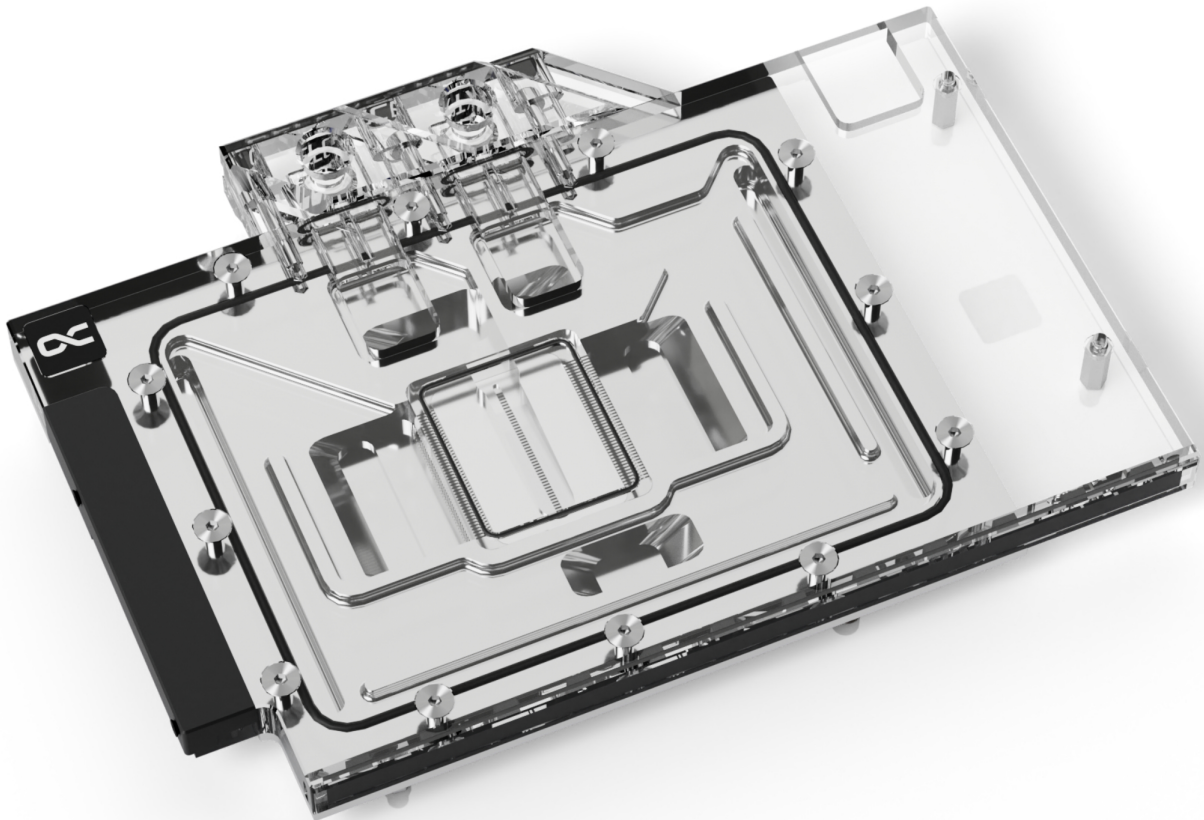


Alphacool Eisblock Aurora Geforce RTX 4090 Strix + TUF with Backplate

Alphacool article number: 13462

Download Center



Quick Info

The next generation - the Alphacool Eisblock Aurora water cooler for Geforce RTX 40XX graphics cards. In order to dissipate the enormous heat of this graphics card generation in the best possible way, numerous optimizations have been made to the water cooler compared to the previous model. The fin structure was adapted and enables a very good water flow while increasing the cooling surface. The modified jet plate with improved inflow engine ensures an optimal distribution of the water on the cooling fins.

- Optimised fin structure enables very good water flow & increase of cooling surface
- Modified jet plate ensures optimal distribution of the water on the cooling fins
- Chrome-plated copper cooler
- Visually calm & simple design with digital aRGB illumination

Compatibility

- Asus ROG Matrix GeForce RTX 4090 Platinum, ROG-MATRIX-RTX4090-P24G-GAMING, 24GB GDDR6X (90YV0ID7-M0NM00)
- Asus ROG Strix GeForce RTX 4090 OC, ROG-STRIX-RTX4090-024G-GAMING, 24GB GDDR6X (90YV0ID0-M0NA00)
- Asus ROG Strix GeForce RTX 4090, ROG-STRIX-RTX4090-24G-GAMING, 24GB GDDR6X (90YV0ID1-M0NA00)
- Asus TUF Gaming GeForce RTX 4090 OC, TUF-RTX4090-024G-Gaming, 24GB GDDR6X (90YV0IE0-M0NA00)
- Asus TUF Gaming GeForce RTX 4090, TUF-RTX4090-24G-GAMING, 24GB GDDR6X (90YV0IE1-M0NA00)

Scope of delivery

1x Eisblock Aurora Acryl GPX-N RTX 4090 Master	1x PCI Bracket
1x Backplate	2x M2x10 Schraube
1x 15x15x1mm Pad	2x 100x8x3mm Pad
2x 51x15x1mm Pad	1x 15x15x3mm Pad
1x 38x15x1mm Pad	2x 51x8x3mm Pad
2x 105x8x1mm Pad	1x 40x8x3mm Pad
4x 8x8x1mm Pad	1x 45x45x3mm GPU-Pad
1x Thermal grease	4x M2x11mm Screw
1x Putty tool	1x ARGB Adaptor
7x EVA Unterlegscheibe	2x G1/4" Plugs
7x M2x5 Schraube	1x Plug tool

Technical data cooler

L x W x H	220,9 x 157 x 34,2mm
Material cooler	chrome-plated copper
Material cooler top	acrylic
Max working temperature	60°C
Pressure tested	0,8 bar
Threads	4 x G1/4"
Thickness cooling fins	0,4mm
Distance cooling fins	0,4mm
Illumination	digital aRGB LEDs
Power connector digital aRGB LEDs	3-Pin JST
Power digital aRGB LEDs	5V
Number of digital aRGB LEDs	12

Technical data backplate

L x W x H	220,9 x 132,5 x 6mm
Material	aluminium
Color	black

Download links

Manual	13462_Alphacool_Eisblock_Aurora_Geforce_RTX_4090_Strix__TUF_with_Backplate_Manual.pdf
Product pictures	13462_Alphacool_Eisblock_Aurora_Geforce_RTX_4090_Strix__TUF_with_Backplate_pics.zip

Packaging dimensions per unit

L x W x H	355 x 170 x 45 mm
Weight	1660 g

Other data

Certificates	CE, FC, RoHS
EAN	4250197134620
Customs code	84195080900

Article text

The next generation - the Alphacool Eisblock Aurora water cooler for Geforce RTX 40XX graphics cards. In order to dissipate the enormous heat of this graphics card generation in the best possible way, numerous optimizations have been made to the water cooler compared to the previous model. The fin structure was adapted and enables a very good water flow while increasing the cooling surface. The modified jet plate with improved inflow engine ensures an optimal distribution of the water on the cooling fins.

Technical Highlights

The fin structure of this Eisblock cooler generation was developed together with Nvidia board partners. The fin thickness is 0.4 mm, the distance between the cooling fins is 0.4 mm. This ensures a very good water flow while increasing the cooling surface. The jet plate has a revised inlay that spreads the water pressure better over the fins thus optimizing the heat absorption. The adjusted water inflow gives the water a better angle of inflow.

Chrome-plated copper

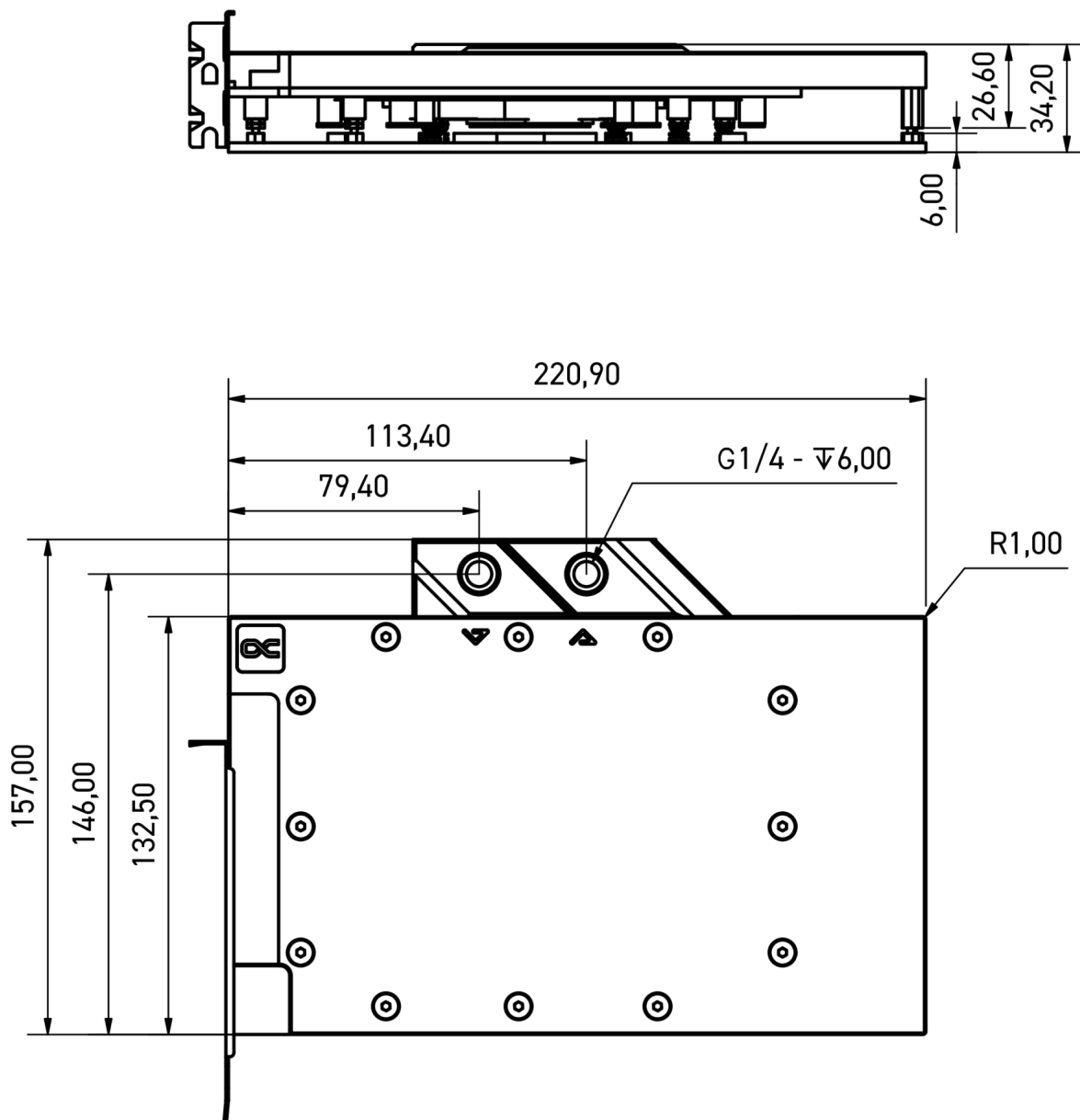
The cooler is made entirely of chrome-plated copper. A chrome plating is much harder than a nickel plating and therefore less sensitive to acids, scratches and damage. It completely eliminates the risk of chipping nickel plating. Additionally, chrome plating looks much more homogeneous and provides a shine that cannot be achieved by nickel plating. Chrome-plated coolers have previously only been used in the industrial sector in areas where extreme influences act on the coolers.

Design

The Aurora design of the Geforce RTX 40XX Eisblock generation is visually calmer and simpler. Only one O-ring runs around the entire cooler. The design around the cooling fins and jetplate makes for a cleaner look. The illumination of the digitally addressable RGB LEDs is even better distributed throughout the cooler as a result of the chrome plating. The terminal's design is in line with the classic Aurora design.

Thermal paste & thermal pads

The included thermal compound is Alphacool's Subzero. With a thermal conductivity of 16 W/mK, it is one of the highest performing thermal pastes on the market. The electrically non-conductive thermal compound is particularly well suited for high contact pressures, but can still be processed perfectly due to its viscosity of 850,000 TF. Alphacool Soft Pads with 1mm thickness are used on the voltage converter and the graphics memory. The thermal conductivity of the pads is 7 W/mK. The pads for the back of the PCB are 3mm thick and have a thermal conductivity of 3 W/mK.



General tolerance: $\pm 0,25\text{mm}$
Dimension in millimeter