

## Service and Maintenance

Regular inspection of all cables, hoses, starters, and cleaning of the intake strainer, will ensure a more reliable operation. If the cable is damaged in any way please stop use and contact your local Depot.



### CAUTION!

- Always assess the risk before service or inspection, especially if pumping contaminated liquids
- Wear appropriate PPE
- Isolate/disconnect the power supply before moving or working on the pump.

The pump and associated equipment should be electrically checked and serviced every 6 months or as required locally depending which is the earliest but no longer than 6 months. The manufacturer's recommended service guide should be used when servicing.



### CAUTION!

#### General Safety

- Always assess the risk before use.
- Wear appropriate PPE for the task.
- This equipment should only be used by a competent person.
- Follow operation and maintenance instructions.
- Ensure safe and correct positioning of equipment prior to use.
- Never operate this equipment if you are ill or under the influence of alcohol or drugs.
- Ensure that the equipment is inspected & serviced at appropriate intervals.
- All lifting attachments or equipment are checked prior to use for suitability / rating and replaced if found damaged or faulty.
- Lifting must always be vertical and never subjected to snatch loadings.
- Never insert your hand or any other object into the pump inlet unless you are sure the pump has been switched off, preferably lock it off and retain the key or remove and keep starter key.
- If pumps and or hoses are to be used for contaminated, noxious or corrosive liquids then it is the duty of the hirer to notify Andrews Sykes of the specific nature of the material. After use both pumps and or hoses should be flushed with clean water.

# SYKES PUMPS

## Operating, Maintenance and Safety Instruction leaflet

For Further Information Visit [www.sykes-pumps.com](http://www.sykes-pumps.com) or contact your local Andrews Sykes Depot on 0800 211611

## Electrical Submersible Drainer Pumps (Three Phase 415V)

### Important

It is the user's responsibility to ensure that the information contained within this leaflet is read and fully understood before any attempt is made to use the equipment

## PRINCIPLE OF OPERATION

Drainage pump units are for pumping dirty water, they should not be used for pumping liquids containing solids.

The units are capable of running on intermittent flow rates but are not suitable for long term dry conditions. Where dry running conditions are likely to occur some form of level control should be used.



### CAUTION!

Damage to the pump will occur if the following is not observed

- Maximum immersion depth up to 20m,
- Maximum temperature of medium being pumped up to 40°C (105°F).



### DANGER!

The pump must not be used in an explosive or flammable environment or for pumping flammable liquids.

## Commissioning and Operation Instruction

### Handling & Installation

The pump can be transported and stored either vertically or horizontally, make sure that it is secured and cannot roll. When handling the pump always lift the pump by the handle not the cable or delivery hose (when fitted/installed).



### CAUTION!

- When installing or uninstalling (or servicing) the pump must always have the power isolated.
- Pump and supply cable should be installed in a safe manner to avoid risk of electrical accidents.
- Never lift the pump by the supply cable or discharge hoses.
- Any lifting tackle must always be rated to suit the pump and hoses total weight, including the weight of the pumped medium within the hoses.

When installing the pump always make sure the power is isolated, it is to be installed onto a firm surface and away from silt and debris (or suspended), connect the delivery hoses, ensuring that these as well as the cables are not

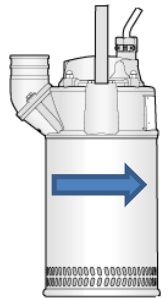
stressed or in contact with a sharp edge once installed or being installed, that may cause damage, always lower the pump and hoses using a suitable lifting attachment rated for the load being lifted.

Once in place the pump rotation can now be checked. Connect pump to power supply and briefly start and stop the pump, at the instant of starting, the pump will jerk anti-clockwise when viewed from above, if the direction of rotation is incorrect, transpose two phases and check rotation again. This can be checked before or after installation depending on site and installation conditions.



### CAUTION!

The starting jerk may be violent. Don't hold the handle when checking the direction of rotation.



Starting Jerk

## Electrical Supply



### CAUTION!

- All electrical work should be carried out by a qualified electrician or competent person
- The electrical installation must conform to national and local regulations (site requirements).
- All electrical equipment must always be earthed (grounded). This applies both to the pump and to any monitoring/starting equipment.
- It is also advised that a suitable Earth leakage detector (ELCB) is fitted to the power supply.
- Ensure that the supply voltage matches the pump voltage and that the supply cables to the starter/switch or supply are not so long as to cause excessive volt drop, see pump data plate.
- If the pump is supplied with a starter panel or you are connecting into your own, please make sure all overloads/fuses are correctly rated for the pump before use. See pump data plate.
- If the built in motor protection has tripped, the pump will stop but will restart automatically when it has cooled down.
- If in any doubt please contact your local Depot.

Pumps are fitted with 20m of cable as standard and fitted with a 16Amp 4 pin plug, 32Amp 4 pin plug or fitted with lugs for stud terminals. This is determined by the KW rating of the pump, which is displayed on the pump data plate, (Cables can be prepared for termination into compression terminals). On pumps above 32 Amps there would also be a signal cable for the motor protection device.