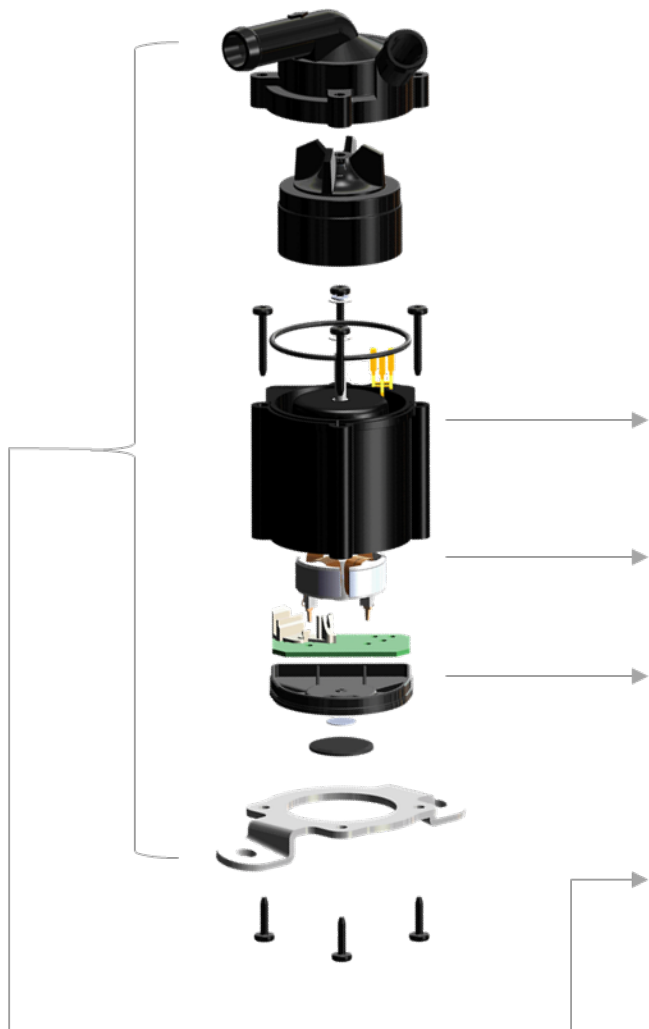




Gates® ThermalPro Radial flux Water Pumps are manufactured for durable, worry-free operation for the life of your vehicle. Constructed using only premium materials, we rigorously function and leak test our water pumps and components, like seals and bearings, to ensure optimum performance under intense driving conditions.

System Overview	
Model	12-20W Platform
Motor type	Single-phase brushless Radial Flux
Motor Mass	>220g
Voltage range	12V
Flow rate (l/min)	<8
Maximum operating speed	<6000rpm
Control strategy	PWM
Coolant temp. (°C)	-40—120
Ambient Temp (°C)	-40 -135
IP rating	IP65





Gates Radial Flux eWP Design:

Chassis or Direct Mounting

Flexibility to available Package

Radial coils

Silent, reliable, low cost design

Control Board

PWM communication

Modular and Scalable

Creating a “family” architecture to different application requirement

Motor Design		Standards	
Motor details	Up to 6 tooth 8 Poles	EMC	ISO 11451 / ISO 11452/ ISO 10605/ CISPR25
Motor Housing Material	Glass Reinforced plastic	Temperature Shock Test	DIN EN 60068-2-14
Volute Housing and Impeller	Glass Reinforced Plastic	Dust Test	ISO 20653
Winding Type	Non-Overlap concentrated	Thermal Cycle	IEC 60068-2-14
Winding Material	Copper or Aluminum	Vibration Test	ISO 16750-3 / DIN EN 60068-2-6/DIN 60068-2-64
Stator & Rotor Core Material:	Electrical steel		
Permanent Magnet	Ferrous		
Load Protection:	anti-reverse connection		
Coolant Specification:	50:50 Ethylene Glycol to water ratio		