

Product Specification Sheet &

Installation Manuals



<u>EK series</u>

DC BRUSHLESS PUMPS

Do not forget other EK products for your water cooling system:











resevoirs



accessories

PUMP SPECIFICATIONS:

Model	EK-DCP 2.2	EK-DCP 2.6	EK-DCP 4.0
Rated voltage	DC12V +/-10%	DC12V +/-10%	DC12V +/-10%
Starting voltage	DC 8V above	DC 8V above	DC 8V above
Power Consumption	6.5W +/-10%	8W +/-10%	18W +/-10%
Load current	0.62A +/-10%	1A +/-10%	1.8A +/-10%
Q-max	400 L/hr +/-10%	600L/hour +/-10%	800L/hour +/-10%
H-max.	2.2m +/-10%	2.6m +/-10%	4m +/-10%
Size	52 x 45 x 50mm	61.7x 46.7 x 59.7mm	75 x 54 x 66mm
life Expectancy	50000/hrs at 25°	50000/hrs at 25°	50000/hrs at 25°
Noise	17.2 dB	21.5 dB	24.5 dB

Output Signal

Wire No.	Item	Standard	Wire Color	
1	GND		Black	
2	Vcc	12VDC (10.8~13.2VDC)	Red	
З	Sensor	Square wave signal	Yellow	

If pump use the power cables are two wires that is only GND and Vcc without sensor, also without signal output from the pump.

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INSTALLATION

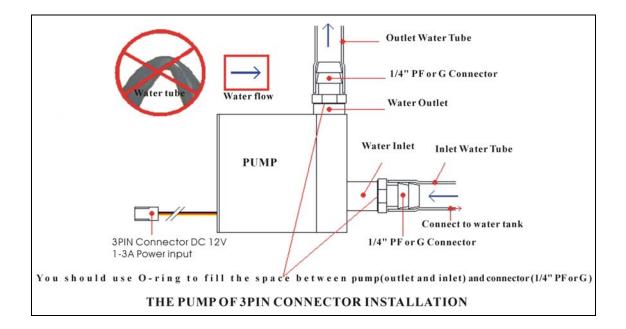
Caution

- Before refilling coolant for testing the water cooling system, please make sure again that all water tubes and connectors are securely fitted and correctively positioned. (EK-EKoolant high quality coolant is recommend)
- 2. If any fault develops not caused by pump but caused by falsely installation, the damage is not covered by the two (2) year warranty.
- 3. Please notice that if the water tube is folded to cause the water flow stopped while installation.
- 4. Forbid to operate EK pump without liquid.
- Operating environment: Indoor or in the computer case, environment temperature range is 0 ~ 60°C.
- 6. While removing water tubes, be sure to keep the device of these tubes away from any electronic part.
- 7. If you hear noise of bubbles while pump is operating, please make sure that the air pocket is out of the pump. (to see details in Annotation below)

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Step 1 <u>Placing the water tank / reservoir</u>

- 1. Make sure the water tank / Reservoir is placed above the pump.
- 2. This enables water coolant to fill the pump and enables pump to fill the whole system with water.



Step 2 Installation of connector

- 3. Setting the O-ring on the G1/4 threaded fittings.
- 4. Fitting the connectors with water outlet and inlet of pump tightly. (The pump suits with G1/4 threaded fittings.)

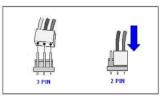
Step 3 Installation of water tube

- 1. Setting the clamp on the tube first.
- 2. Tightly link the tube with connectors which connected with pump.
- 3. Using the clamp to clamp the junctions.(Please make sure that every junction is tightly connected.)



Step 4 Installation of power supply

- 1. The power cord of pump can be plugged into CPU fan's power outlet on motherboard. Besides, you can use 3pin turn 4pin cord to connect with power supply in the non-use of sensor line situation.
- 2. Please read motherboard or power supply manual in detail before pump installation.
- 3. If you choose to use AC adaptor for power supply, please select DCI2V,
 1A to 3A ones. (Please make a choice depending on product specifications)



Step 5 Infusing coolant

- 1. Before you infuse coolant, please make sure that the water-cooling system has been full assembled.
- 2. When you fill the coolant into the water tank/reservoir, please move pump and water tank out of the housing to prevent other components from improper infusing damage. Or cover other hardware with thick layer of paper towels or regular towels.
- 3. Open the refilling lid of water tank, and fill the coolant almost to the top of the water tank/reservoir then cover the top of the tank/reservoir back.
- 4. Turn on the power for few seconds only, and check the coolant is sucked into the system. Before the water tank/reservoir is empty turn off the pump.
- 5. According to different watercooling systems as they can accept different volume of coolant, such as tank capacity and tube length, you may need to repeat the step 4-1 and 4-2 to make sure coolant is full of the whole system.

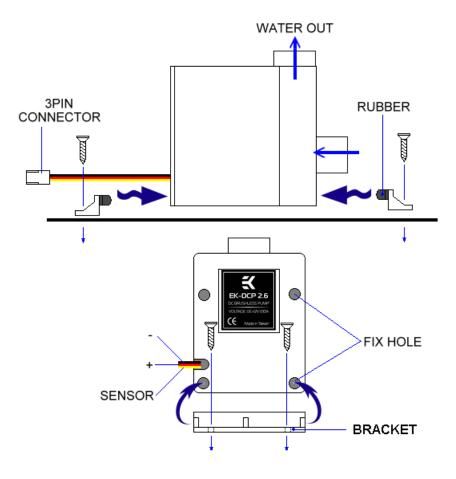
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Step 6 Fixing pump

- 1. After confirming no leakage situation, you can start fixing pump.
- 2. There are four equidistant holes on both top and bottom sides for two steadies. You can freely choose which direction you want to fix. Besides, you can add pad to strengthen the shock-absorbing effect.
- 3. After selecting the fixed mode that you like, assemble mountings, then fix in the place that you make selection.

Annotation: <u>Exhausting / Bleeding</u>

Placing tank upon pump, turn on the power for 1 minute then turn off the power for 1 minute, too. This action should last 5 minutes. This will help bleeding the small air bubbles from your watercooling system.



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