

DATA SHEET

NEWTON CP250, CP400 & CP750

Clean Water Pumps

Rev 1.1 - 23 November 2012

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 height between the 'on' and 'off' positions, but also in height relative to the pump.

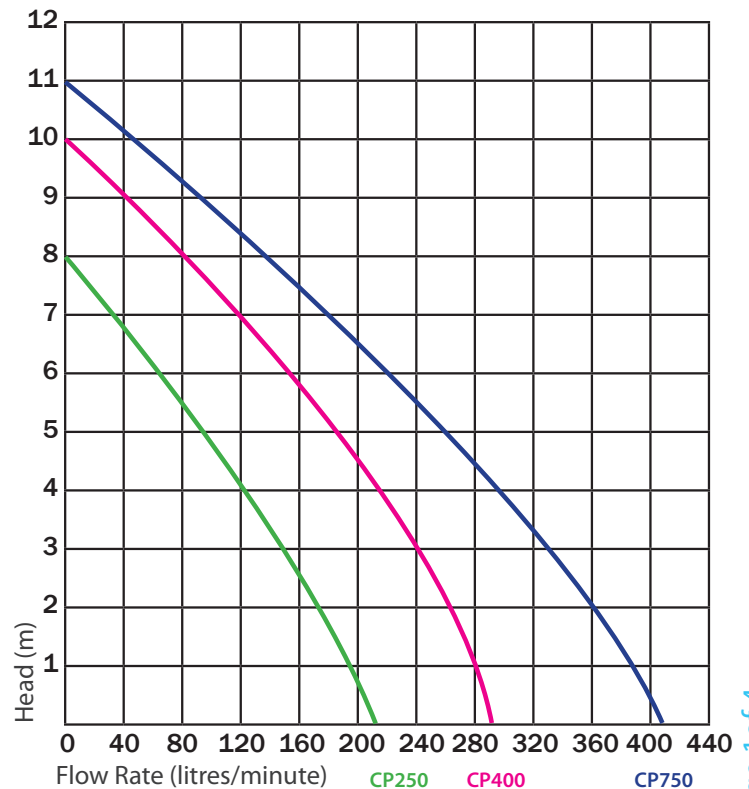
The Newton CP pumps are suitable for use with Newton Power Converters of 1200W (CP250 & CP400) or 3000W (CP750) to give continual pumping even when the power is out.

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 as pumps only, or as a key component in our Titan-Pro packaged pumping system. Please see the data sheet on the Titan-Pro White and Titan-Pro Green for further information.



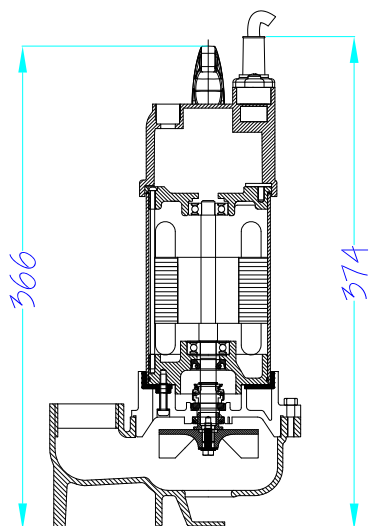
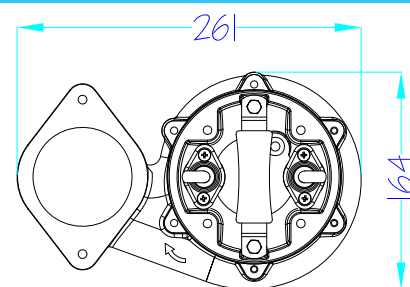
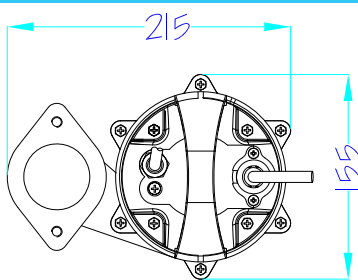
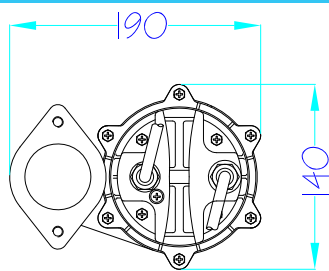
PUMP SPECIFICATION			
Pump Name	CP250	CP400	CP750
Purchase Code	P31	P32	P33
Pump Design	Vortex		
Outlet (mm)	40	50	80
Max Soft Solids Handling (mm)	5	10	15
Recommended Discharge Pipe (mm)	50	50 / 63	63
Max Pumping Head (m)	8.0	10.0	11.0
Max Flow Rate (Litres/Minute)	210	290	410
Flow Rate at 4m Head (Litres/Minute)	120	220	295
Pump Switching	Automatic by pump float		
Float Switch	Fully adjustable vertical operation		
Pump Start Level	Fully adjustable		
Lowest or Stop Water Level (mm)	80	80	127
Length (mm)	190	215	260
Width (mm)	140	155	160
Height - Handle/Gland (mm)	366/374	385/395	419/434
Weight (kg)	11.0	12.0	15.0
Clean Water Pumping	Yes		
Effluent Pumping	No		
Sewage Pumping	No		
Fluid Temperature Range	0° to 40°		
Power Supply	Single Phase		
Motor Output (W)	250	400	750
Amps (Starting)	7.4	10.5	15.8
Amps (Running)	2.4	2.1	3.4
Body Material	Stainless Steel (304)		
Shaft Material	Stainless Steel (410)		
Mechanical Seals	Double Carbon Ceramic		



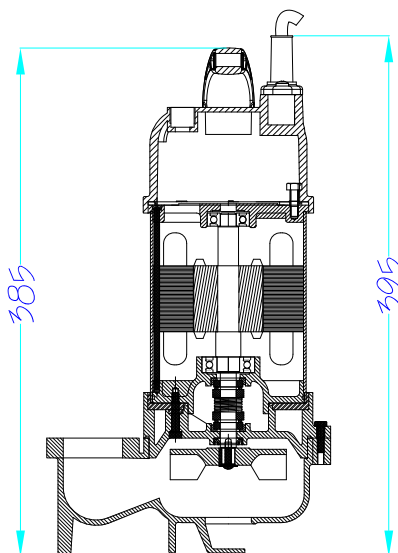
NEWTON CP250, CP400 & CP750

Clean Water Pumps

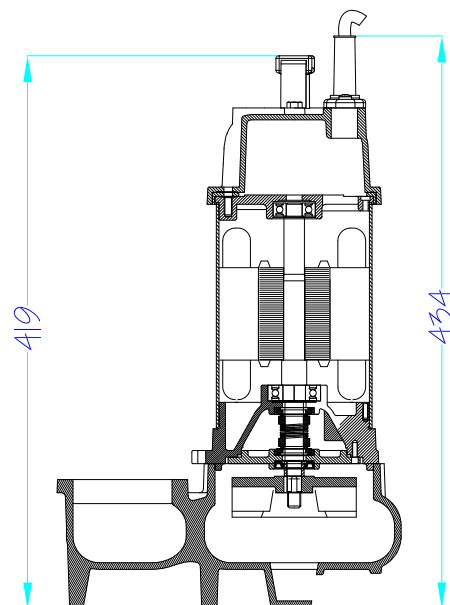
DATA SHEET



CP250



CP400



CP750

KEY BENEFITS

- 3-year warranty - see page 4.
- Thermal overload protection against motor burnout.
- Non-clogging vortex impeller.
- Protection against motor burnout due to 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 sump was previously dry.
- High performance with low current and high efficiency.
- Unique vertical float allows complete adjustment of start and stop height.
- Continued pumping even during power cut when used with Newton Power Converters - see page 3.

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.

SPECIFICATION

John Newton & Company 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 <http://newton-membranes.co.uk/nbs-plus-live-feed>

Our web site has drawings available for download at <http://newton-membranes.co.uk/technical-drawings> and a selection are also available via FastrackCad at http://www.fastrackcad.com/CAD.ASP?Company_id=251

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.

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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 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.

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 sight 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 pumps.

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 below confirms pipe suitability. Options for pipe connection are available and confirmed across the page. 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.

	CP250	CP400	CP750
50mm pressure rated pipe	Suitable	Suitable	Suitable
63mm pressure rated pipe	Not Suitable	Not Suitable	Suitable
40mm waste pipe	Suitable (but not recommended)	Not Suitable	Not Suitable
Supplied valve	1 1/2" flap valve	1 1/2" flap valve	None
Supplied final connection to pipework	50mm female socket ready for 50mm pressure rated pipe	50mm female socket ready for 50mm pressure rated pipe	2" BSP male thread

PIPE & VALVE OPTIONS

CP250

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

Adaption to female socket ready for 40mm waste pipe (not recommended) Newton purchase code - PA36

CP400

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

CP750

Supplied with male 2" BSP thread.

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

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

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

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

uPVC PRESSURE RATED PIPE AND FITTINGS

50mm Pipe - 2.5m lengths - Newton Code PP1

50mm 90 degree elbows - Newton Code PP2

50mm 45 degree elbows - Newton Code PP3

50mm female-female sockets - Newton Code PP4

50mm Tee - Newton Code PP5

50mm wall mount clips - Newton Code PP6

50mm Hosetail Spigot for flexi pipe - Newton Code PP38

63mm Pipe - 2.5m lengths - Newton Code PP10

63mm 90 degree elbows - Newton Code PP11

63mm 45 degree elbows - Newton Code PP12

63mm female-female sockets - Newton Code PP13

63mm Tee - Newton Code PP14

63mm wall mount clips - Newton Code PP15

63mm Hosetail Spigot for flexi pipe - Newton Code PP39

uPVC Solvent - 0.5 litre - Newton Code G1

uPVC Weld-on WetR 0.24 litre - Newton Code G2

ANCILLARY OPTIONS

Battery back up for CP250 and CP400 - Newton 1200W Power Converter System - Newton Code C3

Battery back up for CP750 - Newton 3000W Power Converter System - Newton Code C4

High Water Level Alarm - Newton Code PA12

Text & Speech Dialer for PA12 Alarm - Newton Code PA5

INSTALLATION INSTRUCTIONS

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

LIMITATIONS

Not suitable for:

1. Effluent or Washing machine waste (use NP400W, SP750 Ranger or NP750W).
2. Sewage (Use SP750 Ranger or Flygt DXG).
3. Continuous pumping above 40°C. Pumps can be used to excavate hot water from boiler leaks etc. but only for a maximum of 10 minutes pumping in one hour. (use hot water capable pumps - please contact John Newton for further information).
4. Water with pH value above 10 or below 4 (use pumps suitable for corrosive water - please contact John Newton for further information).
5. Sea water (use sea water pumps - please contact John Newton for further information).

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 John Newton for an approved service engineer in your area.

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'. John Newton have a returns policy and any issues regarding pumps under warranty should in the first instance be referred to our Head Office by contacting 020 7237 1217. Please see our Terms & Conditions of Sale for further information.

PACKAGING & HANDLING

Pumps are supplied in reinforced and protective cardboard boxes. Please handle with care. Please see page 1. for weights and dimensions.

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 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 John Newton or online via our web site. Please see contact details below.