# Pumps, Pumping Systems and Ancillaries

# **NEWTON SP750 CUTTER**

Sewage Pump



Rev 3.2 - 14 July 2017

PRODUCT CODE - P35 & P36

### INTRODUCTION

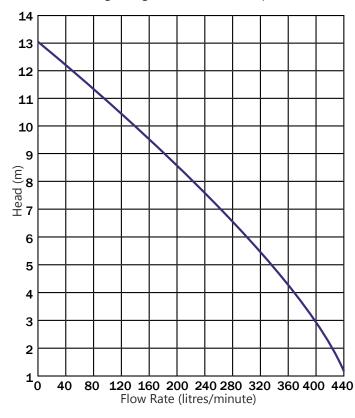
The Newton SP750 Cutter is a high quality sewage pump incorporating a tungsten carbide tipped cutting impeller that rotates against a serrated suction cover in order to cut solid waste before pumping, resulting in a much lower risk of blockage than similar sized vortex impeller pumps.

The SP750 Cutter has a cast iron base and stainless steel body and is ideally suited for the removal of sewage and effluent within small to medium sized sewage chambers, and is especially suited for use within sewage lifting stations such as the <a href="Newton Trojan Pumping System">Newton Trojan Pumping System</a>

The 410 stainless steel shaft is fitted with a silicon carbide mechanical seal and an oil seal within an oil chamber to provide the highest possible level of protection and reliability.

### **KEY BENEFITS**

- 3-year warranty if serviced under a service contract
- Cutter impeller cuts the waste, resulting in less blockages
- Protection against motor burnouts due to a locked impeller
- Double mechanical seals ensure increased durability against particle abrasion and wear
- High performance with low current and high efficiency
- Auto and manual versions
- Freestanding and guiderail mounted options





### **APPLICATIONS**

- Removal of sewage and waste water from suitably manufactured sewage vessels
- Standard pump supplied within Newton Trojan sewage lifting stations
- Pump option for Newton 1m diameter sewage systems

### **PUMP OPTIONS**

The Newton SP750 Cutter pump is supplied in single phase (230V 50Hz) only and is available as both freestanding or for guide rail mounting when supplied with the optional auto-coupling set (1000mm diameter chambers only).

Switching options are also available with the SP750, which can be purchased with a fitted float switch for auto operation or without a float for control by a compatible Newton pump control panel. They are supplied with 10 metres of heavy duty rubber power cable.

## **NEWTON SP750 CUTTER**

Sewage Pump

	TECHNICAL DATA	
Features	Result	Units
Pump Design	Cutter	
Outlet		mm
Max Soft Solids Handling	N/A	
Recommended Discharge Pipe	63	
Max Pumping Head	13.0	m
Max Flow Rate	440	litres/minute
Flow Rate at 4m Head	360	litres/minute
Pump Switching	Auto or by Control Panel	
Float Switch	Pendant Sewage Float (auto only)	
Pump Start Level	Adjustable	
Lowest or Stop Water Level	120	mm
Length	225	mm
Width	190	mm
Height - Handle	445	mm
Weight Manual/Auto	19.90/20.10	kg
Clean Water Pumping	No	
Effluent Pumping	Yes	
Sewage Pumping	Yes	
Fluid Temperature Range	0 to 40	°C
Power Supply	Single Phase	
Motor Output	750	W
Amps (Starting)	15.8	
Amps (Running)	3.4	
Body Material	Stainless Steel (304)	
Shaft Material	Stainless Steel (410)	
Mechanical Seals	Double Carbon Ceramic	

### **WARRANTY**

The Newton SP750 Cutter is supplied with a 1-year manufacturer's 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 on the number listed below. Please see our Terms & Conditions of Sale for further information.

### TRAINING AND COMPETENCY OF INSTALLER

Pumps should be connected to the electricity supply by a person suitably qualified for the type of connection being made.

### **ANCILLARY OPTIONS**

- High Water Level Alarm Code PA50
- Sewage Alarm c/w float switch Code CP5
- Sewage Alarm c/w beacon & float switch Code CP6
- Text & Speech <u>Dialer</u> for PA50 Alarm Code PA5
- Twin Pump Sewage Control Panel CP8
- <u>Control Panel-Pro</u> Control Panel Code CP2
- Newton Pump Controller Code CP9
- 2" Cast Iron Sewage Valve Code V4

### **SERVICING**

Newton sewage pumps should be serviced by trained and qualified pump engineers only. It is recommended that sewage pumps are serviced at the pump engineers discretion and within an ongoing service agreement/contract.

## **NEWTON SP750 CUTTER**

### Sewage Pump

### **ELECTRICAL SUPPLY**

The Newton SP750 Cutter requires 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 undertaken.

Where it is not 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/socket.

Each separate circuit should have its own RCD protection 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 that the automatic variant pumps are 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.

Where a Newton Pump Control Panel is used to switch the manual pump variant, these should be installed as per the panel installation instructions. The spur or socket should be fitted with the correctly sized fuse appropriate to the motor size of the connected pump.

### SP750 Cutter - 13 amps

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

### **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 a wide choice of downloadable <u>Technical Drawings</u>, and a large selection are also available either via <u>FastrackCAD</u>, or as BIM objects on the <u>National BIM Library</u> and/or <u>BIMobject.com</u>

### **INSTALLATION INSTRUCTIONS**

Please see pump installation sheet supplied within pump packaging.

### **PACKAGING & HANDLING**

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

#### LIMITATIONS

Not suitable for:

- 1. Continuous pumping above 40°C
- 2. Water with pH value above 10 or below 4 (use pumps suitable for corrosive water please contact Newton Waterproofing Systems for further information)
- 3. Sea water (use sea water pumps please contact Newton Waterproofing Systems for further information)

### **PUMP ANCILLARIES**

The Newton SP750 Cutter will require a 2" Cast Iron 'Y' type sewage valve with neoprene coated ball. Pressure rated fittings can be supplied to connect the valve to the pump and for connection of 63mm pressure rated pipe after the valve. Further 63mm pipe can be ordered when the pump is purchased. Please see pipe options below.

### **uPVC PRESSURE PIPE AND FITTINGS**

- 63mm Pipe 2.5m lengths Code PP10
- 63mm 90 degree elbows Code PP11
- 63mm 45 degree elbows Code PP12
- 63mm female-female sockets Code PP13
- 63mm Tee Code PP14
- 63mm wall mount clips Code PP15
- uPVC Solvent 0.5 litre Code G1
- uPVC Solvent Wet 'R Dry 240 ml Code G2
- uPVC Pipe Primer 473 ml Newton Code G3
- 2" BSP Nipple Code PP58
- 2" Female Socket 2" BSP Male Code PP30

### **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 Newton Waterproofing Systems or online via our website. Please see contact details below.

Any specification/advice provided is only valid if used with products supplied by John Newton and Company Ltd (trading as Newton Waterproofing Systems). Newton Waterproofing Systems reserve the right to update product literature at any time. Please always refer to our website for the latest versions.