

Titan-Pro

CDM Pumping System

Revision 8.5 - 31 March 2026

INTRODUCTION

The [Newton Titan-Pro](#) is a sump chamber designed specifically to be used with the [Newton CDM](#), Type C cavity drain waterproofing system. The adjustable neck allows for the sump to be installed at a fixed height relative to the slab so that the connection in from the [Newton CDM BaseDrain](#) drainage system and the pump rising main are made above the concrete, and always at the same height relative to the slab or raft.

Please see below for details of the pumping systems built with the Newton Titan-Pro chamber.

BENEFITS

- Compatible with [Newton TAS250](#), [NP400 eco](#) & [NP750 eco](#) pumps
- Adjustable neck ensures that the lid is always at the correct height, regardless of floor finishes
- Supplied with sealed and locked recessed lid. High end finish lids and frames are available as cost options (see page 5)
- Flat areas to side of chamber, ready for wall flanges to receive incoming 110 mm drainage pipes. Wall flanges are available as cost options (see page 5)
- Large foot to base of chamber to prevent flotation
- Anti-Drip system available for the inside of the chamber
- Sump is always set into the slab at the same height, meaning connections in from Newton CDM BaseDrain System and connections out of the chamber are at the same height with every installation

TYPICAL APPLICATIONS

- The Titan-Pro is specifically designed to be used with Newton System CDM, 'Type C' cavity drain waterproofing system
- Basements and cellars
- Lightwells
- Surface water pumping receiving water from gullies and surface slot drainage

PRODUCT LIFE EXPECTANCY

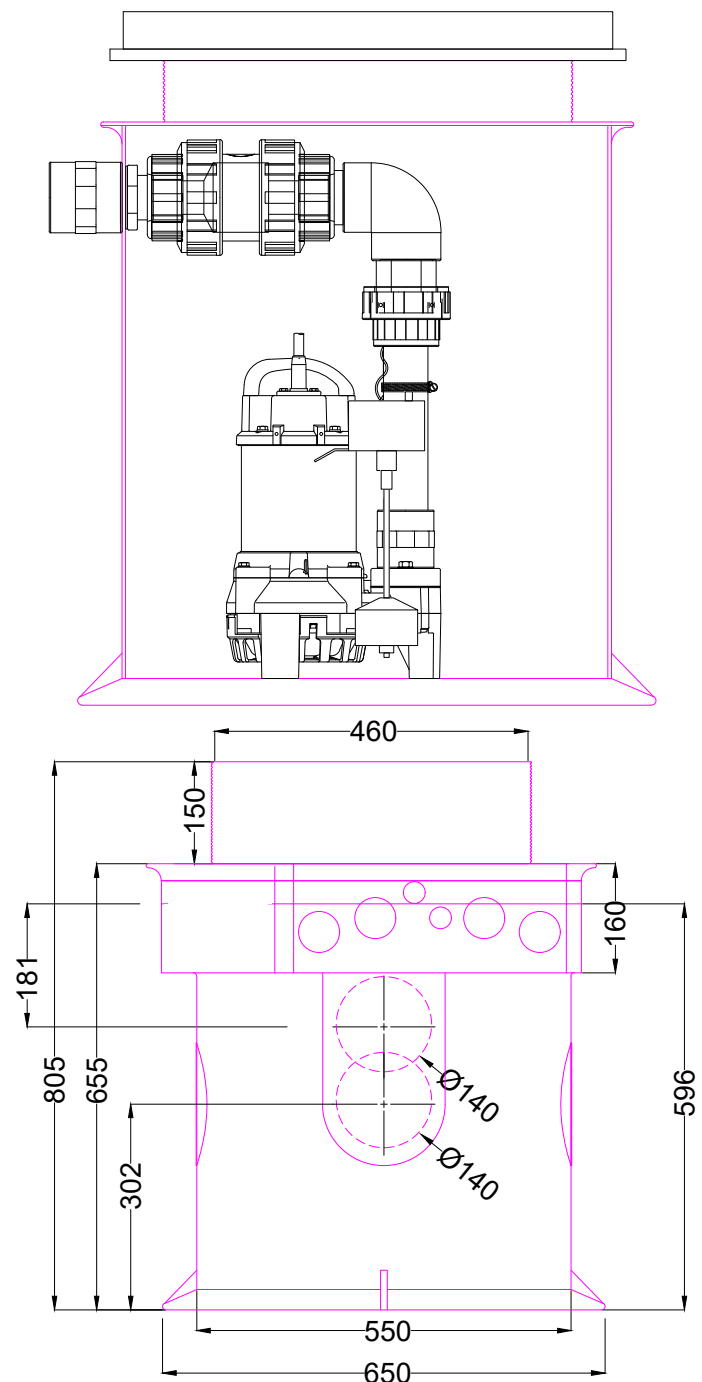
The Titan-Pro chamber is made from robust HDPE and should provide, under normal service conditions, a chamber for the life of the building. Please refer to the relevant data sheets for confirmation of the guarantees for the pumps and ancillaries used within the pumping systems confirmed below.

PUMPING SYSTEMS & PURCHASE CODES

The Titan-Pro chamber can be purchased as a bare sump or as a fully built pumping system. As a bare sump, it can be supplied with or without lid and frame and either pre-drilled or un-drilled.

Please see list of purchase options and codes on page 2.

Where increased pump flow (pump duty assist) is required, twin rising main systems should be considered.



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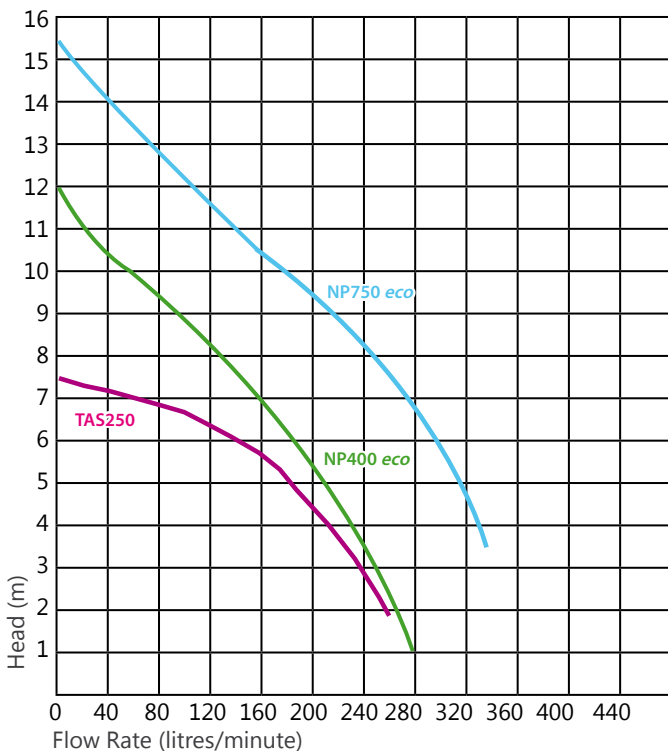
CDM Pumping System

Titan-Pro Sump Chamber	Purchase Code
Chamber only	TPC
Chamber only - Drilled	TPCD
With Lid & Frame - Bare	TPC&L
With Lid & Frame - Drilled	TPCD&L

Built Systems - Twin pumps - 1 x Rising main				
Pumps	Auto or Manual	No. of pumps	No. rising mains	Purchase Code
TAS250	Auto	2	1	CDM1
TAS250	Manual	2	1	CDM2
NP400 <i>eco</i>	Auto	2	1	CDM5/e
NP400 <i>eco</i>	Manual	2	1	CDM6/e
NP750 <i>eco</i>	Auto	2	1	CDM11/e
NP750 <i>eco</i>	Manual	2	1	CDM12/e

Built Systems - Twin pumps - 2 x Rising main				
Pumps	Auto or Manual	No. of pumps	No. rising mains	Purchase Code
NP750 <i>eco</i>	Auto	2	2	CDM13/e
NP750 <i>eco</i>	Manual	2	2	CDM14/e

PUMP PERFORMANCE CURVES



AUTOMATIC VS MANUAL PUMPS

Automatic pumps are supplied with vertical float switches that provide flexible control over pump activation. The float switches allow adjustment of both the ON and OFF positions for each pump, as well as the overall switching height.

Manual pumps must be matched with the [Newton Pump Controller](#).

Please see pump and pump controller data sheets for further information.

PUMPING SYSTEM BENEFITS

- Fully built pumping system featuring high quality Newton TAS250, NP400 *eco* or NP750 *eco* pumps
- Includes all internal pipe and pipe fittings ready for connection to 63mm or 50 mm rising main
- Check valve for each pump included
- Quick release coupling for each pump for easy installation and removal for servicing

Alarm and Monitoring

The Titan-Pro pumping system does not include alarm or monitoring devices. Please order the preferred device when ordering the system:

High Water Level Alarm with 9VDC battery backup featuring alarm switch and 0-volt output to Pulse Monitoring System or BMS.

- Code: PA50-12/B - powered directly from the large 12VDC battery of the battery backup system, if fitted
- Code: PA50-12/M - powered by wall mains connected 12VDC adapter - 9VDC battery backup

Pulse Monitoring System featuring cloud based monitoring of number of pump starts, pumped water volume plus time stamped records of power outages and alarm events with notifications sent to email and/or by push notification to mobile phones. A power lead for connection to the large 12VDC battery of a battery backup system is included.

- Code: Pulse

If a battery backup system is not fitted, a wall mains connected 12VDC adapter is needed.

- Code: PA7.

CHOOSING THE CORRECT PUMP

Newton CDM pumping systems should be purchased with the correctly sized pumps to ensure safe and efficient removal of water collected by the Newton CDM System.

Ideally, the pump should be operating at a pumping head that is within the middle two-thirds of the pump duty curve.

The majority of Newton CDM Systems are installed within single-depth basements, with the pumping head or lift, measured from base of sump to street level termination of the rising main at about 4 metres. In the majority of cases, the TAS250 pump should be used for single-depth basements. Where higher flow or higher pumping head is needed, or where the longer warranty is wanted, NP400 *eco* pumps are suitable for single-depth basements.

With double-depth basements the pumping head could be at 7 or 8 metres, and so more powerful pumps with higher pump heads such as the NP400 *eco* or NP750 *eco* should be chosen.

This depends on the discharge length.

Where extreme pumping head is needed, specialist pumps will need to be used. Please contact the Newton Technical Team for assistance.

BATTERY BACK-UP SYSTEMS - BATTERY SIZING

There is a direct relationship between the energy used to pump water and the volume pumped. Larger batteries hold more power and so more water will be pumped. The energy held within a battery is measured in Amp-hours (Ah). Larger battery packs with higher Ah values will pump more water for longer than smaller batteries with low Ah values.

Inverters

- For 250 W pumps: [12/500/20](#) - Code BB5
- For 400 W pumps: [12/800/35](#) - Code BB1
- For 750 W pumps: [12/2000/80](#) - Code BB18

Batteries

- 38 Ah battery - Code BB38
- 60 Ah battery - Code BB60
- 115 Ah battery - Code BB21/v

Please refer to the Newton [Victron Inverters](#) TDS for further information.

MATCHED BATTERY BACK-UP SYSTEMS

The following battery back-up systems can be purchased separately to ensure continued pumping during power outage:

Matched Battery Back-up Systems			
Pumping System	Inverter	Recommended Battery Sizing (Ah)	Purchase Code
CDM1 & 2	12/500/20	38 Ah	BB5K38
CDM1 & 2	12/500/20	60 Ah	BB5K60
CDM5 & 6	12/800/35	60 Ah	BB1K60
CDM5 & 6	12/800/35	115 Ah	BB1K115
CDM11 & 12	12/2000/80	115 Ah	BB18K115
CDM13 & 14	12/2000/80	115 Ah	BB18K115

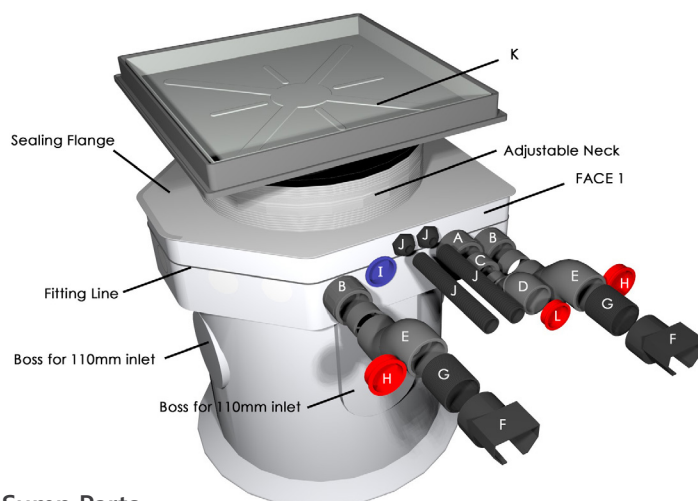
PUMPING SYSTEM INCLUDED PARTS

BARE SUMP

- Codes TPC & TPCD - Sump only
- Codes TPC&L & TPCD&L - Sump plus locked & sealed lid & frame with 46 mm recess

BUILT PUMPING SYSTEMS

- Two Newton TAS250 or NP eco pumps as ordered
- 1 x check valve (NRV) per pump
- 50 mm uPVC pressure-rated pipe and pipe fittings



Sump Parts

Sump, pre-drilled ready for all incoming and outgoing connections

- 63 mm uPVC Bulk-Head fitting ready for connection of the rising main - two are supplied with twin rising main systems
- 2 x 63 mm uPVC Bulk-Head fittings ready for connection from the CDM BaseDrain or CDM FloorDrain drainage system
- 1 x 63 mm to 50 mm uPVC reducer (one for each rising main)
- 50 mm uPVC discharge line 'S' bend for the raising of the discharge line to the slab level (one per discharge line). **NOTE:** 63 mm rising main option - Parts C, D and L are removed from the build and are replaced with 63 mm parts. **If 63 mm discharge pipe is to be used, this must be confirmed at order**
- 2 x 63 mm uPVC Inlet line 'S' bends for the lowering of the drainage in line from the slab level to the sump
- 2 x Newton Drainage Adaptors for connection of Newton CDM FloorDrain to the 63 mm drainage inlet
- 2 x 63 mm flexi connecting pipe for connection of the Drainage Adaptors to the 63 mm 'S' Bends of the drainage inlets
- 2 x 63 mm blanks for sealing the inlet to the 63 mm 'S' Bends to protect from concrete ingress during installation
- 1 x 60 mm blanks for the blanking off of unused inlet and outlet holes drilled to the sump. When twin pumps with separate discharge pumps are ordered, this outlet will be fitted with a second Bulk-Head connection with a single union ready for the connection of the second pump
- 1 x 32 mm and 1 x 40 mm, 5 m conduits and connection to sump for pump power cables and alarm cable
- 1 x 450 x 450 mm Polypropylene Frame with Galvanised 46 mm Recessed Lid - (alternative lids available - see page 6)
- 1 x 50 mm blank for sealing to pump discharge line to protect from concrete ingress during installation

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VENT

If the Type C, Newton CDM System is vented by Newton CDM Condensation Strip, further venting to replace pumped water volume with air is not needed.

If the CDM System is sealed, for example where the system is providing basic radon measures, a vent pipe of at least 50 mm or an air admittance valve will be needed. These should be effectively sealed to the membranes to ensure radon gas tightness.

OPERATING MANUAL

Please refer to the Operational Manual which is supplied in paper form with the product, or available from our website.

LIMITATIONS

Suitable for ground water and surface water only. Please contact the Newton Technical Department for advice on pumping of sewage, grey or other water types.

STORAGE

Store in dry conditions at temperatures between +5°C and +25°C with containers fully sealed. Do not expose to freezing conditions. Do not allow pumps to freeze.

HEALTH & SAFETY

Use appropriate PPE for the environment the system is installed within. Product should only be used as directed. Pumps contain lubricating oil. The relevant pump TDS and SDS should be read carefully prior to installation of the pumping system.

All TDS and SDS are available upon request from Newton Waterproofing Systems or online via our website.

PURCHASING OPTIONS

The CDM pumping systems are designed to be used with the Newton CDM waterproofing system and receives water from the CDM Basedrain Drainage System the Newton CDM System. **Please note: If 63 mm pipe is to be used for the discharge line(s), this must be confirmed at order as the standard build is supplied with 50 mm connections for 50 mm rising main only.**

ANCILLARIES

uPVC Pressure Rated Discharge Pipe

	Product Code
50 mm Pipe - 2.5m lengths	PP1
50 mm 90-degree elbows	PP2
50 mm 45-degree elbows	PP3
50 mm female-female sockets	PP4
50 mm Tee	PP5
50 mm wall mount clips	PP6
1½" BSP to 50 mm Hosetail	PP28
1½" BSP to 50 mm Socket	PP43
63 mm to 50 mm female reducer/adaptor	PP35
63 mm Pipe - 2.5m lengths	PP10
63 mm 90-degree elbows	PP11
63 mm 45-degree elbows	PP12
63 mm female-female sockets	PP13
63 mm Tee	PP14
63 mm wall mount clips	PP15
uPVC Solvent-on Wet 'R Dry - 240ml	G2
uPVC Pipe Primer - 473ml	G3

Alternative Frame and Lid

Galvanised steel frame recessed lid with 450 x 450 mm opening	TPSL2
Stainless steel edged recessed lid with 450 x 450 mm opening	TPSL3
Brass edged recessed lid with 450 x 450 mm opening	TPSL4
Aluminium edged, triple-sealed recessed lid with 450 x 450 mm	TPSL7

General Options

Anti-Drip Kit - extends the two drainage inlets to the bottom of the sump to prevent dripping noises	TPK1
Wet Install Kit - Includes three shut off valves	TPK6

Wall Flanges

Wall flange for 50 mm diameter vent and conduit pipe	WF50
Wall flange for 63 mm inlet	WF63
Wall flange for 110 mm inlet	WF110

Hole Cutters

82 mm Hole Cutter for 50 mm wall flange	HC82
95 mm Hole Cutter for 63 mm wall flange	HC95
140 mm Hole Cutter for 110 mm wall flange	HC140
Arbor for hole cutter	PA33

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