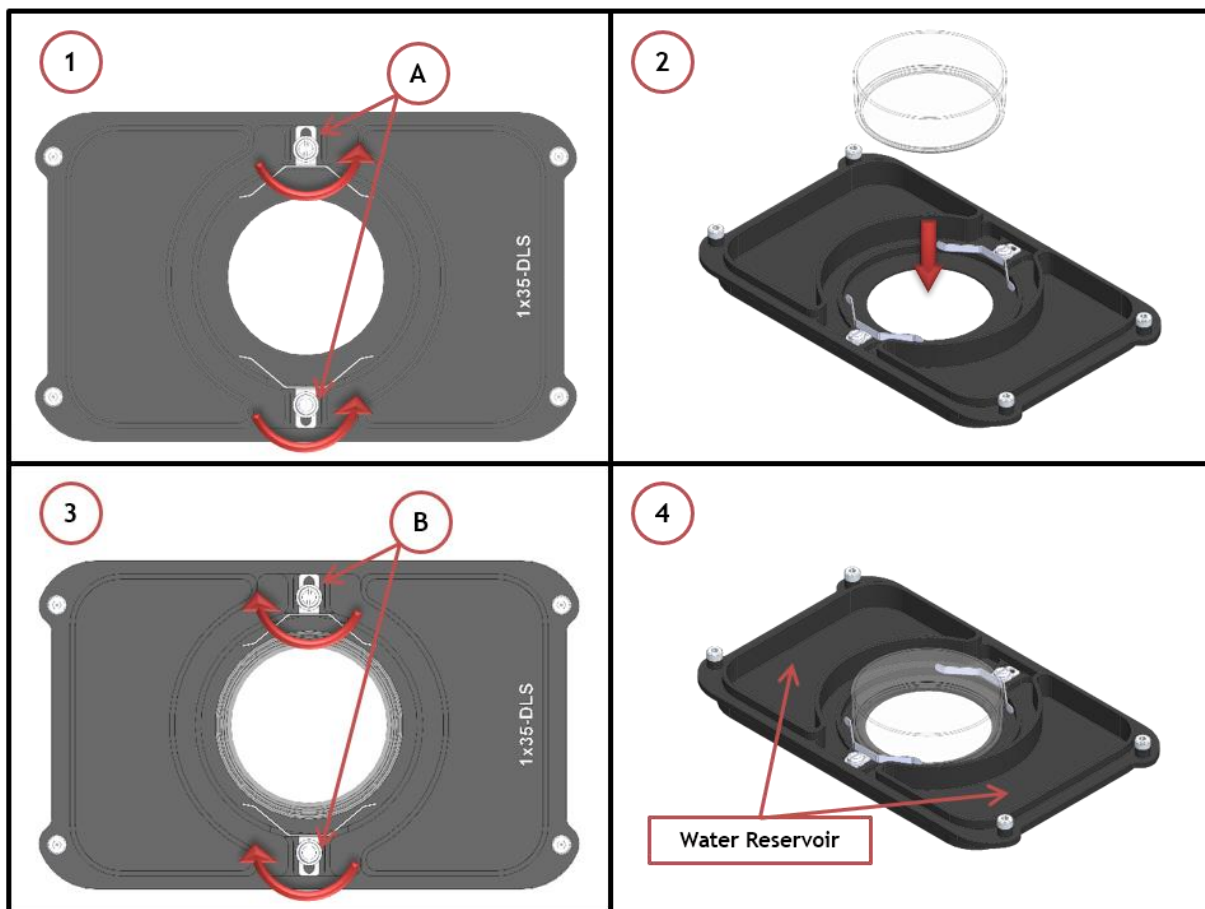
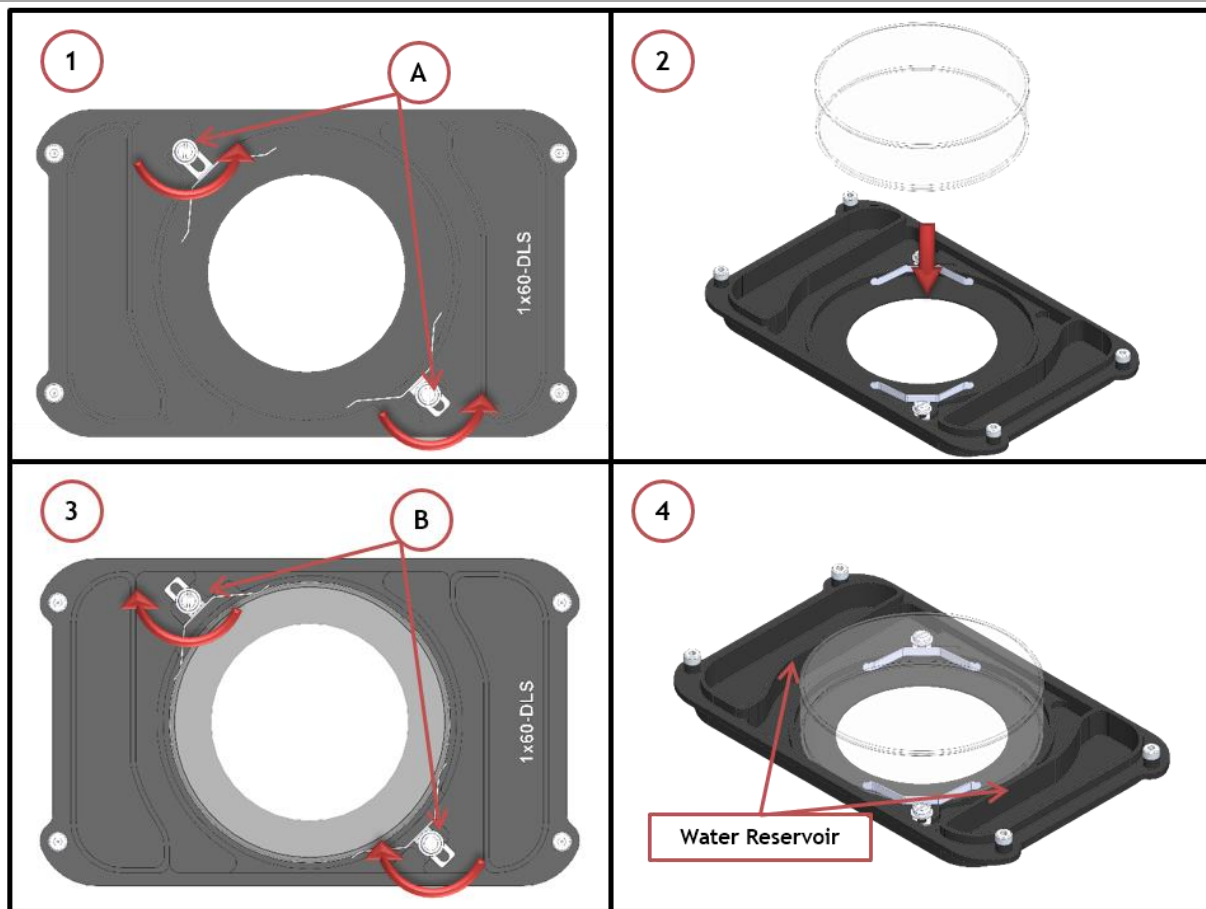


Figure 8. Plate adapter for 35 mm Petri-dish holder.



Note. On the sample holders for petri dishes there are two water reservoirs (see Image 4 of Figure 8 and Figure 9). Fill them with water to ensure a high humidity percentage inside the chamber.

8. Connection of the Gas Supply

A single silicon tubing carries output gas from the Okolab Gas Controller to the H201-LG-DLS. Silicon tubing connects to a gas input - brass opening - located on a corner of the H201-LG-DLS. See Figure 10. Connect by gently pushing silicon tubing onto brass opening.

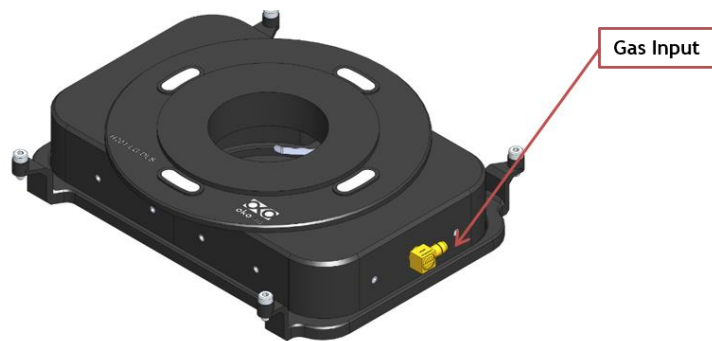


Figure 10. Connection with gas supply.

9. Working with Perfusion

The H201-LG-DLS features 12 perfusion holes on the sides for the insertion of perfusion tubing up to 2.0 mm in outer diameter. Small screws plug the perfusion holes when not in use. (Grub screws M2,5x6). Remove small screws as necessary before introducing perfusion tubing.

Figure 11 shows the location of perfusion holes.

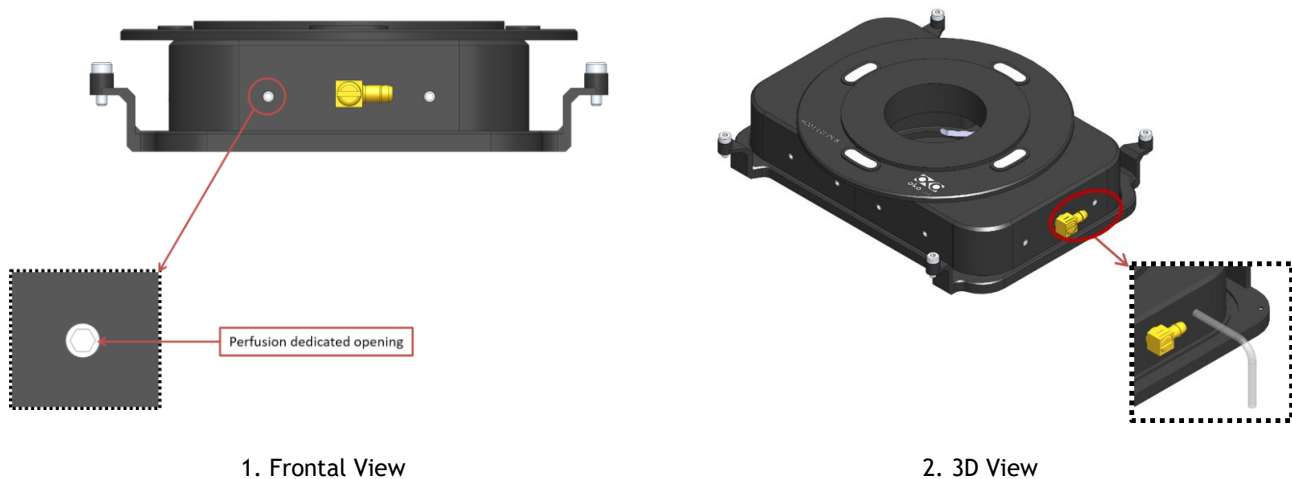


Figure 11. Perfusion

10. Connection of the Chamber with Super Z-Galvo stage

H201-LG-DLS fits on the Super Z-Galvo stage. It can be screwed onto the Galvo Stage as shown in Figure 12; place the chamber on the stage and screw the four captive screws. Screws housings are indicated with letter A in Figure 12.

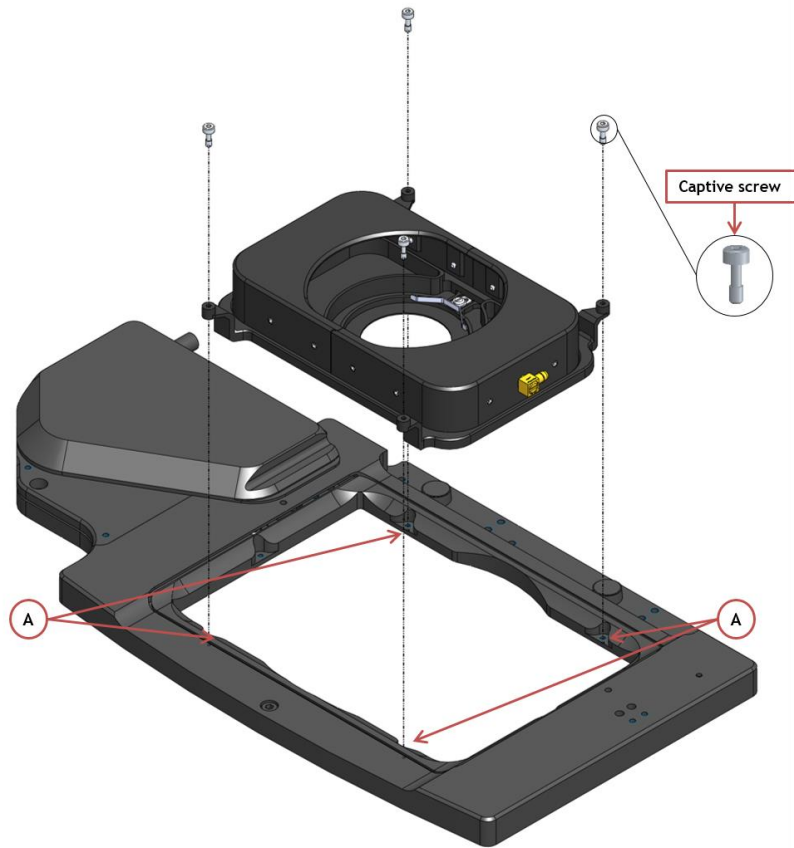


Figure 12. How to fix the H201-LG-DLS on the Super Z Galvo stage