

Pumps, Pumping Systems and Ancillaries

NEWTON CP250, CP400 & CP750

A Range of High Quality Clean Water Pumps

Rev 2.4 - 24 October 2017

PRODUCT CODE - P27 to P32

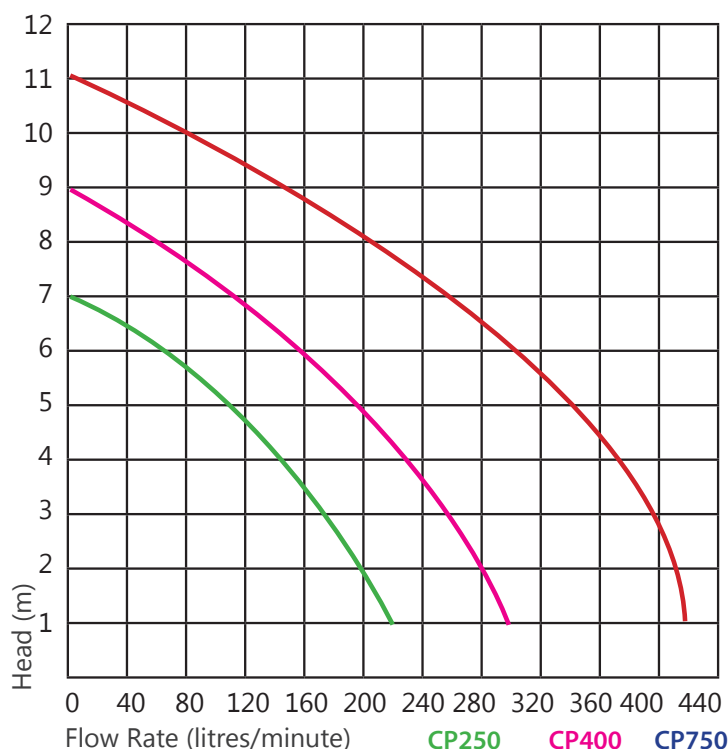
INTRODUCTION

The Newton [CP250](#), [CP400](#) and [CP750](#) are a range of high quality clean water pumps ideally suited for the removal of ground water from basements and cellars. The unique vertical operation float switch ensures that the pumps operate within their footprint, removing the possibility of the float snagging during operation and allowing the pumps to be used within smaller sumps. The vertical float switch is also very flexible, 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 relative to the pump.

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

Newton CP Pumps are supplied with a 1-year manufacturers warranty or a 3-year back-to-base warranty if the pumps are serviced by a Newton approved service engineer.

The Newton CP series pumps are sold in both manual and automatic versions and can be purchased as pumps only, or as a key component in our packaged pumping systems.



TYPICAL APPLICATIONS

Primarily designed to be used with Newton sump systems for the removal of ground water collected by [Newton System 500](#) basement waterproofing system, Newton CP pumps can also be used for the removal of water from:

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



KEY BENEFITS

- 3-year warranty - see page 2
- Thermal overload protection against motor burnout
- Non-clogging vortex impeller
- Protection against motor burnouts due to a locked impeller
- 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 Power Converters - see page 3.

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TECHNICAL DATA

Features	CP250	CP400	CP750	Units
Purchase Code - Automatic Version	P31	P32	Not available*	
Purchase Code - Manual Version	P29	P28	P27	
Pump Design	Vortex			
Outlet	40	50	80	mm
Max Soft Solids Handling	5	10	15	mm
Recommended Discharge Pipe Size	50	50 / 63	63	mm
Maximum Pumping Head	8.0	10.0	11.0	m
Maximum Flow Rate	210	290	410	litres/minute
Flow Rate at 4m Head	120	220	295	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	80	80	127	mm
Length	190	215	260	mm
Width	140	155	160	mm
Height - Handle/Gland	366/374	385/395	419/434	mm
Dry Weight	11.0	12.0	15.0	kg
Clean Water Pumping	Yes			
Effluent Pumping	No			
Sewage Pumping	No			
Fluid Temperature Range	0 to 40			
Power Supply - Single Phase	230			
Motor Output	250	400	750	Watts
Start Current	7.4	10.5	15.8	Amps
Rated Current	2.1	2.4	3.4	Amps
Body Material	Stainless Steel (304)			
Shaft Material	Stainless Steel (410)			
Mechanical Seals	Double Carbon Ceramic			

*Use Newton Pump Controller - Code CP9, for automatic control.

WARRANTY

Newton CP Pumps are 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.

STORAGE

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

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.

INSTALLATION INSTRUCTIONS

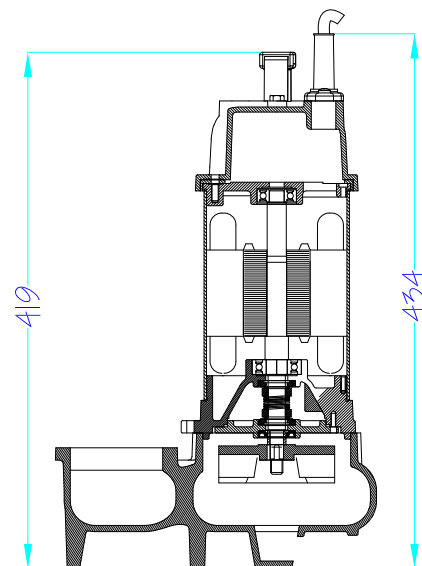
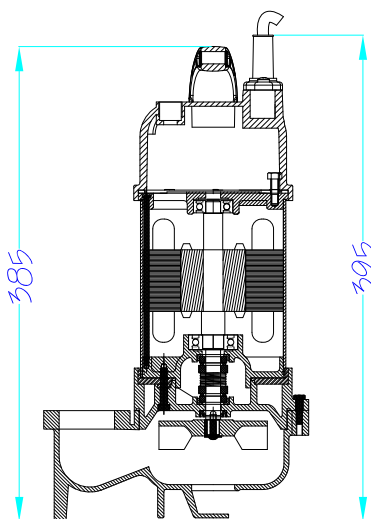
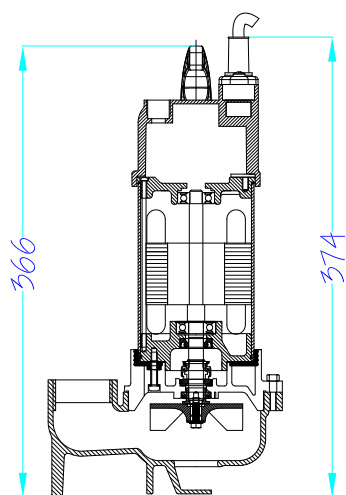
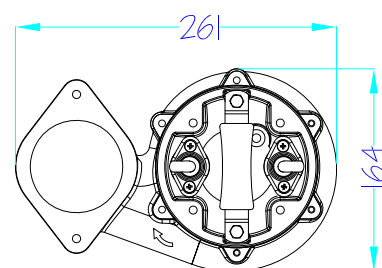
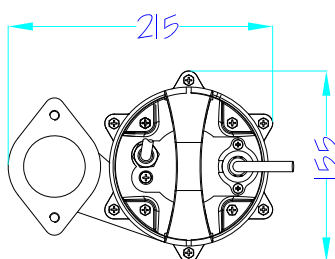
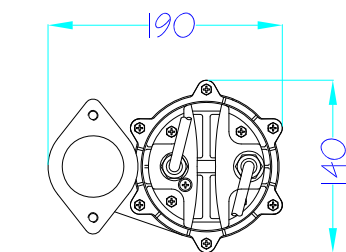
Please see pump installation sheet supplied within pump packaging (also available from our website).

PACKAGING & HANDLING

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

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CP250

CP400

CP750

ANCILLARY OPTIONS

Battery back up for CP250 - Newton MultiPlus 12/800/35 - Newton Code BB20

Battery back up for CP400 - Newton MultiPlus 12/1200/50 - Newton Code BB21

Battery back up for CP750 - Newton MultiPlus 12/3000/120 - Newton Code BB22

[High Water Level Alarm](#) - Newton Code PA50

Text & Speech [Dialer](#) for PA50 Alarm - Newton Code PA5

SUPPLIED PIPE AND PIPE FITTINGS

Newton CP Pumps are supplied with pipe fittings ready to receive pressure rated pipe, the recommended pipe for pumps. The table on page 2 confirms pipe suitability. Options for pipe connections are available and confirmed on page 4. Please specify which pipe connection is required with the pump(s) when purchasing.

The pumps are also supplied with one-way-valves (check valves). The one-way-valves for the CP250 and CP400 are designed to screw directly into the pump body.

The CP750 is not supplied with a one-way-valve and so the valve, if required, must be ordered when the pump is purchased. Please see pipe and valve options across the page.

Pump Name	CP250	CP400	CP750
50 mm pressure rated pipe	Suitable	Suitable	Suitable
63 mm pressure rated pipe	Not Suitable	Not Suitable	Suitable
40 mm waste pipe	Not Suitable	Not Suitable	Not Suitable
Supplied valve	1 ½" flap valve	1 ½" flap valve	None
Supplied final connection to pipework	50 mm female socket ready for 50 mm pressure rated pipe	50 mm female socket ready for 50 mm pressure rated pipe	2" BSP male thread

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LIMITATIONS

Not suitable for:

1. Effluent or Washing machine waste (use [NP400W](#) or [SP750 Cutter](#))
2. Sewage (Use SP750 Cutter)
3. Continuous pumping above 40°C. Pumps can be used to excavate hot water from boiler leaks etc Only for a maximum of 10 minutes pumping in one hour (use hot water capable pumps - please contact Newton Waterproofing Systems for further information)
4. Water with pH value above 10 or below 4 (use pumps suitable for corrosive water - please contact Newton Waterproofing Systems for further information)
5. Sea water (use sea water pumps - please contact Waterproofing Systems for further information)

PIPE & VALVE OPTIONS

CP250

Supplied with female socket ready for 50 mm pressure rated pipe.

CP400

Supplied with female socket ready for 50 mm pressure rated pipe.

CP750

Supplied with male 2" BSP thread.

Adaption to female socket ready for 50 mm pressure rated pipe - Newton purchase code PP33

50 mm Cone Valve for use with 50 mm pressure rated pipe - Newton purchase code V2

Adaption to female socket ready for 63 mm pressure rated pipe - Newton purchase code PP44

63 mm Cone Valve for use with 63 mm pressure rated pipe - Newton purchase code V8

SPECIFICATION

Newton Waterproofing Systems are in partnership with RIBA NBS who publish details of our products and systems within their specification clause library to allow Architects ease of specification through their NBS Plus interface. NBS clauses can be accessed via the technical resources area of the web site where a live NBS Feed is available at [NBS Plus Live Feed](#)

Our website has drawings available for download in [Technical Drawings](#). A selection are also available via [FastrackCAD](#), as well as a range of BIM objects on the [NBS National BIM Library](#)

ELECTRICAL SUPPLY

The Newton CP Pumping range require 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 preferable for the pumps to be wired to the rear of a spur. The spur should be switched and have a neon light confirming the 'on' position. Pumps may be plugged into wall sockets - 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.

The spur or socket should be fitted with the correctly sized fuse appropriate to the motor size of the connected pump:

CP250 - 5 amps

CP400 - 10 amps

CP750 - 13 amps

The spur or socket should be located in direct eye line of the sump and to the wall closest to the sump so that in an emergency it is obvious which switch will turn off the pump/s.

HEALTH & SAFETY

Product should only be used as directed. Pumps contain lubricating oil. We always recommend that the Material Safety Data Sheet (MSDS) is carefully read prior to use of the pump. Our recommendations for protective equipment should be strictly adhered to for your personal protection. The MSDS is available upon request from Newton Waterproofing Systems or online via our website. Please see contact details below.

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uPVC PRESSURE RATED PIPE AND FITTINGS

50 mm Pipe - 2.5m lengths - Newton Code PP1
50 mm 90 degree elbows - Newton Code PP2
50 mm 45 degree elbows - Newton Code PP3
50 mm female-female sockets - Newton Code PP4
50 mm Tee - Newton Code PP5
50 mm wall mount clips - Newton Code PP6
1½" BSP to 50 mm Hosetail - Newton Code PP28
1½" BSP to 50 mm Socket - Newton Code PP43

63 mm Pipe - 2.5m lengths - Newton Code PP10
63 mm 90 degree elbows - Newton Code PP11
63 mm 45 degree elbows - Newton Code PP12
63 mm female-female sockets - Newton Code PP13
63 mm Tee - Newton Code PP14
63 mm wall mount clips - Newton Code PP15
uPVC Solvent - 0.5 litre - Newton Code G1
uPVC Solvent - Wet 'R Dry - 240 ml - Newton Code G2
uPVC Pipe Primer - 473 ml - Newton Code G3

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

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Newton House, 17-20 Sovereign Way, Tonbridge, Kent, TN9 1RH

T: +44 (0)1732 360 095 W: www.newtonwaterproofing.co.uk E: info@newtonwaterproofing.co.uk