EKWB Loop VTX PWM Motor User Guide

Contents

EKWB Loop VTX PWM Motor

Product Usage Instructions

Pump Installation:

1. Insert the O-Ring into a Pump groove.
2. Install the EK-VTX Pump using four (4) M4x35 ISO 7984 screws. Position the pump onto the reservoir. Make sure all the holes are aligned. Tighten the screws evenly.

Connecting the Pump The EK-VTX Pump has two connectors: a 4-PIN MOLEX CONNECTOR and a 4-PIN PWM FAN CONNECTOR.

Testing the Loop

1. To ensure successful installation, perform a leak test for 24 hours after filling the loop with coolant.
2. Connect the pump to a PSU outside of your system and let it run continuously for testing.
3. Inspect all parts for leaks, fix any issues, and repeat the testing if necessary.
4. Ensure all hardware is dry before powering on the system to\ prevent damage.

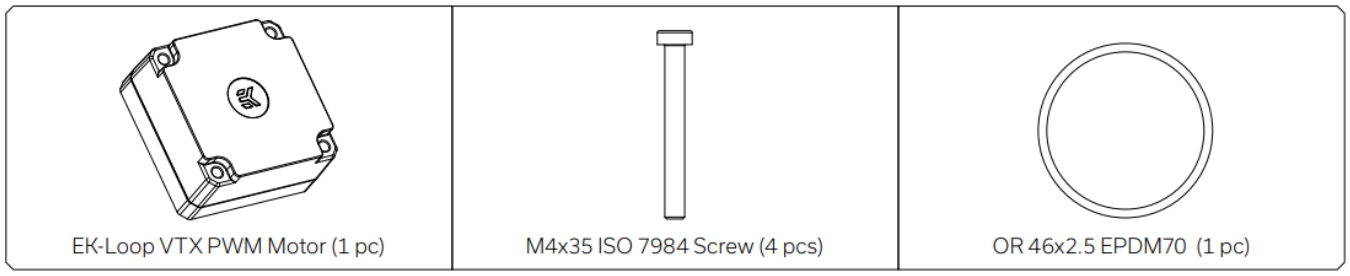
FAQ

- **Q:** Can the EK-VTX Pump be used with all FLT reservoirs?
- **A:** Yes, EK-VTX pumps can be used with all FLT reservoirs compatible with DDC pumps.
- **Q:** What should I do if I encounter coolant leaks during testing?
- **A:** If leaks occur, fix the issue, repeat the testing process, and ensure all hardware is dry before powering on the system.
- **Q:** Where can I find support or order spare parts?
- **A**: For support or spare parts, contact EKWB at **https://www.ekwb.com/customer-support**

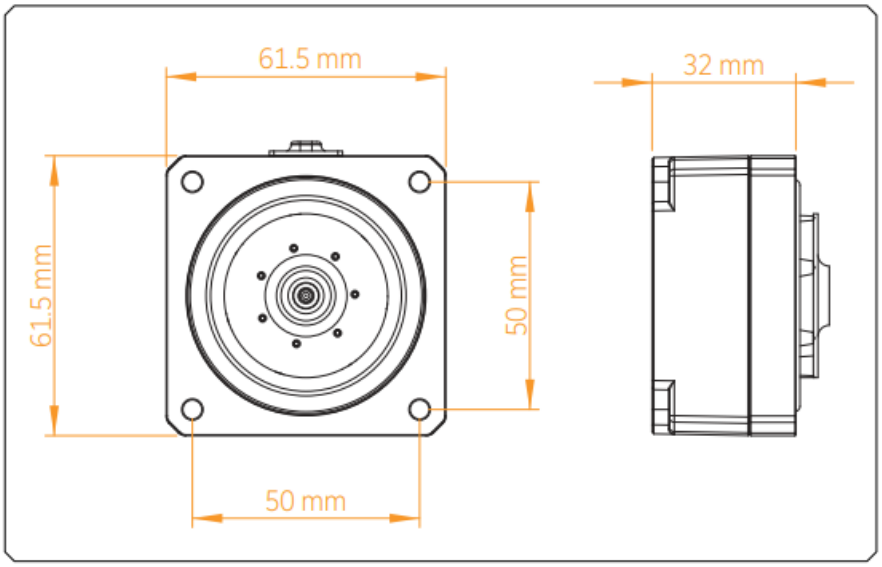
This product is intended for installation by expert users only. Please consult with a qualified technician since improper installation may result in damage to the equipment. EK assumes no liability whatsoever, expressed or implied, for the use of these products, or their installation. The following instructions are subject to change without notice. Please visit our website at **www.ekwb.com** for updates.

Before you start using this product please follow these basic guidelines: Carefully read the manual before beginning with the installation process.

BOX CONTENTS



DIMENSIONS



TECHNICAL SPECIFICATIONS

Maximum Fan and Radiator Compatibility

- **Motor:** Electronically commuted spherical motor
- **Rated voltage:** 12V DC
- **Power consumption:** 18W
- **Maximum pressure head:** 5.3m
- **Maximum flow:** 1100L/h
- **Maximum system temperature**: 60°C
- **Materials:** NORYL GFN2, EPDM O-rings, Copper Coils, Stainless Steel Shaft, Graphite Bushing
- **Power connector:** 4-Pin Molex and 4-Pin PWM FAN connector

Operational regime

- **PWM duty cycle:** ~ 11-100%
- **Default behavior**: Runs at 100% duty cycle when no PWM feedback signal is present

COMPATIBILITY

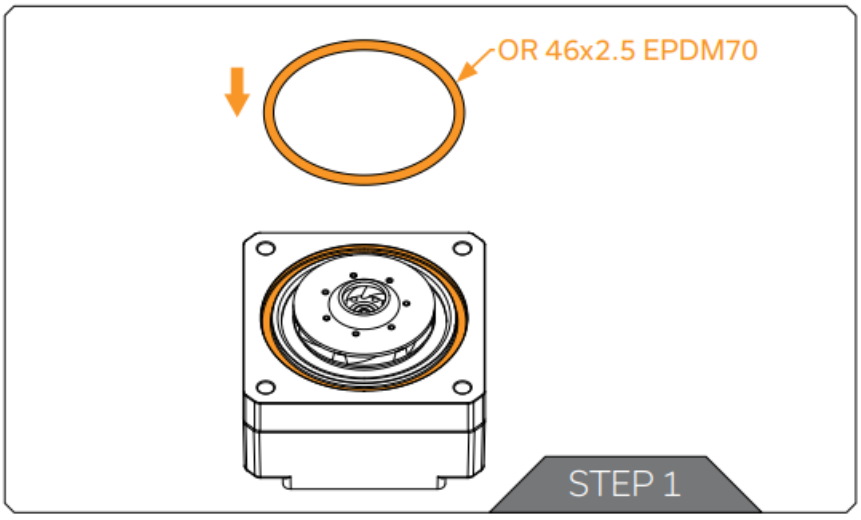
EK-VTX pumps can be used with all FLT reservoirs and REFLECTION distribution plates compatible with DDC pumps, providing an alternative option.

PUMP INSTALLATION

If you have already filled your loop with coolant, you will need to drain it before installing the EK-VTX Pump.

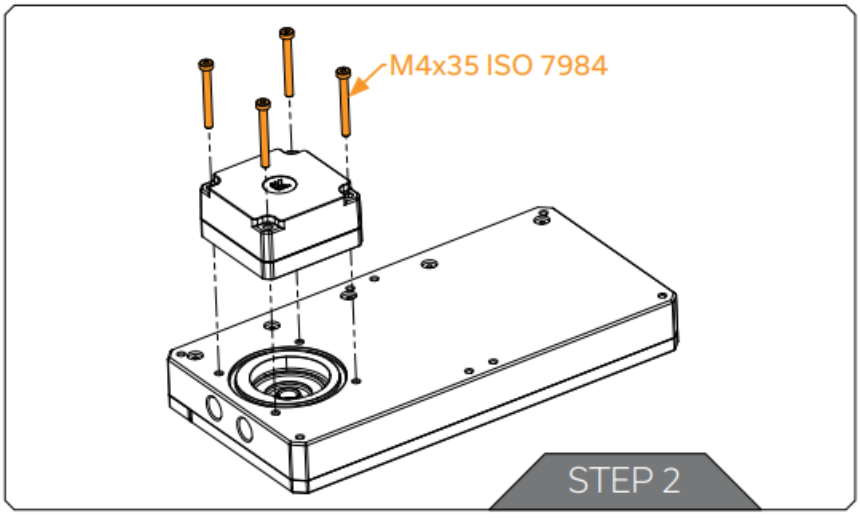
- **STEP 1**

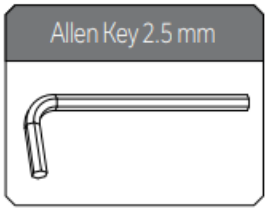
  Insert the O-Ring into a Pump groove.

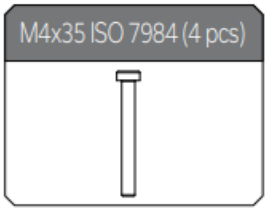


- **STEP 2**

  Install the EK-VTX Pump using four (4) M4x35 ISO 7984 screws. Position the pump onto the reservoir. Make sure all the holes are aligned. Tighten the screws evenly. Before attaching the EK-VTX Pump, make sure the O-Ring is placed correctly! Do not use excessive force! For this step you will need:



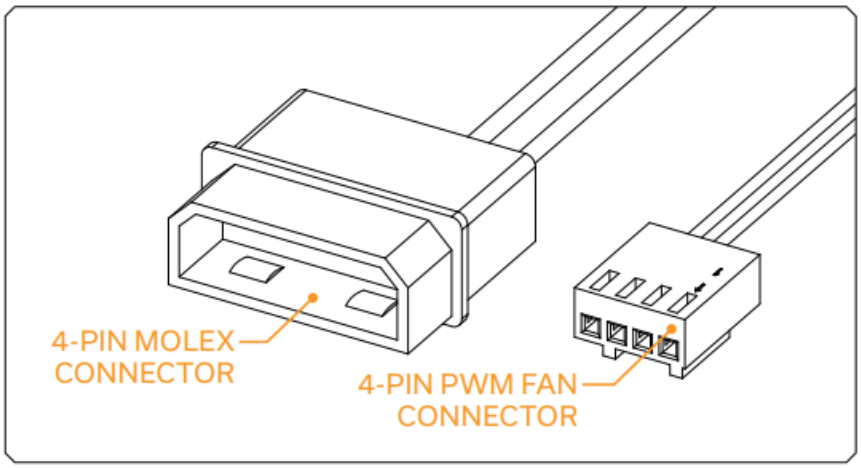




CONNECTING THE PUMP

The EK-VTX Pump has two connectors:

1. 4-Pin Molex – must be connected directly to your PSU at all times as it is used to power the pump;
2. 4-pin PWM Fan – can be connected to your motherboard CPU Fan or designated water pump header. It can also be connected to 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 maximum speed (100% PWM).



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 the power to any other components!
- Turn on the PSU and let the pump run continuously. It is normal for the coolant level to drop during this process as air collects in the reservoir.
- Inspect all the parts of the loop, and in the case of coolant leaks, fix the issue and repeat the testing process. Ensure that all hardware is dry before the system is powered on in order to prevent any damage.

CONTACT

SUPPORT AND SERVICE

- In case you need assistance or wish to order spare parts or a new mounting mechanism, please contact:
- **https://www.ekwb.com/customer-support/**
- EKWB d.o.o.
- Pod lipami 18
- 1218 Komenda
- Slovenia – EU

SOCIAL MEDIA

- EKWaterBlocks
- @EKWaterBlocks
- ekwaterblocks
- EKWBofficial
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Documents / Resources

	**EKWB Loop VTX PWM Motor** [pdf] User Guide Loop VTX PWM Motor, Loop VTX PWM Motor, VTX PWM Motor, PWM Motor, Motor

References

- **User Manual**