

Installation, Operation and Maintenance Manual. DrainMinor Range

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INSTALLATION GUIDELINES:

The DrainMinor should be positioned on a firm level surface. The unit must be located lower than the outflow of the appliances served so as to provide a gravity fall into the unit. It is extremely important to site the DrainMinor with access in mind in the event of maintenance being required.

ON DELIVERY:

Remove lid, check pump is correctly positioned and connecting pipework has not been damaged in transit.

INLET CONNECTIONS:

Inlets can be positioned on the DrainMinor to suit your site requirements. All inverts should be brought into the tank (using tank connectors) at the highest possible level from the floor. See technical info on each product for minimum invert level. Ensure that the inflow of water is not directed onto the float mechanism.

NOTE:

No connections to be put through the lid as this inhibits easy removal of the lid for cleaning tank. (Note: tank MUST be positioned in such a way that lid can be removed easily to allow access to tank interior and pump cleaning)

DISCHARGE CONNECTION:

The tank has a 1.1/4" BSP male thread discharge outlet. (NRV supplied is female thread). Plastic non-return valve supplied in the horizontal position, we recommend that this is fitted in the vertical position on the first lift. All pipework must be run in UPVC solvent weld.

IMPORTANT:

Any bends in the rising main must be slow radius swept 90's. If the discharge pipework connects to a soil stack, manhole, etc. below the discharge outlet of the tank, an anti-syphon valve must be fitted to the highest point of the discharge pipework.

ELECTRICAL CONNECTION:

A qualified person in accordance with the Institute Of Electrical Engineers Regulations should connect the unit to the appropriate mains supply taking into account all the electrical information provided.

IMPORTANT:

All pump systems must be used with an appropriate motor rated protection device. VENTING Unit is complete with an integrated carbon vent.

MAINTENANCE:

Before any inspection or maintenance please ensure the power supply is turned off.
The collecting tank should be inspected at least every 4 weeks.
All debris, fats and grease should be removed.

Maintenance every 6 to 12 months depending upon the nature of the application is recommended.

For scheduled inspection / cleaning and maintenance please call Pump Technology Services Ltd. (Direct Line)

Tel 0118 3385 724

Email

team@pumptechnologyservices. co.uk





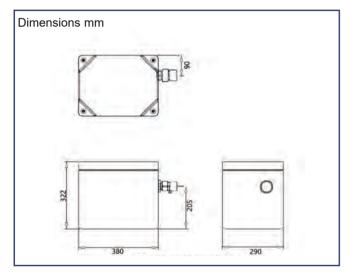
DRAINMINOR 30 (240V)(Wastewater Pumping System)



DrainMinor 30 (240V) Part No. 111 (Wastewater Pumping System.)

General Description:

DrainMinor 30 (240V) features a heavy-duty tank and submersible pump for automatically pumping wastewater from kitchens, teapoints, etc.



Tank:

Manufactured from recyclable polyethylene and fully rigged with internal pipe work and non-return valve. The lid is held in place with easy-to-remove hand screws and sits on a custom moulded, fitted rubber seal.

Tank Volume: 35.5 litres

Total Approximate Usable Volume - 23.7 litres

Tank Inlets:

To suit site layout, all inverts should be brought into the side of the tank by drilling a hole and using an appropriate tank connector. Minimum invert height 110 mm.

Tank Outlet:

Fitted 1¼ "BSP male thread discharge outlet (NRV supplied female thread)

Tank Venting:

The tank is fitted with its own vent.

Good for the Environment:

DrainMinor tanks are made from Recyclable Polyethylene.

Recycling polyethylene is highly cost effective and therefore successful. It is greener than incineration, far more ecofriendly than landfill disposal and easier to use when manufacturing products such as toys, recycling bins, envelopes and much more.



DATA SHEET DRAINMINOR 30 (240V) (Wastewater Pumping System)

Pump:

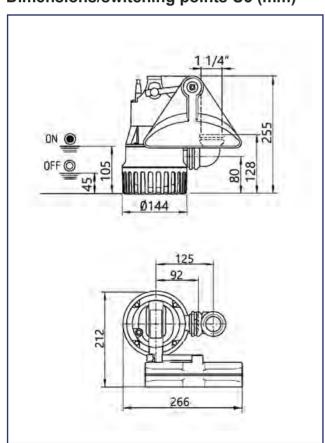
- Cooling jacket for motor housing
- Flushing device activatable and deactivatable
- Variable discharge branch with closable ventilation
- Run dry protection
- EIP Technology
- Moisture sealed cable inlet
- Fluid temperature 35 °C, temporarily 60 °C (10 min.)

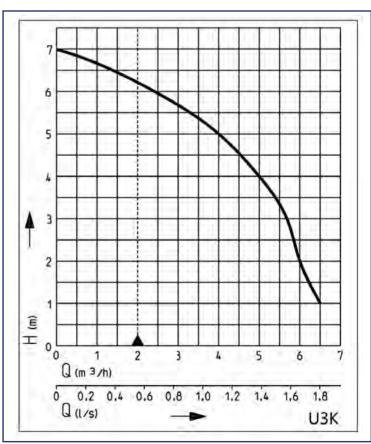


The heavy duty centrifugal submersible drainage pump U3 KS is suitable for dealing with wastewater and capable of handling soft solids up to 10mm in particle size.



Dimensions/switching points U3 (mm)







DATA SHEET DRAINMINOR 30 (240V) (Wastewater Pumping System)

Yes

Scope of Supply

Pump ready for connection acc. to EN 12050 with 90°, 11/4" female connection elbow, 4m cable and automatic level float switch.

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Run dry protection Pump Vertical single stage

Free Passage 10 mm Shaft Stainless Steel

Vortex impeller, GFK Impeller Ball bearing, grease-Bearing

lubricated Motor housing Stainless Steel

Seal on motor side Rotary shaft seal **GRP** Pump housing Oil chamber Yes Submersible Yes

Seal on medium side Pressure outlet 11/4" 2-fold rotary shaft seal

Electrical Data

Type of enclosure

1/N/PE-230V Insulation class F Voltage

Motor rating P1 0.32kW Winding thermostat Yes

Integrated Motor rating P2 0.2kW Motor protection

1.4A Current Plug Safety **IP 68**

U3

Type Code No. Power line Wires Weight

With built-in level control

U3 KS, 4m cable JP50000 4m H07RN-F 3G1,0 5.5kg

Notes:

- This unit is for wastewater only
- Ensure the location of the DrainMinor enables the lid to be easily removed for regular inspection and maintenance
- If the discharge pipework connection to a soil stack, manhole etc. is below the discharge outlet of the tank, an anti-syphon unit must be fitted at the highest point of the discharge pipework
- Warranty: The DrainMinor 30 (240V) comes complete with a one year warranty.





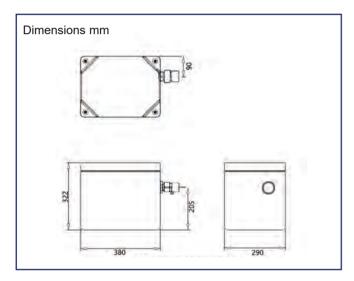
DRAINMINOR 30 SL (240V) (Wastewater Pumping System)



DrainMinor 30 SL Part No 113 (Wastewater Pumping System. Ideal for wastewater containing mildly corrosive chemicals. 20 parts per million concentration)

General Description:

DrainMinor 30 SL features a heavy-duty tank and submersible pump for automatically pumping wastewater. This small pump features a shaft mechanical seal rather than lip seals, therefore it is suitable for applications like - Laboratories, vets, dentists, hairdresser, janitor sinks and coffee shops where excess coffee granules and milk skin is being washed down a sink.



Tank:

Manufactured from recyclable polyethylene and fully rigged with internal pipe work and non-return valve. The lid is held in place with easy-to-remove hand screws and sits on a custom moulded, fitted rubber seal.

Tank Volume: 35.5 litres

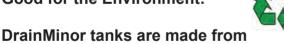
Total Approximate Usable Volume - 23.7 litres

Tank Inlets:

To suit site layout, all inverts should be brought into the side of the tank by drilling a hole and using an appropriate tank connector. Minimum invert height 110 mm.

Good for the Environment:

Recyclable Polyethylene.



Recycling polyethylene is highly cost effective and therefore successful. It is greener than incineration, far more ecofriendly than landfill disposal and easier to use when manufacturing products such as toys, recycling bins, envelopes and much more.

Tank Outlet:

Fitted 1¼" BSP male thread discharge outlet (NRV supplied female thread)

Tank Venting:

The tank is fitted with its own vent.



DATA SHEET DRAINMINOR 30 SL (240V) (Wastewater Pumping System)

Pump:

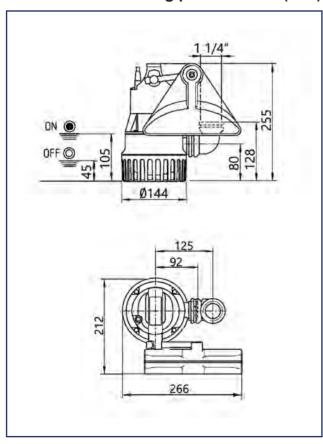
- For saline solutions up to 15 % salinity
- Cooling jacket for motor housing
- Low level pumping by detachable strainer base
- Flushing device activatable and deactivatable
- Variable discharge branch with closable ventilation
- Run dry protection
- EIP Technology
- SiC mechanical seal
- Moisture sealed cable inlet

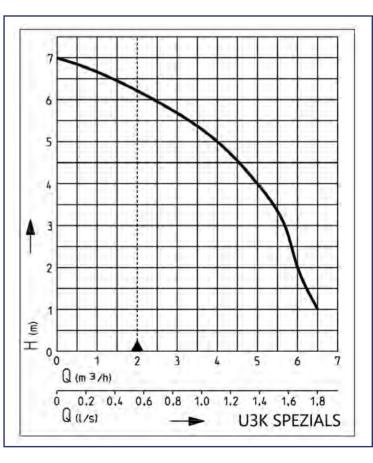


The heavy duty centrifugal submersible drainage pump U3K SPEZIAL is suitable for dealing with wastewater and capable of handling soft solids up to 10mm in particle size.

The U3K SPEZIAL is a variant of the U3k (with Mechanical shaft seal) and designed to pump wastewater containing mildly corrosive chemicals (20 parts per million concentration)

Dimensions/switching points U3 KS (mm)







DRAINMINOR 30 SL (240V) (Wastewater Pumping System)

Scope of Supply

Pump ready for connection acc. to EN 12050 with 90° , $11/4^\circ$ female connection elbow, 4m cable with automatic level float switch.

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Pump Vertical single stage Run dry protection Yes

Free Passage 10 mm Shaft Stainless Steel

Bearing Bearing, grease- Impeller Vortex impeller, GFK

lubricated Motor housing Stainless Steel

Seal on motor side Rotary shaft seal Pump housing GRP
Oil chamber Yes Submersible Yes

Seal on medium side SiC mechanical seal Pressure outlet 11/4"

Electrical Data

Voltage 1/N/PE-230V Type of enclosure IP 68
Motor rating P1 0.32kW Insulation class B

Motor rating P2 0.2kW Winding thermostat Yes

Current 1.4A Motor protection Integrated

Type of enclosure 3G1,0 Plug Safety

U3 SPEZIAL

Type Code No. Power line Weight

With built-in level control

U3 KS spezial, 4m cable **JP50005** 4m H07RN-F 3.7kg

Notes:

- This unit is for wastewater only
- Ensure the location of the DrainMinor enables the lid to be easily removed for regular inspection and maintenance
- If the discharge pipework connection to a soil stack, manhole etc. is below the discharge outlet of the tank, an anti-syphon unit must be fitted at the highest point of the discharge pipework
- Warranty: The DrainMinor 30 SL (240V) comes complete with a one year warranty.





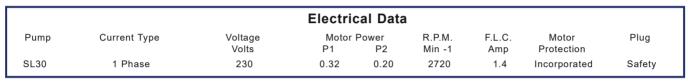
DRAINMINOR C (240V) (Combi Oven Pump)

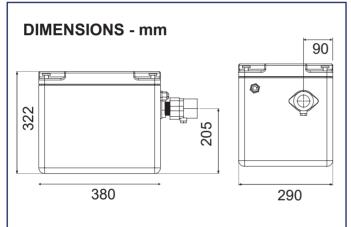


DRAINMINOR C (240V) (Combi Oven Pump) Part No. 113 C These units have been designed to pump hot wastewater from single or multiple combination ovens. A sink or basin can also be connected.

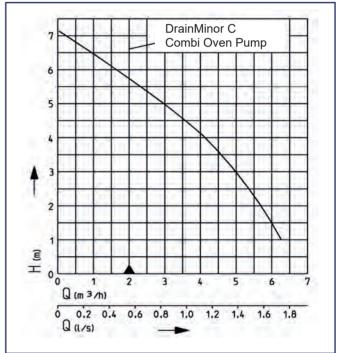
Key features: Low-level inlet (70mm base to centreline), submersible pump with rigid external float arm, low level float and mechanical shaft seal for reliable operation and long life.

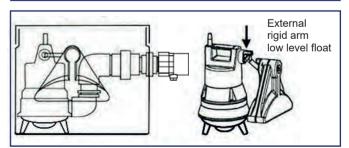
The pump will handle hot water up to 60°C, or even higher temperatures for short periods and can deal with up to 10 mm solids.











The **DRAINMINOR C** comes complete with a one year warranty.



DRAINMINOR C (Combi Oven Pump)



GOOD FOR THE ENVIRONMENT

DrainMinor tanks are made from Recyclable Polyethylene.

Recycling polyethylene is highly cost effective and therefore successful. It is greener than incineration, far more eco-friendly than landfill disposal and easier to use when manufacturing products such as toys, recycling bins, envelopes and much more.

Tank Volume: 35.5 litres

Total Approximate Usable Volume - 23.7 litres

DrainMinor C: This consists of a durable tank manufactured from polyethylene laminate.

Vent: An integrated, activated charcoal filter is built into the lid of the unit.

Quantity: Rigid Polyethylene tank with encapsulated seal and easy-to-remove lid. The tank is recyclable.

Inverts: Single or multiple inverts to be made to the tank using tank connectors.

Outlets: The tank has a 11/4" BSP discharge outlet.

Pump Type SL30

Vertical, single-stage, submersible, max. Soft solids 10 mm. Volute casing with 1¼" (male) radial pressure branch.

Bearings

Common shaft for pump and motor, mounted in ball bearings and grease lubricated for life.

Seal

Shaft sealing by means of silicon carbide mechanical seal, oil chamber and inboard shaft sealing ring, safe to run dry for short periods.

Motor

Submersible motor, type of enclosure IP 68, insulation class B, starting via plug or automatic circuit. Completely water tight cable entry.

Materials

Motor housing in high-grade steel, volute casing, impeller and control head in plastic (GRP), shaft in stainless steel, rubber insulated flexible cable.

Nota:

For continuously rated hot wastewater pumping up to 90°C please see DrainMajor 730HES.



DATA SHEET DRAINMINOR S (240V) (Shower Tray Drain Pump)

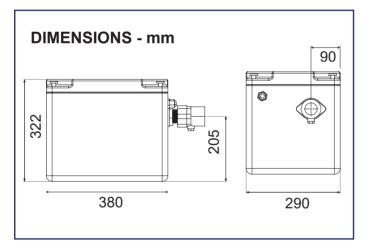


DRAINMINOR S (240V) (Shower Tray Drain Pump)
Part No 113S These units have been designed to pump
hot wastewater from one or more shower drain trays. A
sink or basin can also be connected.

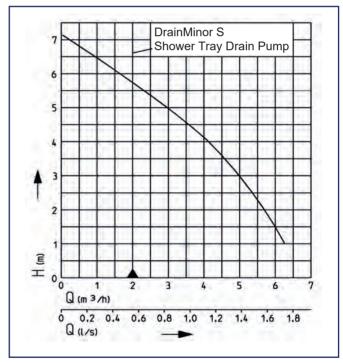
Key features: Low-level inlet (70 mm base to centre line) submersible pump with rigid external float arm, low level float and mechanical shaft seal for reliable operation and long life.

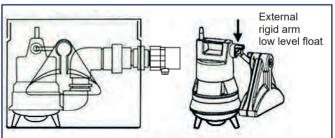
The pump will handle hot water up to 60°C, or even higher temperatures for short periods and can deal with shampoos and gels etc.

Electrical Data								
Pump	Current Type	Voltage Volts	Motor P1	Power P2	R.P.M. Min -1	F.L.C. Amp	Motor Protection	Plug
SL30	1 Phase	230	0.32	0.20	2720	1.4	Incorporated	Safety









The **DRAINMINOR S** comes complete with a one year warranty.



DRAINMINOR S (Shower Tray Drain Pump)



GOOD FOR THE ENVIRONMENT

DrainMinor tanks are made from Recyclable Polyethylene.

Recycling polyethylene is highly cost effective and therefore successful. It is greener than incineration, far more eco-friendly than landfill disposal and easier to use when manufacturing products such as toys, recycling bins, envelopes and much more.

Tank Volume: 35.5 litres

Total Approximate Usable Volume - 23.7 litres

DrainMinor S: This consists of a durable tank manufactured from polyethylene laminate.

Vent: An integrated, activated charcoal filter is built into the lid of the unit.

Quantity: Rigid Polyethylene tank with encapsulated seal and easy-to-remove lid. The tank is recyclable.

Inverts: Single or multiple inverts to be made to the tank using tank connectors.

Outlets: The tank has a 11/4" BSP discharge outlet.

Pump Type SL30

Vertical, single-stage, submersible. Volute casing with 1½" (male) radial pressure branch.

Bearings

Common shaft for pump and motor, mounted in ball bearings and grease lubricated for life.

Seal

Shaft sealing by means of silicon carbide mechanical seal, oil chamber and inboard shaft sealing ring, safe to run dry for short periods.

Motor

Submersible motor, type of enclosure IP 68, insulation class B, starting via plug or automatic circuit. Completely water tight cable entry.

Materials

Motor housing in high-grade steel, volute casing, impeller and control head in plastic (GRP), shaft in stainless steel, rubber insulated flexible cable.