

Filtering

The filter fitted is to prevent large debris such as fibers, scale and slime from blocking the pump mechanism and tubes. The filter is removable and washable. It extends the life of the pump and should be carefully fitted (fig. 10).

On sealed and filtered air flow systems in clean environments, where clean condensate is produced, the filter may be removed providing the system is flushed through first. If in doubt keep the filter fitted.

Troubleshooting

Pump Not Operating or operating intermittently:

- Check Supply Fuse.
- Check the filter (see inspection and maintenance).
- Check Discharge tube for blockages.
- Check Tube connections are secure and water tight.
- See Note 2

Water Overflowing or Leaking:

- Check the pump is secure and level.
- Check Discharge tube for blockages.
- Check Tube connections are secure and water tight.
- Check Supply Fuse.
- Check the filter (see inspection and maintenance).

Note 2. The pump motor is protected by an automatic self re-setting thermal overload. This will cause the pump to stop if the discharge tube is blocked or debris built up on the sensor plates causing the pump to pump air. Shut Off power for 30 minutes to allow to cool. Perform full service routine and test. If problems still occur, Replace complete Pump.

Auxiliary Parts

MCP.0084.0	Replacement Filter Sponge
MCP.0083.0	MicroPump II Acoustic Control Jacket for the most sensitive applications
ACC.0056.0	Anti-siphone Valve (see fig. 7)
ACC.0059.0	6mm Discharge Tubing 30m coil

Warranty

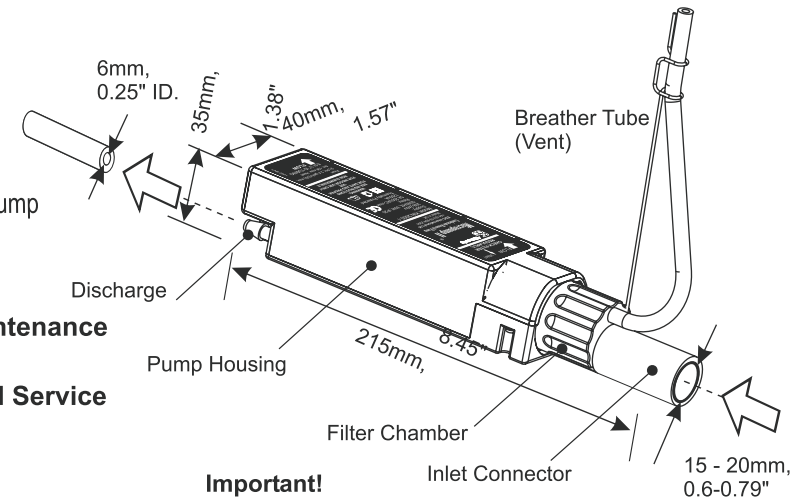
This product is guaranteed for two years to be free from manufacturing defects or faulty materials. If it should fail for either of these reasons within two years from the date of manufacture it will be replaced or repaired free of charge, at the option of EDC International Limited.

EDC International Limited can accept no liability whatsoever for any loss or damage arising from the use of this product, however caused. Before using this product the user should satisfy himself that the product is suitable for use in the intended application, and for the manner in which it is intended that it be used. Note that the warranty on this product is void if it has been blocked by dirt or if any part has been mechanically damaged. This product is subject to continuous development and improvement and EDC International Limited reserves the right to alter the specifications or design without prior notice.

LIT-2500



Waterway Micropump II® Condensate Removal Pump



Operation and Maintenance guide For Installation and Service Engineers

Important!

The installation of this product is to be carried out by Competent Engineers.

READ THIS BOOKLET before installation of this product.

Retain this booklet as it contains important information for the safe and proper use of this product.

All electrical wiring must comply with all National and Local Electrical Codes.

This product complies with the European Directive on Low Voltage Safety, and contains components designed to promote compliance with the European EMC Directive.

Specification

	Model	Power Supply:	Cable Length
Euro	MCP.2000.0	230V 50/60Hz 30W	1.0 M / 3/4" - 0.75mm ²
US:	MCP.2000.1	208-240V 60Hz 30W	3/4" - 18 AWG
US:	MCP.2000.2	110-120V 60Hz 30W	3/4" - 18 AWG



Relay: 5A 250V, Break on Alarm.
Protection: IP20
Operating Temperature: Air 50°C / 122°F max
Water 25°C / 77°F max

Pumping Capacity: See Graph
Discharge Head: 15 metres/49ft max, see fig
Max Tube Length: 100 metres/ 330ft
Thermal Protection: Auto-reset at 55°C 131°F.
Pump Switching Levels: On 17 mm / 9/32"
Off 12 mm / 1/2"

Alarm Level *1 19 mm / 3/4"
*1. Level must be above for 15 seconds to trigger alarm.

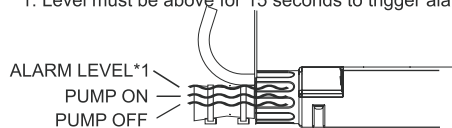
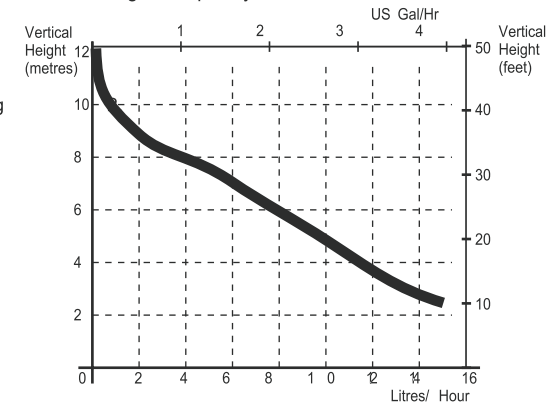


fig.2 Capacity Chart



Installation

Location

This Pump is not submersible. Select a suitable location for the pump within the equipment which is level (fig. 4 & 5) and not likely to be disturbed in general use. Ensure the drain hose slopes down directly to the pump without drooping and kinking (fig. 3). If connecting directly to Earthed/ Grounded Metal Tray or pipes, allow 15mm/ 5/8" distance between parts (fig.12).

Separate the Pump and Discharge Tube from panels and surfaces with insulating foam rubber to further reduce noise transmission.

Piping

Run discharge tubing to a suitable drain where it is unlikely to freeze during operation. The highest point of the run must be less than 49ft/ 15m above the Pump and not more than 0.3m(1ft) below to avoid siphoning (fig. 7). Maximum tube length is 330ft/ 100m. Take care not to pinch or kink the tubing. Secure or support the discharge tube to reduce noise.

Push the rubber Inlet Connector onto the drain hose (fig. 3) or collection tray stub. Secure with the cable ties provided.

Bend into position the breather support wire so tube end is above collection tray if possible (fig.8).

Wiring

WARNING! SWITCH OFF ALL SUPPLIES AT THE FUSE BOX BEFORE MAKING CONNECTIONS TO THIS PUMP.

This pump requires an Earth/ Ground connection.

The installation must provide a suitable means for electrical disconnection (fig.3).

Fuse Protection Required: Europe 5 Amp max.

European Cable: 0.75mm²

USA. Factory fitted cable is 18 AWG for equipment internal wiring only.

Refer to National and Local Electrical Codes for fusing and disconnection requirements.

EUROPEAN Cable Colour Coding

BROWN	L	LIVE PHASE
BLUE	N	NEUTRAL
GREEN/YELLOW	E	EARTH
BLACK		ALARM RELAY
GREY		ALARM RELAY

USA Cable Colour Coding

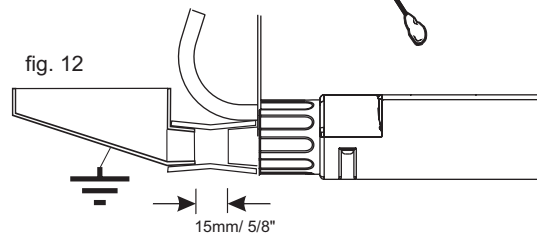
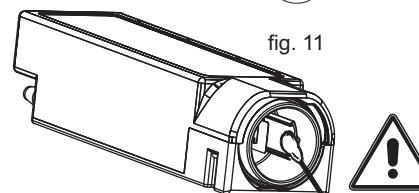
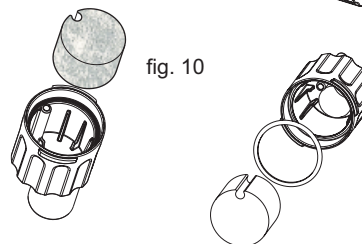
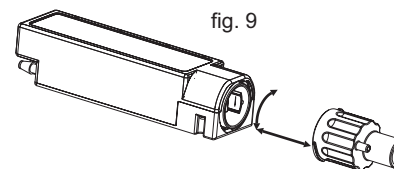
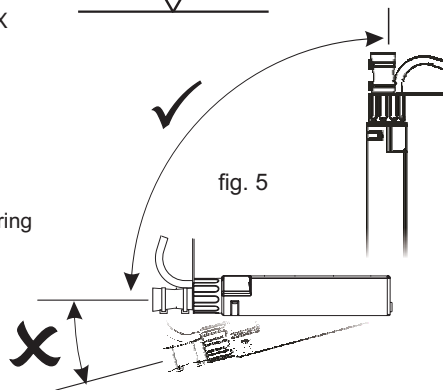
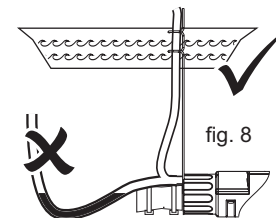
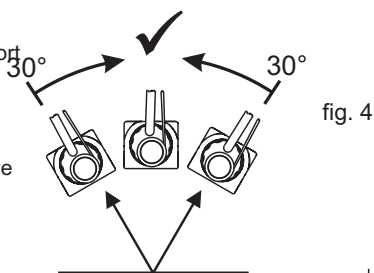
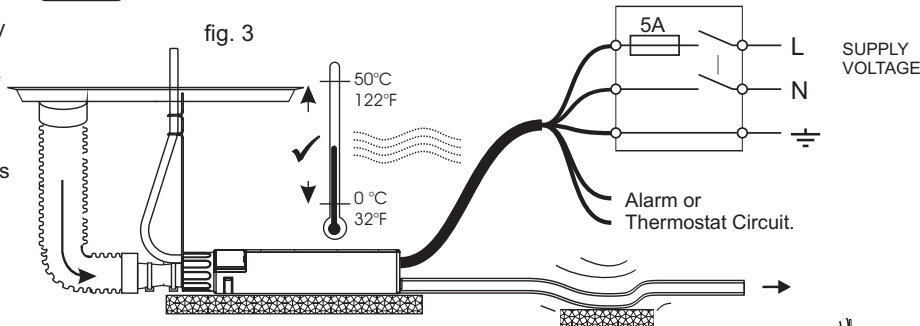
BLACK	L1	LIVE PHASE
WHITE	L2	NEUTRAL (PHASE 2, 220V SYSTEM)
GREEN		GROUND
ORANGE		ALARM RELAY
RED		ALARM RELAY

Alarm Relay

The alarm relay is energised to make continuity during normal operating conditions (break on fault).



CAUTION: DISCONNECT ALL POWER SUPPLY BEFORE PERFORMING ANY SERVICING OR MAINTENANCE. ONLY COMPETENT PERSONS SHOULD ATTEMPT TO SERVICE THIS PRODUCT.



Inspection and Maintenance

Inspect the filter for sediment and debris.

When handling pump during inspection and maintenance, keep Pump Assembly reasonably upright and level to prevent any water spills from entering the pump.

In some installations it may be possible to service the pump while still attached to the equipment. If necessary support the Pump Assembly to prevent excessive strain on cables and connections.

If cleaning is required, disconnect the filter housing by rotating 80° Counter clockwise and carefully separate (fig.9).

Do not use detergents in servicing this product.

Using a small tool carefully lift the filter out of its location and rinse under a tap with clean water. If the O ring is disturbed, clean O ring and mating surfaces and re-seat (fig.10).

Inside of the Sensor chamber check for debris between the sensor plates. Clean gently with a soft cloth or Q-tip (fig.11). Do not scratch sensitive surfaces.

Inspect the Inlet Tube for dirt and blockages and clean if required.

Clean the sealing surface and re-assemble the Filter chamber onto the pump

Inspect the discharge tube for blockages and kinks.

Inspect the Breather tube for positioning and obstructions.

Evaporator / Coil Cleaning.

When using evaporator cleaning agents, drain discharged liquid into a separate container and flush with clean water. Do not allow cleaning agents and dirt to drain into Pump.

Testing

On new installations, flush installation debris through condensate system into a bucket, before connecting the pump. If possible carefully pour clean water via the condensate collection tray to check also the water drain route.

Use a wash bottle if possible as these are more controllable.

The pump should begin to pump until all, but approximately 12mm / 1/2" of water is left remaining.