#### EK-Quantum Inertia D5 PWM



PUMP



This product is intended for installation by expert users only. Please consult with a qualified technician for installation. Improper installation may result in damage to the 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 website at www.ekwb.com for updates.

Before you start using this product, please follow the basic auidelines:

Carefully read the manual before beginning with the installation process!

EK Fittings require only a small amount of force to screw them firmly in place since the liquid seal is ensured with the rubber o-ring gaskets.

The use of quality market-proven corrosion-inhibiting coolants is always strongly recommended for any liquid cooling system.

#### **BOX CONTENT**



EK-Ouantum Inertia D5 PWM D-RGB

Bag content is universal; you may not need every screw.

Allen Key 2 mm (1 pc)

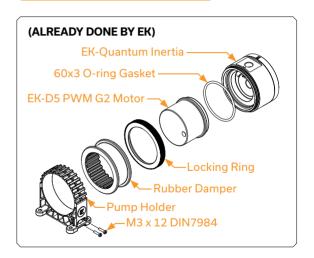
Allen Key 2.5 mm (1 pc)



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# Bag content is universal; you may not need every screw. M4 x 10 DIN7984 (5 pcs) M3 x 12 DIN7984 (2 pcs) M4 PVC Washers (5 pcs) Protective Sticker (1 pc)

#### **INSTALLING THE PUMP**

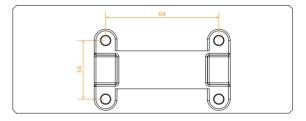


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### Install the EK-D5 PWM G2 Motor onto the EK-Quantum Inertia by following these steps:

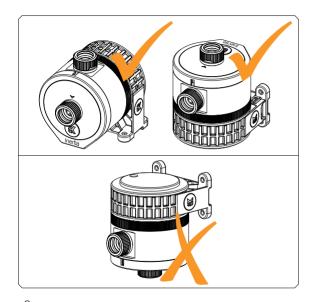
- Install the provided 60x3 O-ring gasket to the EK-D5 PWM G2 Motor.
- Once the O-ring gasket is in place, take the pump and place it into the EK-Quantum Inertia. You can rotate the EK-D5 PWM G2 Motor if required.
- 3. Fix the pump onto the **EK-Quantum Inertia** using the locking ring.
- 4. Take the **rubber damper** and place it into the **pump holder**.
- Once the rubber damper is installed into the pump holder, push the assembled part onto the EK-D5 PWM G2 Motor.
- 6. Take the M3x12 DIN7984 screws and secure the EK-D5 PWM G2 Motor to the pump holder. You should use the 2mm Allen Key. The plate with two M3 thread holes is preinstalled by EK.

## INSTALLING EK-QUANTUM INERTIA D5 PWM D-RGB



By default, the **EK-Quantum Inertia D5 PWM D-RGB** ships with a pump holder that can be installed directly to the computer chassis. If there are no appropriate mounting holes available, the user may need to drill four (4)  $\Phi$ 5 mm holes through the metal chassis with an electric power drill. **Included is a sticker that can be used to mark the hole centers accurately.** 

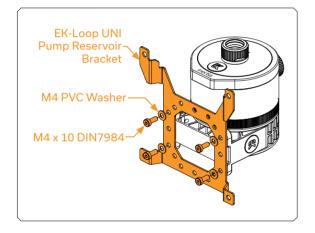
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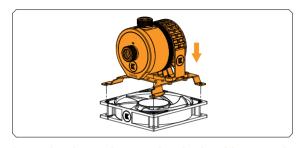


EK-Quantum Inertia D5 PWM D-RGB can be used in any mounting configuration (position) apart from being mounted upside down! Mounting the pump upside down will result in the pump running dry and eventually lead to premature failure of the pump!

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### INSTALLING THE ASSEMBLY USING A PUMP BRACKET\*





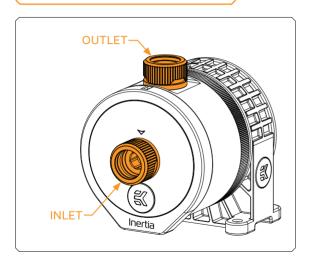
\*an optional step; the pump bracket is sold separately

If you have an option to mount the assembly on 120/140mm fan or 120/140mm fan mounting holes, EK recommends using the **EK-Loop UNI Pump Reservoir Bracket**.

Secure the **EK-Quantum Inertia D5 PWM D-RGB** onto the **EK-Loop UNI Pump Reservoir Bracket** using the enclosed **M4 x 10 DIN7984** screws and **M4 PVC** washers (as shown in the image).

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#### **ATTACHING THE FITTINGS**

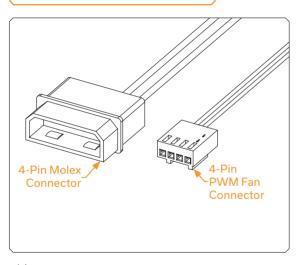


EK recommends using **EK-Quantum Torque Fittings** with the **EK-Quantum Inertia D5 PWM D-RGB** series pump tops. To ensure the tubes are securely attached to the barb/fitting, please use hose clamps or an appropriate substitute.

- It is mandatory to use the correct INLET and OUTLET ports.
- The OUTLET is the G1/4 threaded opening on the side of the pump-top housing.
- The INLET (suction) port is the central G1/4 threaded opening on the EK-Quantum Inertia D5 PWM D-RGB front face plane.
- Make sure not to use fittings or barbs with a G1/4 thread longer than 5mm! All EK fittings are compatible.

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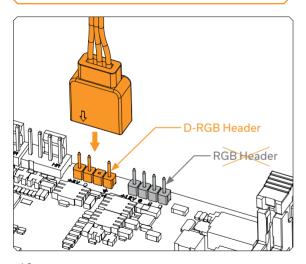
#### **CONNECTING THE PUMP**



The EK-D5 PWM pump has two following connectors:

- **1. 4-Pin Molex** Must be connected directly to your PSU at all times as it's used to power the pump.
- 2. 4-Pin PWM Fan Connector Can be connected to your motherboard's CPU, fan, or designated water pump header, as well as a controller. This cable is used to control and report the rotational speed of the pump. If it's not connected, the pump will run at its maximum speed (100% PWM).

#### **CONNECTING THE D-RGB LIGHTS**



Plug the 3-pin connector from the water block's D-RGB LED light to D-RGB HEADER on the motherboard. The LEDs will work if the pin layout on the header is as follows: +5V, Data, Empty, Ground.



Please, ensure that the arrow indicated on the connector is plugged into the +5V line, as indicated on your motherboard.

Failure to do so will damage your motherboard or the LED strip.

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#### **TESTING THE LOOP**

To make sure the installation of EK components was successful, we recommend you perform a leak test for 24 hours.

When your loop is complete and filled with coolant, connect the pump to a PSU outside of your system. Do not connect power to any of the other components. Turn on the PSU and let the pump run continuously. It is usual for the coolant level to drop during this process as air collects in the distribution plate.

Inspect all parts of the loop, and in case the coolant leaks, fix the issue and repeat the testing process. Ensure that all hardware is dry before the system is powered on, to prevent any damage.

#### SUPPORT AND SERVICE

For assistance please contact: http://support.ekwb.com/

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