



Magnetically coupled pump

Data Sheet

RS stock numbers 266-597, 266-979, 445-986 & 445-992

General description

The range of RS magnetically-coupled pumps are centrifugal types of fully encapsulated construction. The pumps are continuously rated and are ideally suited to recirculation or similar applications. The pumps can be used with mild acid or alkaline solutions, such as those found in the photographic or printing industries, hygiene or sterilisation processes.

Applications

These pumps are continuously rated, provided adequate ventilation is given. A minimum of 12mm clearance must be allowed between the pump and surrounding parts of the installation to provide sufficient cooling for the motor. If the pump is to be mounted in an enclosure, a minimum total aperture size of 200mm² must be provided for ventilation, half adjacent to the pump end and the other half at the motor end. Inadequate ventilation will cause the motor to overheat and operation of the internal thermal cut-out will occur.

The pump must be mounted horizontally and not vertically with the motor above the pump. The pumps must not be run dry and should be provided with a minimum fluid head of 1 meter. They should be also provided with a flooded suction inlet as they are not self-priming. Any filters or restrictions should be installed downstream of the pump to prevent cavitation of the impeller. The pumps must not be run against a blocked outlet for more than 30 seconds. They should not be used with liquids containing large particles or abrasive materials such as sand.

The pumps may be used with the substances given in the chemical compatibility list, but these are for guidance only. The end user must ascertain the suitability of the pumps for use with a particular fluid, taking into account other parameters such as fluid concentration, viscosity, specific gravity, temperature, inlet pressure and any other relevant information. The RS Technical Helpline will be pleased to assist in choosing the correct product for an application. The wetted internal parts of the pump are as follows:

Pump body & Impeller _____ Polypropylene
 Pump spindle _____ Alumina ceramic
 Seals _____ Viton

Installation

Pipe connections:

The inlet and outlet connections to the pumps should be made with hoses of the correct diameter secured with worm-drive clips, or BSP threaded pipe-fittings as appropriate. Do not overtighten the clamps or fittings as this may cause damage to the pump ports or threads. The pump and pipework should be adequately supported and fitted to avoid any strain or loading on the inlet and outlet ports.

Electrical connections

Warning: Ensure the power supply is switched-off before connecting.

These pumps are designed to be hard-wired to the supply and should be connected by a competent person in accordance with current IEE wiring regulations. The supply should provide a means of disconnection with a minimum contact separation of 3 mm on all poles. It is recommended that the supply is protected by a Residual Current Device. The pump cable is not replaceable. The supply cord should be routed and retained so that it does not come into contact with the pump, motor-body or any part of the pipework.

Operation & maintenance

The pump should be primed by operating it for short periods not exceeding 10 seconds to clear the air from the body & pipework. Once primed, check all pipe connections for leaks and ensure the fluid flow is not restricted.

Where the pumped fluid causes a deposition or coating on the internals of the pump, periodic cleaning may be achieved by flushing through with an appropriate cleaning agent. Do not dismantle the pump or motor, as this will invalidate the guarantee.

Specifications (All models)

Maximum specific gravity _____ 1.20
 Maximum viscosity _____ 30Cp
 Maximum body pressure _____ 1.4 bar (20psi)
 Temperature range _____ -20 to 65°C
 Motor specifications

RS stock no. 266-979

Supply _____ Single phase 230Vac, 50/60Hz
 Input power _____ 51W
 Output power _____ 10W
 Maximum current _____ 0.7A

RS stock no. 266-597

Supply _____ Single phase 230Vac, 50/60Hz
 Input power _____ 84W
 Output power _____ 18W
 Maximum current _____ 0.7A

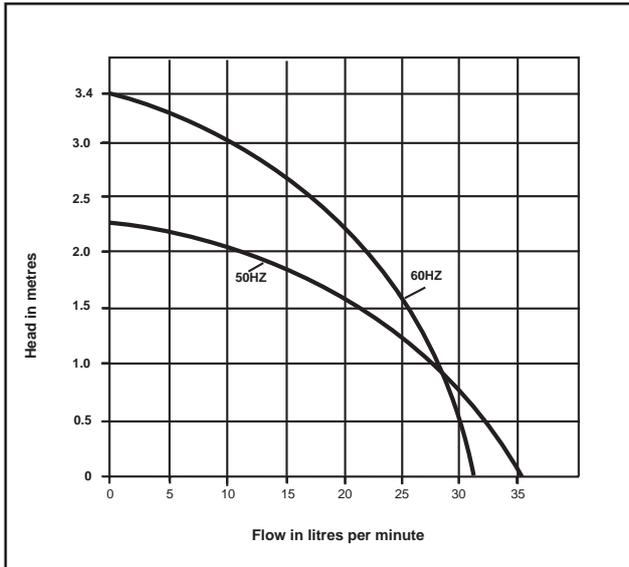
RS stock no. 445-986

Supply _____ Single phase 230Vac, 50/60Hz
 Input power _____ 95W
 Output power _____ 60W

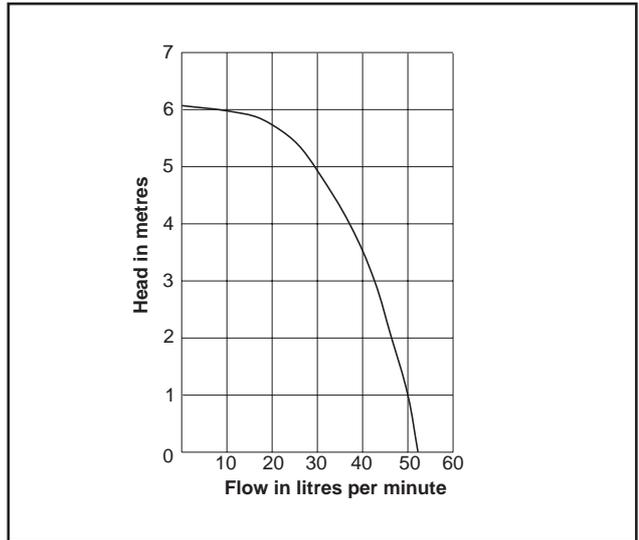
RS stock no. 445-992

Supply _____ Single phase 230Vac, 50/60Hz
 Input power _____ 95W
 Output power _____ 60W

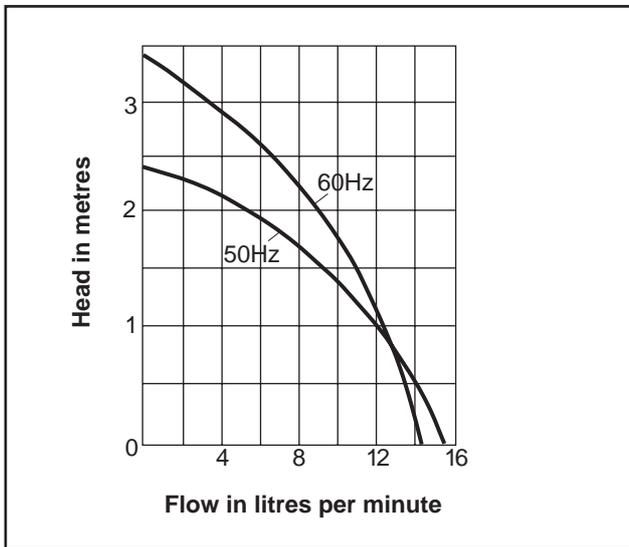
Performance **RS** stock no. 266-597



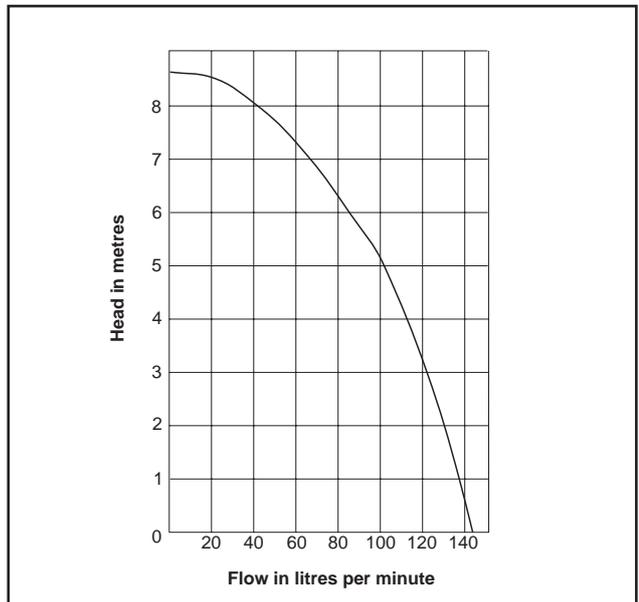
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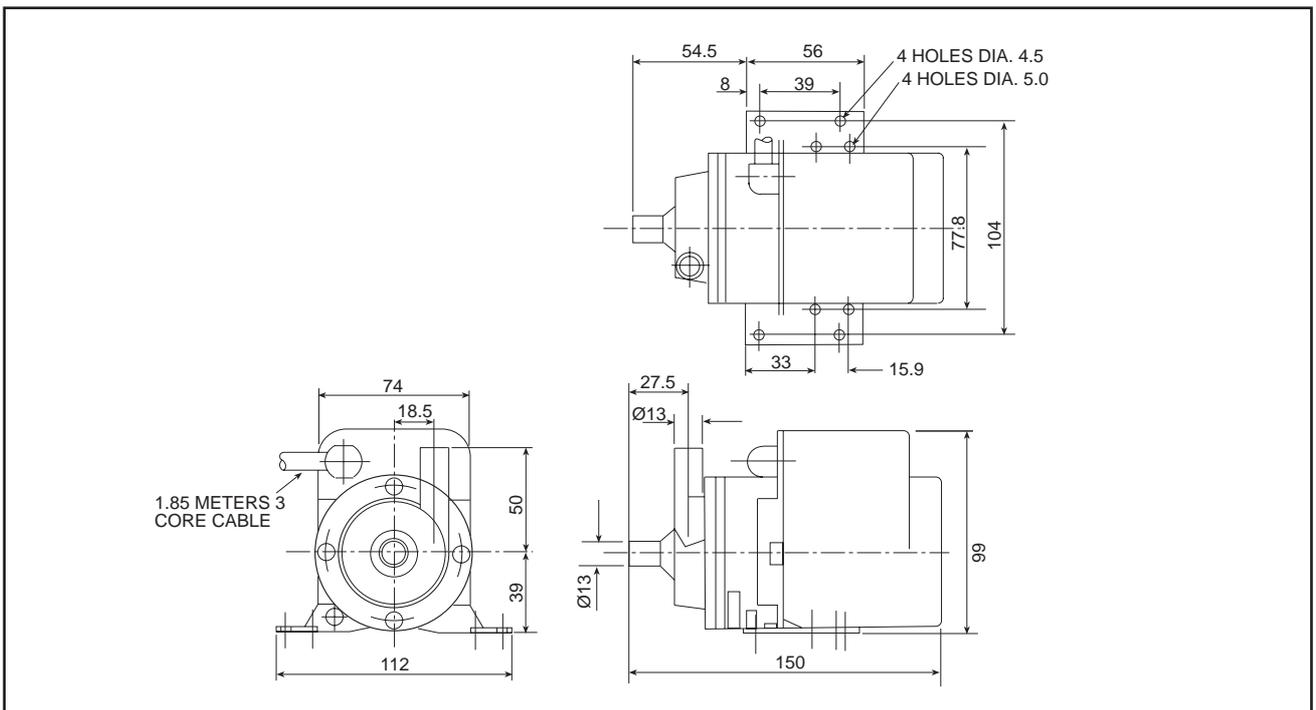
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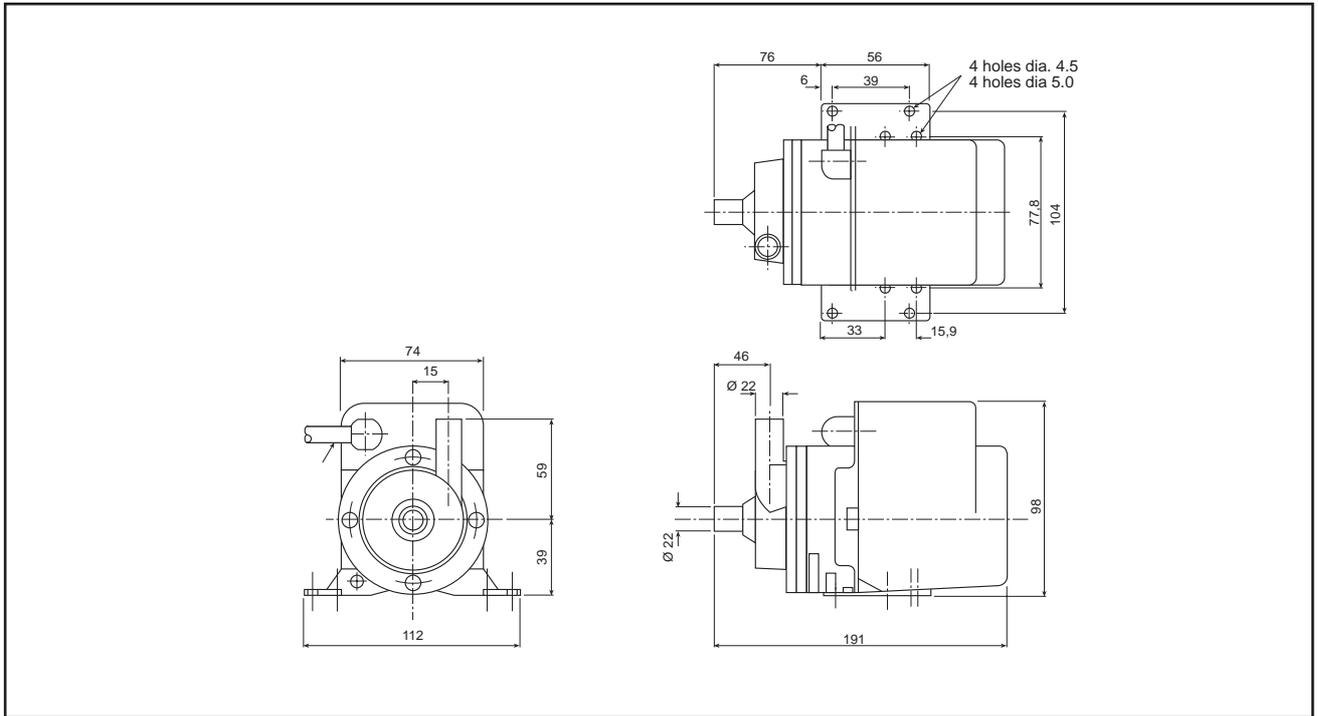
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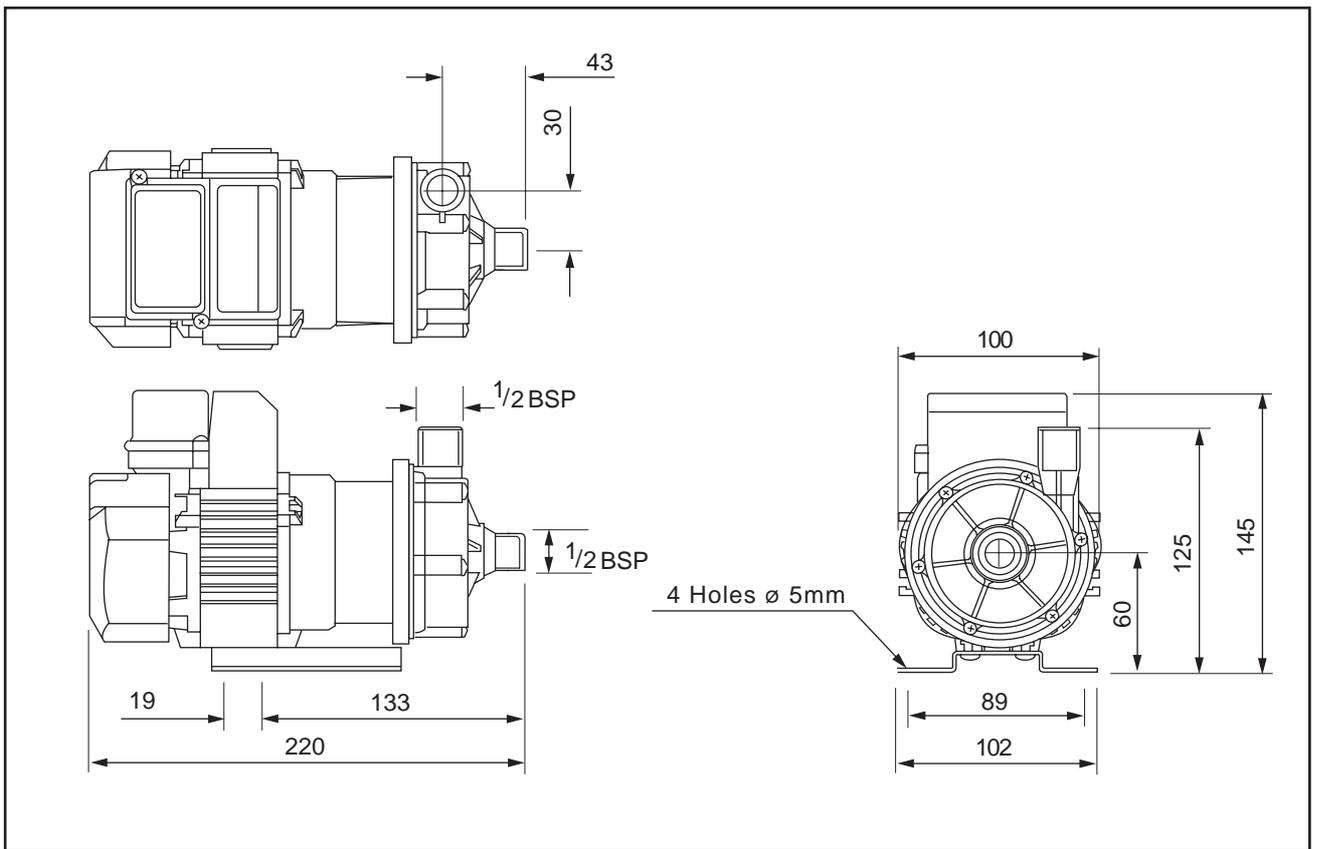
Dimensions **RS** stock no. 266-979

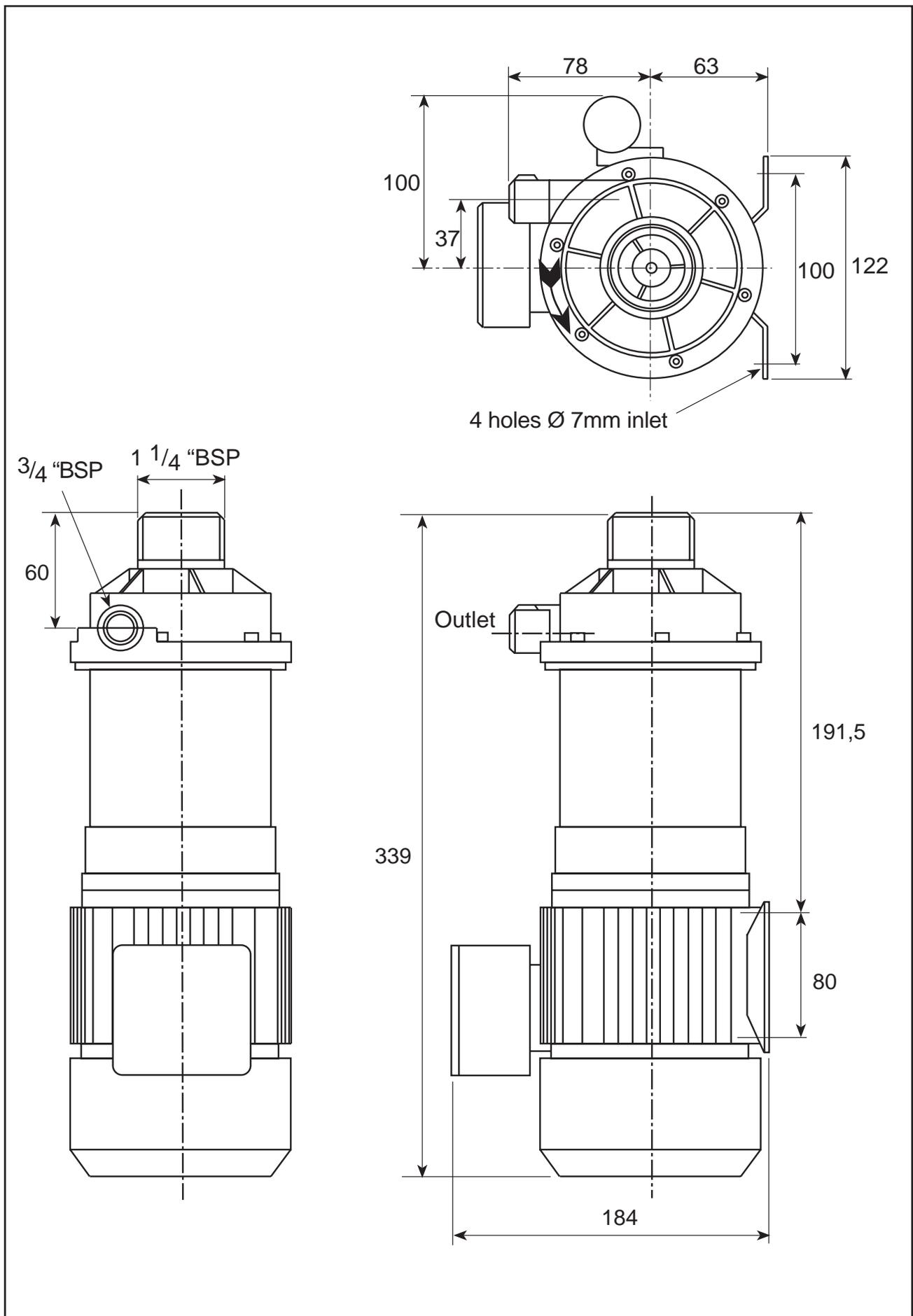


Dimensions **RS** stock no. 266-597



Dimensions **RS** stock no. 445-986





For guide only**Chemical compatibility list**

Aluminium chloride (10%)	Sodium carbonate (10%)
Ammonium sulphate (50%)	Sodium chloride (25%)
Aniline	Sodium cyanide
Antimony trichloride	Sodium nitrate
Arsenic acid	Stannic chloride
Barium chloride	Sulphur dioxide
Boric acid	Tetrachloroethane
Calcium chloride	Tricesyl phosphate
Castor oil	Water (distilled)
Chromic acid	Water (sea)
Citric acid	White spirit
Cod liver oil	Wine
Copper sulphate	Zinc chloride (ad sol)
Cresols	
Diesel oil	
Diethylene Glycol	
Ferric chloride	
Formaldehyde (40%)	
Freon - 113	
Furfural	
Glycerol	
Hexane	
Hydrochloric acid (10%)	
Hydrochloric acid (36%)	
Hydrogen peroxide (35%)	
Hydrogen sulphide gas	
Iso-propanol	
Lactic acid (90%)	
Linseed oil	
Lubricating oil	
Magnesium chloride	
Mercuric chloride	
Molasses	
Nickle chloride	
Oleic acid	
Olive oil	
Paraffin oil	
Petrol	
Potassium cyanide	
Potassium permanganate (25%)	
Potassium sulphate	
Rape seed oil	
Silicone fluids	
Silver nitrate	

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