

# Newton TAS250 Pump

## Ground & Surface Water Pump

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Code: TAS250

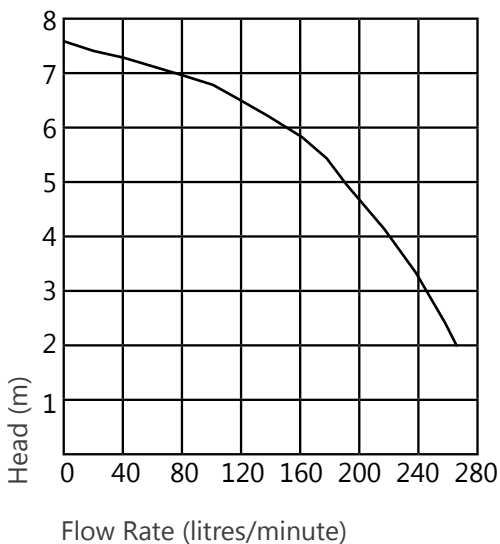
### INTRODUCTION

The Newton TAS250 is a high quality pump ideally suited for the removal of ground water from basements and cellars as well as surface water collected within light-wells, patios and terraces. The vertical operation float switch ensures that the pump operates within the pump footprint, removing the possibility of the float snagging during operation and allowing the pump to be used within smaller sumps. The vertical float switch of the TAS250 is also very adaptable, allowing the pump switching height to be adjusted both in terms of the height between the 'on' and 'off' positions, as well as the height of the switch relative to the pump.

The Newton TAS250 is suitable for use with [Newton Victron Power Inverters](#) to give continual pumping even during power outage.

Newton TAS250 is supplied with a 1-year manufacturers warranty or a 3-year back-to-base warranty if serviced by a Newton approved service engineer.

The TAS250 replaces the, CP250 and is sold in both manual and automatic versions. The TAS250 can be purchased as pump only, or within selected packaged pumping systems.



TAS250

### TYPICAL APPLICATIONS

Primarily designed to be used with Newton pumping systems for the removal of ground water collected by the [Newton CDM](#) Type C basement waterproofing system, Newton TAS250 is also suitable for:

- Flooded basements and cellars
- Light-wells
- Surface water
- Reservoirs and water holding vessels

### PUMPING SYSTEMS

Newton TAS250 is fitted to the following pumping systems:

- [Newton Titan](#)
- [Newton Titan-Pro](#)

### KEY BENEFITS

- 3-year warranty - see page 2
- Thermal overload protection against motor burnout
- Non-clogging vortex impeller
- Can pump down to just 15mm
- Double mechanical seals ensure increased durability against particle abrasion and wear
- Anti-airlock impeller housing ensures that the pump is able to remove trapped air even when the sump was previously dry
- High performance and efficiency even with a low current
- Unique vertical float allows complete adjustment of the start and stop heights
- Continued pumping even during power cuts when used with Newton Victron Power Inverters - see page 4.

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### TECHNICAL DATA

Features	TAS250	Units
Purchase Code - Automatic Version	TAS250A	
Purchase Code - Manual Version	TAS250M	
Pump Design	Vortex	
Outlet	1 1/2" BSP	
Max Soft Solids Handling	14	mm
Recommended Discharge Pipe Size	50	mm
Maximum Pumping Head	7.5	m
Maximum Flow Rate	270	litres/minute
Flow Rate at 4m Head	220	litres/minute
Pump Switching	Automatic by pump float or by separate pump control	
Float Switch	Fully adjustable vertical operation	
Pump Start Level	Fully adjustable	
Lowest or Stop Water Level	20	mm
Length	190	mm
Width	140	mm
Height - Handle/Gland	360	mm
Cable Length	10	m
Dry Weight	11.0	kg
Clean Water Pumping	Yes	
Effluent Pumping	No	
Sewage Pumping	No	
Fluid Temperature Range	5 to 40	°C
Power Supply - Single Phase	230	Volts
Motor Output	250	Watts
Start Current	7.4	Amps
Rated Current	2.1	Amps
Body Material	Stainless Steel (304)	
Shaft Material	Stainless Steel (410)	
Mechanical Seals	Double Carbon Ceramic	

### WARRANTY

Newton TAS250 is supplied with a 1-year manufacturers warranty from the proven date of installation, or the date of purchase if this cannot be verified. A 3-year warranty is available if the pumps are serviced at intervals agreed by a Newton approved service engineer. In all cases, the warranty is 'back-to-base'. Newton Waterproofing Systems have a returns policy and any issues regarding pumps under warranty should in the first instance be referred to our Head Office by contacting 01732 360 095. Please see our Terms & Conditions of Sale for further information.

### INSTALLATION INSTRUCTIONS

Please see pump installation sheet supplied within pump packaging (also available from our website).

### SPECIFICATION

Newton Waterproofing Systems work in partnership with RIBA NBS who publish our products on [NBS Source](#). The platform integrates seamlessly into project workflows, providing all product data from Newton's NBS BIM Objects, NBS Plus Clauses and RIBA Product Selector into one single source of product information.

NBS Source also hosts a large selection of Newton [case studies](#), as well as product [literature and certifications](#). A wide range of drawings are available [on our website](#).

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### VALVE OPTIONS

The pump outlet is 1 1/2", female BSP.

There are 2 valve options and therefore two ways to prepare the pump ready to receive the recommended 50mm pipe and fittings.

#### FLAP VALVE

The following will need to be purchased with the pump:

1 1/2" flap valve plus socket adapter - Purchase code V31. Valve screws directly to pump.

Adapter leaves 50 mm socket ready for 50 mm pipe and fittings.

#### CONE VALVE

The following will need to be purchased with the pump:

- 1 1/2" male BSP to 50mm female BSP socket - Code PP57
- 50mm pipe, cut to length - Purchase Code PP1
- 50mm female socket 50mm female socket cone valve - Purchase Code V2

This will leave a 50 mm socket ready for 50 mm pipe and fittings.

### PIPE & PIPE FITTINGS OPTIONS

The following pipe and pipe fittings are available and should be ordered with the pump as required for the particular project:

- 50 mm Pipe - 2.5 m lengths - Code PP1
- 50 mm 90 degree elbows - Code PP2
- 50 mm 45 degree elbows - Code PP3
- 50 mm female-female sockets - Code PP4
- 50 mm female-female socket union - Code PP46
- 50 mm Tee - Code PP5
- 50 mm wall mount clips - Code PP6

To joint the pipe and fittings, the following will be needed:

- uPVC Pipe Primer - 473 ml - Code G3 - NOTE: Not required if the pipe glaze is removed by sanding
- uPVC Solvent - Wet 'R Dry - 240 ml - Code G2

Fit the pump into the sump chamber with correctly sized and cut pipe and pipe fittings, ensuring that the pipe build includes a means of removal of the pumps for servicing and repair.

### SERVICING

Newton pumps should be serviced by trained and qualified pump engineers only. It is recommended that pumps are serviced within 6 months of installation and then at service engineers discretion, but with at least one inspection or service every 12 months. Please call Newton Waterproofing for an approved service engineer in your area.

### BATTERY BACK-UP

The battery back-up systems for use with the TAS250 pump are laid out below. The systems include everything required for a safe and complete installation, including battery cables, isolation switches. Please see the Newton Victron Data Sheet for further information.

Pump	Inverter	Battery Size	System Purchase code
TAS250	12/500/20	40 Ah	BBS1
		60 Ah	BBS2

### ELECTRICAL SUPPLY

The Newton TAS250 requires a single phase 230V AC power supply. It is advisable that all pumps are connected to their own individual power supply directly from the consumer board so that each of the pumps does not share a consumer board supply with the other pump or with any other electrical circuit or device. In reality, this is normally only achievable with new build properties or where fundamental refurbishment of the whole property or the electrical supply is to be undertaken.

Where it is not planned or possible to have each pump connected to a separate supply from the consumer board, it is preferable that each pump is supplied from a separate circuit. If this is not possible, each pump should be connected to a separate fused and switched spur or socket. Each separate circuit should have its own RCD protection as required by the 17th Edition Wiring Regulations. The RCD should be correctly sized at 30mA so as not to trip during normal pump start or pump run parameters.

It is a requirement of BS 7671:2008 that:

Where an electric motor might give rise to hazard, the motor should be provided with an effective means of isolation on all poles and such means shall be adjacent to the motor which it controls (see BS EN 60204-1)

- Every fixed electric motor should be provided with a readily accessible and easily operated device to switch off the motor and all associated equipment including any automatic circuit breaker. The device must be placed as to prevent danger.
- The position of the contacts of the isolator must be either externally visible or be clearly and reliably indicated.
- Each device used for isolation must be clearly identified by position or durable marking to indicate the insulation or circuit that it isolates.

It is preferable for the pumps to be wired to the rear of a switched spur. The spur should be switched and have a neon light confirming the 'ON' position. Pumps may be plugged into wall sockets and again these should be switched and have neon light notification of the 'ON' position. It is recommended that the spur or socket have a label confirming that the switch must not be switched off unless in an emergency.

Therefore, the spur or socket should be located in direct eye sight line of the sump and to the wall closest to the sump so that in an emergency it is obvious which switch(es) will turn off the pumps.

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### PACKAGING & HANDLING

Pumps are supplied in reinforced and protective cardboard boxes. Please handle with care.

### LIMITATIONS

- Not suitable for pumping of effluent or sewage
- Do not let the pump run dry
- Cannot be used for sea water and inflammable corrosive, explosive or dangerous liquids

### STORAGE

Store in dry conditions at temperatures between 5°C and 35°C. Do not expose to freezing conditions.

### HEALTH & SAFETY

Product should only be used as directed. Pumps contain lubricating oil. We always recommend that the Safety Data Sheet (SDS) is carefully read prior to use of the pump. Our recommendations for protective equipment should be strictly adhered to for your personal

Newton Waterproofing Systems reserve the right to update product literature at any time. Please always refer to our [website](#) for the latest versions.