# Pumps, Pumping Systems and Ancillaries

# **NEWTON CP Pumps**

A Range of High Quality Clean Water Pumps



Rev 3.0 - 01 December 2020

PRODUCT CODE - P27 to P32

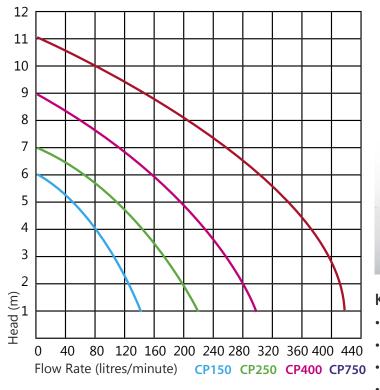
#### INTRODUCTION

The Newton <u>CP150</u>, <u>CP250</u>, <u>CP400</u> and <u>CP750</u> are a range of high quality clean water pumps ideally suited for the removal of ground water from basements and cellars as well as surface water collected in light-wells, patios and terraces. The 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 of the CP250, CP400 and CP750 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 of the switch 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 CP150 is an automatic pump only, whilst the CP250, CP400 and CP750 pumps are sold as both manual and automatic versions. Newton CP Pumps can be purchased as pumps only, or within selected packaged pumping systems.



CP250

#### TYPICAL APPLICATIONS

Primarily designed to be used with Newton sump systems for the removal of ground water collected by the Newton CDM Type C basement waterproofing system, Newton CP Pumps are also suitable for:

- Flooded basements and cellars
- Light-wells
- Surface water
- 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 impellor 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
- 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 4.

### A Range of High Quality Clean Water Pumps

TECHNICAL DATA							
Features	CP150	CP250	CP400	CP750	Units		
Purchase Code - Automatic Version	P30	P31	P32	P33			
Purchase Code - Manual Version	N/A	P29	P28	P27			
Pump Design	Vortex						
Outlet	40	40	50	80	mm		
Max Soft Solids Handling	5	5	10	15	mm		
Recommended Discharge Pipe Size	50	50	50 / 63	63	mm		
Maximum Pumping Head	6.0	8.0	10.0	11.0	m		
Maximum Flow Rate	160	210	290	410	litres/minute		
Flow Rate at 4m Head	80	120	220	295	litres/minute		
Pump Switching	Automatic by pump float or by separate pump control						
Float Switch	Vertical - Fixed	Fully adjustable vertical operation					
Pump Start Level	210	Fully adjustable					
Lowest or Stop Water Level	80/110	80	80	127	mm		
Length	190	190	215	260	mm		
Width	140	140	155	160	mm		
Height - Handle/Gland	366/374	366/374	385/395	419/434	mm		
Dry Weight	5.5	11.0	12.0	15.0	kg		
Clean Water Pumping	Yes						
Effluent Pumping	No						
Sewage Pumping	No						
Fluid Temperature Range	0 to 40				°C		
Power Supply - Single Phase	230				Volts		
Motor Output	150	250	400	750	Watts		
Start Current	5.6	7.4	10.5	15.8	Amps		
Rated Current	1.8	2.1	2.4	3.4	Amps		
Body Material	Stainless Steel (304)						
Shaft Material	Stainless Steel (410)						
Mechanical Seals	Double Carbon Ceramic						



#### **WARRANTY**

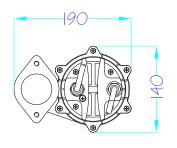
Newton CP Pumps are supplied with a 1-year manufacturers warranty from the proven date of installation, or the date of purchase if this cannot be verified. A 3-year warranty is available if the pumps are serviced at intervals agreed by a Newton approved service engineer. In all cases, the warranty is '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.

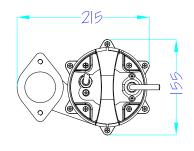
#### **STORAGE**

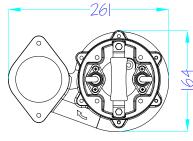
Store in dry conditions at temperatures between 5°C and 35°C. Do not expose to freezing conditions.

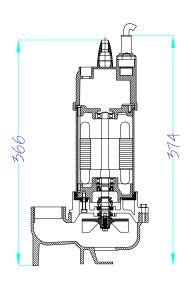
CP150

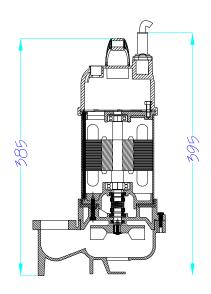
### A Range of High Quality Clean Water Pumps

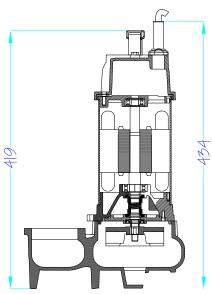












CP150 & CP250

CP400

CP750

### 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	CP150, P250 & CP400	CP750
50 mm pressure rated pipe	Suitable	Suitable
63 mm pressure rated pipe	Not Suitable	Suitable
Supplied valve	1 ½" flap valve	None
Supplied final connection to pipework	50 mm female socket ready for 50 mm pressure rated pipe	2" BSP male thread

#### PIPE & VALVE OPTIONS

CP150, CP250 & 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

#### **PUMPING SYSTEMS**

Newton CP Pumps are fitted to the following pumping systems:

Newton Titan-2

Newton Titan-Pro

**Newton Trojan** 

Newton Trojan-Pro

### A Range of High Quality Clean Water Pumps

#### **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 newbuild 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:

CP150 & 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.

#### **LIMITATIONS**

Not suitable for:

- 1. Effluent or washing machine waste
- 2. Sewage
- 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)
- 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)

#### 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.

#### **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.

#### **SPECIFICATION**

Newton Waterproofing Systems work in partnership with RIBA NBS who publish our products on <u>NBS Source</u>. 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 <u>case</u> <u>studies</u>, as well as product <u>literature and certifications</u>.

A wide range of drawings are available on our website.

#### **ANCILLARY OPTIONS**

- Battery back up for CP150
   Newton MultiPlus 12/500/20 Newton Code BB5
- 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
- Newton <u>High Water Level Alarm</u> Newton Code PA50
- Text & Speech <u>Dialer</u> for PA50 Alarm Newton Code PA5

#### **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 - 2.5 m 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 - 2.5 m 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.