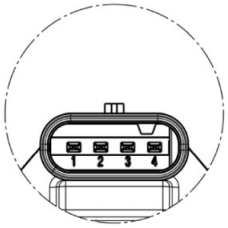
Pierburg „CWA100“ (CWA100-2)

Pierburg's electric water pump in the medium capacity range.



1 - Power (GND)
2 - Signal (GND)
3 - Signal (PWM)
4 - Power (12V)

Pierburg CWA100

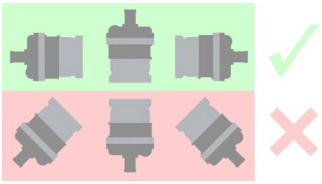
The CWA100 is a performance enhanced version of the CWA50. The dimensions and the weight is nearly the same.
This closes the gap between the CWA50 and the CWA200. (Sometimes also called CWA100-2)
Suitable for instance for intercooling in combustion engine vehicles and cooling of various systems in electrical vehicles.

Specifications:

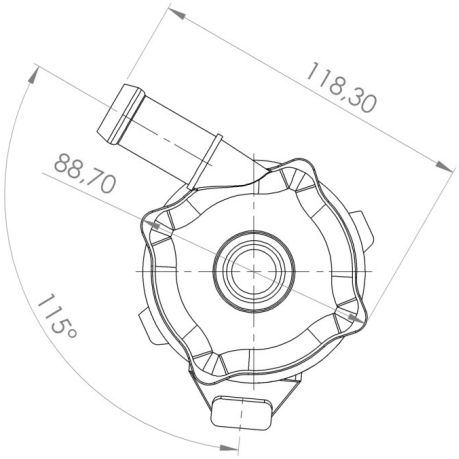
- Name: "Pierburg CWA100-2"
- Operation voltage: 8 to 16 V (Nominal: 12.5 V) (Full hydraulic power @ 12.5 to 16 V)
- Weight: approx. 1.0 kg
- Current consumption: 8.5A max. / (approx. 0.2mA in standby mode)
- Nominal diff. pressure: ≥ 0.75 bar *
- Flow rate: approx. 30-35 l/min @ 0.75bar / 40-45 l/min @ 0.50bar
- Speed: approx. 24 to 7000 rpm
- Temperature range: -40°C – 110°C (water) / -40°C – 120°C (ambient)
- Protection: IP 67 + IP 69 K
- Inlet / outlet nozzle removable / Four possible positions
- Part numbers: Pierburg: 7.06754.05.0 // Mercedes: A0005000486

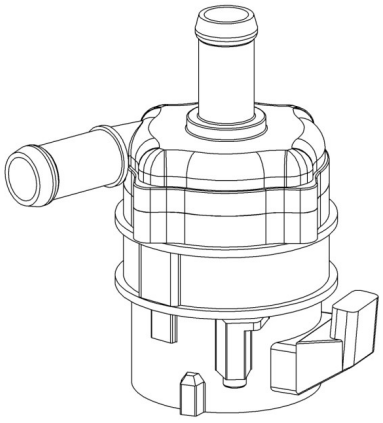
Notes:

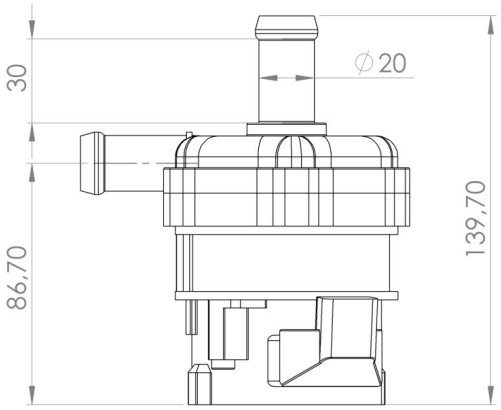
- Power (speed) reduction below 0°C and/or below 12.5V.
- Works with water, water/glycol mixtures and “other liquids” (according to Pierburg)
- The PWM input is equipped with a 10 kOhm pull-down resistor.
- Flow diagram @ 80°C, 12.5V, Water/Glycol 50/50

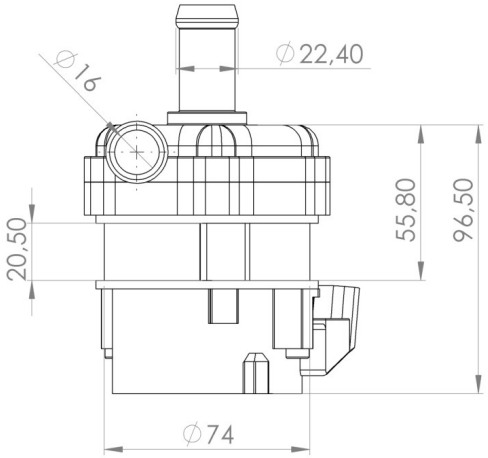


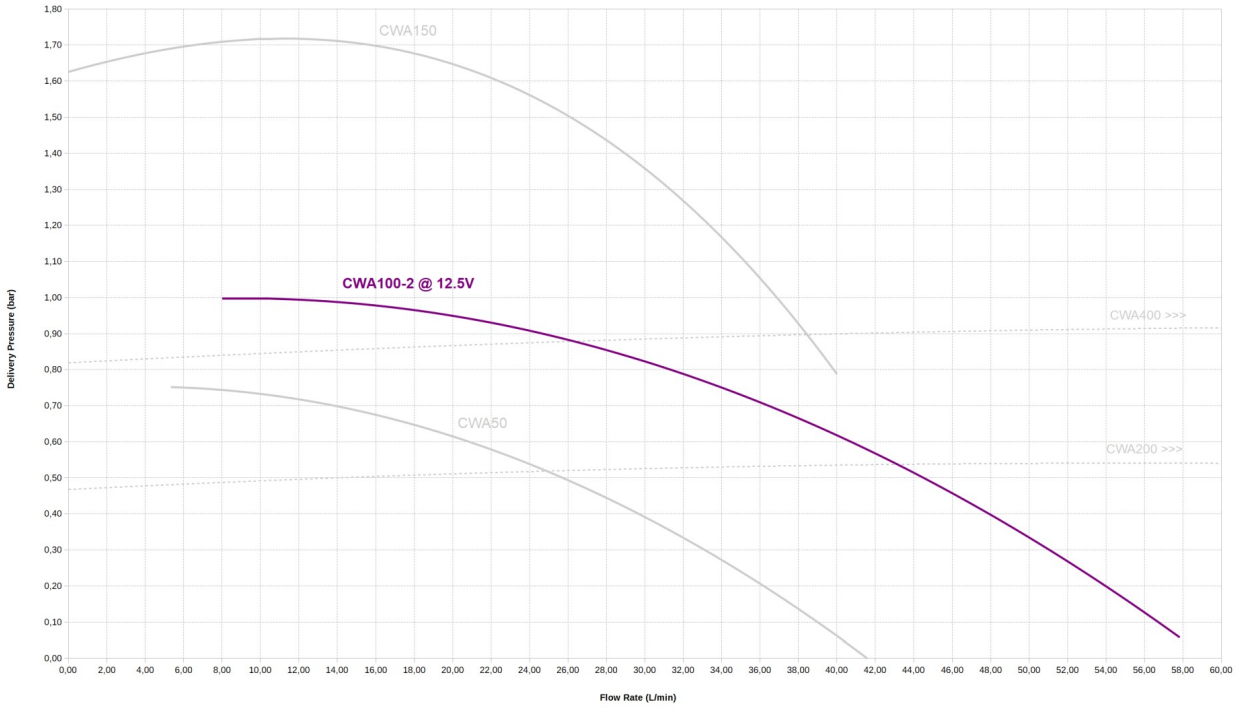
Know-how:
* Pump pressure is not the same as the system pressure.
Those pumps can of course be used in normal automotive cooling systems with system pressures in the range of 0.8 to 1.2 bar for instance.
The pump pressure or differential pressure expresses the ´resistance´ of which the pump has to work against. (more or less)


118,30
88,70
115°




30
∅20
86,70
139,70


∅16
∅22,40
20,50
55,80
96,50
∅74


CWA150
CWA100-2 @ 12.5V
CWA400 >>>
CWA50
CWA200 >>>
Delivery Pressure (bar)
Flow Rate (L/min)
1,80
1,70
1,60
1,50
1,40
1,30
1,20
1,10
1,00
0,90
0,80
0,70
0,60
0,50
0,40
0,30
0,20
0,10
0,00
0,00 2,00 4,00 6,00 8,00 10,00 12,00 14,00 16,00 18,00 20,00 22,00 24,00 26,00 28,00 30,00 32,00 34,00 36,00 38,00 40,00 42,00 44,00 46,00 48,00 50,00 52,00 54,00 56,00 58,00 60,00