

This product is intended for installation only by expert users. Please consult with a qualified technician for installation. Improper installation may result in damage to your equipment. EK Water Blocks assumes no liability whatsoever, expressed or implied, for the use of these products, nor their installation. The following instructions are subject to change without notice. Please visit our web site at www.ekwb.com for updates. Before installation of this product please read important notice, disclosure and warranty conditions printed on the back of the box.

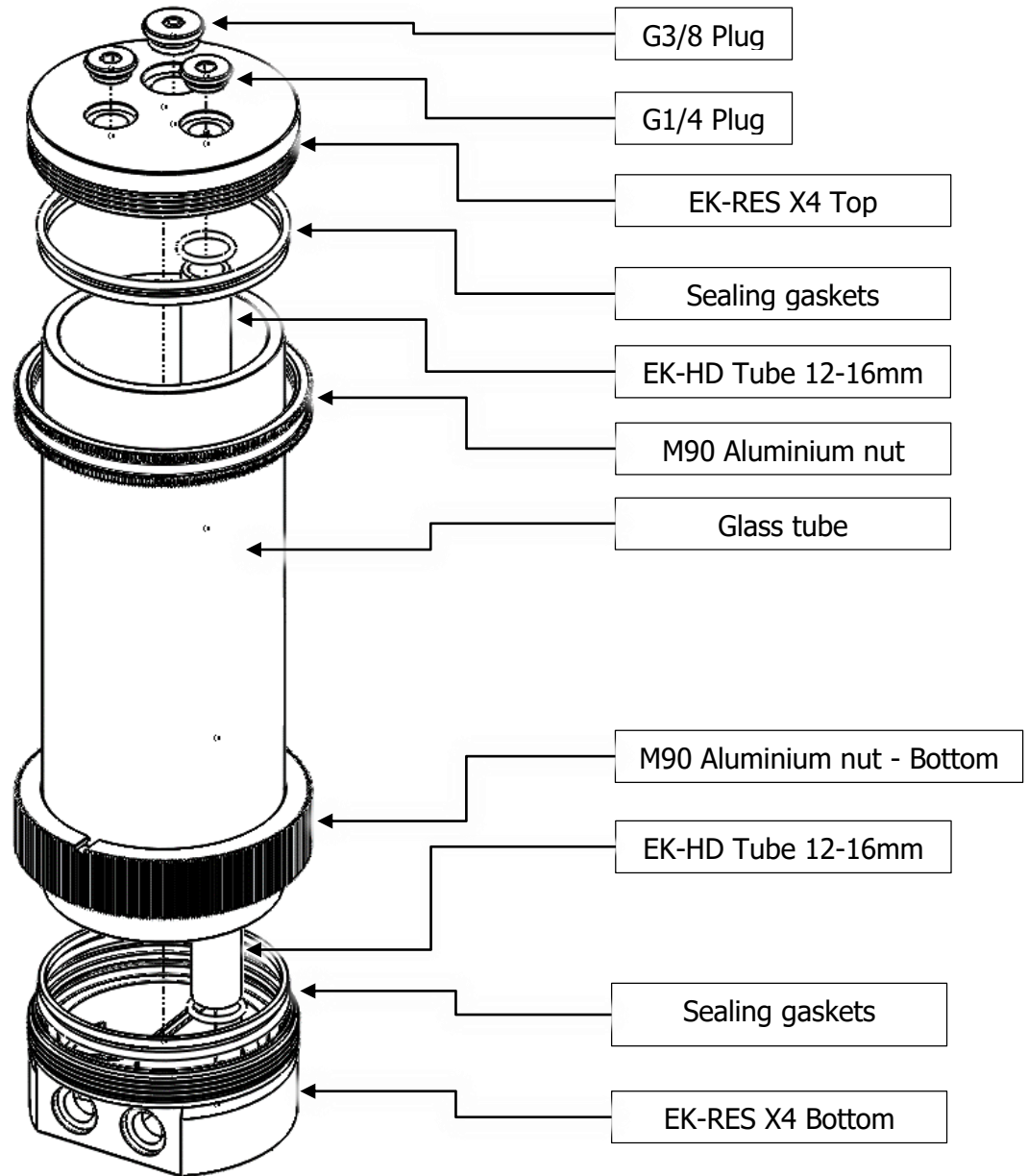
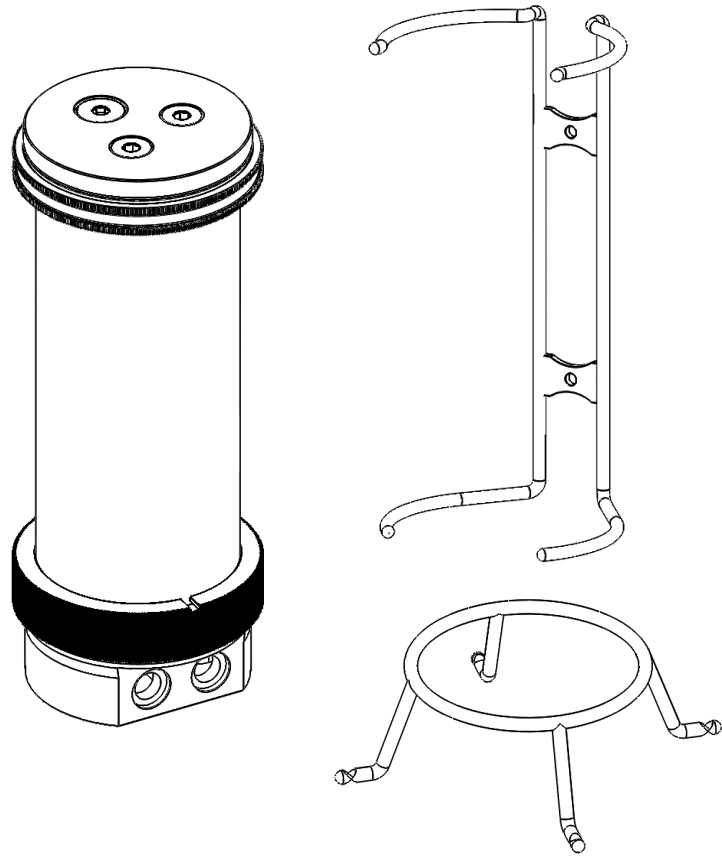
Before you start using this product please follow these basic guidelines:

1. **Please carefully read the manual before through before beginning with the installation process!**
2. **The EK High Flow and EK-ACF type fittings require only a small amount of force to screw them firmly in place since the liquid seal is ensured by the rubber o-ring gaskets.**
3. **The use of corrosion inhibiting coolants is always recommended for any liquid cooling system.**
4. **DO NOT USE any kind of alcohol or alcohol derivate with this reservoir or the acrylic tube may crack and fail! Do not clean it using alcohol either!**

STEP 1: GENERAL INFORMATION

Congratulations on your purchase of EK-RES X4 series reservoir! By default the EK-RES X4 series reservoir comes with the following:

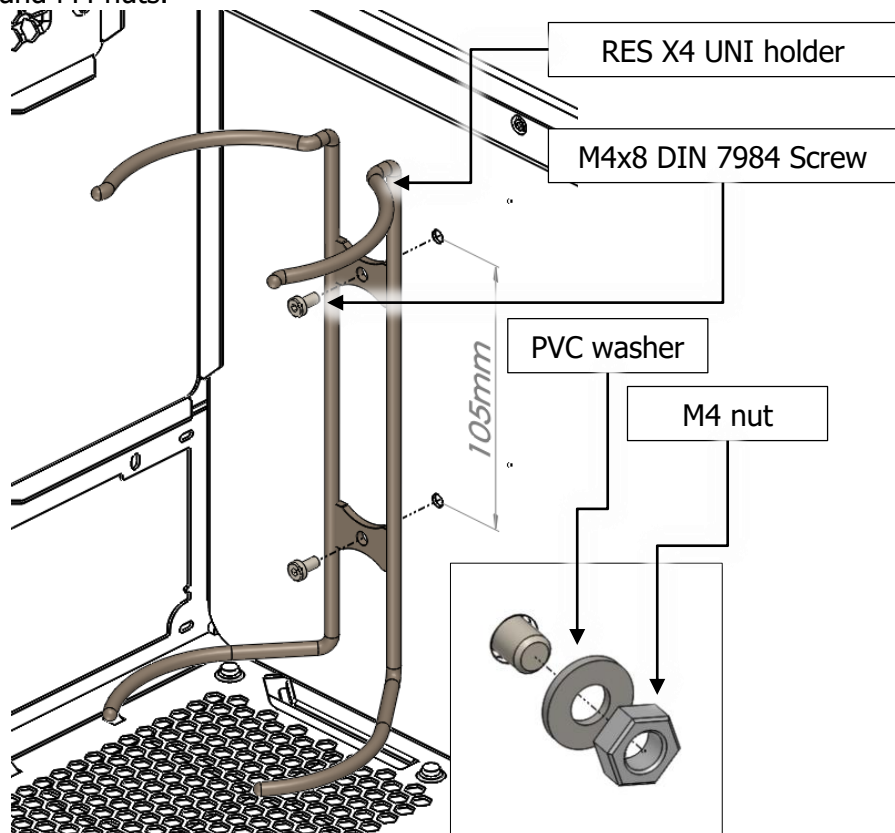
- EK-RES X4 *series* reservoir with preinstalled Anticyclone
- Reservoir holders (Bottom and universal)
- Pair of pre-cut solid Acrylic tubes
- LED light strip
- Mounting mechanism:
 - o 5x G1/4 Plug
 - o 2x EK-G1/4 Extender
 - o 1x G3/8 Plug
 - o Allen Key 6mm
 - o Allen key 2,5mm



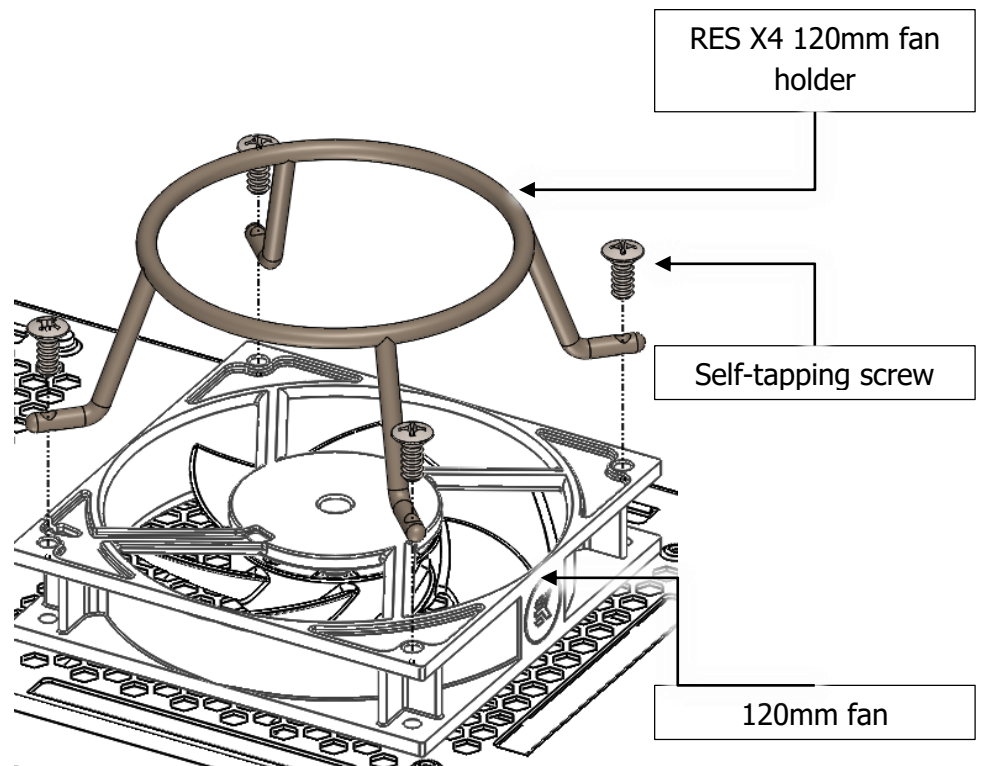
STEP 2: INSTALLING THE RESERVOIR HOLDERS

EK-RES X4 *series* reservoirs comes with two special holders. These holders are meant to be installed directly on the computer chassis or alternatively fan holes. User may need to drill up to 4 (four) Φ 5mm holes through chassis metal using electric power drill if there are no appropriate mounting holes available.

The **RES X4 UNI holder** is intended to be mounted anywhere in the chassis and in any possible direction. The gap between the mounting holes is 105mm, therefore it can also be mounted on 120mm fan holes. Secure the holder using the 2 (two) M4x8 DIN 7984 screws, PVC washers and M4 nuts.

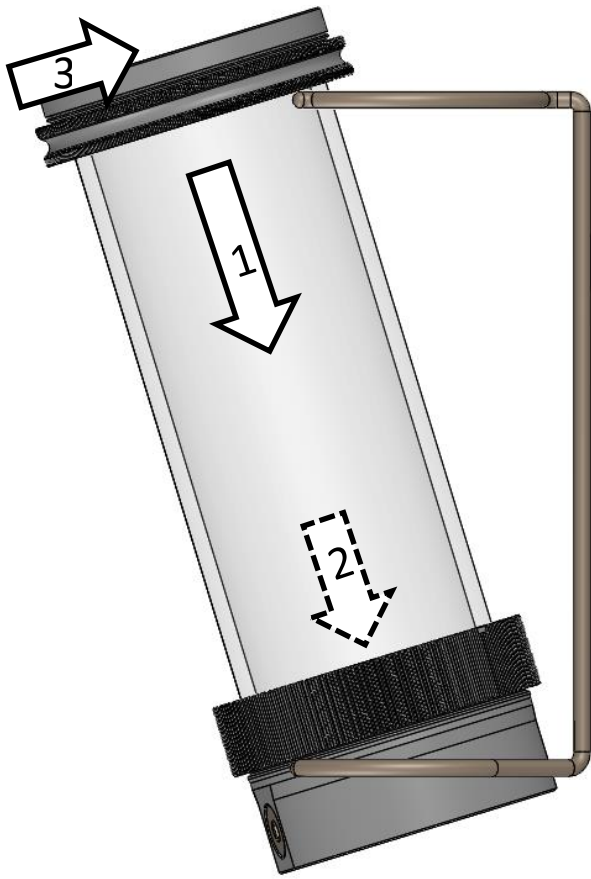


The **RES X4 120mm fan holder** is intended to be mounted on the bottom of the chassis. The gap between the mounting holes is 105mm, therefore it can also be mounted on 120mm fan holes. If you want to mount the holder on the fan, you should use 4 (four) self-tapping screw, otherwise you must use the enclosed 4 (four) M4x8 DIN 7984 screws, secured with nuts and washers.



STEP 3.: ATTACHING THE RESERVOIR ON THE HOLDERS

In order to mount the RES X4 onto the RES X4 UNI holder you should follow the steps below:

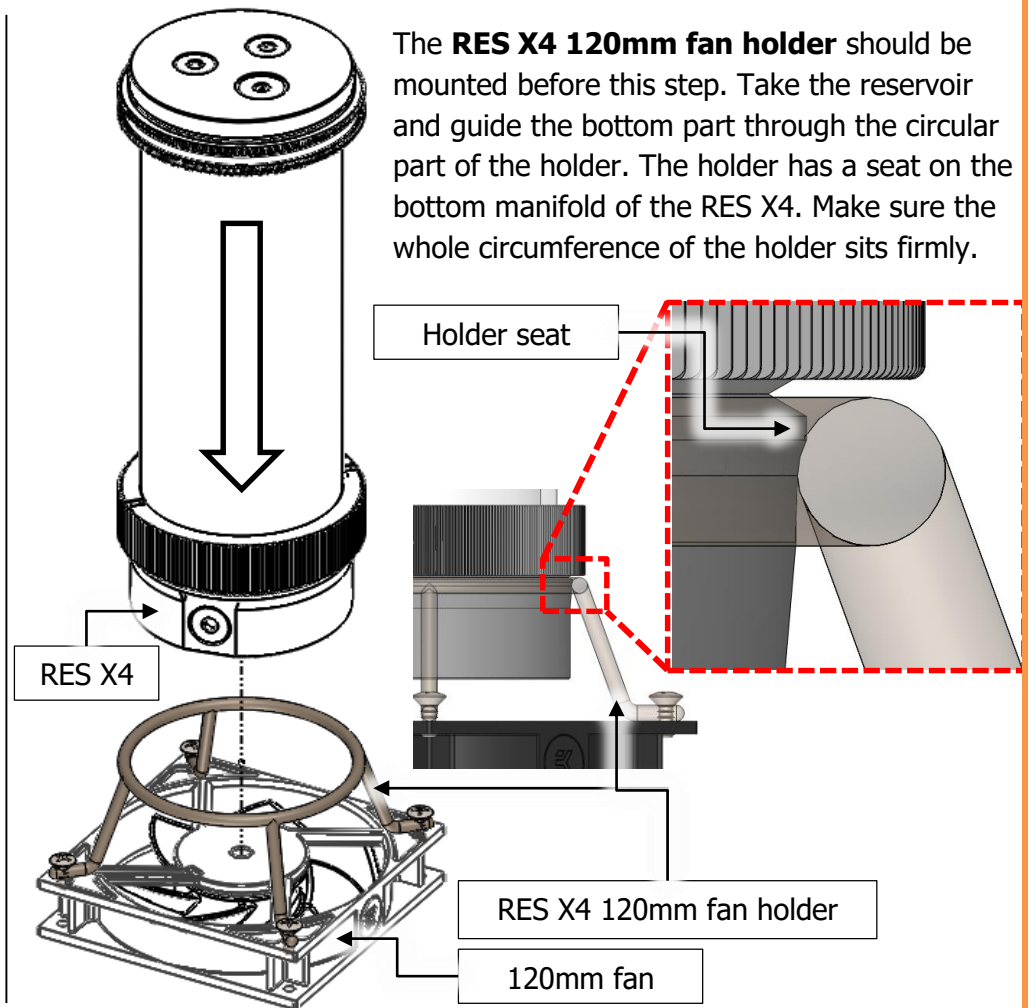


STEP 1: Take the RES X4 reservoir and guide the RES X4 Bottom into the bottom circular jaws of the holder.

STEP 2: Gently push the reservoir into the bottom jaws so that they bend a little. When pushing down guide the upper jaws of the holder into the groove in the upper M90 nut.

STEP 3: Push the upper part of the reservoir into the upper jaws. It should slide in smoothly.

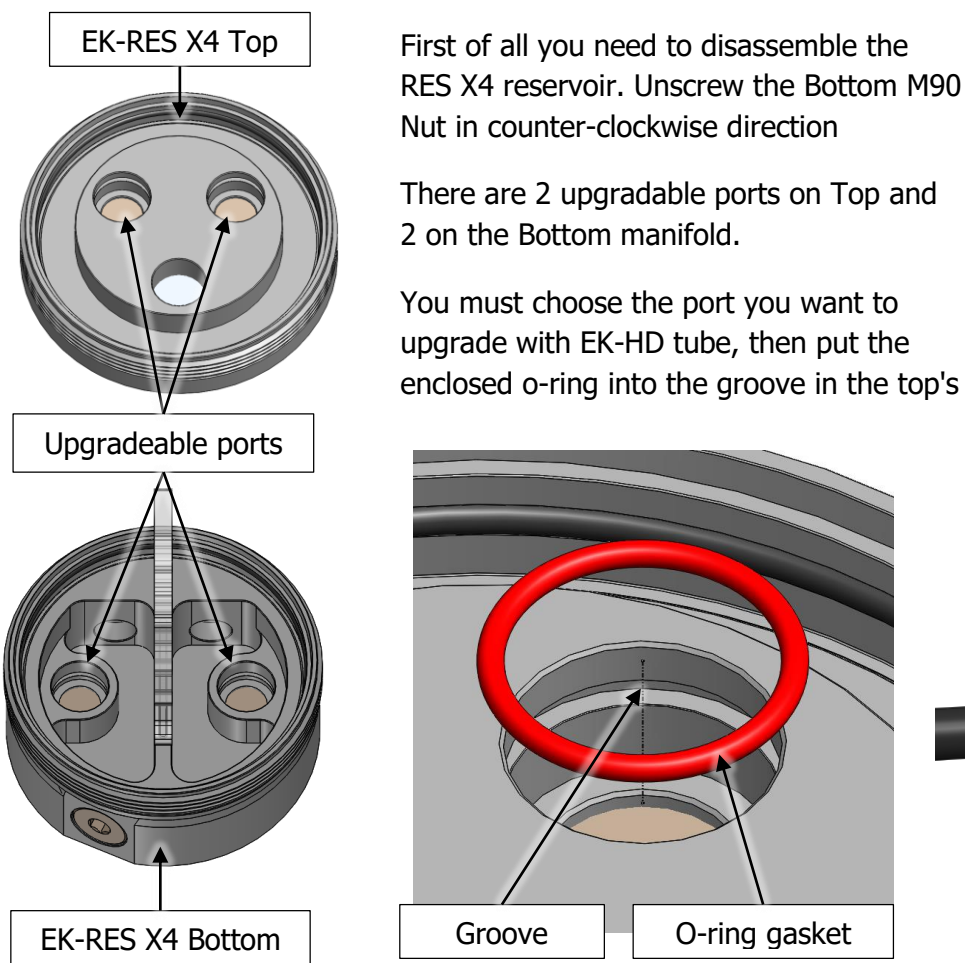
The holder must grab the reservoir firmly. If it doesn't please repeat the upper steps.



The **RES X4 120mm fan holder** should be mounted before this step. Take the reservoir and guide the bottom part through the circular part of the holder. The holder has a seat on the bottom manifold of the RES X4. Make sure the whole circumference of the holder sits firmly.

STEP 3 (optional): USING ACRYLIC HD TUBE AS PRESSURE/SUCTION PORT EXTENSION:

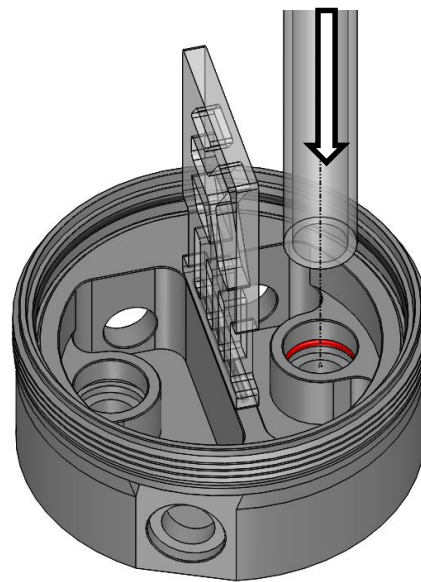
EK-RES X4 series reservoir comes preinstalled with Anticyclone by default. In case your system suffers from excessive vortex issues, air bleeding problems or if the pump is sucking in air you may install the enclosed HD tube port extensions. There are 4 (four) ports that can be upgraded with HD tube as shown below.



First of all you need to disassemble the RES X4 reservoir. Unscrew the Bottom M90 Nut in counter-clockwise direction

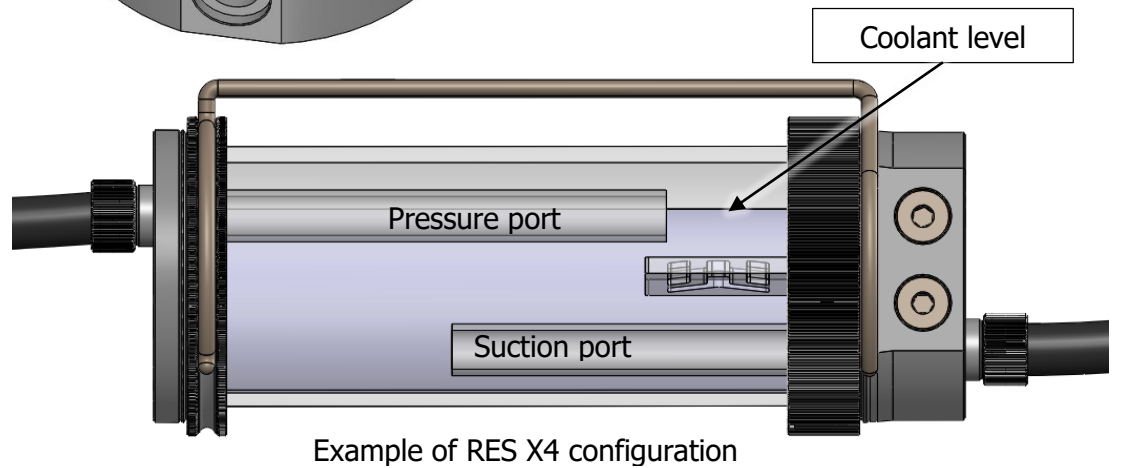
There are 2 upgradable ports on Top and 2 on the Bottom manifold.

You must choose the port you want to upgrade with EK-HD tube, then put the enclosed o-ring into the groove in the top's



The enclosed EK-HD Tubes are 150mm long. They come in standard 12/16mm size.

When you have successfully installed the o-ring gasket into the groove you just align the tube with the hole and push it as far as it goes. It is essential to push the tube through the o-ring gasket to ensure the optimum tightness.

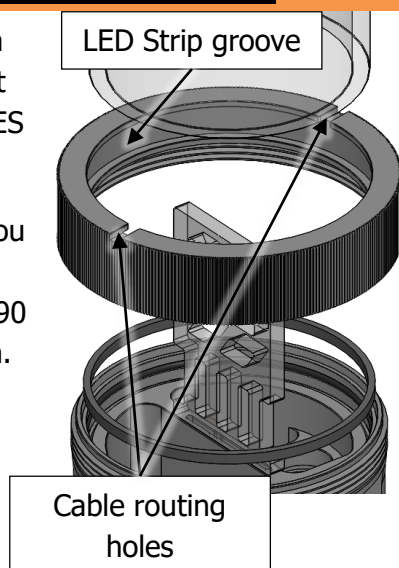


STEP 4 (optional): LED STRIP INSTALLATION

Inside the package you will find a self-adhesive LED strip. It is meant to illuminate the inside of your RES X4 reservoir.

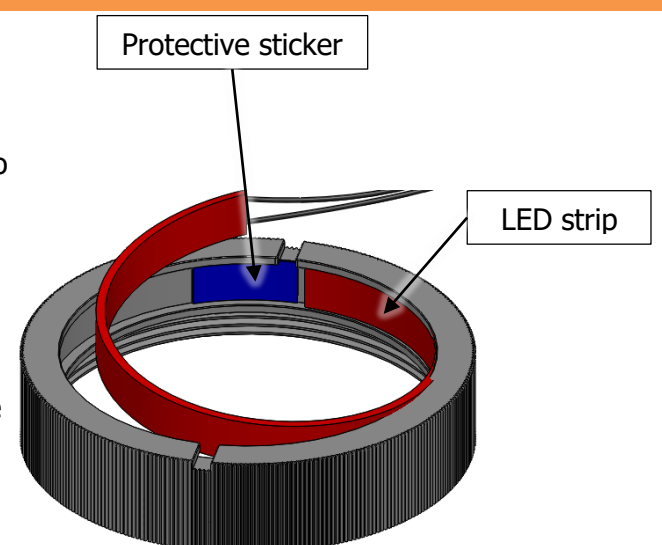
In order to install the LED strip you will have to disassemble the reservoir. Unscrew the Bottom M90 nut in counter-clockwise direction.

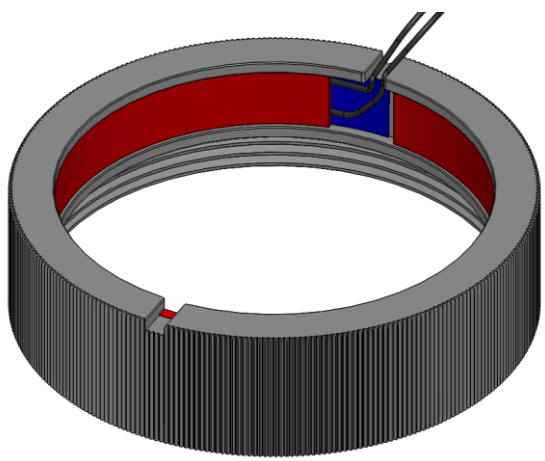
The LED strip fits into the groove on the inside of the Aluminium **M90 nut – Bottom.**



Check the box for self-adhesive protective sticker (10x25mm). You should stick it into the groove on the spot where the cables are soldered to the LED strip. The sticker serves as short circuit protection.

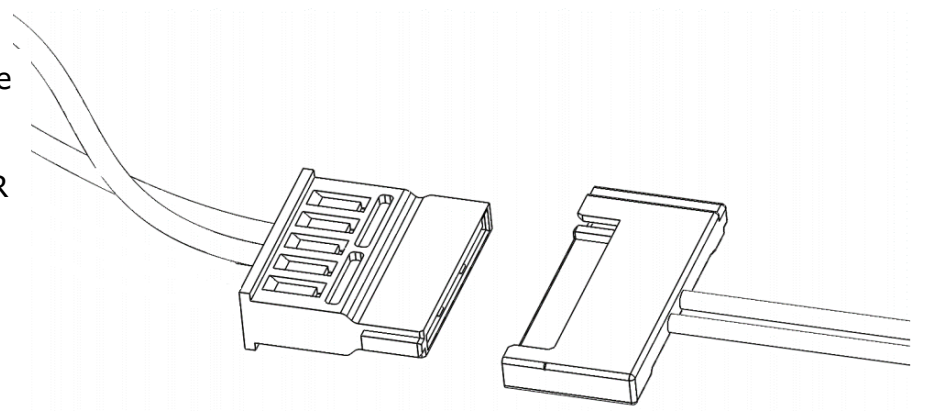
Remove the protective foil on the backside of the LED strip and adhere it to the groove wall as shown on the picture. The strip should fill the 95% of the circumference of the groove.



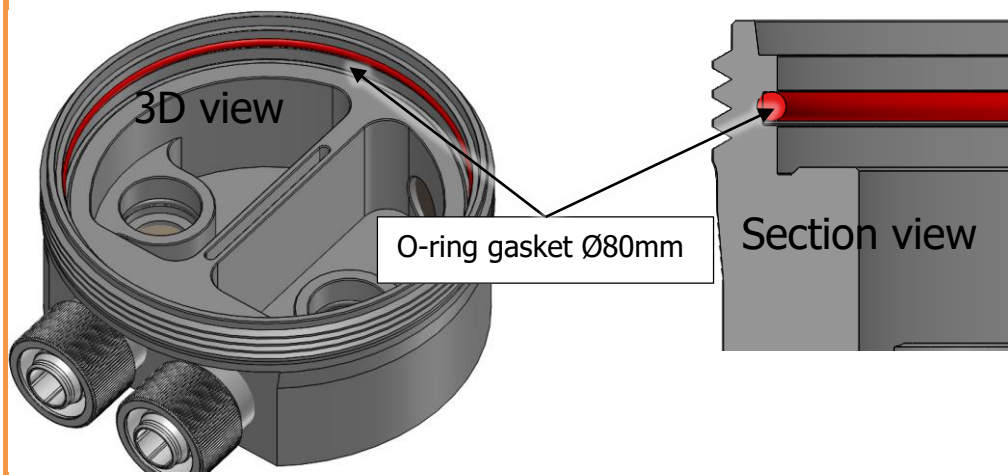


When the LED-strip is installed please guide the cables through the hole.

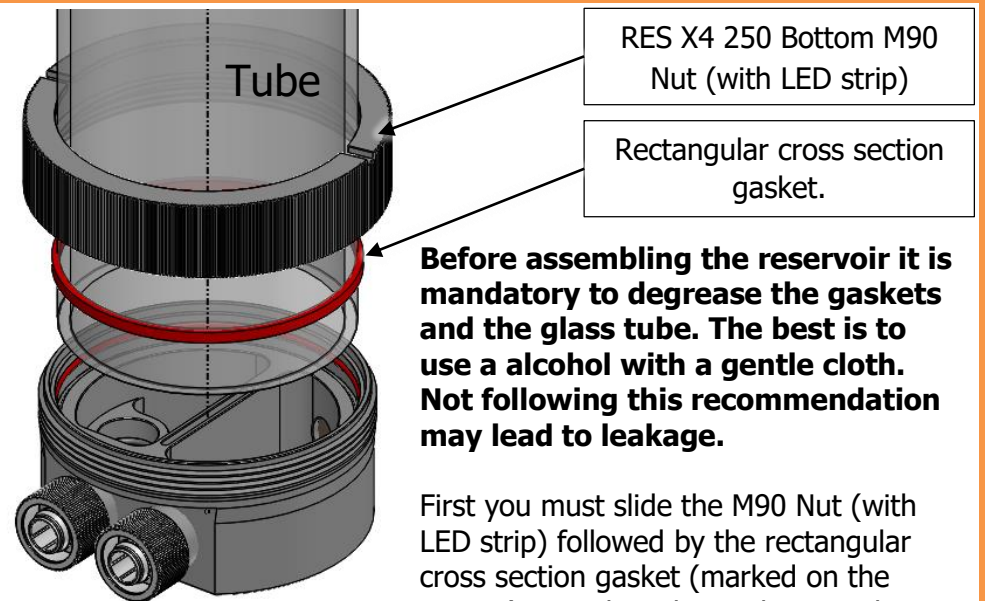
The LED strip has male SATA POWER connector. You can plug it in to the female connector found on the main power supply.



STEP 4 (optional) cont.: REASSEMBLING THE RESERVOIR

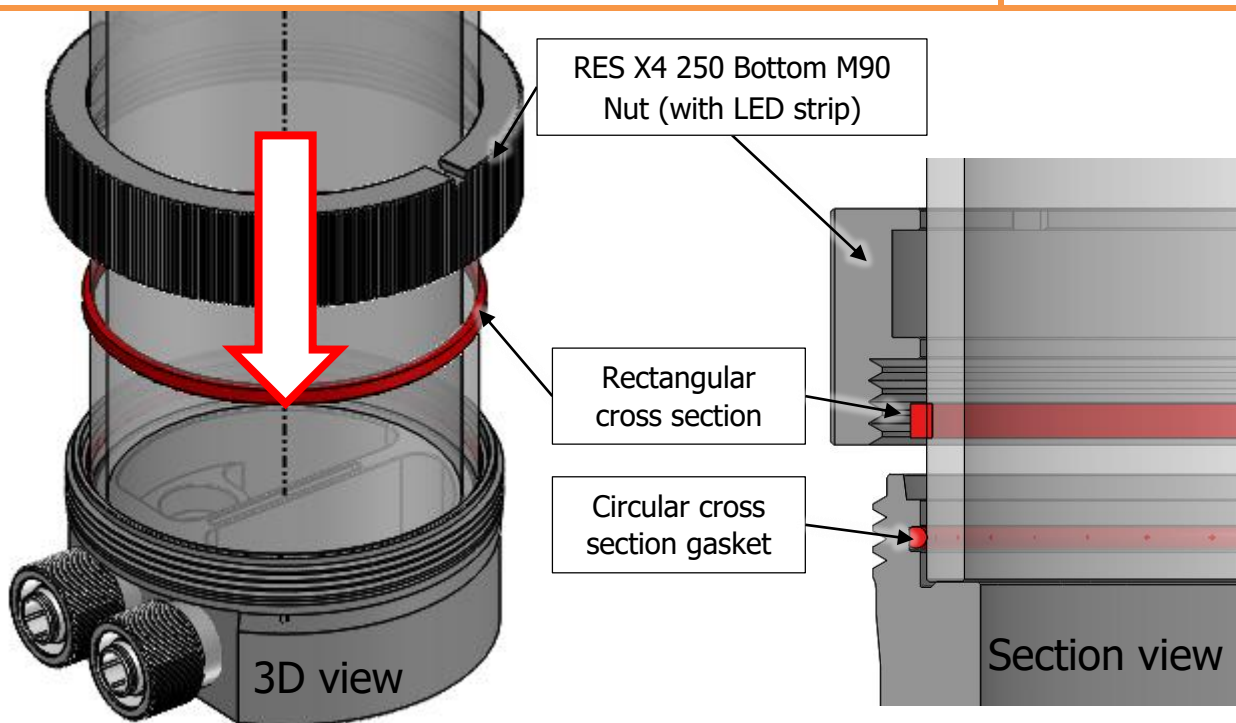


Please make sure that the circular O-ring gasket sits firmly inside the groove in the Bottom part of the reservoir, as shown on the pictures. (Marked on the picture!)



Before assembling the reservoir it is mandatory to degrease the gaskets and the glass tube. The best is to use a alcohol with a gentle cloth. Not following this recommendation may lead to leakage.

First you must slide the M90 Nut (with LED strip) followed by the rectangular cross section gasket (marked on the picture) onto the tube. Make sure that the gasket isn't twisted when sitting on the tube.

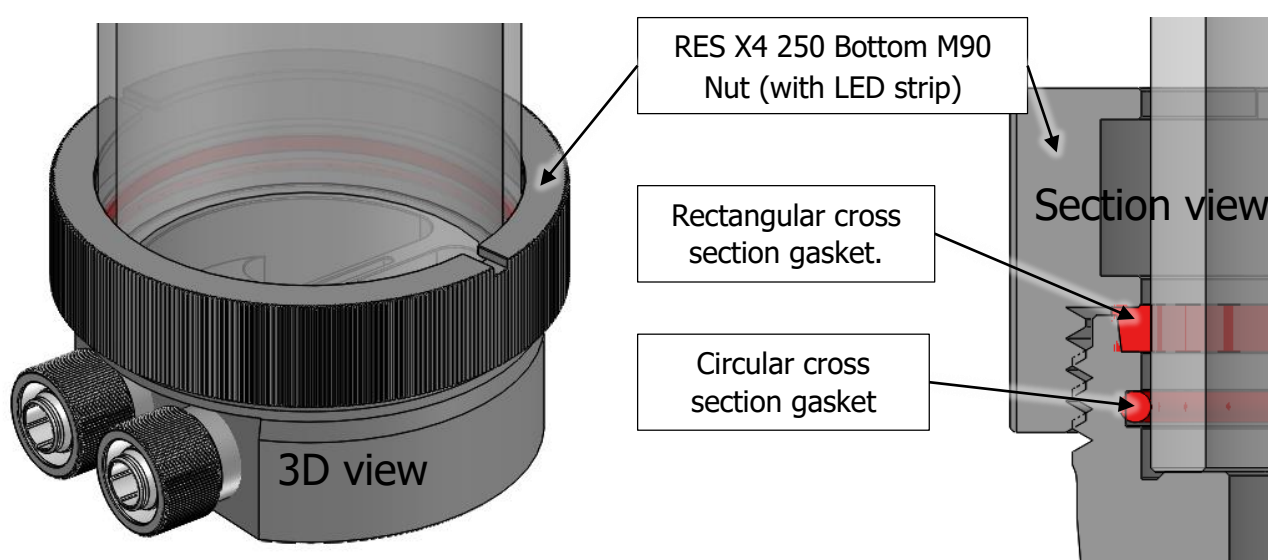


In order to ensure the optimal tightness of the reservoir please follow the steps below carefully.

Place the bottom part of the reservoir on level and stable surface.

Slide the glass tube through the circular O-ring gasket as far as it goes. The fit is relatively tight so you should use just the right amount of force to slide the tube over the gasket. While pressing down tilt the top of the tube in circular motion to help it at sliding in.

When you are done visually check that the circular O-ring sits in its groove around the whole circumference.



Grab the M90 Nut and gently push it down towards the thread on the bottom part of the reservoir. The rectangular cross-section gasket should slide into its groove along with the nut.

Start tightening the nut by rotating it in clockwise direction. While tightening the nut the gasket is being compressed.

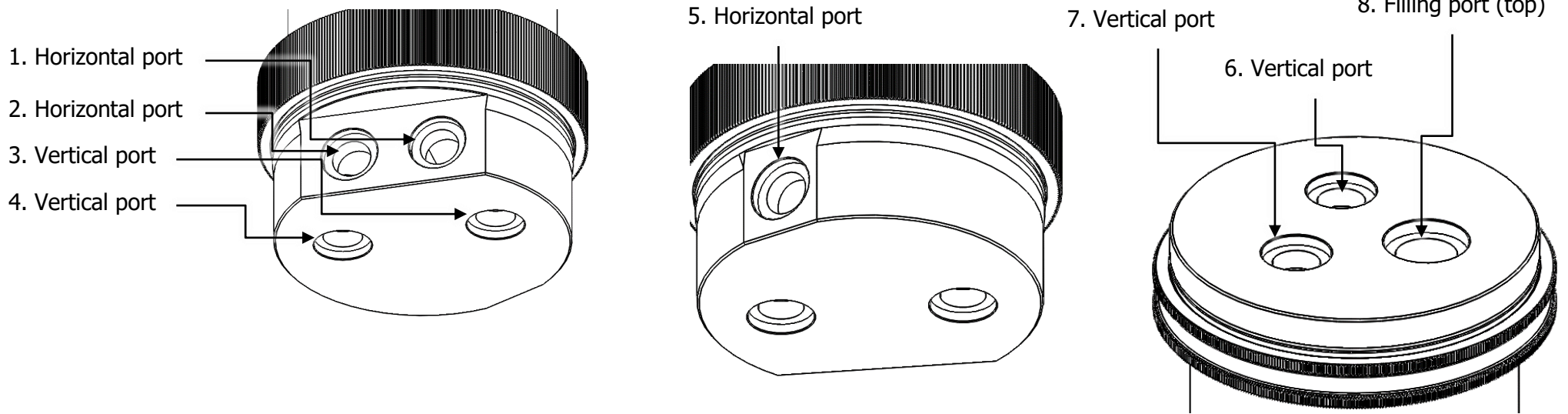
The nut must be tightened with fair amount of force so that the rectangular gasket is fully compressed.

The assembly is now completed.

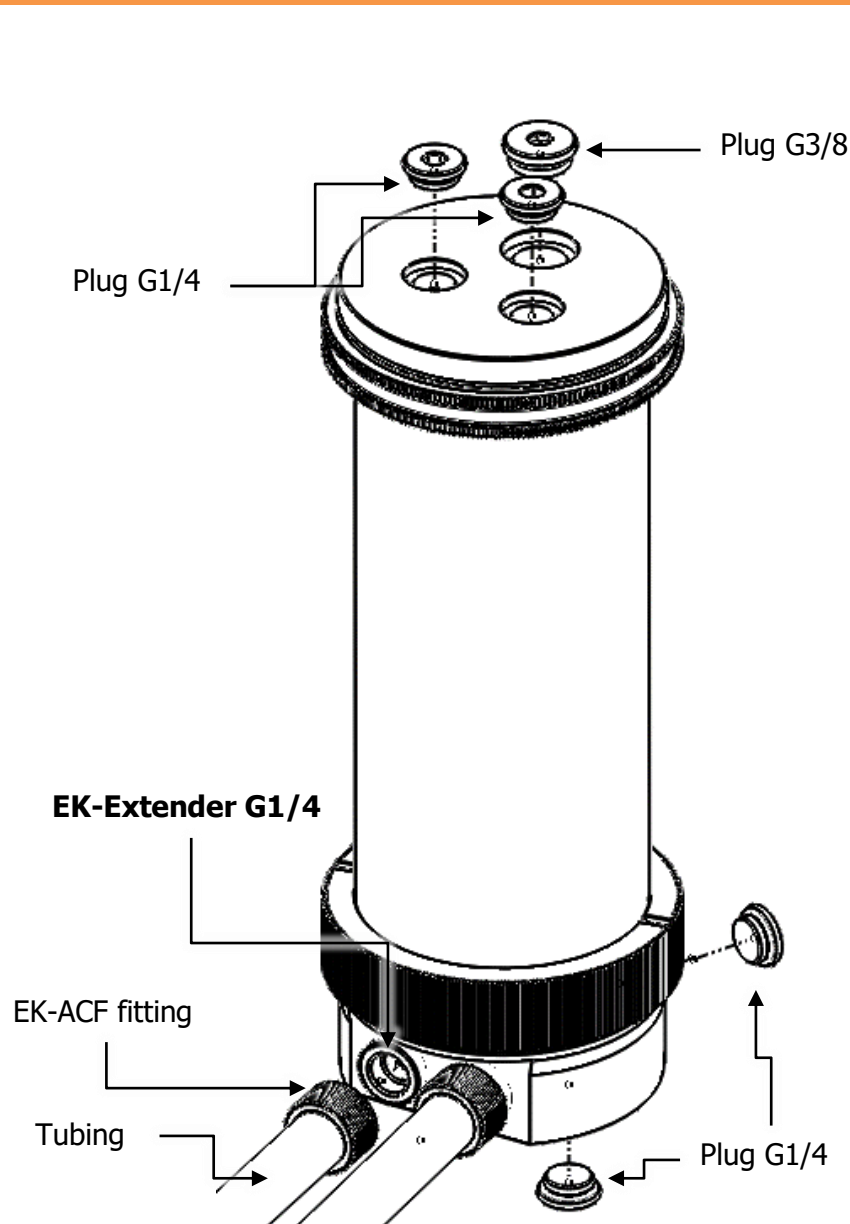
The same procedure stands for both sides of the reservoir (Top and Bottom).
You should always use Bottom M90 Nut with bottom acetal part and Top M90 Nut with Top acetal part of the RES X4 250 Reservoir.

GENERAL OVERVIEW OF THREADED PORTS

EK-RES X4 series reservoir features 5 (five) G1/4 threaded inlet/outlet openings on the Reservoir Bottom plus additional two on the Reservoir Top + the G3/8 filling port. In order for reservoir to function properly one port must be used as an inlet and one as an outlet. Unused ports must be closed with plugs using enclosed 6mm Allen key!



RECOMMENDED RESERVOIR CONFIGURATION



IMPORTANT NOTES

1. All the ports are recessed therefore it is mandatory to use the enclosed **EK-Extender G1/4** (EAN: 3831109845165) with all the active ports.
2. G3/8 port on the top is intended to be used only as fill port.
3. When using EK-Extender G1/4 make sure not to use fittings or barbs with G1/4 thread longer than 5mm! All *EK-ACF* and *EK-HFB* are compatible!
4. When using ports #1 and #2 make sure not to use fittings or barbs with diameter larger than 25mm! All *EK-ACF* and *EK-HFB* fittings are compatible!
5. EK recommends the use of EK-ACF fittings. When using fittings other than EK-ACF series please use hose clamps or appropriate substitute to secure the tubing to the barb. The use of biocide containing and corrosion inhibiting coolant is always recommended for any liquid cooling system.
6. **When disassembling the reservoir it is mandatory to degrease the gaskets and the glass tube. The best is to use a alcohol with a gentle cloth. Not following this recommendation may lead to leakage.**

TIPS AND ADVICES

1. The reservoir can be installed in all possible directions. Please make sure that the main suction port is flooded in order to prevent air bleeding problems.
2. When using a bottom feeding vertical configuration (using ports #3 and #4 as inlet/outlet) you may experience severe vortex issues. Using a Acrylic HD tube will remedy this issue. Please see STEP 3 (optional)!
3. When using Acrylic HD tubes to extend the ports make sure that there is enough coolant in the reservoir to flood the suction port.

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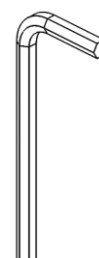
REQUIRED TOOLS AND ACCESSORIES:



Phillips-head
screwdriver



power drill with 5mm
drill bit (optional)



2,5mm and 6mm
Allen keys