

# Installation, Operation and Maintenance Manual. DrainMajor Duo Range

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### **INSTALLATION GUIDELINES:**

The DrainMajor Duo 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 DrainMajor Duo 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 DrainMajor Duo 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.

It is essential to have inlets into both tanks to ensure both pumps operate.

### 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 1.1/2" BSP male thread discharge outlet. Two brass non return valves supplied in the vertical position fitted inside the tank off the pumps discharge. 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.

### ELECTRICAL CONNECTION CONTINUED:

Power supply to Pump and Alarm must be via independent fused spurs. An isolator switch to the power supply must also be installed.

### **IMPORTANT:**

All pump systems must be used with an appropriate motor rated protection device.

Units require venting. If vent to atmosphere cannot be achieved a 1.1/4" vent pipe must be run off the side of the tank to the ceiling void and connected to a Charcovent. (2" pipe for Microvent, hot water)

### **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





### DRAINMAJOR DUO 30 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)



DrainMajor Duo 30 (240V) Part No.157 (Duty/Standby Wastewater Pumping System with Dual Alarm)

### **General Description:**

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

The DrainMajor Duo provides users with the additional security of duty/standby operation. If one pump should become blocked or fail, the wastewater would rise within the tank, activate the high-level alarm, overflow into the adjoining tank were the other pump would then act as the standby pump.



### Alarm:

The dual zone alarm has two triggered inputs. When triggered it is activated and an LED indication of which input was triggered is illuminated.

It has a built-in backup battery (72 hours) in the event of a power outage. It operates from a switched input, such as a float switch or pressure switch. The alarm can be activated either by a closed circuit switched input or an open circuit switched input. It is designed for connection to 240Vac supply voltages. Once activated, it provides a visual and audio indicator.

There is an option to connect an external beacon or other circuitry via the auxiliary output and/or the volt-free relay outputs. Each trigger has its own volt-free relay allowing the alarm to be connected to a Building Management System with ease.

### **Key Alarm Features**

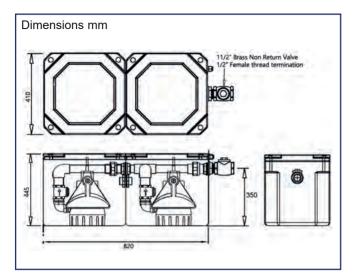
- 2 Alarm inputs
- Alarm LED indicator
- Alarm audio buzzer
- Alarm audio mute button
- Alarm test button
- Power LED indicator
- IP65-rated enclosure

- Auxiliary alarm output for accessories such as a beacon or siren
- 2 independent Volt free relay contact outputs SPDT
- Easy installation no tool required WAGO wiring terminals
- Backup battery with up to 72 hours of run time





### DATA SHEET DRAINMAJOR DUO 30 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)



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: 149.6 litres

Total Approximate Usable Volume - 99.6 litres

### Tank Inlets:

Tank:

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:



DrainMajor Duo 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.

### Tank Outlet:

Fitted 1½" BSP male thread discharge outlet (NRV supplied female thread)

### Tank Venting:

To suit site layout, a vent should be taken from the side of the tank by drilling a hole and using an appropriate tank connector. Vent pipe should be 11/4" min. to air or via a Pump Technology MicroVent

It is essential to have inlets into both tanks to ensure both pumps operate.



### DATA SHEET DRAINMAJOR DUO 30 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)

### Pump:

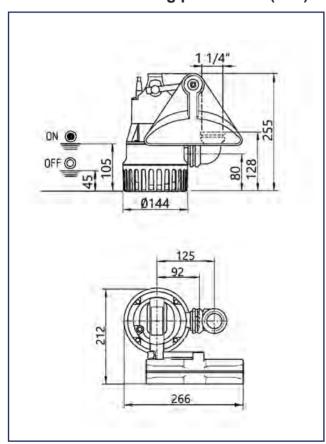
- Cooling jacket for motor housing
- Flushing device activatable and deactivatable
- Variable discharge branch with closable ventilation
- Run dry protection
- EIP Technology
- Moisture sealed cable inlet
- Fluid temperature 35 °C, temporarily 60 °C (10 min.)

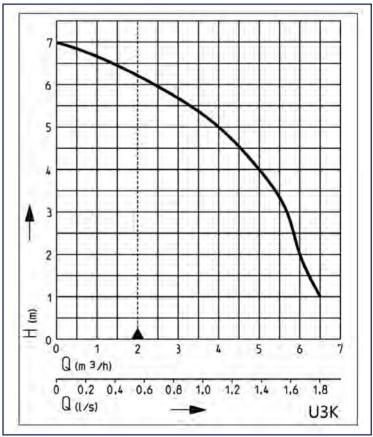


### **Description:**

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

### Dimensions/switching points U3K (mm)









### DRAINMAJOR DUO 30 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)

### **Scope of Supply**

Pump ready for connection acc. to EN 12050 with 90°,  $1\frac{1}{4}$ " female connection elbow, 4m cable and automatic level float switch.

RЛ	AC P	าวท	102	l Data
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Pump Vertical single stage Run

Free Passage 10 mm

Bearing Ball bearing, grease-

lubricated

Seal on motor side Rotary shaft seal

Oil chamber Yes

Seal on medium side 2-fold rotary shaft seal

Run dry protection Yes

Shaft Stainless Steel

Impeller Vortex impeller, GFK

11/4"

F

Yes

Motor housing Stainless Steel
Pump housing GRP
Submersible Yes

**Electrical Data** 

Voltage 1/N/PE-230V In

Motor rating P1 0.32kW

Motor rating P2 0.2kW
Current 1.4A

Type of enclosure IP 68

Insulation class

Pressure outlet

Winding thermostat

Motor protection Integrated

Plug Safety

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 DrainMajor 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 DrainMajor Duo 30 (240V) comes complete with a one year warranty.





### DRAINMAJOR DUO 30 SL (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)





### **Key Alarm Features**

- 2 Alarm inputs
- Alarm LED indicator
- Alarm audio buzzer
- Alarm audio mute button
- Alarm test button
- Power LED indicator
- IP65-rated enclosure
- Auxiliary alarm output for accessories such as a beacon or siren
- 2 independent Volt free relay contact outputs SPDT
- Easy installation no tool required WAGO wiring terminals
- Backup battery with up to 72 hours of run time

DrainMajor Duo 30 SL Part No 157/A (Wastewater Pumping System. Ideal for wastewater containing mildly corrosive chemicals. 20 parts per million concentration)

### **General Description:**

DrainMajor Duo 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.

The DrainMajor Duo provides users with the additional security of duty/standby operation. If one pump should become blocked or fail, the wastewater would rise within the tank, activate the high-level alarm, overflow into the adjoining tank were the other pump would then act as the standby pump.

### Alarm:

The dual zone alarm has two triggered inputs. When triggered it is activated and an LED indication of which input was triggered is illuminated.

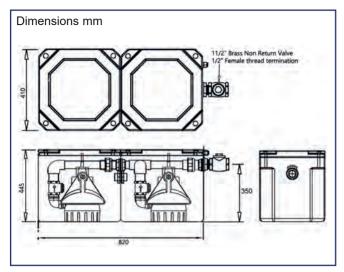
It has a built-in backup battery (72 hours) in the event of a power outage. It operates from a switched input, such as a float switch or pressure switch. The alarm can be activated either by a closed circuit switched input or an open circuit switched input. It is designed for connection to 240Vac supply voltages. Once activated, it provides a visual and audio indicator.

There is an option to connect an external beacon or other circuitry via the auxiliary output and/or the volt-free relay outputs. Each trigger has its own volt-free relay allowing the alarm to be connected to a Building Management System with ease.





### DATA SHEET DRAINMAJOR DUO 30 SL (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)



Good for the Environment:



DrainMajor Duo 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.

### 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: 149.6 litres

Total Approximate Usable Volume - 99.6 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 1½" BSP male thread discharge outlet (NRV supplied female thread)

### Tank Venting:

To suit site layout, a vent should be taken from the side of the tank by drilling a hole and using an appropriate tank connector. Vent pipe should be 1½" min. to air or via a Pump Technology MicroVent

It is essential to have inlets into both tanks to ensure both pumps operate.





### DATA SHEET DRAINMAJOR DUO 30 SL (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)

### Pump:

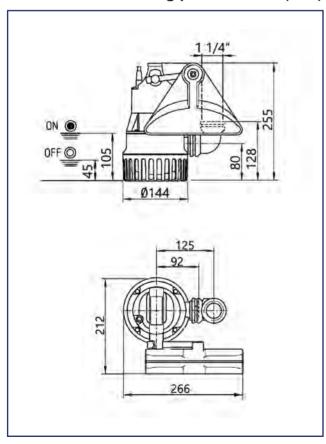
- For saline solutions up to 15% salinity
- SiC mechanical seal
- Cooling jacket for motor housing
- Flushing device activatable and deactivatable
- Variable discharge branch with closable ventilation
- Run dry protection
- EIP Technology
- Moisture sealed cable inlet
- Fluid temperature 35°C, temporarily 60°C (10 mins)

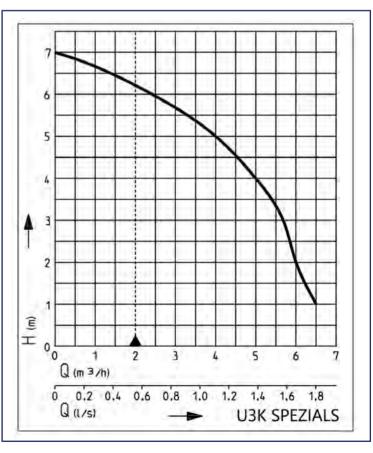


The heavy duty centrifugal submersible drainage pump U3K SPEZIAL Is suitable for dealing with wastewater and capable of handling soft solids up to 10mm in particle size.

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)











### DRAINMAJOR DUO 30 SL (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)

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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Pump Vertical single stage Run dry protection

Free Passage 10 mm Shaft Stainless Steel

Bearing Ball 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

Mater rating P2 0.3kW Winding the reserved.

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 DrainMajor 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 DrainMajor 30 SL (240V) comes complete with a one year warranty.





### DATA SHEET DRAINMAJOR DUO 60 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)



DrainMajor Duo 60 (240V) Part No.158 (Duty/Standby Wastewater Pumping System with Dual Alarm)

### General Description:

DrainMajor Duo 60 (240V) features a heavy-duty tank and submersible pump for automatically pumping wastewater from commercial kitchens, teapoints, etc.

The DrainMajor Duo provides users with the additional security of duty/standby operation. If one pump should become blocked or fail, the wastewater would rise within the tank, activate the high-level alarm, overflow into the adjoining tank were the other pump would then act as the standby pump.



### Alarm:

The dual zone alarm has two triggered inputs. When triggered it is activated and an LED indication of which input was triggered is illuminated.

It has a built-in backup battery (72 hours) in the event of a power outage. It operates from a switched input, such as a float switch or pressure switch. The alarm can be activated either by a closed circuit switched input or an open circuit switched input. It is designed for connection to 240Vac supply voltages. Once activated, it provides a visual and audio indicator.

There is an option to connect an external beacon or other circuitry via the auxiliary output and/or the volt-free relay outputs. Each trigger has its own volt-free relay allowing the alarm to be connected to a Building Management System with ease.

### **Key Alarm Features**

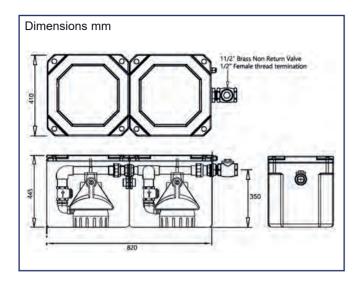
- 2 Alarm inputs
- Alarm LED indicator
- Alarm audio buzzer
- Alarm audio mute button
- Alarm test button
- Power LED indicator
- IP65-rated enclosure

- Auxiliary alarm output for accessories such as a beacon or siren
- 2 independent Volt free relay contact outputs SPDT
- Easy installation no tool required WAGO wiring terminals
- Backup battery with up to 72 hours of run time





### DRAINMAJOR DUO 60 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)



### Good for the Environment:



DrainMajor Duo 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.

### 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: 149.6 litres

Total Approximate Usable Volume - 99.6 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 120 mm.

### Tank Outlet:

Fitted 1½" BSP male thread discharge outlet (NRV supplied female thread)

### **Tank Venting:**

To suit site layout, a vent should be taken from the side of the tank by drilling a hole and using an appropriate tank connector. Vent pipe should be 1½" min. to air or via a Pump Technology MicroVent.

It is essential to have inlets into both tanks to ensure both pumps operate.





### DATA SHEET DRAINMAJOR DUO 60 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)

### Pump:

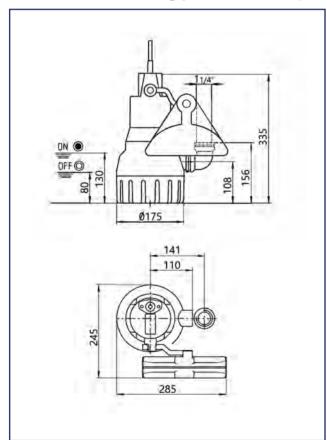
- Safe to run dry
- 20 mm free passage with EIP technology
- Cooling jacket for motor housing
- SiC mechanical seal independent of sense of rotation
- Replaceable moisture sealed cable inlet
- Flushing device
- Fluid temperature 35°C, temporarily 60°C (10 mins)

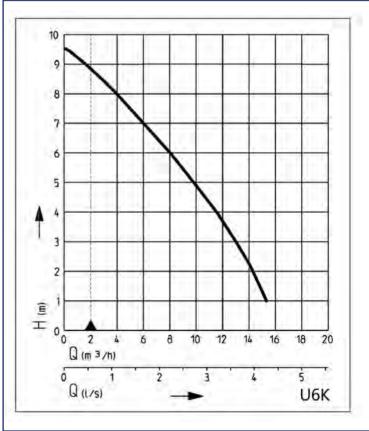


The heavy duty centrifugal submersible drainage pump U6K ES is suitable for dealing with wastewater and capable of handling soft solids up to 20mm in particle size.



### Dimensions/switching points U6K ES (mm)







### **DRAINMAJOR DUO 60 (240V)** (Duty/Standby Wastewater Pumping System with Dual Alarm)

### Scope of Supply

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

**Mechanical Data** 

Pump Vertical single stage

Free Passage 20 mm

Ball bearing, grease-Bearing

lubricated

Seal on motor side Rotary shaft seal

Oil chamber

Seal on medium side SiC mechanical seal Run dry protection

Shaft Stainless Steel

Impeller Vortex impeller, GFK

Motor Housing Stainless Steel

Submersible Yes Pressure outlet 11/4"

**Electrical Data** 

Motor Rating P1 0.75kW

IP 68 Type of enclosure

**Insulation Class** В Winding thermostat

Motor protection

Yes

Yes

Integrated

**U6K ES** 

Motor rating Type Code No. Voltage Current Power line Wires Plug Weight P2 With built-in level control

U6K ES, 4m cable JP00227 1/N/PE-230V 0.50kW 3.3A 4m H07RN-F 3G1,0 5.5kg Safety

### Notes:

- This unit is for wastewater only
- Ensure the location of the DrainMajor 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 DrainMajor Duo 60 (240V) comes complete with a one year warranty.





### DATA SHEET DRAINMAJOR DUO 60 (3ph) (Duty/Standby Wastewater Pumping System with Dual Alarm)



DrainMajor Duo 60 (3ph) Part No.158/A (Duty/Standby Wastewater Pumping System with Dual Alarm)

### General Description:

DrainMajor Duo 60 (3ph) features a heavy-duty tank and submersible pump for automatically pumping wastewater from commercial kitchens, teapoints, etc.

The DrainMajor Duo provides users with the additional security of duty/standby operation. If one pump should become blocked or fail, the wastewater would rise within the tank, activate the high-level alarm, overflow into the adjoining tank were the other pump would then act as the standby pump.



### Alarm:

The dual zone alarm has two triggered inputs. When triggered it is activated and an LED indication of which input was triggered is illuminated.

It has a built-in backup battery (72 hours) in the event of a power outage. It operates from a switched input, such as a float switch or pressure switch. The alarm can be activated either by a closed circuit switched input or an open circuit switched input. It is designed for connection to 240Vac supply voltages. Once activated, it provides a visual and audio indicator.

There is an option to connect an external beacon or other circuitry via the auxiliary output and/or the volt-free relay outputs. Each trigger has its own volt-free relay allowing the alarm to be connected to a Building Management System with ease.

### **Key Alarm Features**

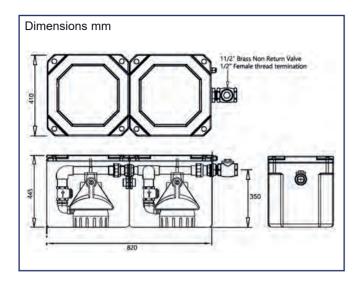
- 2 Alarm inputs
- Alarm LED indicator
- Alarm audio buzzer
- Alarm audio mute button
- Alarm test button
- Power LED indicator
- IP65-rated enclosure

- Auxiliary alarm output for accessories such as a beacon or siren
- 2 independent Volt free relay contact outputs SPDT
- Easy installation no tool required WAGO wiring terminals
- Backup battery with up to 72 hours of run time





### DRAINMAJOR DUO 60 (3ph) (Duty/Standby Wastewater Pumping System with Dual Alarm)



### Good for the Environment:



DrainMajor Duo 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.

### 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: 149.6 litres

Total Approximate Usable Volume - 99.6 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 120 mm.

### Tank Outlet:

Fitted 1½" BSP male thread discharge outlet (NRV supplied female thread)

### **Tank Venting:**

To suit site layout, a vent should be taken from the side of the tank by drilling a hole and using an appropriate tank connector. Vent pipe should be 1½" min. to air or via a Pump Technology MicroVent.

It is essential to have inlets into both tanks to ensure both pumps operate.





### DATA SHEET DRAINMAJOR DUO 60 (3ph) (Duty/Standby Wastewater Pumping System with Dual Alarm)

### Pump:

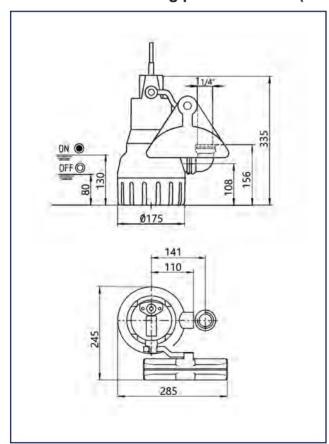
- Safe to run dry
- 20 mm free passage with EIP technology
- Cooling jacket for motor housing
- SiC mechanical seal independent of sense of rotation
- Replaceable moisture sealed cable inlet
- Flushing device
- Fluid temperature 35°C, temporarily 60°C (10 mins)

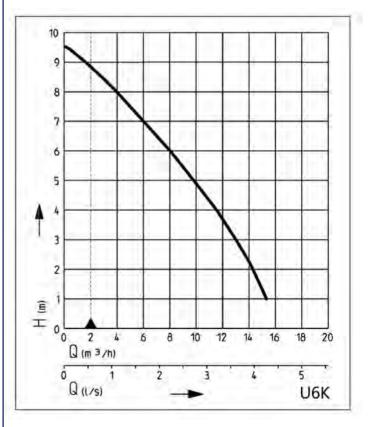


The heavy duty centrifugal submersible drainage pump U6K ES is suitable for dealing with wastewater and capable of handling soft solids up to 20mm in particle size.



### Dimensions/switching points U6K DS (mm)







### DRAINMAJOR DUO 60 (3ph) (Duty/Standby Wastewater Pumping System with Dual Alarm)

### **Scope of Supply**

Pump ready for connection acc. to EN 12050 with 90°, 1¼" female connection elbow, 4m cable with automatic level float switch.

**Mechanical Data** 

Pump Vertical single stage

Free passage 20 mm

Bearing, grease-

lubricated

Seal on motor side Rotary shaft seal

Oil chamber Yes

Seal on medium side SiC mechanical seal

Run dry protection Yes

Shaft Stainless Steel

Impeller Vortex impeller, GFK

Motor housing Stainless Steel

Submersible Yes
Pressure outlet 1½"

**Electrical Data** 

Motor rating P1 0.75kW Winding thermostat Yes

Type of enclosure IP 68 Motor protection Integrated

Insulation Class B

U6K

Туре	Code No.	Voltage	Motor rating	Current	Power line	Wires	Plug	Weight
<i>7</i> I			D-)					0

With built-in level control

U6K DS, 4m cable **JP00229** 3/PE-400V 0.55kW 1.3A 4m H07RN-F 4G1,0 CEE 5.9kg

### Notes:

- This unit is for wastewater only
- Ensure the location of the DrainMajor 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 DrainMajor Duo 60 (3ph) comes complete with a one year warranty.



### DATA SHEET DRAINMAJOR DUO 730 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)



DrainMajor Duo 730 (240V) Part No.144 (Duty/Standby Wastewater Pumping System with Dual Alarm)

### General Description:

DrainMajor Duo 730 (240V) features a heavy-duty tank and submersible pump for automatically pumping wastewater from commercial kitchens, teapoints, etc.

The DrainMajor Duo provides users with the additional security of duty/standby operation. If one pump should become blocked or fail, the wastewater would rise within the tank, activate the high-level alarm, overflow into the adjoining tank were the other pump would then act as the standby pump.



### Alarm:

The dual zone alarm has two triggered inputs. When triggered it is activated and an LED indication of which input was triggered is illuminated.

It has a built-in backup battery (72 hours) in the event of a power outage. It operates from a switched input, such as a float switch or pressure switch. The alarm can be activated either by a closed circuit switched input or an open circuit switched input. It is designed for connection to 240Vac supply voltages. Once activated, it provides a visual and audio indicator.

There is an option to connect an external beacon or other circuitry via the auxiliary output and/or the volt-free relay outputs. Each trigger has its own volt-free relay allowing the alarm to be connected to a Building Management System with ease.

### **Key Alarm Features**

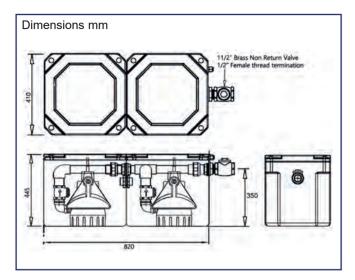
- 2 Alarm inputs
- Alarm LED indicator
- Alarm audio buzzer
- Alarm audio mute button
- Alarm test button
- Power LED indicator
- IP65-rated enclosure

- Auxiliary alarm output for accessories such as a beacon or siren
- 2 independent Volt free relay contact outputs SPDT
- Easy installation no tool required WAGO wiring terminals
- Backup battery with up to 72 hours of run time





### DRAINMAJOR DUO 730 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)



### Good for the Environment:



DrainMajor Duo 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.

### 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: 149.6 litres

Total Approximate Usable Volume - 99.6 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 155 mm.

### Tank Outlet:

Fitted 1½" BSP male thread discharge outlet (NRV supplied female thread)

### **Tank Venting:**

To suit site layout, a vent should be taken from the side of the tank by drilling a hole and using an appropriate tank connector. Vent pipe should be 1½" min. to air or via a Pump Technology MicroVent.

It is essential to have inlets into both tanks to ensure both pumps operate.





### DATA SHEET DRAINMAJOR DUO 730 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)

### Pump:

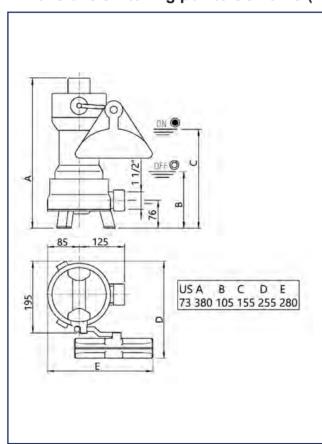
- Safe to run dry
- 30 mm free passage
- Controllable oil chamber
- SiC mechanical seal independent of sense of rotation
- Replaceable moisture sealed cable inlet
- Fluid temperature 35°C, temporarily 60°C (10 mins)

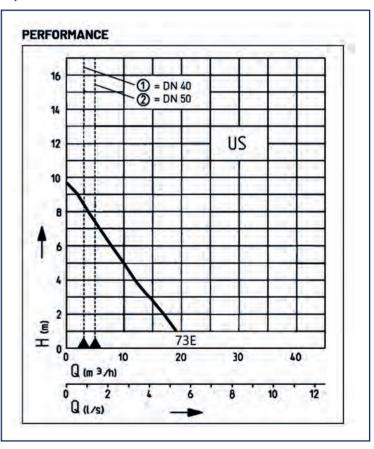


The heavy duty centrifugal submersible drainage pump US 73 ES is suitable for dealing with wastewater and capable of handling soft solids up to 30 mm particle size.



### Dimensions/switching points US 73 ES (mm)









### **DRAINMAJOR DUO 730 (240V)** (Duty/Standby Wastewater Pumping System with Dual Alarm)

Scope of Supply

Pump according to DIN EN 12050 ready for connection with 4m cable and automatic level float switch.

-				<b>D</b>
IN/I	OC P	าวท	ıcal	Data
IV	CUI	ıaıı	ıcaı	Data

Pump Vertical single stage

Ball bearing, grease-Bearing

lubricated

Seal on motor side Duplex rotary shaft seals

Oil chamber

Seal on medium side SiC Mechanical seal

Run dry protection Yes Shaft Stainless Steel

Impeller Vortex impeller, GFK

Motor housing Edelstahl (253: Grauguss)

Pump housing Grey cast iron

Yes Submersible

Pressure outlet IG 11/2" (US253:2")

**Electrical Data** 

Power line 10m H07RN-F

IP68 Type of enclosure

Insulation class

B (253:F)

Winding thermostat

Yes

### **US 73 ES**

Туре	Code No.	Voltage	Motor rating P1	Motor rating P2	Current	Wires	Motor protection	Plug	Free passage	Weight
With built-in level control										
US 73 ES	JP00678	1/N/PE-230V	0.83kW	0.50kW	3.9A	3G1,0	Integrated	Safety	30 mm	12.5kg

### Notes:

- This unit is for wastewater only
- Ensure the location of the DrainMajor 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 DrainMajor Duo 730 (240V) comes complete with a one year warranty.





### DATA SHEET DRAINMAJOR DUO 730 HES (240V) (Duty/Standby Hot Wastewater Pumping System with Dual Alarm)





### **Key Alarm Features**

- 2 Alarm inputs
- Alarm LED indicator
- Alarm audio buzzer
- Alarm audio mute button
- Alarm test button
- Power LED indicator
- IP65-rated enclosure
- Auxiliary alarm output for accessories such as a beacon or siren
- 2 independent Volt free relay contact outputs SPDT
- Easy installation no tool required WAGO wiring terminals
- Backup battery with up to 72 hours of run time

DrainMajor Duo 730 HES (240V) Part No. 143 (Duty/Standby Hot Wastewater Pumping System with Dual Alarm. Continuously rated for 90°C Hot Wastewater)

### **General Description:**

DrainMajor Duo 730 HES (240V) features a heavyduty tank and submersible pump for automatically pumping "Hot Wastewater" from tea points with zip taps, commercial kitchens, sinks, dishwashers, combi ovens, pasta cookers, washing machines etc.

The DrainMajor Duo provides users with the additional security of duty/standby operation. If one pump should become blocked or fail, the wastewater would rise within the tank, activate the high-level alarm, overflow into the adjoining tank were the other pump would then act as the standby pump.

### Alarm:

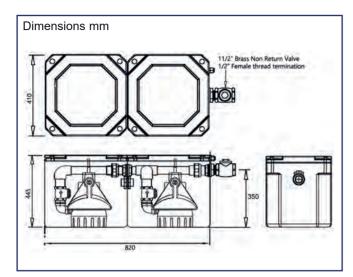
The dual zone alarm has two triggered inputs. When triggered it is activated and an LED indication of which input was triggered is illuminated.

It has a built-in backup battery (72 hours) in the event of a power outage. It operates from a switched input, such as a float switch or pressure switch. The alarm can be activated either by a closed circuit switched input or an open circuit switched input. It is designed for connection to 240Vac supply voltages. Once activated, it provides a visual and audio indicator.

There is an option to connect an external beacon or other circuitry via the auxiliary output and/or the volt-free relay outputs. Each trigger has its own volt-free relay allowing the alarm to be connected to a Building Management System with ease.



### DRAINMAJOR DUO 730 HES (240V) (Duty/Standby Hot Wastewater Pumping System with Dual Alarm)



### 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: 149.6 litres

Total Approximate Usable Volume - 99.6 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 155 mm.

### Good for the Environment:



DrainMajor Duo 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.

### **Tank Outlet:**

Fitted 1½" BSP male thread discharge outlet (NRV supplied female thread)

### Tank Venting:

To suit site layout, a vent should be taken from the side of the tank by drilling a hole and using an appropriate tank connector. Vent pipe should be 2" to air or via a Pump Technology MicroVent.

It is essential to have inlets into both tanks to ensure both pumps operate.





DATA SHEET
DRAINMAJOR DUO 730 HES (240V)
(Duty/Standby Hot Wastewater
Pumping System with Dual Alarm)

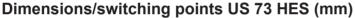
### Pump:

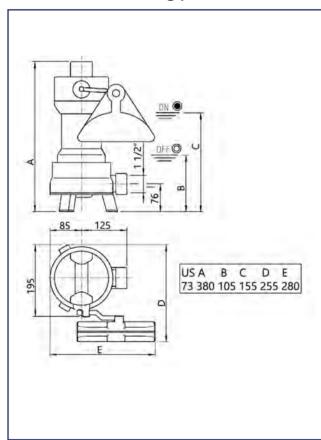
- Safe to run dry
- 30 mm free passage
- Hot water up to 90°C (Rated for continuous operation)
- Controllable oil chamber
- SiC mechanical seal independent of sense of rotation
- Replaceable moisture sealed cable inlet

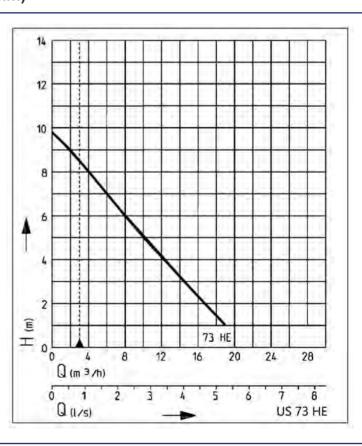
### **Description:**

The heavy duty centrifugal submersible drainage pump US 73 HES is suitable for dealing with wastewater and capable of handling soft solids up to 30mm in particle size.

The Pump is rated for continuous operation for very hot wastewater up to 90°C.









### DRAINMAJOR DUO 730 HES (240V) (Duty/Standby Hot Wastewater Pumping System with Dual Alarm)

### **Scope of Supply**

Pump acc. To EN 12050 ready for connection with 4m cable and automatic level float control.

Mec	hani	ical	Data

Pump Vertical single stage Run dry protection Yes

Free passage 30mm Shaft Stainless Steel

Bearing Ball bearing, grease- Impeller Vortex impeller GFK

Seal on motor side Duplex rotary shaft seals Pump housing Grey cast in Oil chamber Yes Submersible Yes

Seal on medium side SiC Mechanical seal Pressure outlet IG 1½"

**Electrical Data** 

Voltage 1/N/PE-230V Insulation class F
Power line 10m H07RN-F Winding thermostat Yes

Wires 3G1.0 Motor protection Integrated

Type of enclosure IP68 Plug Safety

**US 73 HES** 

Type Code No. Motor rating Motor rating Current Weight

US 73 HES **JP09264** 0.83kW 0.50kW 3.9A 12.5kg

### Notes:

- This unit is for wastewater only
- Ensure the location of the DrainMajor 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 DrainMajor Duo 730 HES (240V) comes complete with a one year warranty.



### DATA SHEET DRAINMAJOR DUO 1030 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)



DrainMajor Duo 1030 (240V) Part No. 145 (Duty/Standby Wastewater Pumping System with Dual Alarm)

### **General Description:**

DrainMajor Duo 1030 (240V) features a heavy-duty tank and submersible pump for automatically pumping wastewater from commercial kitchens, teapoints, etc.

The DrainMajor Duo provides users with the additional security of duty/standby operation. If one pump should become blocked or fail, the wastewater would rise within the tank, activate the high-level alarm, overflow into the adjoining tank were the other pump would then act as the standby pump.



### Alarm:

The dual zone alarm has two triggered inputs. When triggered it is activated and an LED indication of which input was triggered is illuminated.

It has a built-in backup battery (72 hours) in the event of a power outage. It operates from a switched input, such as a float switch or pressure switch. The alarm can be activated either by a closed circuit switched input or an open circuit switched input. It is designed for connection to 240Vac supply voltages. Once activated, it provides a visual and audio indicator.

There is an option to connect an external beacon or other circuitry via the auxiliary output and/or the volt-free relay outputs. Each trigger has its own volt-free relay allowing the alarm to be connected to a Building Management System with ease.

### **Key Alarm Features**

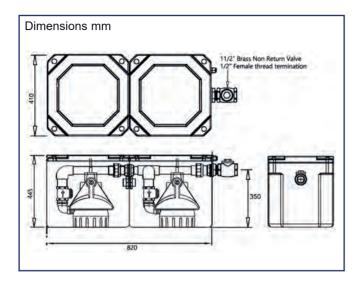
- 2 Alarm inputs
- Alarm LED indicator
- Alarm audio buzzer
- Alarm audio mute button
- Alarm test button
- Power LED indicator
- IP65-rated enclosure

- Auxiliary alarm output for accessories such as a beacon or siren
- 2 independent Volt free relay contact outputs SPDT
- Easy installation no tool required WAGO wiring terminals
- Backup battery with up to 72 hours of run time





### DRAINMAJOR DUO 1030 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)



### Good for the Environment:



DrainMajor Duo 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.

### 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: 149.6 litres

Total Approximate Usable Volume - 99.6 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 185 mm.

### Tank Outlet:

Fitted 1½" BSP male thread discharge outlet (NRV supplied female thread)

### **Tank Venting:**

To suit site layout, a vent should be taken from the side of the tank by drilling a hole and using an appropriate tank connector. Vent pipe should be 1½" min. to air or via a Pump Technology MicroVent.

It is essential to have inlets into both tanks to ensure both pumps operate.





DATA SHEET DRAINMAJOR DUO 1030 (240V)
(Duty/Standby Wastewater Pumping System with Dual Alarm)

### Pump:

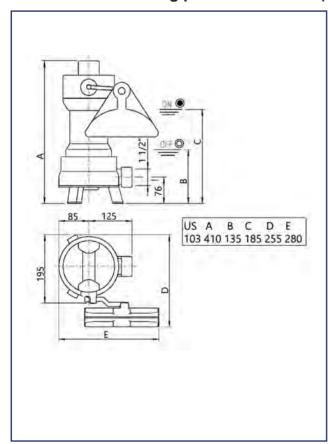
- Safe to run dry
- 30 mm free passage
- Controllable oil chamber
- SiC mechanical seal independent of sense of rotation
- Replaceable moisture sealed cable inlet
- Fluid temperature 35°C, temporarily 60°C (10 mins)

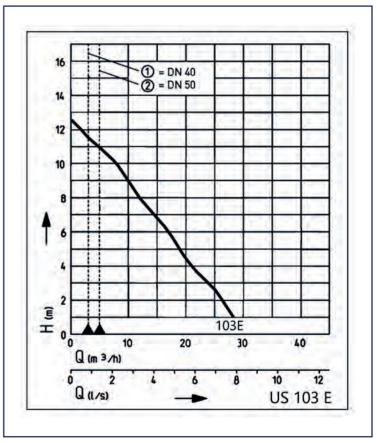
### **Description:**

The heavy duty centrifugal submersible drainage pump US 103 ES is suitable for dealing with wastewater and capable of handling soft solids up to 30 mm particle size.



### **Dimensions/switching points US 103 ES (mm)**







### DRAINMAJOR DUO 1030 (240V) (Duty/Standby Wastewater Pumping System with Dual Alarm)

### Scope of Supply

Pump according to DIN EN 12050 ready for connection with 4m cable and automatic level float switch.

Yes

Mechanical Data				
Pump	Vertical single stage	Shaft	Stainless Steel	
Bearing	Ball bearing, grease-	Impeller	Vortex impeller, GFK	
Dearing	lubricated	Motor Housing	Edelstahl (253: Grauguss)	
Seal on motor side	Duplex rotary shaft seals	Pump Housing	Grey cast iron	
Oil chamber	Yes	Submersible	Yes	
Seal on medium side	SiC Mechanical seal	Pressure outlet	IG 1½" (US253:2")	

Run dry protection

**Electrical Data** 

Power line 10m H07RN-F Insulation class B (253:F)

Type of enclosure IP68 Winding thermostat Yes

US 103 ES										
Туре	Code No.	Voltage	Motor rating P1	Motor rating P2	Current	Wires	Motor protection	Plug	Free passage	Weight
With built-in level control										
US 103 ES	JP09281	1/N/PE-230V	1.37kW	0.98kW	6.0A	3G1,0	Integrated	Safety	30 mm	14.0kg

### Notes:

- This unit is for wastewater only
- Ensure the location of the DrainMajor 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 DrainMajor Duo 1030 (240V) comes complete with a one year warranty.



### DATA SHEET DRAINMAJOR DUO 1030 HES (240V) (Duty/Standby Hot Wastewater Pumping System with Dual Alarm)





### **Key Alarm Features**

- 2 Alarm inputs
- Alarm LED indicator
- Alarm audio buzzer
- Alarm audio mute button
- Alarm test button
- Power LED indicator
- IP65-rated enclosure
- Auxiliary alarm output for accessories such as a beacon or siren
- 2 independent Volt free relay contact outputs SPDT
- Easy installation no tool required WAGO wiring terminals
- Backup battery with up to 72 hours of run time

DrainMajor Duo 1030 HES (240V) Part No. 146 (Duty/Standby Hot Wastewater Pumping System with Dual Alarm. Continuously Rated for 90°C Hot Wastewater)

### **General Description:**

DrainMajor Duo 1030 HES (240V) features a heavy-duty tank and submersible pump for automatically pumping "Hot Wastewater" from tea points with zip taps, commercial kitchens, sinks, dishwashers, combi ovens, pasta cookers, washing machines etc.

The DrainMajor Duo provides users with the additional security of duty/standby operation. If one pump should become blocked or fail, the wastewater would rise within the tank, activate the high-level alarm, overflow into the adjoining tank were the other pump would then act as the standby pump.

### Alarm:

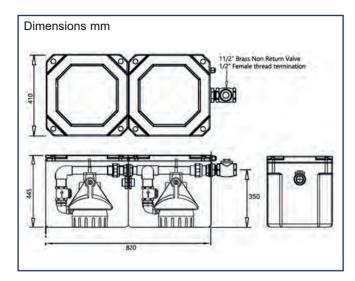
The dual zone alarm has two triggered inputs. When triggered it is activated and an LED indication of which input was triggered is illuminated.

It has a built-in backup battery (72 hours) in the event of a power outage. It operates from a switched input, such as a float switch or pressure switch. The alarm can be activated either by a closed circuit switched input or an open circuit switched input. It is designed for connection to 240Vac supply voltages. Once activated, it provides a visual and audio indicator.

There is an option to connect an external beacon or other circuitry via the auxiliary output and/or the volt-free relay outputs. Each trigger has its own volt-free relay allowing the alarm to be connected to a Building Management System with ease.



### DRAINMAJOR DUO 1030 HES (240V) (Duty/Standby Hot Wastewater) Pumping System with Dual Alarm)



### 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: 149.6 litres

Total Approximate Usable Volume - 99.6 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 185 mm.

### Good for the Environment:



DrainMajor Duo 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

### Tank Outlet:

Fitted 11/2" BSP male thread discharge outlet (NRV supplied female thread)

### Tank Venting:

To suit site layout, a vent should be taken from the side of the tank by drilling a hole and using an appropriate tank connector. Vent pipe should be 2" to air or via a Pump Technology MicroVent.

It is essential to have inlets into both tanks to ensure both pumps operate.





DATA SHEET DRAINMAJOR DUO 1030 HES (240V) (Duty/Standby Hot Wastewater Pumping System with Dual Alarm)

### Pump:

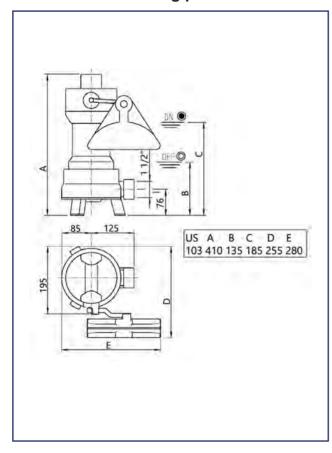
- Safe to run dry
- 30 mm free passage
- Hot water up to 90°C (Rated for continuous operation)
- Controllable oil chamber
- SiC mechanical seal independent of sense of rotation
- Replaceable moisture sealed cable inlet

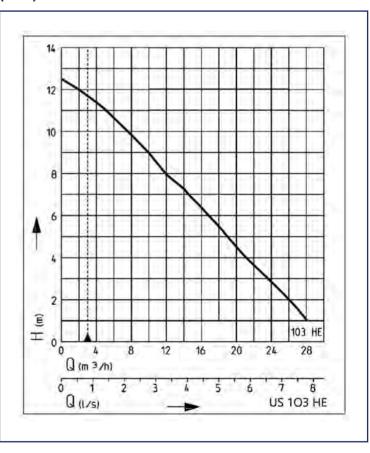
### **Description:**

The heavy duty centrifugal submersible drainage pump US 1030 HES is suitable for dealing with wastewater and capable of handling soft solids up to 30mm in particle size.

The Pump is rated for continuous operation for very hot wastewater up to 90°C.

### Dimensions/switching points US 103 HES (mm)







### DRAINMAJOR DUO 1030 HES (240V) (Duty/Standby Hot Wastewater Pumping System with Dual Alarm)

**Scope of Supply** 

Mechanical Data

Pump acc. To EN 12050 ready for connection with 4m cable and automatic level float switch.

moonamour Data			
Pump	Vertical single stage	Run dry protection	Yes

Free passage 30mm Shaft Stainless Steel

Bearing Ball bearing, grease- Impeller Vortex impeller GFK lubricated Motor Housing Stainless Steel

Seal on motor side Duplex rotary shaft seals Pump Housing Stainless Steel

Orey cast iron

Oil chamber Yes Submersible Yes
Seal on medium side SiC Mechanical seal Pressure outlet IG 1½"

Electrical Data

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

Power line 10m H07RN-F Winding thermostat Yes

Wires 3G1.0 Motor protection Integrated
Type of enclosure IP68 Plug Safety

1.37kW

## Type Code No. Motor rating P1 Current Weight With built-in level control

0.98kW

6.0A

14.1kg

### Notes:

**US 103 HES** 

This unit is for wastewater only

JP09308

- Ensure the location of the DrainMajor 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 DrainMajor Duo 1030 HES (240V) comes complete with a one year warranty.

