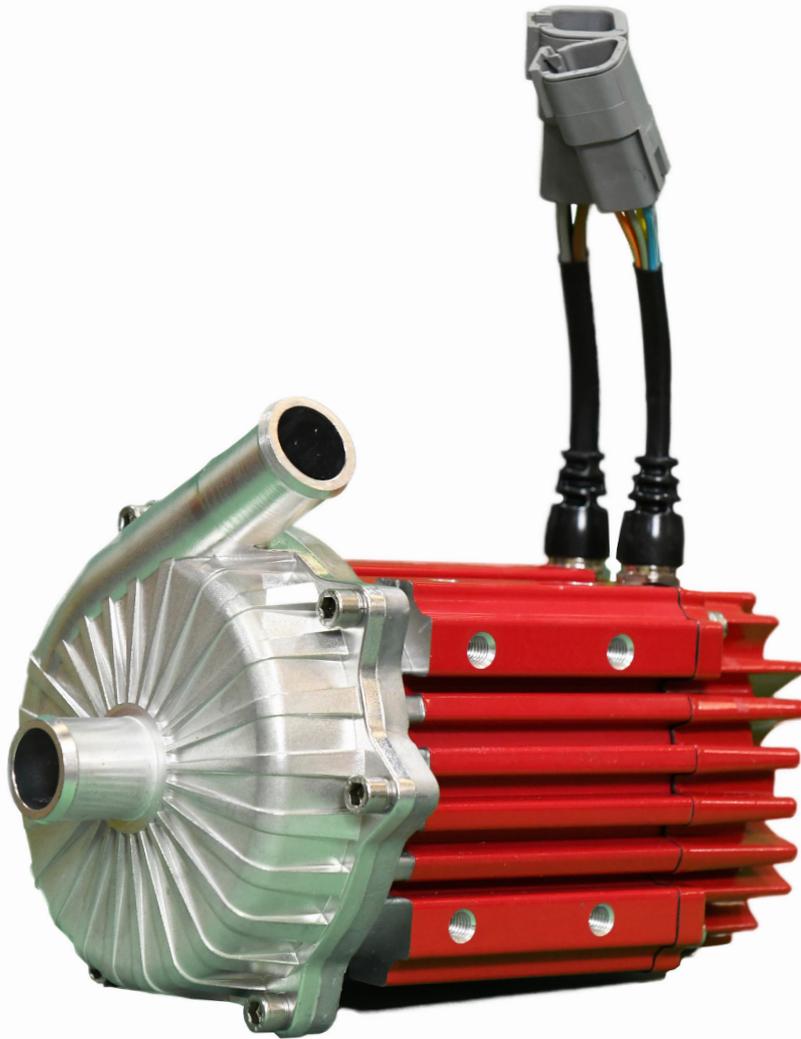


SEALED ELECTRIC WATER PUMP RANGE

generations of knowledge



SPECIFICATION AND TECHNICAL INFORMATION

Designed to the highest standards Built to deliver



Built to deliver



Higher flow at lower pump speed



Up to 40,000 hour motor life



Quieter operation



ELECTRIC WATER PUMP RANGE

5A-3970 & 5A-6550 (Base Models)

Grayson Thermal Systems 24V mechanical seal electric water ethylene-glycol (WEG) pump range has been developed specifically for hybrid, electric, hydrogen and ICE vehicle applications.

The pumps, suitable for global use in a variety of operating and environmental territories, are lightweight whilst offering long motor life, variable flow control and exceptional corrosion and water resistance. Mounted in a number of orientations, without impacting reliability or performance.

BENEFITS

- High flow / pressure at low pump speed
- Can be mounted in various orientations
- Up to 40,000 hour life (motor)
- 2 year warranty
- Extremely robust design
- Quiet operation
- Various methods of control
- Corrosion and coolant resistant
- Integrated controller and power electronics
- Brushless DC permanent magnet motor
- Designed to match industry standard control protocols

FEATURES

- No Media Function - Run Dry Protection
- Triple 'O' Ring seal design with EU high quality spring
- Long life SIC / EPDM sealing
- Heavy duty bearings
- EMC certified
- Integrated overvoltage protection
- Integrated thermal protection
- Stand alone / PWM / CAN control configurations
- Motor manufactured to Class F temperature rating
- Multiple pump operation on single CAN network through addressing

Additional benefits of 5A-6550

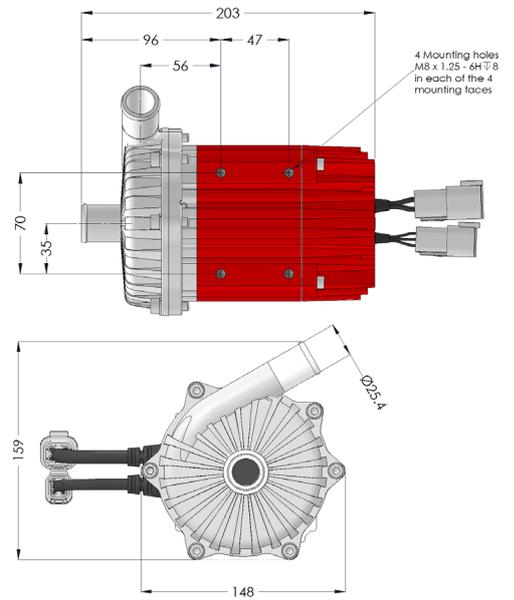
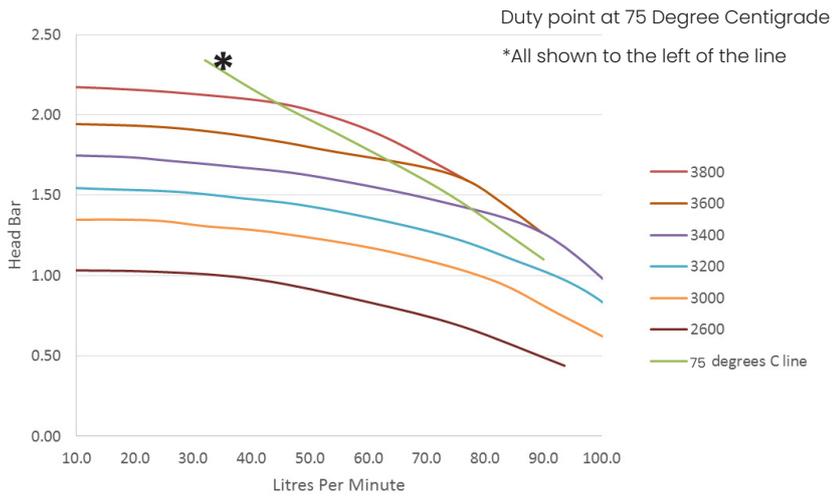
- Operates at a higher duty temperature

Enquire today

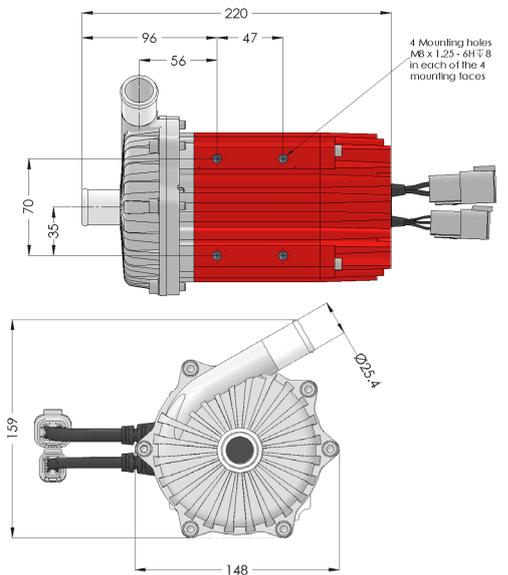
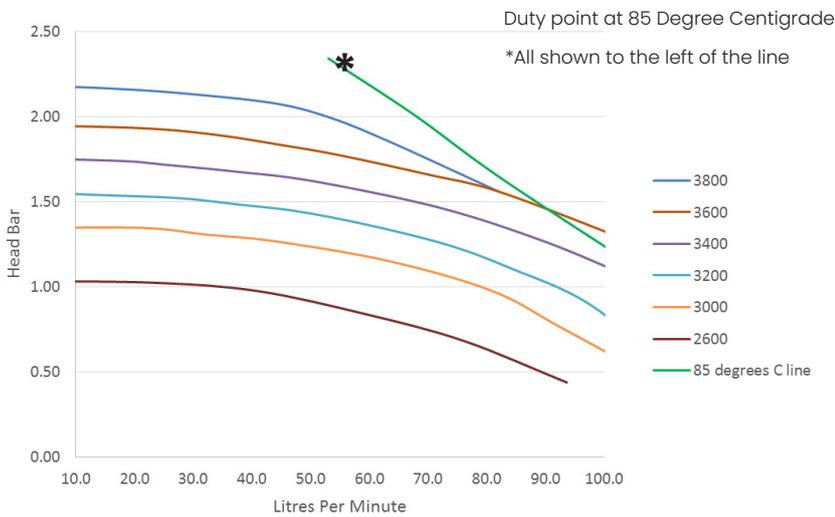
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5A-3970 PERFORMANCE & SIZE



5A-6550 PERFORMANCE & SIZE

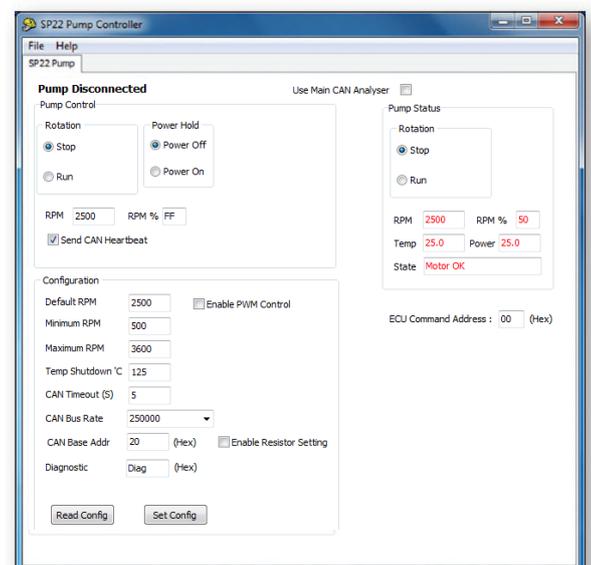


EASY CONFIGURATION

- 1 PC based app to configure the pump (Free app)
- 2 Run the pump for test purposes
- 3 Used in conjunction with CAN interface

EASY CONTROL

- 1 Default (On/Off)
- 2 CAN SAE J1939
- 3 PWM



Enquire today

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TECHNICAL SPECIFICATIONS

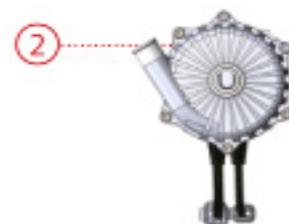
	MINIMUM	TYPICAL	MAXIMUM	UNITS
VOLTAGE	18	27.2	32	V DC
CURRENT	-	16	19	A
TARGET LIFE	10,000	-	40,000	Hours
FLUID TEMPERATURE	-20	-	5A-3970: 75 5A-6550: 85	°C
AMBIENT TEMPERATURE	-40	-	85	°C
STORAGE TEMPERATURE	-40	-	95	°C
WETTED MATERIALS	Cast aluminium & stainless steel			
PRESSURE	-	1.6	2.2	bar
FLOW RATE	-	45	100	l/min
MOTOR IP	-	-	69K	IP
WEIGHT	-	5A-3970: 4.2/9.3 5A-6550: 4.6/10.1	-	kg/lb

TECHNICAL PARAMETERS

GEOMETRY	5A-3970: X = 203mm Y= 159mm Z= 148mm 5A-6550: X = 220mm Y= 159mm Z= 148mm	HEAD ORIENTATION	170° x 2 options via inbuilt motor mountings, please ask advice for other options
CORE MATERIALS	Aluminium body, aluminium head and brushless motor	OUTLET SIZE	25.4mm O.D. (1") / 20mm I.D. (3/4")
CONNECTORS	DTM and DTP connectors 6 and 4 Pin, heavy duty vehicle approved cable	FLUID TEMPERATURE	5A-3970: -20 to 75°C 5A-6550: -20 to 85°C
FUSE SIZE	25A recommended	AMBIENT TEMPERATURE	-40 to 85°C
CURRENT / MAXIMUM CURRENT	Rated current 16A / maximum self-regulating at 19A, operational 3A - 17A	VOLTAGE	24V, (operational range 18V - 32V) (Absolute maximum) Optimised to 27.2 V DC
FLOW / MAXIMUM FLOW	Rated 45 l/min (11.8 US gpm) / maximum 120 l/min (32.5 US gpm)	RELEVANT STANDARDS	J1939, ISO7637, ISO16750, IP69K
PRESSURE / MAXIMUM PRESSURE	Rated 1.6 bar (24 psi) / maximum 2.2 bar (33 psi)	TESTING	HALT (Highly Accelerated Life Testing). Including arduous cold, hot and vibration testing from -60°C to 125°C combined with vibration inputs from 2.5g RMS to 11.45g RMS
INLET PRESSURE	Grayson Thermal Systems Electric Pump requires inlet pressure greater than +0.03bar (+0.45psi) at the operating speed under all operating conditions	CONTROL CAPABILITY	CAN J1939 / PWM / Standalone
WEIGHT	5A-3970: 4.2kg / 9.3lb 5A-6550: 4.6kg / 10.1lb	ELECTRONICS	Fully encapsulated, protected against voltage transients and reverse polarity connection
MOTOR LIFE	Up to 40,000 hours design life	STORAGE TEMPERATURE	-40 to 95°C
		NO MEDIA FUNCTION	Run Dry Protection

RECOMMENDED MOUNTING ORIENTATIONS

Vertical and Horizontal Mounting



Enquire today

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