MARINA

Classic Pump-Out Pedestal (RS100)

INSTALLATION & OPERATION MANUAL





Installation & Operation Manual - MANAM-01-V01-R1 July 2021



Amendments

Amendment Number	Details	Date
Ver 1, Rev 0	New Document.	April 2021
Ver 1, Rev 1	Correction to pedestal dimensions	July 2021

Product:	Classic RS100 Pump-Out Pedestal		
	Sanitation Models	Bilge Models	
Applicable	MANA0010	MANA0040	
Models:	MANA0020	MANA0050	
	MANA0030	MANA0060	11
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Contents

Safety Safety Advice within this Manual	4 4
Product Overview Options and Accessories	5 5
Product Specification Physical Specification Electrical Specification Pump Specification Certifications and Compliances Schematics	7 7 8 8 8 9
Labelling Options and Accessories	11
Unpacking Typical Contents	12
Installation Before Installation Ground Mounting - if a Mounting Base is Supplied Ground Mounting - if a Base NOT Supplied Install the Pedestal About the Pump Priming Dry-Running About the Timer Set the Timer About the Coin Mechanism Commissioning	13 14 14 14 15 17 17 17 18 19 20 21
Operation Maintenance	23 24



Safety

This manual is specifically applicable to the Classic RS100 Pump-Out Pedestal product and is provided as a guide to its installation and use.



WARNING: Electrical Power

Make sure electrical power is isolated BEFORE starting this procedure.

• Turn power OFF at the SOURCE.



IMPORTANT: Installers and End Users must **read** and **understand** the content of this manual before installation/use.

Installation must **only** be performed by someone who is properly qualified and competent to do so in accordance with the current legislation and Electrical Wiring Regulations of the geographical location of the installation.

- If the advice in this manual is not understood, contact Rolec for further advice and/or training BEFORE attempting installation/operation of the equipment.
- Rolec Services Ltd cannot accept any responsibility for improper installation or any problems arising from improper installation.

NOTE: Damage to the equipment, connected systems or to property caused by improper installation/use are the responsibility of the installer/user.

- The information provided in this manual must ONLY be used with the model(s) listed on page 2 of this manual.
- The information provided in this manual must NOT be used with any other product.
- The content of this manual may be updated by the manufacturer as required.
- Do NOT use the equipment for anything other than its intended purpose.
- Do NOT modify the equipment unless specifically instructed to do so by the manufacturer.
- Do NOT attempt to repair the equipment unless specifically instructed to do so by the manufacturer.
- Damage to the product may render it unsafe. The product must be electrically isolated and NOT used until appropriate corrective action has been completed.

Safety Advice within this Manual

Rolec manuals use a system of warnings, cautions and notes.

- WARNINGS concern the safety of installers/end user and will be given before the detail/instructions in the manual.
- **CAUTIONS** concern the potential for damage to the equipment and will be given before the detail/instructions in the manual.
- NOTES are given to provide additional information and/or highlight information of
 importance. They will be given either before or after the detail/instructions as
 appropriate and may use different wording (such as IMPORTANT) where emphasis is
 required.

Warnings, Cautions and Notes may be repeated several times as appropriate and may be preceded by a hazard symbol.



Product Overview

The Classic RS100 Pump-Out Pedestalhas been designed to be a simple and cost-effective option that still offers all the essential needs.

Manufactured using high quality materials, the Classic range has a long and successful history of use throughout the world.

This manual covers the range in standard specification.

Model Number	Sanitation Pump-Out Models
MANA0010	RS100 self-contained, illuminated, Sanitation pump-out pedestal • Stop / Start Operation
MANA0020	RS100 self-contained, illuminated, Sanitation pump-out pedestal Stop / Start Operation Key Switch
MANA0030	RS100 self-contained, illuminated, Sanitation pump-out pedestal Pause / Stop Operation Coin / Token

Model Number	Bilge Pump-Out Models
MANA0040	RS100 self-contained, illuminated, Bilge pump-out pedestal • Stop / Start Operation
MANA0050	RS100 self-contained, illuminated, Bilge pump-out pedestal Stop / Start Operation Key Switch
RS100 self-contained, illuminated, Bilge pump-out pedestal MANA0060 Pause / Stop Operation Coin / Token	

Options and Accessories

- Shell colours and materials.
- Panel materials.
- Branding vinyls.

- Payment facility
- Key switch control
- Heat trace tape (internal heating).



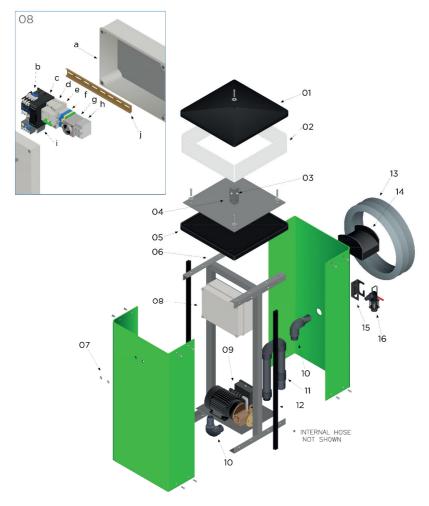


Figure 1 Typical, Classic RS100 Pump-Out Pedestal Components (Sanitation Model)

Pedestal			
1. Lid	5. Sandwich	9. RS100 Pump	13. Flexible Hose
2. Lens	6. Internal Frame	10. PVC Pipe - Elbow	14. Hose Hook
3. LED Dome Light	7. Start/Stop Button	11. PVC Pipe to ground	15. Probe Holster
4. Lens Light Basket	8. Switchgear Enclosure	12. Extrusion	16. Sanitation Probe

Enclosure			
a. Enclosure	d. 16A 100mA 2P RCBO	g. Timer	j. DIN Rail.
b. 16A 30mA Contactor	e. 6A 1P+N Lighting MCB	h. Terminals	
c. Power Supply	f. Incoming Terminals	i. Thermal Overload	



Product Specification

Physical Specification

Material	Head: ABS Granulate Natural Polyethylene and Aluminium Internal Frame: Hot-Dipped Galvanised Steel Body External: Aluminium or Steel
Mass	Typically, 40 - 50kg (Including Pump) 17.5kg (Pump Only)
Operating Temperature	-30°C to +60°C
IP Rating	IP65 Enclosure,
IK Rating	IK10 Enclosure

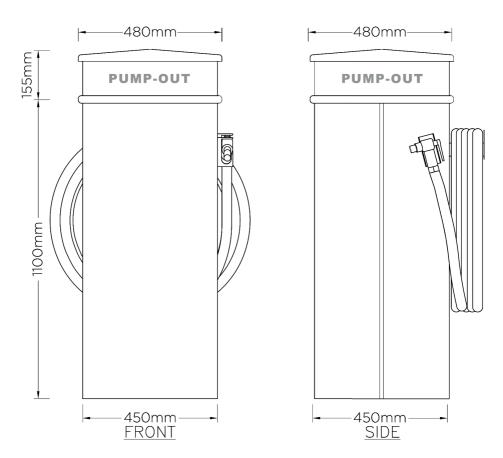


Figure 2 Classic RS100 Pump-Out Pedestal Dimensions (Sanitation Model shown)



Electrical Specification

Refer to the Product Overview table on page 5.

Input Voltage	230V Single Phase
Overload & Fault Current Protection	 MCBs IEC 60898-1 RCD or RCBO IEC 61008-1, IEC 61009-1
Lighting	360 Degree Low Energy LEDs (4 x 1W Approx)

Pump Specification

Material	Bronze body, IP55	
Motor	230V/1/50Hz Continuous Duty, 0.55kW, 1400rpm,	
Shaft	Stainless-steel	
Shaft seal	Carbon ceramic	
Impeller	Nitrile Rubber	
Rotation	Clockwise – viewed from brass end cover	
Flow	 Up to 80 I/min at 0 meters with clean water. (Flow rate varies in line with fluid viscosity and lift) Up to 25 meters or up to 4 metres lift 	
Priming	Self-priming up to 3m vertical lift Greater vertical lift and faster response can be achieved by pre- priming and by keeping the pump primed	
Protection	Manual reset thermal overloadUp to 30 min dry running protection	
Capacity	Hard and soft solids <8mmUp to 90% entrained air	

Certifications and Compliances

This product has been designed and built in accordance with the following standards and legislation:

Wiring Regulations	BS 7671-2018	
Low Voltage Directive	2014/35/EU	
Switchgear	MCB/RCD or RCBO IEC 60898-1, IEC 61008-1, IEC 61009-1	
EMC Directive	2014/30/EU	
Enclosure	 BS EN-10204:2004, BS EN 573-3:2013, BS EN 755-2:2016 IK10 EN 62262:2008 IP65 BS EN 60529:1992 Corrosion Resistant / Salt Mist Tested Panels ISO 9227 UV Stabilised Flame Retardant to UL94 	
RoHS	2011/65/EU	
REACH	1907/2006	





Schematics

MANA0010 & MANA0020 MANA0040 & MANA0050

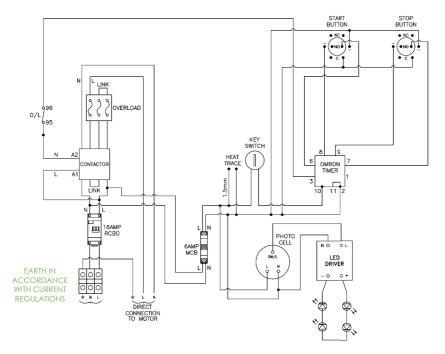


Figure 3 RS100 Pump-Out Pedestal - Free-to-Use and Key Switch Models (Single Phase Model)

NOTE: Free-to-Use models use the same schematic with the exception of the key switch.



MANA0030 & MANA0060

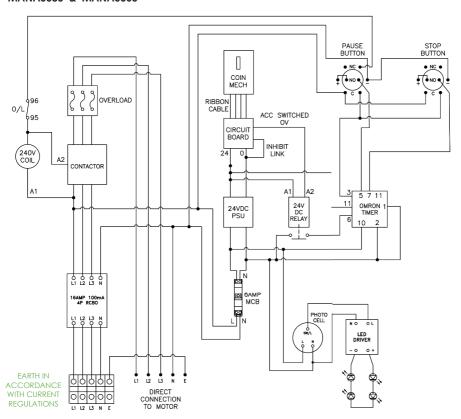


Figure 4 RS100 Pump-Out Pedestal – Coin/Token Models (Three Phase Model Shown)



Labelling

Users must observe the information given on labels to ensure safe use of the product. Labels may be in the form of adhesive 'stickers', plates, and/or moulded into the surface of components.



Figure 5 Typical Product Label



Figure 6 Power Warning Labels as Appropriate



Figure 7 Key switch and Buttons Labels



Figure 8 Instruction Label

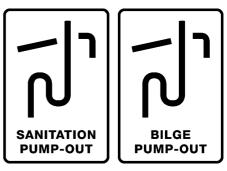


Figure 9 (Sanitation or Bilge) Front/Rear Panel Label

Options and Accessories

- Shell colours.
- Panel materials.
- Branding vinyls.

- Switching and control.
- Heat trace tape (internal heating).



Unpacking



WARNING: Lifting Hazard

The pedestal typically weighs 40 - 50 kg but may differ depending on end user specifications.

- Use safe and correct lifting techniques.
- Use additional staff to assist with lifting and/or use a mechanical lifting aid.

The content of the package depends on the model ordered and any options or accessories.

IMPORTANT:

- Do NOT allow the pedestal to be exposed to sunlight if inside plastic bag packaging. Increases in temperatures and or humidity may affect electronic components.
- Make sure all packaging is disposed of responsibly and in accordance with the current regulations in your region.
- 1. Place the package on a flat, level surface.
- 2. Visually examine the packaging for indications of damage caused in transit.
 - Obtain photographic evidence of the damage if required.
- 3. Carefully remove the packaging.
- 4. Visually examine the product for indication of damage that match any damage to the packaging.
 - Obtain photographic evidence of the damage if required.
- 5. If damage has been sustained, contact the transportation service and your supplier. Photographs may be required to back up any claim you may make.

Typical Contents

- 1 x Pump-Out Pedestal with either sanitation probe or bilge probe.
- Rubber Splash Mat
- Ground Fixings (optional extra).
- Installation and Operation Manual.



Installation



WARNING: Electrical Power

Make sure electrical power is isolated BEFORE starting this procedure.

Turn power OFF at SOURCE.



WARNING: Fire / Explosion Hazard

Do NOT use this equipment to pump flammable fluids. An explosion or fire may occur.



WARNING: Lifting Hazard

The pedestal weighs around 40 kg.

- Use safe and correct lifting techniques.
- Use additional staff to assist with lifting and/or use a mechanical lifting aid.

IMPORTANT: Waste Fluid Connections



- Water Fluid Connections must be made in accordance with the current regulations applicable to the geographical region of the installation.
- All waste fluids must be disposed in accordance with the current regulations applicable to the geographical region of the installation



IMPORTANT: Installers and End Users **must** read and **understand** the content of this manual before installation and/or use of the product.

Installation must **only** be performed by someone who is properly qualified and competent to do so in accordance with the current legislation in force in the geographical location of the installation.

- Advice provided in this manual does NOT override any legislation.
- If the advice in this manual is not understood, contact Rolec for further advice and/or training BEFORE attempting installation/operation of the equipment.
- Rolec Services Ltd cannot accept any responsibility for improper installation or any problems arising from improper installation.

NOTE: Damage to the equipment, connected systems or to property caused by improper installation are the responsibility of the installer.



Before Installation

- Establish a suitable site location for the unit that is both secure and environmentally safe.
- 2. Make sure the location meets current legislation (if applicable).
- 3. Make sure there is a suitable mains power supply available at the installation site.
- Make sure there is a suitable means of disposing of waste fluids available at the installation site.
- 5. Make sure the unit model is correct and matches the order.

NOTE: Incorrect or damaged units must NOT be installed. Contact your supplier to discuss replacement.

NOTE: If the pedestal is NOT going to be sited on a pontoon or similar decking type location, a firm mounting point will be needed in/on the ground. Refer to the sections immediately below on setting up a base location.

Ground Mounting - if a Mounting Base is Supplied

- 1. Prepare the ground and set the ground mounting base in the desired location.
 - Make sure ALL cables are fed upward through the middle of the base.
- 2. Concrete the base into place and allow time for it to set.
 - \bullet The lip of the base should be 2 3 mm above the surface.

Ground Mounting - if a Base NOT Supplied

- 1. Refer to the footprint diagram.
- 2. Prepare a suitable area of firm, flat ground.
 - It must be possible to secure the pedestal to the ground with bolts or similar fasteners that are appropriate to the type of prepared ground.
 - Typically, into concrete, M8 x 100mm Anchor Bolts should be used but installers must assess the site and choose the most appropriate fastener for their needs.

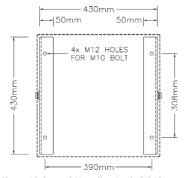


Figure 10 Ground Mounting Footprint Diagram



Install the Pedestal



WARNING: Electrical Power

Make sure electrical power is isolated BEFORE starting this procedure.

• Turn power OFF at SOURCE.

NOTE: All electrical work must be performed in accordance with the current Electrical Wiring Regulations.



WARNING: Fire / Explosion Hazard

Do NOT use this equipment to pump flammable fluids. An explosion or fire may occur.



WARNING: Lifting Hazard

The pedestal weighs around 40 kg.

- Use safe lifting techniques.
- Use additional staff to assist with lifting and/or use a mechanical lifting aid.
- Remove and retain the fixings securing the front and rear skin panels to the pedestal.
 - Fixings are located at the side of the pedestal at the top and bottom of each skin panel.
 - Carefully ease the panels away from the unit to gain access to the interior.
 - Take care not to damage or put strain on any connectors and cables between the pedestal and the front panel.
- 2. On the front skin panel, disconnect the cables attached to the light sensor and to the start/stop buttons. Move the panel away from the pedestal.
- Carefully lift the pedestal then lower it over the cable / pipe and onto its mounting position.
- 4. Secure the pedestal to the ground with the correct type and size of fasteners for the location.
- Route the power cable to the appropriate position to be able to connect to the terminals within the switchgear electrical enclosure (item 08 on the exploded diagram).
 - Loosely fit the cable in the cable clamps that run up one side of the internal frame. The clamps will be secured later in the procedure.

NOTE: In the following steps, all electrical and plumbing work must be performed by an appropriately qualified engineer in accordance with the current regulations.

- 6. Remove the front cover from the switchgear enclosure.
- 7. Create a suitably sized hole in the switchgear enclosure to accept the power cable and an appropriate cable gland for the cable being used.
- 8. Terminate the power supply cable in the appropriate manner and connect to the pedestal as per the schematic.



- 9. Make sure the cable is routed neatly along the frame and secure the cable clamps to hold the cable in place.
- 10. Make sure ALL debris is removed from the switchgear enclosure and that no debris is present on any of the components.
- 11. Make sure ALL cable connections are secure and have not become loose or damaged in transit or during installation.
- 12. Position the site waste pipe to be able to connect to the pedestal's waste outlet pipe.
- 13. Connect the site waste pipe to the pedestal waste pipe in accordance with the current, appropriate legislation.
- 14. Make sure ALL debris is removed from the enclosure and that no debris is present on any of the components.

IMPORTANT NOTE:

- It is the responsibility of the installing engineer to satisfy themselves that all
 cable terminations throughout this product are secure and tight and have not
 become loose, strained or disconnected during transit and/or installation.
- It is the responsibility of the installing engineer to satisfy themselves, that the
 waste connection has been performed in accordance with the current
 legislation and that all pipework is secure and has not become loose, strained
 or disconnected during transit and/or installation.
- 15. Connect the flexible suction hose to the inlet on the rear of the pedestal.
 - Connect the probe to the hose if required or not already fitted.
- 16. Refer to the following three sections About the Pump, About the Timer and About the Coin Mechanism before moving on to Commissioning.



About the Pump

Priming

The Utility pump can safely self-prime from dry and does not need to be filled with liquid before starting. However, the pump will prime more rapidly, will generate a higher suction lift, and will be better protected against dry running on first use, if filled with liquid first.

- On first start-up, check that the pump has primed itself within a few seconds. If a steady flow is not established within 20 - 30 seconds, STOP THE PUMP and investigate the cause.
 - Check the inlet line carefully for air leaks. If problems persist, check that the
 end cover is tight, the O-ring seal is clean, the cam screw and cam itself are
 properly sealed in the body, and that the shaft seal is undamaged and
 correctly fitted.

Dry-Running

Properly installed and filled with liquid before use, the pump is protected against dryrunning damage for up to 30 minutes.

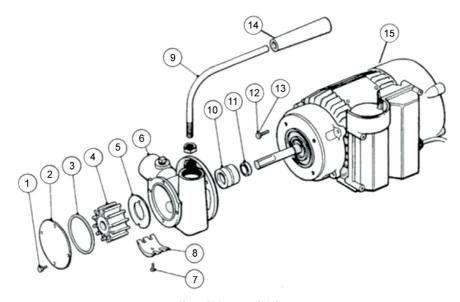


Figure 11 Pump and Motor

1. End cover Screws	6. Body	11. Spacer Assembly
2. End Cover	7. Cam Screw	12. Body Screws
3. 'O'ring	8. Cam	13. Washers
4. Impeller	9. Handle	14. Handle Grip
5. Wearplate	10. Seal Assembly	15. Motor



About the Timer

The timer is located within the switchgear enclosure and controls the period of time over which the pump will run when activated.

The timer is pre-set by the manufacturer to a default of **15 minutes** unless a different time was requested by the client when the order was placed.

- Pedestals with a key switch use the key to simply enable or inhibit use of the
 pedestal by applying or removing power.
 - Pump-out is controlled by the start and stop buttons.
 - The timer is activated when the start button is pressed and is reset ready for next use when the stop button is pressed.
 - If stop is not pressed, the pump will run for the duration of the timer's pre-set time period.
- Pedestals with a coin/token mechanism are activated when a coin/token is inserted, and the pump starts automatically.
 - Pump-out can be paused and un-paused using the Pause button.
 - While paused the timer is not running, allowing pumping to resume with all unused time remaining.
 - If the unit is not paused, or stopped the pump will run for the duration of the timer's pre-set time period.
 - The **Stop** button stops the pump-out and resets the timer ready for next use. To start pumping again, another coin/token must be inserted.

 $\ensuremath{\text{NOTE:}}$ Only one coin or token should be used for each pre-set time period.

Only 1 coin or token is recognised at a time. If 2 coins or tokens were placed into the pedestal, one immediately after the other, the time will only run for ONE preset time period.

If more time is required the second coin must be used AFTER the first timer period has ended or the pump-out has been **stopped**.

If pumping has been paused and not released (un-paused), the remaining time may be used by the next user. Alternatively, the **Stop** button must be used to 'cancel' the current pump-out so that a coin/token can be used to initiate a new pump-out session. Coins/tokens inserted while a pump-out is paused will not be registered.



Set the Timer

If required, the pump run time can be changed by amending the settings on the timer.

Pedestals with a coin/token mechanism

Before changing the timer setting, consider what time period and cost is most appropriate for a pump-out service in your location.

For example, if the average pump-out at your location takes 30 minutes you could simply set the timer to 30 minutes for one coin or token. Alternatively, you could set the timer to 15 minutes and the average pump-out would cost 2 coins/tokens. The setting you make will depend on the time required and the value of the coin or token used.

There are three factors involved with setting the required time period.

- 1. Unit of time selection 1 second, 10, seconds, 1 minute, 1 hour or 10 hours
- **2. Time range selection** 1.2, 3, 12 or 30
- 3. Time dial setting

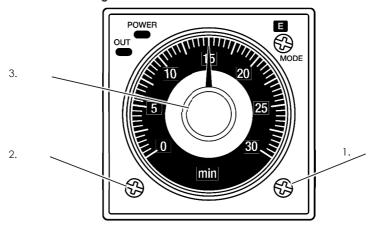


Figure 12 Front of Timer – Factory Default Setting

- 1. Make sure the MODE is set to 'E'. if the mode is changed the timer will not function correctly in this application.
- 2. Use a small screwdriver to:
 - Turn the Unit of time selector (1) to the desired units. In most cases this will be 'min' as shown above.
 - Turn the Time range selector (2) to the desired range. In most cases this will be '0 30' as shown above.
 - Turn the time dial to the place the pointer at desired time.

The time is now set and when activated it will allow the pump to run for the desired time.

In the example above, the pump run time could be set between 0 and 30 minutes. If a longer time is required, the three settings at step 2 will need to be changed.



The example below describes setting the timer/pump to run for 45 minutes. However, to preserve the operational life of the pump, it is advised that the pump should not be run for much more than the pre-set 15 mins without a period of rest between each operation.

- 1. Use a small screwdriver to:
 - Turn the Unit of time selector
 (1) to display 10m.
 - Turn the Time range selector (2) to the range 0 12
 - Turn the time dial to the place the pointer at halfway between 4 and the marker line for 5. (i.e 4.5)

From this, the timer understands the calculation 4.5×10 (minutes) = 45 minutes.

Other time periods can be set in the same way.

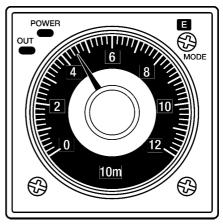


Figure 13 Changing the Timer Setting

About the Coin Mechanism

If tokens are used, the mechanism does not usually need to be changed. If the cost of the pump-out service changes, you simply adjust the price charged for each token. The only occasion on which adjustment may be required, is if needing to use a different type/make of token.

The coin mechanism is set during manufacturing to accept the coin used in at the installation site. Coins that fall outside the settings are rejected and returned to the user.

If the mechanism needs to be set to accept a different coin/token, contact Rolec Services to discuss your needs.



Commissioning



WARNING: Electrical Power

You will be exposed to LIVE electrical power in the next steps to enable testing and commissioning to be performed before protective covers are refitted.

- Perform any checks required to make sure it is safe to apply electrical power to the site and the pedestal.
- 2. Switch ON the internal switchgear for the power and LED lamp.

Switchgear and Timer

- Switch ON the power to the pedestal and test in accordance with the current regional Electrical Wiring Regulations.
 - Investigate and correct any issues if required.
- 4. Set the pump-out time period required by the marina operator.
 - When activated, the pump will operate for the set period unless stopped by the Stop or Pause button.
- 5. Refit and secure the cover to the switchgear enclosure.
- 6. Remove electrical power to the pedestal.

Waste Fluids

- 7. Loosely fit the front panel to the pedestal.
 - Reconnect the light sensor and the start/stop buttons to the cables removed earlier in the procedure.
- 8. Reapply electrical power to the pedestal.
- 9. Place the suction nozzle into a constant supply of clean water.
- Activate the pump using the Start button (and a coin/token if required).
 - Check the run time of the pump matches what was set at item 4
 - Perform a visual check that fluid is flowing freely to the site waste system without any leaks from connections, the hose or within the pedestal.
 - Investigate and correct any issues if required.
- 11. Disconnect the suction hose from the pedestal.
- 12. Refit the rear skin panel and secure with the fasteners removed earlier in the procedure.
- 13. Reconnect the suction hose and store it neatly on the Hose Hook.



LED Lamp	The pedestal incorporates an amenity illumination lamp which activates in response to changing light levels.
	14. Cover the light sensor, located on the side of the pedestal, the pedestal lamp should illuminate.
	15. Uncover the light sensor and the lamp should switch OFF.
	NOTE : To prevent flickering in frequently changing light conditions the lamp has a built-in delay before it switches on / off.
Secure	16. Refit the front skin panel and secure with the fasteners removed earlier in the procedure.
	17. Check the rear skin panel is secure.
	18. Make sure you are satisfied that the installation is complete and is in a safe condition.
Clean	 Make sure all information labels are present, undamaged, and visible.
	Clean the pedestal ready for hand over, to remove handling and installation marks.
Handover	21. Make sure the pedestal is NOT covered and all plastic packaging has been removed. Even in temperate climates, plastic packaging can cause localised heating of the pedestal that may result in temporary or permanent component failures.
	Make sure this manual is given to the customer along with copies of any installation paperwork.



Operation



WARNING: Fire / Explosion Hazard

Do NOT use this equipment to pump flammable fluids. An explosion or fire may occur.

Operation is controlled by simple **Start / Stop** buttons (on coin/token units the buttons are marked **Pause / Stop**). Refer to About the Timer for more detail.

MANA0010 and MANA0040 have unrestricted access to the pump-out operation.

MANA0020 and MANA0050 have a key switch that restricts use of the pedestal by

deactivating the power.

MANA0030 and MANA0060 have a coin or token mechanism that restricts use of the

pedestal until the fee is paid.

- 1. Fully uncoil the suction hose.
 - Make sure the hose is not kinked or crushed and appears to be in good condition.
 - Make sure the probe is connected securely to the hose.
 - Make sure the hose is connected securely to the pedestal.
- 2. Connect the probe to the boat's waste or bilge outlet point (as appropriate for the type of pump-out pedestal).
 - Make sure there is enough hose to allow movement of the boat with any waves.
 - Make sure the connection to the boat is secure.
 - Do NOT attempt to move the boat whilst the pump-out hose is connected.
- 3. Open the valve on the probe.
- If using a key switch model or a coin/token model, use the key or a coin or token to activate the pedestal.
 - On coin/token models the pump (and time period) will start immediately.
- 5. If using a key switch or free to use model, press the **Start** button. The button will illuminate GREEN when the pump is running. If the button illumination turns RED, stop the pump out.
 - When running as normal, the pump will run for the pre-set time period or until stopped manually by the Stop button.
 - If the system fails to pump for any reason, stop the pump-out.
- 6. When the pump has stopped and the pump-out is complete, close the probe valve then disconnect the probe from the boat's connection point.
- 7. Flush the system by pumping through with clean water after each use.



- 8. Make sure the hose is coiled neatly on the on the Hose Hook.
- 9. For systems with a key, remove the key at the end of the operation.

NOTE: If a pumping operation is PAUSED and not released the pump-out operation may not function correctly for the next person. Refer to About the Timer for more detail.

Maintenance

NOTE: In the event of a hardware issue, always contact your installer first.

 Damage caused to the equipment by misuse, lack of maintenance, inappropriate maintenance or modification is not covered by the manufacturer warranty.



WARNING: Flectrical Power

This pedestal enclosure does NOT need to be opened for routine maintenance tasks.

- 1. Flush clean water through the system after each pump-out.
 - Remove any debris from the probe and/or any filters or strainers.
- 2. Perform an extend flush of the system with clean water once a month or more often during busy periods.
 - Visually check the discharge water runs clean.
 - Remove and correctly dispose of any solids that should not be in the waste system.
- 3. Visually inspect the pump operation every 12 months or more often in periods of high usage. Damage to the impeller may be experienced as vibration or noise coming from the pump, poor flow rate of fluid, a racing pump motor or seizing of the pump/motor.
 - Damage to the impeller can cause other parts of the pump to fail.
 - The impeller must be replaced if damaged. Other items such as bearings or seals may need to be replaced.
- 4. Visually inspect the hose and connections for damage or leaks on a weekly basis.
 - Avoid damage to the hose from vehicle tyres or similar crushing or abrasion.
 - Avoid damage to the hose from being stretched or kinked.
 - Avoid damage to the hose from chemicals.



5. Regularly clean the external surfaces of the pedestal by wiping with a damp cloth.

CAUTION: Equipment Damage

To avoid damage to the surface finish, and/or internal components do NOT use:

- Abrasive materials.
- Mineral or petroleum solvents / degreasers.
- Hose pipes, Jet washers or Steam cleaners.
- Cleaning using these methods will invalidate the warranty.
- 6. Regularly clean the light sensor with a damp soft cloth and check its functionality as described in the commissioning section of this manual.
- Regularly clean the start/stop buttons with proprietary stainless-steel cleaner that will also lightly lubricate the button movement and apply a protective film to the metal surface.
- 8. Regularly, visually inspect the exterior of the pedestal for damage.
 - If damage affects safety, isolate the equipment and prevent its use until appropriate repairs have been completed.
 - Damaged to painted surfaces should be treated by removing damaged paint and any corrosion that may have occurred. Apply new paint to protect any exposed metal. Rolec standard colours are: Green RAL 6005, Blue RAL 5002.
- 9. Perform a functional test of the switchgear every six months by pressing the test button and making sure that the switchgear deactivates.
 - If the equipment fails the test, isolate the equipment and prevent its use until appropriate repairs have been completed.
- 10. The pedestal and switchgear should be electrically inspected in accordance with the current leaislation for the installation location.
 - If the equipment fails the test, isolate the equipment and prevent its use until appropriate repairs have been completed.



THE WORLD'S LEADING MARINA SERVICES SPECIALIST

