

## Alphacool ES Laing DDC310 Pump - Single black plastic bottom

Alphacool article number: 13991



### Quick Info

The Alphacool ES Solution Laing DDC310 pump serves as the foundation for various 1 to 4U server solutions from Alphacool. The unit is based around the very popular Alphacool DDC pump and has been coupled with a simple pump base to maintain compatibility with various Enterprise Solution reservoirs.

- Spherical bearing
- Maintenance-free pump
- Compact and powerful

### Scope of delivery

1x ES DDC310 Pump, black  
1x O-Ring  
1x Plastic bottom for direct mounting

## Technical data

Dimensions (L x W x H)	62 x 62 x 30mm
Material	Stainless steel, Carbon (FH821Z2), Ceramic (Al2O3 99,5%), Luranyl KR 2403 GW T4 (PPE+PS) , Fortron 1140L4 (PPS)
Weight	170g
Speed	3250 rpm
Max power consumption	8W
Voltage	12V DC
Power connector	4-Pin Molex
PWM control	n/a
Tacho-Signal	yes (3-Pin Molex)
Max. working temperature ambiente	10°C - 50°C
Max. working temperature water	10°C - 60°C
Max. head of pump	2,28m
Max. flow	200 l/h
Color	black
Revision	DDC4.CF-XTXXWX-01 BP54

## Download links

Product pictures	<a href="#">13991_Alphacool_ES_Laing_DDC310_Pump_-_Single_black_plastic_bottom_pics.zip</a>
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## Packaging dimensions per unit

L x W x H	75 x 75 x 45 mm
Weight	331 g

## Other data

Certificates	CE, FC, RoHS
EAN	4250197139915
Customs code	84137081900

## Article text

The Alphacool ES Solution Laing DDC310 pump serves as the foundation for various 1 to 4U server solutions from Alphacool. The unit is based around the very popular Alphacool DDC pump and has been coupled with a simple pump base to maintain compatibility with various Enterprise Solution reservoirs.

### Compact and powerful.

The flat design of the Laing DDC310 pump saves space and fits with the corresponding Enterprise reservoirs from chassis as small as a 1U server rack. This results in a very powerful pump that can be used in the smallest of spaces. The DDC310 variant offers with a delivery height of 2.44m enough power to operate an extensive water loop. The performance is enough to operate a dual or quad socket system including reservoir and radiators. The performance of the pump is also sufficient to operate a render server with up to 4 graphics cards.

### Spherical Ceramic Bearing

The pump uses a shaftless ball motor or spherical bearing. The motor is driven by magnets while the rotor is mounted on a ball-ceramic bearing. This makes the pump maintenance-free, as the bearing is self-adjusting and maintenance-free. The pump is lubricated by the coolant during operation. This makes the Alphacool ES Solution Laing DDC310 pump a so-called wet rotor pump. Due to its design, even small particles of dirt are no problem for the pump.

### Installation and Commissioning

The pump is delivered with a classic plastic bottom which ensures a high compatibility to all Enterprise Solution products. However, the pump can also be mounted on all existing DDC pump tops from Alphacool. The pump comes with a corresponding O-ring, only the mounting screws must be used from the respective reservoir, as these may differ in length. The power is supplied via a 4-pin Molex connector, the speed can be read out via a 3-pin Molex connector. This is usually done via the 3-pin fan connector on the mainboard or via an appropriate fan controller.

## Drawing

Performance Curves

