

Electric Water Pump (EWP°)

The revolutionary range of Davies, Craig's patented Electric Water Pumps are performance accessories suitable for most makes of engines.

There are two models available: the EWP®80 (80 litres per minute) suitable for engines up to 3.0L and the EWP®115 (115 litres per minute) for larger, more powerful engines and 4WDs. They are designed to replace a vehicle's existing mechanical belt-driven water pump. Both models are simple, fit-it-yourself electric water pumps – lightweight, compact, more powerful design suitable for small, large, plus high-performance cars and 4WD vehicles.

They are vital performance products that improve engine cooling management while giving more power and torque and evenly dissipating heat soak. All deliver 3% to 5% improved fuel economy while lowering environmental

The many benefits of the EWP® include:

- · increased power and torque
- increased cooling capability
- eliminating heat soak
- better control of engine temperature
- flexible options for pump control

impact by reducing emissions. The EWP®80 is sufficient for use as a 'booster' to your existing mechanical pump.

Options for pump control

- 1. Use in conjunction with EWP®/Fan Digital Controller
 The Digital Controller has a micro-processer which will
 run the EWP® at exactly the right flow rate maintaining
 your set, targeted engine temperature.
- 2. Use in conjunction with Thermal Switch
 Combine the EWP® with an adjustable Thermal Switch to
 add a cooling boost to an overheating mechanical pump
 cooling system.
- 3. Continuous Running

Wire the pump to the ignition for maximum cooling – suitable for race vehicles, very hot climates and chronically overheating engines.

Electric Water Pump Kits are supplied with everything you need for DIY installation, including easy-to-understand instructions.

The EWP®/Fan Digital Controller is supplied in "Combo Packs" (see pages 7-9) or can be purchased separately.

Thermal switches are sold separately – for details see page 29.

Electric Booster Pump (EBP°)

The EBP® (Electric Booster Pump) is a 'brushless' 12 volt, high-flow, magnetically-driven water pump. The EBP® motor has no brushes to wear out – ever – and the pump is magnetically driven by the motor, which means that no shaft sealing is required. There is only one moving part, the impeller, and it is floating in the coolant. The pump chamber is hermetically sealed for trouble-free operation.

The EBP's ease of installation, low-current draw, highflow capacity and long life make it ideal for a range of applications.

The kit (part #9001) comes with everything you need for easy installation including, easy to understand, do-it-yourself instructions.

The many EBP® applications include:

- booster for car heater and LPG systems
- solar and marine applications
- water-cooled motorcycle and go-kart engines
- · turbo air/water intercoolers
- caravans and motor homes
- household irrigation

The EBP® is available in: #9001 Kit, #9002 Short, #9012 EBP only See page 15 for full details.

Questions? Please see "frequently-asked questions" on our website: www.daviescraig.com.au

EWP®115 Alloy/Digital Controller Combo 115 litres/min

Part #8050



Turbocharge your engine's cooling system with an EWP®115 Alloy Electric Water Pump

The revolutionary Davies, Craig EWP® 115 Electric Water Pump is now available in lightweight aluminium.

Designed for universal engine fitment, and with the high-performance pro, sprint, tarmac, circuit and drag racer in mind, the EWP®115 Alloy has 1" NPT internal threads at inlet and outlet for neat, tight, dash fitting applications.

All the same exciting features offered on the EWP®115 are here on the street-smart alloy Electric Water Pump.

This rugged alloy electric water pump is designed to replace the engine's existing mechanical water pump. This essential performance accessory increases power to your vehicle's drive wheels and improves coolant temperature control.

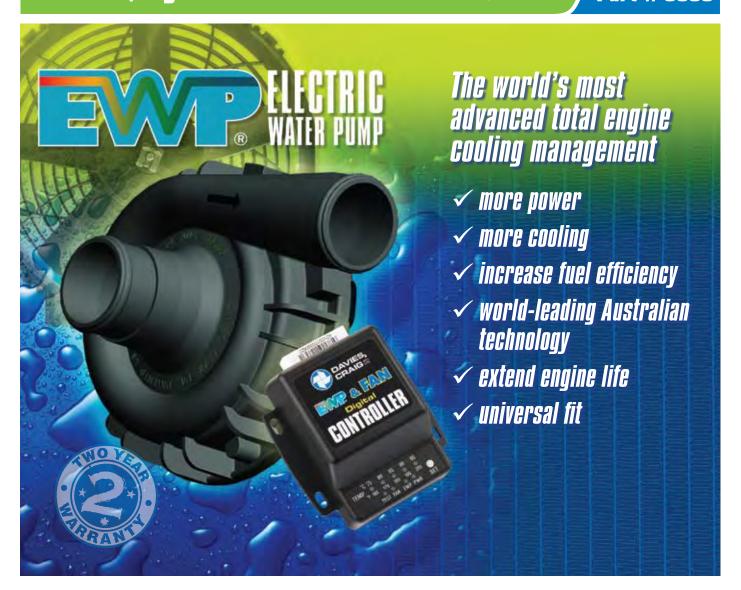
The EWP®115 Alloy is a universal, do-it-yourself, easy installation fitment to engines up to seven litres.

By removing the parasitic power losses of belt-driven water pumps, the EWP®115 Alloy releases up to 10kW (13hp) of extra power, increased torque and fuel savings.

Combine it with the EWP® & Fan Digital Controller and the pump continues to run after you've switched off, eliminating "heat soak" and extending engine life.

The EWP®115 Alloy and EWP® & Fan Digital Controller Combination Pack is the most economical way to increase horsepower and save on fuel consumption whilst caring for your engine.

Please refer to pages 10 and 16 in this catalogue for product specifications.



The EWP®115 Electric Water Pump and **EWP® & Fan Digital Controller**

The EWP®115 is a simple, DIY electric water pump designed to replace your existing beltdriven water pump.

Lighter and more powerful, the EWP®115 (115 litres per minute) pump is suitable for small, medium, large, high-performance and 4WD vehicles. It's a performance accessory that improves engine cooling control and capacity whilst giving you more power and torque and improved fuel economy.

Mechanical belt-driven water pumps run directly off the motor and sap engine power ... the EWP®115 is hardwired into your electrical system, by-passing the engine and releasing up to an additional 10kw (13hp).

Combined with the EWP® & Fan Digital Controller, the pump continues to run after you've switched off, eliminating "heat soak" and extending engine life.

Davies, Craig's revolutionary, Australian-designed EWP® pumps are made from anti-corrosive, lightweight nylon reinforced with fibreglass. Universal fit allows for easy mounting into the bottom radiator hose.

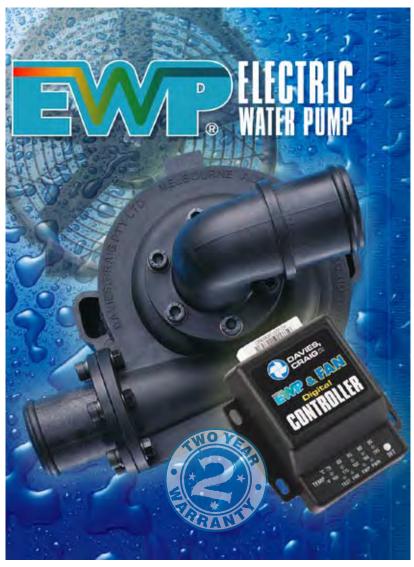
Our kits come with easy-to-understand DIY instructions and everything you need for easy installation, including different couplings to fit every hose size and all necessary electrical wiring.

The EWP®115 and EWP® & Fan Digital Controller Combination Pack is the most economical way to increase horsepower and save on fuel consumption whilst caring for your engine.

Please refer to pages 12 and 16 in this catalogue for product specifications.

EWP®80/Digital Controller Combo 80 litres/min

Part #8007



Please refer to pages 14 and 16 in this catalogue for product specifications.

The EWP®80 Electric Water Pump and **EWP®** and Fan Digital Controller Combo

- simple, do-it-yourself, easy to install, designed to complement or replace your existing belt-driven, mechanical water pump and engine thermostat.

The EWP®80 will fit most vehicle makes and models fitted with naturally-aspirated or turbo engines up to three litres. The revolutionary, Australian-designed EWP®80 is made from anti-corrosive, lightweight, heat-resistant, glass-filled nylon and incorporates a ceramic faced impellor seal for long-life durability.

The EWP®80 greatly enhances engine cooling control while giving you added power and improved fuel economy. By removing the parasitic power losses of a belt-driven, mechanical water pump the EWP® can provide up to 10kW (13hp) of extra power and increased torque.

The EWP® and Fan Digital Controller will manage both the EWP® and Thermatic® fan operations. The Digital Controller will vary the speed of the EWP® in response to the engine's coolant temperature. Five temperature settings are provided on the Controller for either maximum power or fuel efficiency.

The Thermatic® Fan/s will be activated automatically once the engine coolant rises 3°C (5.4°F) above the targeted (set) temperature. The Digital Controller will automatically run on for two minutes (or to 5°C/9°F below the set temperature) after engine shut down, eliminating 'heat soak' and extending engine life.

The EWP®80 Digital Controller Combo is supplied in a do-it-yourself kit with everything you need for fitment to your vehicle's engine, including an easy-to-follow DIY instruction booklet.

Spare Parts



Part # Contents

8505 90° Hose adaptor (suits EWP®)



Part # Contents 8307 Straight adaptor 8309 Elbow adaptor 8510 3mm sleeve rubber adaptor 8511 6mm sleeve rubber adaptor 8509 '0' ring

EWP® Adaptors



#1026	#1025	#1029	#1027	#1028

Part #	Contents
1025	Alloy adaptor - 1" NPT
1026	Alloy adaptor - 11/4" NPT
1027	Alloy adaptor straight - 25mm (1")
1028	Alloy adaptor straight - 19mm (3/4")
1029	1" NPT-16 adaptor

The world's first universal-fit, automotive Electric Water Pump. Suitable for all makes and models but will excel on large six-cylinder V8 engines, heavy-duty 4WDs and most engines over 400HP.

ELECTRIC WATER PUMP

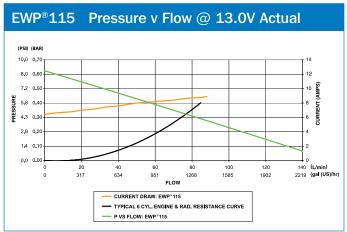
Technical specifications

Operating voltage	3V DC to 15V DC
Maximum current	10A
Flow rate (max)	115 L/min (1822 US gal/hr) @ 13V DC
Operating temperature	-40° to 130°C (-40° to 266°F)
Pump design	Clockwise centrifugal with volute chamber
Motor life	3,000 hours continuous at 80°C (176°F) and 12V DC; 7,000 hours with an EWP®/Fan Digital Controller
Pump weight	1,151 grams (2.56 lb)
Pump material	Aluminium
Burst pressure	500 kPa (72.5 psi)
Seal	Ceramic face seal
Fits hose sizes	38mm to 51mm (1½" to 2") Internal thread - inlet: 1" NPT - outlet: 1" NPT



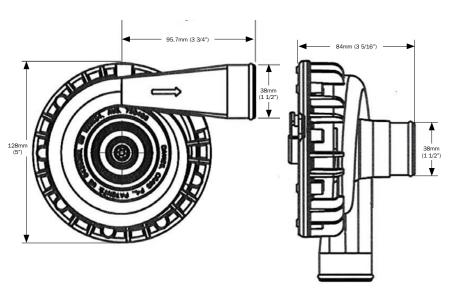
Kit contents

Part #	Description	Qty
8140	EWP®115 Alloy Pump	1
8515	Wiring harness	1
8510	Sleeve 3mm rubber adaptors	2
8512	Hose clamps	2
8525	Assorted hardware bag - includes relay #0533	1



Options

Part #	Description	Qty
8505	90° Hose adaptor	1
1025	Alloy adaptor 1"	1
	(2 required)	



Electric Water Pump - 24 volt EWP°115 115 litres/min

Part #8041

The world's first universal-fit, automotive Electric Water Pump - to suit 24-volt vehicles too! Can be a practical alternative to the mechanical belt-driven pump or fitted as an auxiliary pump.

Technical specifications

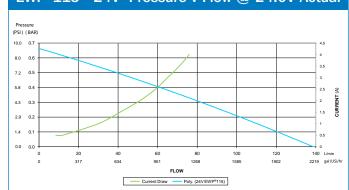
Operating voltage	10V DC to 27V DC
Maximum current	5.5A @ 24V
Flow rate (max)	115 L/min (1822 US gal/hr) @ 24V DC
Operating temperature	-40° to 130°C (-40° to 266°F)
Pump design	Clockwise centrifugal with volute chamber
Motor life 3,000 hours continuous at 80°C (176°F) and 24V DC;	
Pump weight	1,151 grams (2.56 lb)
Pump material	Aluminium
Burst pressure	500 kPa (72.5 psi)
Seal	Ceramic face seal
Fits hose sizes	38mm to 51mm (1½" to 2") Internal thread - inlet: 1" NPT - outlet: 1" NPT



Kit contents

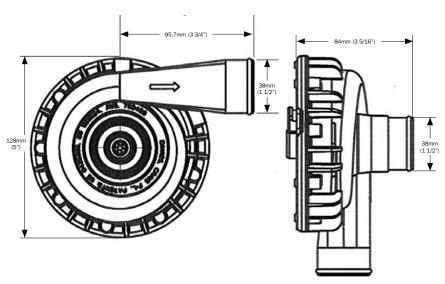
Part #	Description	Qty
8141	EWP®115 Alloy 24V Pump	1
8515	Wiring harness (with 10A fuse)	1
8510	Sleeve 3mm rubber adaptors	2
8512	Hose clamps	2
8527	Assorted hardware bag - includes 24V relay #0534	1

EWP®115 - 24V Pressure v Flow @ 24.0V Actual



Option

Part #	Description	Qty
8505	90° Hose adaptor	1
1025	1" NPT alloy adaptors	2



The world's first universal-fit, automotive Electric Water Pump. Suitable for all makes and models but will excel on large six-cylinder V8 engines, heavy-duty 4WDs and most engines over 400HP.



Technical specifications

Operating voltage	3V DC to 15V DC
Maximum current	10A
Flow rate (max)	115 L/min (1822 US gal/hr) @ 13V DC
Operating temperature	-40° to 130°C (-40° to 266°F)
Pump design	Clockwise centrifugal with volute chamber
Motor life	3,000 hours continuous at 80°C (176°F) and 12V DC; 7,000 hours with an EWP®/Fan Digital Controller
Pump weight	980 grams (2.16 lb)
Pump material	Nylon 66, 30% glass-filled
Burst pressure	500 kPa (72.5 psi)
Seal	Ceramic face seal
Fits hose sizes	38mm to 51mm (1½" to 2")



Kit contents

Part #	Description	Qty
8125	EWP®115 Pump	1
8515	Wiring harness	1
8510	Sleeve 3mm rubber adaptors	2
8512	Hose clamps	2
8525	Assorted hardware bag - includes relay #0533	1

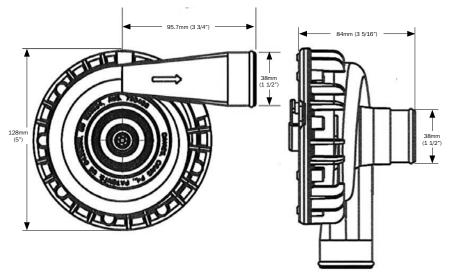
(PSI) (BAR) 10.0 0.70 8.0 0.60 7.2 0.50 10 0.0 0.00 2.0 0.00 2.0 0.00 2.0 0.00 317 634 951 1268 1585 1902 2219 (gal (US)hr) FLOW FLOW FLOW FLOW FLOW FLOW FLOW FLOW P VS FLOW: EWP*115 — TYPICAL 6 CYL. ENGINE & RAD. RESISTANCE CURVE — P VS FLOW: EWP*115

Pressure v Flow @ 13.0V Actual

EWP®115

Option

Part #	Description	Qty
8505	90° Hose adaptor	1



Electric Water Pump - 24 volt EWP°115 115 litres/min

Part #8026

The world's first universal-fit, automotive Electric Water Pump - to suit 24-volt vehicles too! Can be a practical alternative to the mechanical belt-driven pump or fitted as an auxiliary pump.



Technical specifications

Operating voltage	10V DC to 27V DC
Maximum current	5.5A @ 24V
Flow rate (max)	115 L/min (1822 US gal/hr) @ 13.5V DC
Operating temperature	-40° to 130°C (-40° to 266°F)
Pump design	Clockwise centrifugal with volute chamber
Motor life	3,000 hours continuous at 80°C (176°F) and 12V DC;
Pump weight	980 grams (2.16 lb)
Pump material	Nylon 66, 30% glass-filled
Burst pressure	500 kPa (72.5 psi)
Seal	Ceramic face seal
Fits hose sizes	38mm to 51mm (1½" to 2")



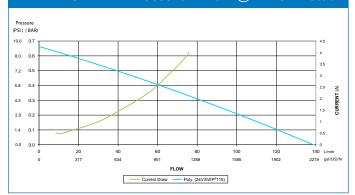
Kit contents

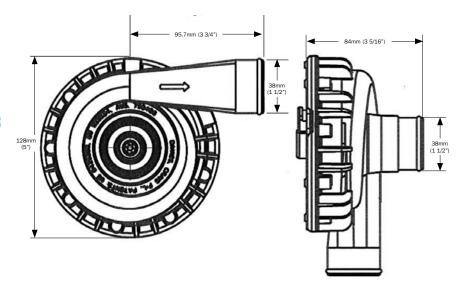
Part #	Description	Qty
8126	EWP®115 24V Pump	1
8515	Wiring harness	1
8510	Sleeve 3mm rubber adaptors	2
8512	Hose clamps	2
8527	Assorted hardware bag - includes relay #0534	1

Option

Part #	Description	Qty
8505	90° Hose adaptor	1

EWP®115 - 24V Pressure v Flow @ 24.0V Actual





The world's first universal-fit, automotive Electric Water Pump. Suitable for naturallyaspirated and turbo engines up to 3 litres.

Technical specifications

Operating voltage	3V DC to 15V DC
Maximum current	7.5A
Flow rate (max)	80 L/min (1268 US gal/hr) @ 13.5V DC
Operating temperature	-20° to 130°C (-4° to 266°F)
Pump design	Clockwise centrifugal with volute chamber
Motor life	3,000 hours continuous at 80°C (176°F) and 12V DC; 6,000 hours with an EWP®/Fan Digital Controller
Pump weight	900 grams (2.0 lb)
Pump material	Nylon 66, 30% glass-filled
Burst pressure	350 kPa (50 psi)
Seal	Ceramic face seal
Fits hose sizes	32mm to 51mm (11/4" to 2")



Part #	Description	Qty
8105	EWP®80 Pump	1
8307	Straight adaptor	1
8309	Elbow adaptor	1
8509	O ring	2
8515	Wiring harness	1
8510	Sleeve 3mm rubber adaptors	2
8511	Sleeve 6mm	2
8512	Hose clamps	2
8908	Assorted hardware bag - includes relay #0533	1

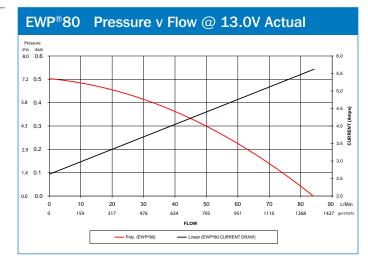
Options

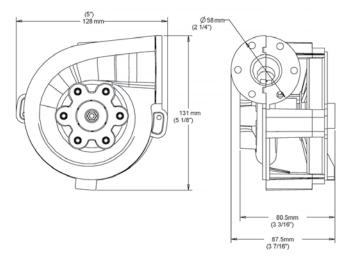
Part #	Description	Qty
1025	Alloy adaptor - 1"	1 *
1026	Alloy adaptor - 11/4"	1 *
1027	Alloy adaptor straight - 26mm	1 *
1028	Alloy adaptor straight - 19mm	1 *

* 2 required









Electric Booster Pump (EBP®) 15 litres/min

A high-performance brushless motor, magneticdrive pump. Compact and versatile 12V pump for a range of applications.

Davies, Craig developed the Electric Booster Pump (EBP®), designed for use with either an EWP® or a conventional mechanical water pump to enhance the heater and LPG systems.

This high-performance 15 litre per minute, 12 volt, brushless, magnetically-driven EBP has drawn high acclaim globally for its diversity of applications. These include booster for car heater and LPG systems, solar and marine applications, water-cooled motorcycle, go-kart engines, turbo air/water intercoolers, caravans, motor homes and domestic irrigation.



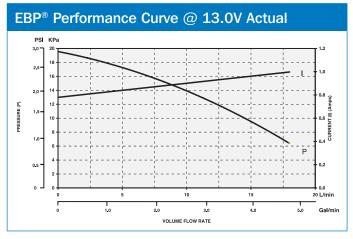
Motor	12V brushless
Operating voltage	9V DC to 15V DC
Maximum current	1.3A
Flow rate	15 L/min (4 US gal/min) @ 10 kPa
Operating temperature	-40° to 120°C (-40° to 248°F)
Pump design	Recirculating centrifugal
Motor life	15,000 hours at 80°C (176°F) continuous
Pump weight	245 grams (0.54 lb)
Pump material	Nylon 66, 30% glass-filled
Burst pressure	250 kPa (36 psi) minimum
Fits hose size	19mm ($\frac{3}{4}$ ") 12.5mm to 19mm ($\frac{1}{2}$ " to $\frac{3}{4}$ ") using stepped adaptors

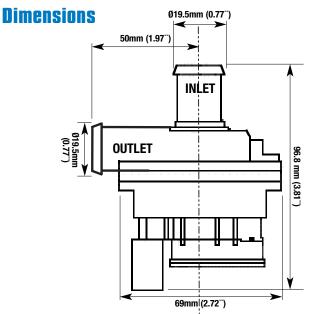
Kit contents

Part #9001 (Kit)	Description	Qty
9012	Electric Booster Pump	1
9020	Adaptor - stepped: 19mm, 15mm, 12.5mm	2
9511	Hose clamps	4
9516	Wiring harness	1
9510	Hose	2
9901	Fitting instructions	1
Part #9002 (Short)		
9012	Electric Booster Pump	1
9516	Wiring harness	1
Part #9012 (Electric Booster Pump only)		
9012	Electric Booster Pump	1









Digital Controller 12 volt only

For optimum control of Electric Water Pumps. Suits Davies, Craig EWP®80, EWP®115, EBP® and Thermatic® Fans.

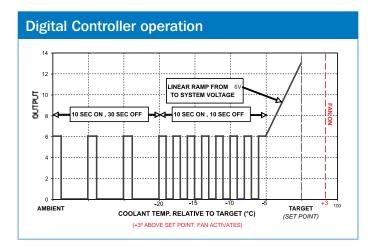
The updated Digital Controller now has two specific functions.

This unique Digital Controller will manage the operation of the EWP® by varying the speed of the pump in response to the coolant temperature and manage control of your electric engine fan. The Controller has a push-button on the facia panel that offers five target temperatures: 75°C, 80°C, 85°C, 90°C and 95°C $(165^{\circ}, 175^{\circ}, 185^{\circ}, 195^{\circ} \text{ and } 205^{\circ}\text{F}).$

Generally, higher engine temperature will offer improved fuel efficiency and lower engine temperature more power. The Digital Controller will operate the engine's electric fan automatically once the engine has reached 3°C (5.4°F) above the targeted (set) temperature. Another significant benefit is that the Controller allows the EWP® to run on after ignition shutdown to eliminate heat soak.

Technical specifications

Input voltage	12V DC to 15V DC
Output voltage	5V to 15V
Maximum current	12A
Operating temperatures	-20° to 60°C (-5° to 140°F)
Targeted (set) temperatures	75°C, 80°C, 85°C, 90°C and 95°C (165°, 175°, 185°, 195° and 205°F)
Fan cut-in temperature	3°C (5.4°F) above the targeted (set) temperature
Controller type	PCB with micro-processor
Sensor type	Thermister in housing
Time-out	2 minutes maximum or set -5°C (23°F)
Indicator LEDs	Temperature, power, EWP, test, fan
Weight	90 grams (3.2 oz)
Dimensions	101mm (I) x 95mm (w) x 35mm (d)



Kit contents

Part #	Description	Qty
8120	Digital Controller	1
8920	Instructions	1
8411	Wiring harness	1
0410	In-line adaptor	1
8510	Sleeve 3mm rubber adaptors	2
8512	Hose clamp	2
8414	Thermal sensor	1
	Assorted hardware	

