

Alphacool Core DDCzero XS Reservoir with Pump

Alphacool article number: 14848



Quick Info

The Alphacool Core DDCzero XS Reservoir combines an exceptionally compact reservoir with the powerful Alphacool DDCzero PWM pump. Thanks to its space-saving design, this combination is ideal for small-form-factor systems and other water-cooling systems with severely limited installation space.

- Compact design, ideal for small-form-factor systems
- Includes Core DDCzero PWM pump
- Robust construction ensures stability
- Level indicator with aRGB lighting

Scope of delivery

- 1x Alphacool Core DDCzero XS Reservoir
- 1x Alphacool Core universal bracket set for DDCzero reservoir
- 1x Alphacool Core DDCzero 3300-4800rpm PWM Pump
- 1x G1/4 Plug
- 1x aRGB Adapter

Technical data

Dimensions (L x W x H) (in mm)	80,30 x 60,87 x 58,30
Material base	Acetal
Material top	Aluminium
Material reservoir	Acryl
Number of connections	3x
Material connection thread	2x Acetal, 1x Acryl
Threads	G 1/4
Maximum torque G1/4 thread (in Nm)	1,00
Maximum torque M3 thread (in Nm)	0,48
Maximum operating temperature (in °C)	60
Minimum operating temperature (in °C)	-20
Recommended working temperature (in °C)	20
Maximum tested pressure (in bar)	2,00
Recommended working pressure (in bar)	0,0 - 1,0
Maximum filling volume (in ml)	50
LED quantity and length	11pc. / 182,60mm
LED Voltage	5V DC
LED Ampere	0,06A
LED Power	3,3W

Technical data pump

Dimensions (D x H)	46,00 x 24,20mm
Material pump housing	Plastic
Material pump cover	Plastic
Material axle	Ceramic
Connections	4-Pin PWM
Power	6,2W
Rotational speed	3000 - 4800 RPM
Cable lengths	4-Pin PWM - 48cm
Operating voltage	8-13V DC / 14W IP32
Starting voltage	12V DC
Maximum pumping head	1,4m
Maximum flow rate	220L/h
Maximum working temperature	60°C
Weight	50g
Color	Black

Download links

Manual	14848_Alphacool_Core_DDCzero_XS_Reservoir_with_Pump_Manual.pdf
Product pictures	14848_Alphacool_Core_DDCzero_XS_Reservoir_with_Pump_pics.zip
EU-DoC / CE / RoHS	Alphacool_EuDoc_CE_RoHS_14848.pdf

Packaging dimensions per unit

L x W x H	265 x 140 x 70 mm
Weight	800 g

Other data

Certificates	CE, FC, RoHS
EAN	4250197148481
Customs code	84733080000
Guarantee	3 years

Article text

The Alphacool Core DDCzero XS Reservoir combines an exceptionally compact reservoir with the powerful Alphacool DDCzero PWM pump. Thanks to its space-saving design, this combination is ideal for small-form-factor systems and other water-cooling systems with severely limited installation space.

Despite its compact dimensions, the reservoir provides sufficient filling volume for high-performance cooling loops. Three G1/4" ports allow flexible integration into the cooling system.

The base of the Core DDCzero XS Reservoir is made of durable acetal. The top is manufactured from aluminium, while the transparent reservoir is made of high-quality acrylic. This combination of materials ensures a high level of stability. The aluminium top serves solely as a visual design element and does not come into contact with the coolant. Two of the G1/4" connection threads are integrated directly into the robust acetal base. An additional port is located in the acrylic reservoir and can be used as a fill port.

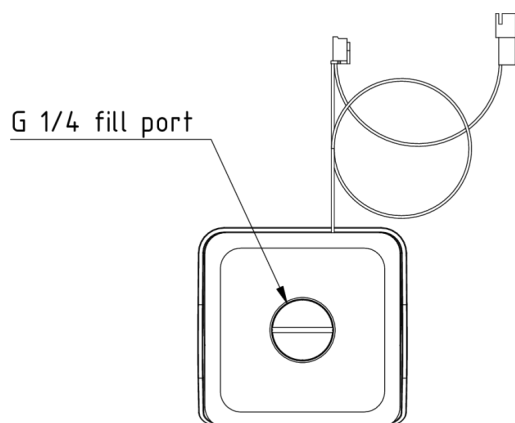
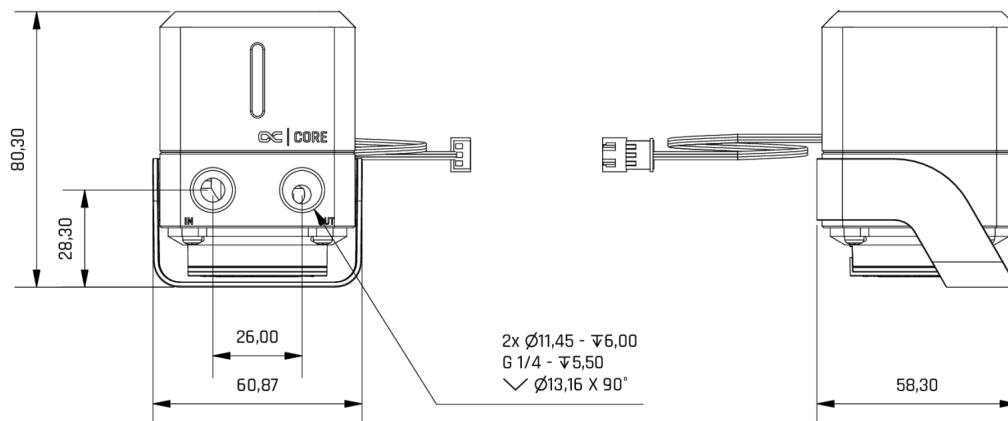
The integrated digitally addressable aRGB lighting discreetly highlights the reservoir and provides a narrow view into its interior. The lighting can be controlled via a compatible digital aRGB header on the motherboard or a suitable aRGB controller (Art.-No. 15360).

The compact pump-reservoir combination integrates both components into one space-saving unit, thereby reducing the required installation space.

The integrated Alphacool DDCzero PWM pump is a compact and powerful circulation pump for PC water-cooling systems, datacenter systems and industrial applications. A robust ceramic shaft, combined with the durable plastic housing, ensures reliable and long-lasting operation. The pump offers high delivery performance and ensures a reliable coolant flow. Its speed can be flexibly adjusted across a wide control range to meet the specific requirements of the system. The Alphacool DDCzero PWM pump is connected to the motherboard or a suitable controller via a 4-pin fan connector. This connector supplies power to the pump, enables PWM control and transmits the speed signal. PWM control allows the pump performance to be adjusted specifically to the current system load. This enables a balanced operation between high cooling performance and the lowest possible noise level.

The Alphacool Core Universal Mounting Kit is included in the scope of delivery. It enables easy installation and securely holds the Core DDCzero Flat Reservoirs on radiators or fan mounting positions in the **120 mm format**. Using the Alphacool Core Universal Mounting Kit, the reservoirs can be installed in two different orientations: straight or rotated by 90°.

Figure (1)



FAN/Pump Connection



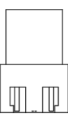
GND
12V DC
Tacho
PWM

aRGB Connection



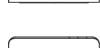
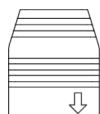
VCC 5V DC
DATA
DATA
GND

aRGB Socket



GND
DATA
DATA
VCC 5V DC

aRGB Connection



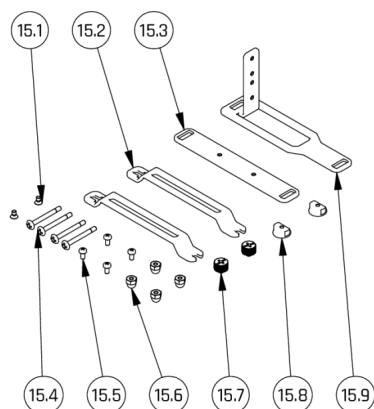
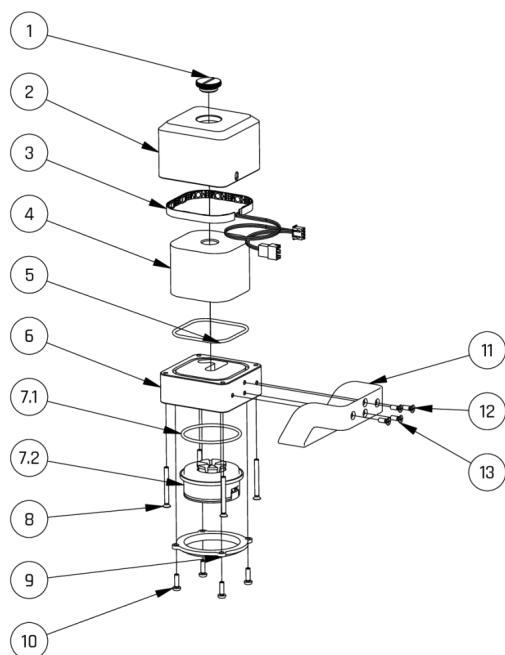
GND
DATA
DATA
VCC 5V DC

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

Figure (2)

Mechanical properties:

LED quantity and length	11,0pc. / L =182,6mm	Minimum temperature t min =	-20°C	Maximum torque of G thread M max =	G1/4 = 1,00Nm
LED Voltage V =	5 V	Working temperature t =	20°C	ISO 228-1 Parallel Whitworth pipe thread BSPP (BB)	
LED Ampere A =	0,06 A	Maximum temperature t max =	60°C	Maximum torque of	M max = M3X0,5 = 0,48Nm
LED Power W =	3,3 W	Working pressure p =	0,0 - 1,0Bar	M thread	
		Maximum pressure p max =	2,0Bar	DIN 13-1 Metric ISO standard thread	
		Maximum filling volume ml =	50ml		



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Alphacool Core DDCzero XS Reservoir

Parts List

Item	Quantity	Description	Material
1	1	Alphacool Eiszapfen screw plug G1-4 - Deep Black	CuZn39Pb3
2	1	AGB Cover V2	AlMg1SiCu
3	1	11 LEDs	Generisch
4	1	AGB. V2	LXN865
5	1	O-Ring 49 x 2	NBR Shore 70
6	1	Top	POM-C 4520
7.1	1	ORing 40 x 2	VMQ Shore A 70
7.2	1	Alphacool Core DDCzero PWM Pumpe	Generisch
8	4	ISO 7046-1 - M3 x 30	X10CrNi18-8
9	1	Pump Ring 38	ZnAl4Cu1
10	4	ISO 7045 - M3 x 10	X10CrNi18-8
11	1	Bracket Zink injection moulding	PA-757
12	2	ISO 7046-1 - M3 x 8	X10CrNi18-8
13	2	ISO 7046-1 - M3 x 8	X10CrNi18-8

Accessories

Item	Quantity	Description	Material
15.1	2	ISO 7046-1 - M3 x 5	X10CrNi18-8
15.2	2	Bracket 3	X10CrNi18-8
15.3	1	Bracket 2	X10CrNi18-8
15.4	4	FAN Screw M3 x 5 - L30mm	X10CrNi18-8
15.5	4	ISO 7045 - M3 x 6	X10CrNi18-8
15.6	4	M3 cap nut	X5CrNi18-10
15.7	2	Knurled screw M3 x 6	CuZn39Pb3
15.8	2	T-slot nut	CuZn39Pb3
15.9	1	Bracket 1	X10CrNi18-8