

# DRAINAGE

ONGA • JUNG PUMPEN

SUBMERSIBLE SUMP PUMPS



## Onga

A wide range of submersible sump pumps to suit almost any drainage application.

The moulded and stainless steel submersible sump pumps are a high quality, versatile submersible pump, built to withstand the most testing of conditions.

You can't look past our cast iron and stainless steel submersible sump pumps for durability and reliability across dewatering, drainage, water treatment and sewerage applications.

## Jung Pumpen

Jung Pumpen is a quality German manufacturer of pumps for wastewater and dewatering applications.

For over 85 years Jung Pumpen has been a reliable partner for sewage and wastewater disposal across the globe. Producing high-quality pumps and pumping stations for both small-scale domestic house and land drainage to large-scale industrial and community wastewater treatment.



# JUNG PUMPEN SUBMERSIBLE SUMP PUMPS

## U3 / U5 / U6



Proven millions of times over, handling domestic waste water is no trouble at all for the UK series of submersible pumps. Special design features make these pumps extremely versatile.

A flushing device which can be activated to keep chambers clean, the integrated low level pumping feature offers great advantages when emptying flooded rooms and the EIP technology provides enhanced operational reliability where there are solid particles in the pumping medium.

The variable discharge branch allows great freedom when installing the pump and the swing-type check valve provided for mobile operation prevents unintentional emptying of the hose.

All components which come into contact with the pumping medium are made of stainless steel or plastic. Installed as stationary units in a sump or collecting chamber, they reliably dispose waste water and prevent backpressure. But they also come into their own in mobile applications, such as in the garden or when flooding occurs.

### Features:

- For saline solutions up to 10% salinity (*U3KS special*).
- 10mm / 20mm free passage.
- Flushing device.
- SiC mechanical seal.
- Continuous operation.
- Moisture sealed cable inlet.
- Low level pumping.
- Replaceable sealed cable inlet.

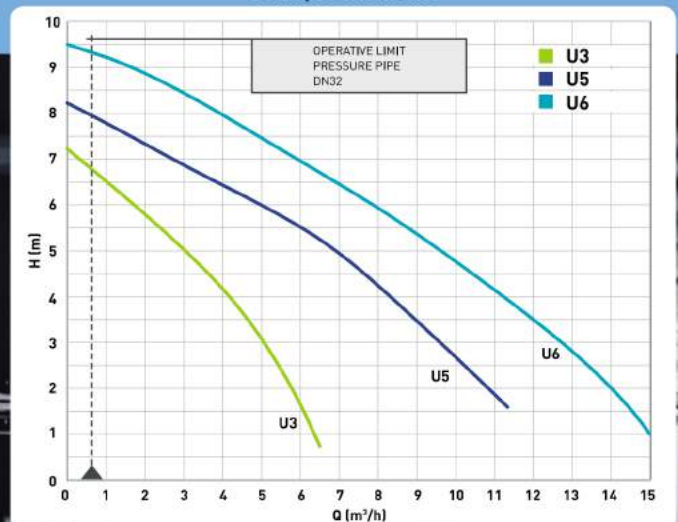


**HEBEFIX**  
ABOVE FLOOR TANK  
Install items which require drainage but there is no drain pipe available.



**FLUTBOX**  
EMERGENCY KIT  
Helps people who are affected by flood water, to react quickly and efficiently.

### • U Pumps Performance



| Model        | H max (m) | Q max (l/m) | Free passage (mm) | Voltage (V) | P1 (kW) | P2 (kW) | Current (A) | Motor protection |
|--------------|-----------|-------------|-------------------|-------------|---------|---------|-------------|------------------|
| U3KS         | 7         | 110         | 10                | 230         | 0.32    | 0.20    | 1.4         | Integrated       |
| U3KS Special | 7         | 110         | 10                | 230         | 0.32    | 0.20    | 1.4         | Integrated       |
| U5KS         | 8         | 190         | 10/20             | 230         | 0.52    | 0.38    | 2.3         | Integrated       |
| U6KS         | 9.5       | 260         | 10/20             | 230         | 0.75    | 0.49    | 3.3         | Integrated       |

# JUNG PUMPEN SUBMERSIBLE SUMP PUMPS

## US



The submersible drainage pumps of the US range provide a reliable solution for all types of faecal-free waste water.

These pumps use high-performance motors, hydraulics which are specially adapted to the pumping medium and high-quality materials. The US62 to US152 pumps have a stainless steel housing which means that they can also be easily carried in portable use.

The US62 to US102 pumps offer a free passage of 10 mm particle size to convey waste water from dishwashers or washing machines.

The submersible drainage pump US103 is used when a larger free passage of up to 30 or 40 mm particle size is required.

The range is rounded off with the US75 to US155 range with a free passage of 50 mm particle size. Standard features of the dry running safe pumps are a controllable oil chamber, a wear resistant silicon carbide mechanical seal and a permanently lubricated roller bearing to ensure a long service life.

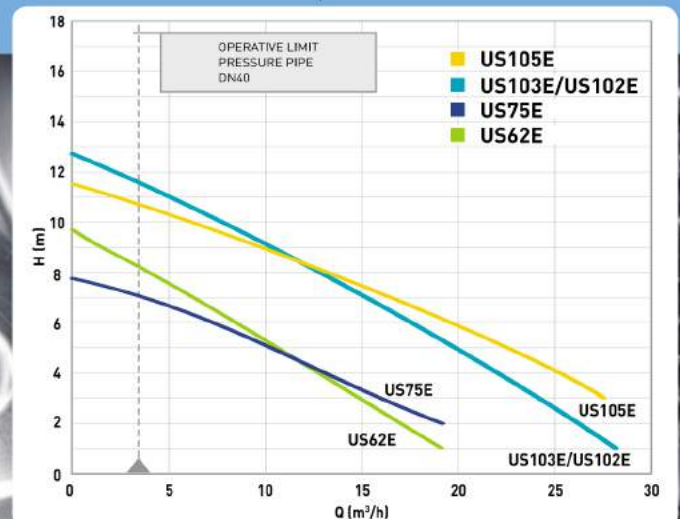
### Features:

- 10mm / 30mm / 50mm free passage.
- Controllable oil chamber.
- SiC mechanical seal independent of rotation direction.
- Replaceable sealed cable inlet.



*-Optional-*  
**Guide rail system GR40 or GR50** where the pumps are needed to be easily taken out of the sump for servicing or visual inspection.

• US Pumps Performance



| Model       | H max (m) | Q max (m³/h) | Free passage (mm) | Voltage (V) | P1 (kW) | P2 (kW) | Current (A) | Motor protection |
|-------------|-----------|--------------|-------------------|-------------|---------|---------|-------------|------------------|
| US 62 E/ES  | 9.5       | 19           | 10                | 1/N/        | 0.83    | 0.50    | 3.9         | integrated       |
| US 75 E/ES  | 7.5       | 20           | 50                | 1/N/        | 0.83    | 0.50    | 3.9         | integrated       |
| US 102 E/ES | 12.5      | 28           | 10                | 1/N/        | 1.37    | 0.98    | 6.0         | integrated       |
| US 103 E/ES | 12.5      | 28           | 30                | 1/N/        | 1.37    | 0.98    | 6.0         | integrated       |
| US 105 E/ES | 11.5      | 28           | 50                | 1/N/        | 1.37    | 0.98    | 6.0         | integrated       |

# JUNG PUMPEN SUBMERSIBLE SEWAGE PUMPS

## MULTICUT



### Cutting system:

For more than 30 years the MultiCut submersible sewage pump has been a success with its approved cutting system. High-quality pumps that guarantee a clean solution.

### High operational reliability:

Unsusceptible to blockages, since the cutting takes place upstream of the pump's hydraulic system.

### High performance:

Outstanding cutting performance with around 67,200 cuts per minute.

### Low maintenance costs:

The cutting system and impeller can be adjusted without the need for replacement parts.

### Types of media that can be pumped:

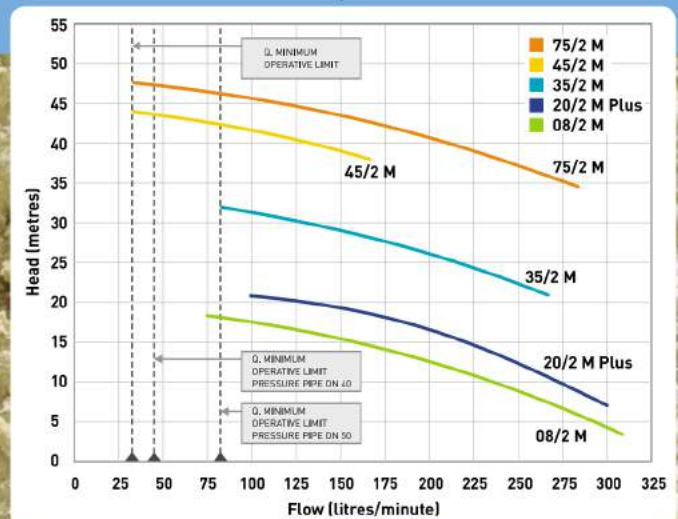
- Wastewater containing solids and fibrous matter.
- Wastewater containing sewage.
- Domestic wastewater with no sewage content.
- Mechanically cleaned wastewater.

### Features:

- Cutting rotor with stirring effect.
- Plug-in cable connection.
- External adjustable cutting mechanism.
- Controllable oil chamber.
- SiC mechanical seal independent of sense of rotation.
- Moisture-sealed cable inlet.
- Installed motor protection.



• Multicut Pumps Performance



| Model       | H max (m) | Q max (m³/h) | Max Solids (mm) | Voltage (V) | P1 (kW) | P2 (kW) | Current (A) | Motor protection | Discharge branch |
|-------------|-----------|--------------|-----------------|-------------|---------|---------|-------------|------------------|------------------|
| 08/2 M      | 2 - 14    | 304 - 127    | 8               | 3/PE - 400  | 1.65    | 1.24    | 2.8         | In-built         | DN 32            |
| 08/2 MS     | 2 - 14    | 304 - 127    | 8               | 3/PE - 400  | 1.65    | 1.24    | 2.8         | In-built         | DN 32            |
| 20/2 M Plus | 6 - 21    | 300 - 100    | 8               | 3/PE - 400  | 2.40    | 1.91    | 7.0 / 4.0   | Thermostat       | DN 32            |
| 35/2 M      | 21 -      | 267 - 83     | 8               | 3/PE - 400  | 3.70    | 3.04    | 11.5 /      | Thermostat       | DN 32            |
| 45/2 M      | 38 -      | 167 - 33     | 8               | 3/PE - 400  | 4.84    | 3.93    | 13.7 /      | Thermostat       | DN 32            |
| 75/2 M      | 34 -      | 283 - 33     | 8               | 3/PE - 690  | 7.70    | 6.60    | 13.2 /      | Thermostat       | DN 32            |

# JUNG PUMPEN SUBMERSIBLE SEWAGE PUMPS

## MULTISTREAM



The MultiStream pump specialises in managing effluent or sewage typically involved with fibrous matter, effluent solids, mixed water, raw effluent and raw sludge. Our MultiStream pumps show their strength in pumping various types of wastewater in municipal and industrial pumping stations, rainwater retention basins and in disaster control applications.

### Single-channel impeller:

The single-channel impeller pump is unbeatable when it comes to pumping large quantities and bridging large differences in height.

### Energy-efficient pumping:

The high efficiency of the pumps makes this possible.

### Long service life:

Optional wear coating on the impeller – also ideal when pumping abrasive wastewater.

### Maximum operational reliability:

Hydraulics optimised to prevent entangling.

### Low maintenance costs:

The adjustable axial gap allows the efficiency of the pump to be maintained even if there are signs of wear.

### Low life cycle costs:

Thanks to easily exchangeable components, such as the wear plate and the adjustable axial gap.

### Wide range of auxiliary equipment:

Enables optimum use of the pumps in every type of application.

### Types of media that can be pumped:

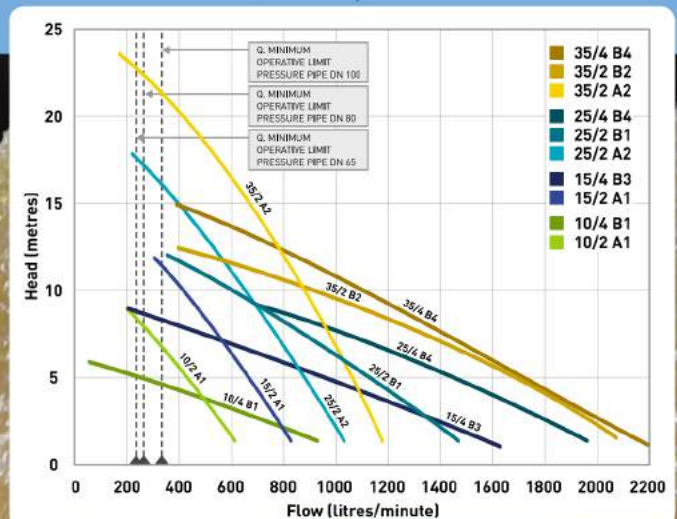
- Wastewater containing fibrous and solid matter.
- Raw wastewater.
- Raw sludge.
- Rainwater and combined wastewater.

### Features:

- Adjustable single-channel impeller.
- Safe to run dry.
- Controllable oil chamber.
- SiC mechanical seal independent of sense of rotation.
- Moisture sealed cable inlet.

| Model   | H max (m) | Q max (m³/h) | Max Solids (mm) | Voltage (V) | P1 (kW) | P2 (kW) | Current (A) | Motor protection | Discharge branch |
|---------|-----------|--------------|-----------------|-------------|---------|---------|-------------|------------------|------------------|
| 10/2 A1 | 9         | 633          | 40              | 3/PE - 400  | 1.3     | 1.1     | 4.6 / 2.7   | Thermostat       | DN 65            |
| 15/2 A1 | 12        | 833          | 40              | 3/PE - 400  | 1.80    | 1.50    | 5.7 / 3.3   | Thermostat       | DN 65            |
| 25/2 A2 | 18        | 1033         | 40              | 3/PE - 400  | 2.60    | 2.10    | 7.6 / 4.4   | Thermostat       | DN 65            |
| 35/2 A2 | 24        | 1167         | 40              | 3/PE - 400  | 3.70    | 3.04    | 11.5 / 6.6  | Thermostat       | DN 65            |
| 25/2 B1 | 12        | 1517         | 70              | 3/PE - 400  | 2.60    | 2.10    | 7.6 / 4.4   | Thermostat       | DN 80            |
| 35/2 B2 | 15        | 2100         | 70              | 3/PE - 400  | 3.70    | 3.04    | 11.5 / 6.6  | Thermostat       | DN 80            |
| 10/4 B1 | 6         | 1000         | 70              | 3/PE - 400  | 0.95    | 0.73    | 4.2 / 2.4   | Thermostat       | DN 80            |
| 15/4 B3 | 9         | 1633         | 70              | 3/PE - 400  | 1.80    | 1.40    | 5.9 / 3.4   | Thermostat       | DN 80            |
| 25/4 B4 | 9         | 2000         | 70              | 3/PE - 400  | 2.70    | 2.04    | 7.9 / 4.6   | Thermostat       | DN 80            |
| 35/4 B4 | 12        | 2200         | 70              | 3/PE - 400  | 3.50    | 2.65    | 12.0 / 6.9  | Thermostat       | DN 80            |

• Multistream Pumps Performance



# SUBMERSIBLE UTILITY SUMP PUMPS

# PENTAIR SUMP PUMP CONTROLLERS

## SIMER



Portable by design, the Simer allows for versatile water removal including: draining of flat roofs, emptying swimming pools, waste water from core-hole drilling and concrete cutting, puddles on worksites, empties garden ponds and drainage and disposal of faecal free waste water.

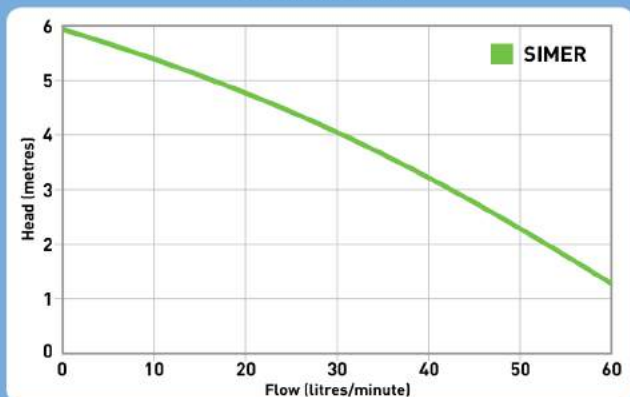
The Simer pump removes unwanted water quickly and efficiently, leaving a residual water level of just 2mm, while starting to pump at a water level of just 5mm.

### Features:

- Robust cast aluminum housing.
- Manual pump - self-venting - operable at a water level of 5 mm.
- Removes water down to a level of 2 mm.
- Replaceable cable inlet.
- Max. head - 6m.
- Max. flow - 62lpm.

| Model        | H max (m) | Q max (l/m) | Voltage (V) | P1 (kW) | Current (A) | Discharge Branch |
|--------------|-----------|-------------|-------------|---------|-------------|------------------|
| <b>SIMER</b> | 1m - 5m   | 62 - 16     | 1/PE - 230  | 0.40KW  | 2.6 A       | 1½" BSP (Female) |

• Simer Performance



## PPC RANGE



On control units for pumps from 0.37 kW to 7.7 kW. Areas of application included; drainage for buildings, pressure drainage for built-up regions, municipal additional and main pumping stations.

- Single, duplex or multiple pumping stations.
- Auto alternating pump start.
- Optimal accessory selection based on customer needs.
- High-quality and specifically designed for pumps and chambers.
- Selection of level contact switches, depending on application.
- All control units meet the current standards and guidelines.
- Lockable mains power.
- Isolation switch.

| Model        | Single / Dual Pump    | Voltage Rating (V) | Contactor Rating (A) | Overload Rating (A) | Enclosure Type |  |
|--------------|-----------------------|--------------------|----------------------|---------------------|----------------|--|
| PPC-15002-B  | single pump           | 240                | 18                   | 4-6                 | FEB - 42431    |  |
| PPC-15002-D  | single pump           | 240                | 18                   | 9-13                |                |  |
| PPC-30010-B  | dual pump             | 240                | 18                   | 4-6                 |                |  |
| PPC-30010-D  | dual pump             | 240                | 18                   | 9-13                |                |  |
| PPC-15006-A  | single pump           | 415                | 18                   | 2.5-4               |                |  |
| PPC-15006-B  | single pump           | 415                | 18                   | 4-6                 |                |  |
| PPC-15006-C  | single pump           | 415                | 18                   | 7-10                |                |  |
| PPC-15006-D  | single pump           | 415                | 18                   | 9-13                |                |  |
| PPC-30030-A  | dual pump             | 415                | 18                   | 2.5-4               |                |  |
| PPC-30030-B  | dual pump             | 415                | 18                   | 4-6                 |                |  |
| PPC-30030-C  | dual pump             | 415                | 18                   | 7-10                |                |  |
| PPC-30030-D  | dual pump             | 415                | 18                   | 9-13                |                |  |
| Float switch | Cable Length (metres) |                    | Voltage Rating (V)   |                     |                |  |
| FSW-12517    | 10                    |                    | 12                   |                     |                |  |

# SUBMERSIBLE SUMP PUMPS

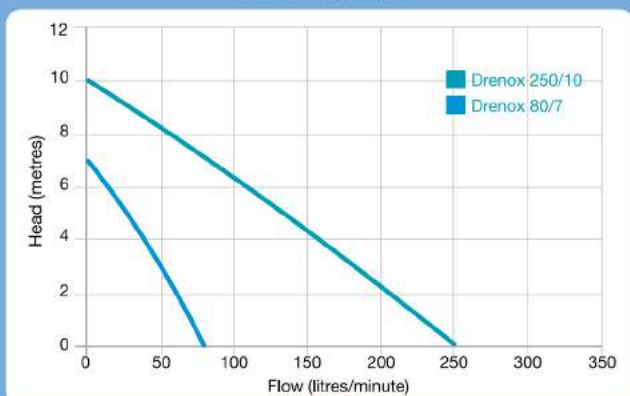
## DRENOX RANGE



- The Onga Drenox range 250/10 is constructed entirely of 304 grade stainless steel, including a cast stainless steel impeller. 80/7 is 304 grade stainless steel with a plastic impeller.
- Includes a heat exchange chamber to cool the motor for long periods of unsubmerged operation, and an oil chamber for lubrication of the seal.
- Suitable for continuous operation.  
Drenox 80/7 drains down to a level of 3mm.

| Model                | Product code | Free Passage (mm) | Voltage (V) | kW   |      |
|----------------------|--------------|-------------------|-------------|------|------|
|                      |              |                   |             | P1   | P2   |
| <b>DRENOX 80/7</b>   | P1031020     | 3                 | 230         | 0.30 | 0.20 |
| <b>DRENOX 250/10</b> | P1031400     | 6                 | 230         | 0.90 | 0.55 |

• Drenox Performance



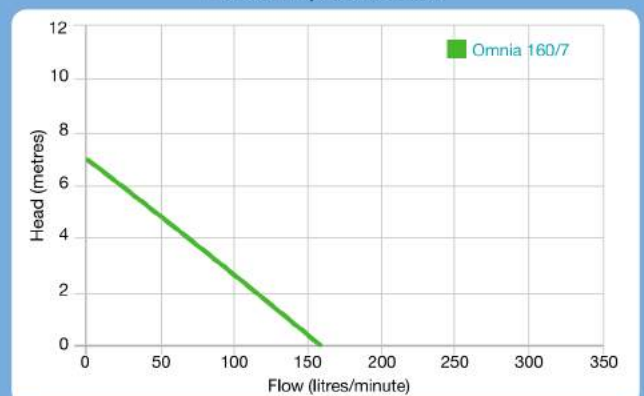
## OMNIA 160/7



- The Onga Omnia 160/7 includes all the great features of the Drenox and includes a vortex impeller so that it can pass larger solids.
- Dual oil-lubricated NBR70 lip seal on a hard ceramic shaft.

| Model              | Product code | Free Passage (mm) | Voltage (V) | kW   |      |
|--------------------|--------------|-------------------|-------------|------|------|
|                    |              |                   |             | P1   | P2   |
| <b>OMNIA 160/7</b> | P2081010     | 20                | 230         | 0.90 | 0.37 |

• Omnia 160/7 Performance



# SUBMERSIBLE SUMP PUMPS

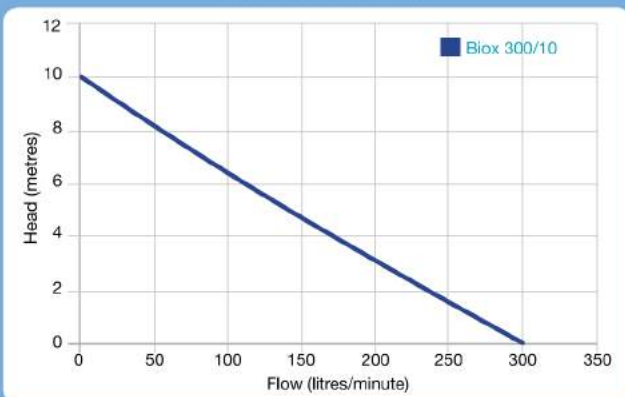
## BIOX 300/10



- The Onga Biox is a submersible vortex pump that includes both a lip seal with sand guard and a carbon ceramic mechanical seal.
- 2" discharge connection enables soft solids up to 40mm in diameter.
- Suitable for continuous use.
- Motor must remain submerged for cooling.

| Model       | Product code | Free Passage (mm) | Voltage (V) | kW   |      |
|-------------|--------------|-------------------|-------------|------|------|
|             |              |                   |             | P1   | P2   |
| BIOX 300/10 | P2091010     | 40                | 230         | 0.90 | 0.60 |

• Biox 300/10 Performance



## VF150



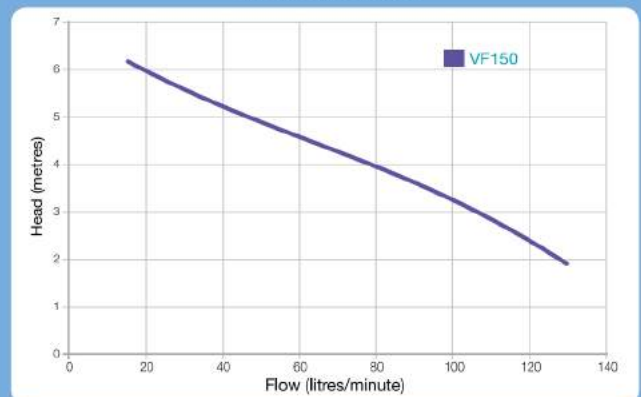
- The VF150 is a single phase drainage pump with cast iron construction making it durable and providing a longer life cycle.
- Contains a vortex impeller capable of handling soft solids up to 15mm.
- Optimum performance reaches 80 litres per minute at 4 metres head.
- Automatic float switch operation protects pump against dry running.
- Lip seal and dual mechanical seal for improved service life.

### Applications:

- Septic effluent disposal, water transfer, grey water and sump pumping liquid including grey water (of neutral pH with soft solids up to 15mm at a 10% content or fine solids at 1% concentration).

| MODEL | Watts (P2) | Nominal Current (Amps) | Full Load Current (Amps) |
|-------|------------|------------------------|--------------------------|
| VF150 | 180        | 1.4                    | 2.0                      |

• VF150 Performance





# SUBMERSIBLE CAST IRON SUMP PUMPS

## CSM RANGE



- This range of rugged cast iron submersible pumps is suitable for many dewatering, drainage, water treatment and wastewater applications.
- Cast iron construction making them solid, durable and rugged, with high abrasion resistance to suspended particles.
- Dual mechanical seals in oil bath with lip seal for motor protection to provide longer life combined with low friction for low power consumption.
- Epoxy cable - motor connection for preventing water ingress through the cable.
- Dry motor design with cap start/cap run provides superior motor protection with maximum starting torque.
- Continuous duty rating (40°C - intermittent duty 50°C) designed to handle the largest and toughest jobs.
- 30 metre maximum submergence will deal with the deepest pit dewatering.
- Stainless steel fasteners for corrosion protection for long life.
- Dual cutter design in stainless grade 440C, hardened to 55 Rockwell C<sup>8</sup> for long service life.
- Grinder assembly replaceable without disassembling pump<sup>8</sup> for very short repair downtime.

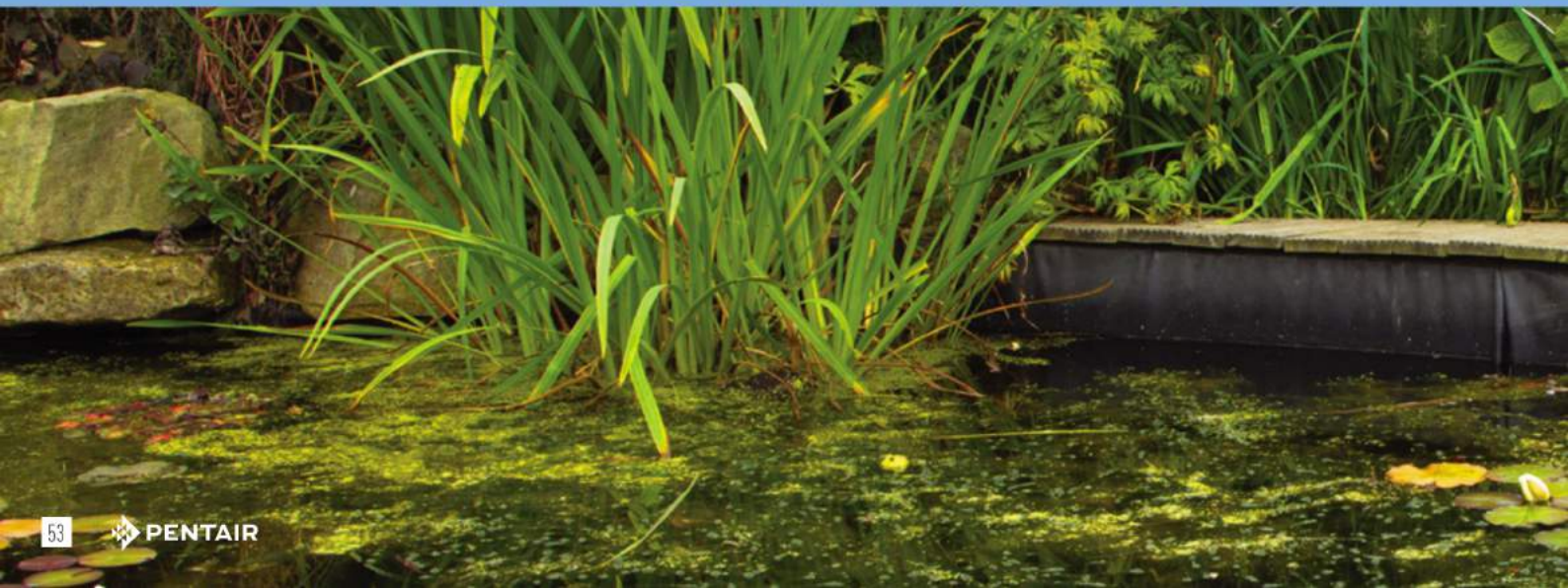
- Optional Guide Rails available - no need to enter the pit.
- Stainless steel shaft with dual ball bearings and short overhang making them corrosion resistant, smooth running and reducing deflection to prolong seal and bearing life.

### Available in 3 broad types:

- **VORTEX** (suitable for dewatering where some solids may be present).
- **CUTTER** (suitable for draining water where stringy materials may be present).
- **GRINDER** (suitable for wastewater applications and where more soft solids are present).

### Nomenclature

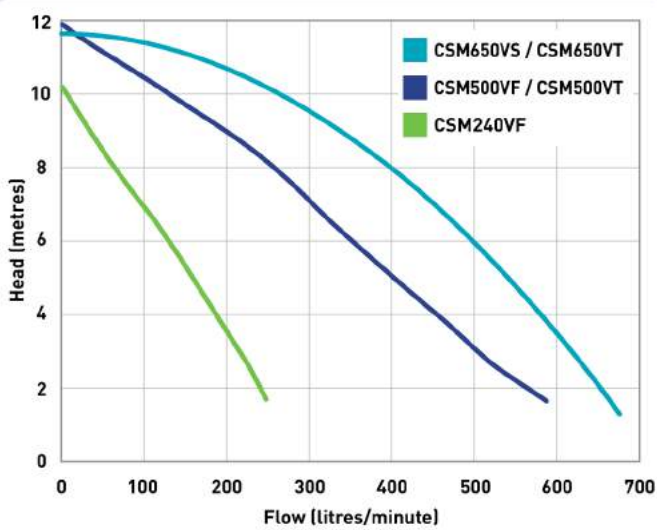
| CSM   | 240   | V  | F  |
|---|---|--|--|
| Cast iron submersible pump with dual mechanical seals | Max flow rate at open discharge (litres/minute) | V - vortex<br>C - cutter<br>XG - grinder | F - float switch, 1 ø<br>S - single phase<br>T - three phase |



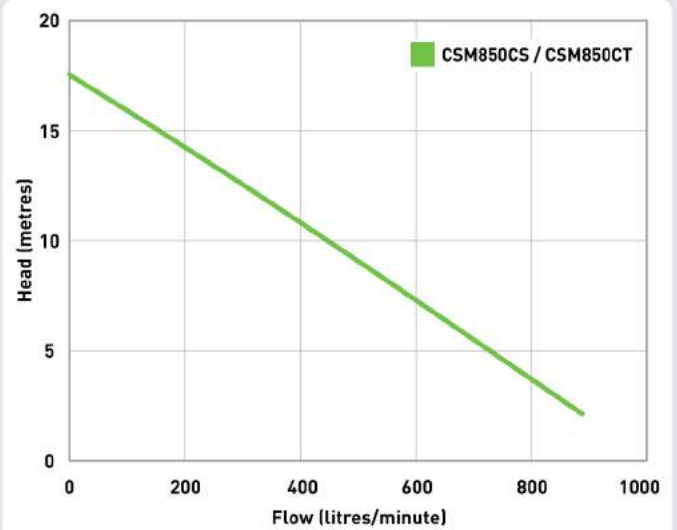
# SUBMERSIBLE CAST IRON SUMP PUMPS

## CSM RANGE

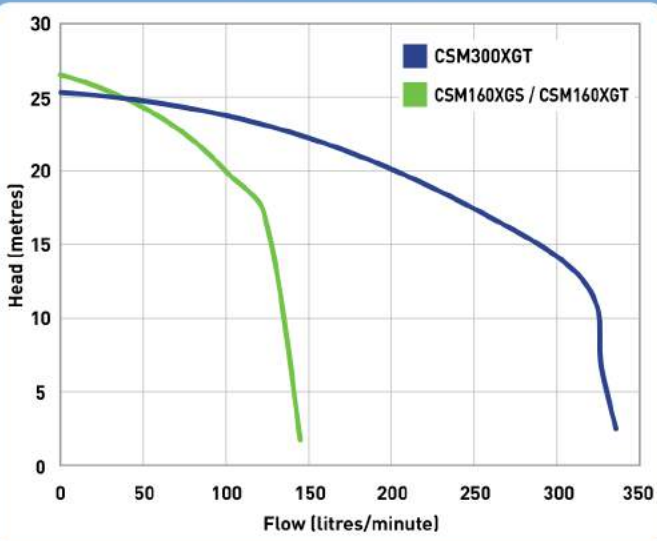
• CSM Performance - Vortex



• CSM Performance - Cutter



• CSM Performance - Grinder



| Applications                         | CSM240VF | CSM500V | CSM650V | CSM850C | CSM160XG | CSM300XGT |
|--------------------------------------|----------|---------|---------|---------|----------|-----------|
| Ponds and fountains                  | ✓        | ✓       | ✓       |         |          |           |
| Dairy pit drainage                   |          |         | ✓       | ✓       | ✓        | ✓         |
| Water treatment circulation          | ✓        | ✓       | ✓       | ✓       |          |           |
| Pit drainage (few small hard solids) | ✓        | ✓       | ✓       | ✓       |          |           |
| Raw sewerage disposal                |          |         |         |         | ✓        | ✓         |
| Low pressure sewerage                |          |         |         |         | ✓        | ✓         |
| Dewatering (clean water)             | ✓        | ✓       | ✓       |         |          |           |
| Water with stringy material          |          |         |         | ✓       | ✓        | ✓         |
| Grey water (hair, small soft solids) | ✓        | ✓       | ✓       | ✓       | ✓        | ✓         |

| Model      | P1 (kW) | Voltage (V) | Rated FLA (A) | Starting | Speed (RPM) | Cable Length (M) | Cable Type | Insulation Class | Start Cap | Run Cap | Power Factor | Max. Temp Rating (°C) |            | Motor Protection          |
|------------|---------|-------------|---------------|----------|-------------|------------------|------------|------------------|-----------|---------|--------------|-----------------------|------------|---------------------------|
|            |         |             |               |          |             |                  |            |                  |           |         |              | Intermittent          | Continuous |                           |
| CSM240VF * | 0.4     | 230-1-50    | 2.7           | PSC      | 2pole/2850  | 10               | H07RNF     | B                | 8µF       | -       | 0.98         | 50                    | 40.6       | Auto Cutout Switch (ACOS) |
| CSM500VF * | 0.75    | 230-1-50    | 5.3           | PSC      | 2pole/2850  | 10               | H07RNF     | B                | 12µF      | -       | 0.98         | 50                    | 40.6       |                           |
| CSM500VT   | 0.75    | 415-3-50    | 2.0           | DOL      | 2pole/2850  | 10               | H07RNF     | B                | -         | -       | 0.86         | 50                    | 40.6       |                           |
| CSM650VS   | 1.5     | 230-1-50    | 9.6           | CS/CR    | 2pole/2850  | 10               | H07RNF     | B                | 15µF      | 100µF   | 0.89         | 50                    | 40.6       |                           |
| CSM650VT   | 1.5     | 415-3-50    | 3.4           | DOL      | 2pole/2850  | 10               | H07RNF     | B                | -         | -       | 0.87         | 50                    | 40.6       |                           |
| CSM850CS   | 1.5     | 230-1-50    | 9.6           | CS/CR    | 2pole/2850  | 10               | H07RNF     | B                | 15µF      | 100µF   | 0.89         | 50                    | 40.6       |                           |
| CSM850CT   | 1.5     | 415-3-50    | 3.4           | DOL      | 2pole/2850  | 10               | H07RNF     | B                | -         | -       | 0.87         | 50                    | 40.6       |                           |
| CSM160XGS  | 1.5     | 230-1-50    | 10.2          | CS/CR    | 2pole/2850  | 10               | H07RNF     | B                | 12µF      | 100µF   | 0.97         | 50                    | 40.6       |                           |
| CSM160XGT  | 1.5     | 415-3-50    | 3.6           | DOL      | 2pole/2850  | 10               | H07RNF     | B                | -         | -       | 0.86         | 50                    | 40.6       |                           |
| CSM300XGT  | 2.2     | 415-3-50    | 5.3           | DOL      | 2pole/2850  | 10               | H07RNF     | F                | -         | -       | 0.86         | 50                    | 40.6       |                           |

PSC: Permantly Split Capacitor. CS/CR: Capacitor start, Capacitor Run (centrifugal switch). DOL: Direct On Line.  
 \* Models include float switches - should you require floats with any other model please contact our Customer Service team.