

River and Lake Pump Package

Description (EPPKLR)

The package provides a pressurised water supply using a river, lake or well as the water source. The kit includes an auto-start submersible pump and ancillaries, supply pipework, threaded connection fitting for valve box etc.

Pump

A DAB Divertron fully automatic pump is included, this should be positioned vertically fully submerged in water. The pump has a built-in pressure switch which operates the pump whenever a downstream valve is opened. Once the valve is closed the pump will re-pressurise the system and after a few seconds turn off.

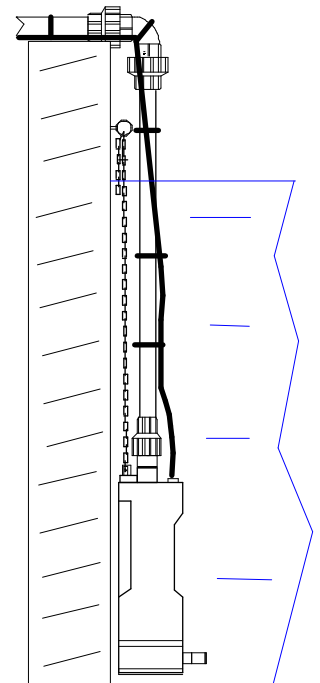
The 1" BSPF pump inlet is located on the lower metal section of the pump, screw in the pump strainer (EVS4) using PTFE tape to seal the threads.

The 1" BSPF pump outlet is located on the top of the pump, screw in the male compression fitting (FLM25-4) using PTFE tape to seal the threads.

Pump attachment (EPWK pump suspension kit)

Before placing the pump in the water carry out the following:

- Choose a suitable fixing point adjacent to the proposed pump location for attachment of the suspension chain. Screw in the 8mm SS screw eye either directly if suitable or by drilling and using the 10mm grey wall plug.
- Fit a suitable length of the 25mm supply pipe (PEB25-25M) to the pump outlet fitting.
- Remove the locknut from one of the 'D' shackles, unscrew and remove the bolt then feed one end of the SS chain through the 'U' part of the shackle. Refit the bolt through the shackle and the pump attachment lug, tighten the bolt using a 3mm hex key, refit the nut and tighten securely using a 10mm spanner.
- Using the supplied ratchet straps secure the pump electrical supply cable to the 25mm supply pipe ensuring the cable isn't unduly strained.
- Remove the locknut from the spare 'D' shackle, unscrew and remove the bolt and keep parts to hand.
- Using **only** the attached chain to lift the pump, carefully lower into the water ensuring the end of the electrical supply cable is kept dry.
- Feed the end of the SS chain through the ring of the screw eye and after setting the correct pump depth (clear of the bottom) use the 'D' shackle to link the chain together.



If using the package for an underground water storage tank drill a 20mm hole in the top of the tank and feed the chain through the hole, lift the pump clear of the bottom of the tank slip over the black round washer and secure the chain using the R clip.

Supply pipework

25mm MDPE type supply pipework is included for connection from the pump to standpipes or valve manifolds. Cut down the pump outlet pipework if necessary and fit a 25mm elbow (FLE25). Connect a suitable length of 25mm pipe to the elbow outlet and run to the filter location. Connect the pipe onto the inlet (valve) side of the assembly.

Filter assembly

The parts should be assembled as per diagram using PTFE tape to seal the threads on the entry/exit fittings only (ensure filter is orientated correctly). The assembly can be fitted anywhere along the supply pipe run but must be before any take off pipework. If burying the pipework use a Jumbo size underground valve chamber to house the assembly (not supplied).



Electrical connections

The pump is pre-wired with 15m of electrical supply cable. This should be appropriately routed to the pump isolator (ESBI). The pump isolator should be fixed in a vertical position close to the pump location using the external fixing holes. The isolator has 20mm knock out entry/exit holes at the base (use appropriate glands). A suitably protected 230vac electrical supply is required for connection to the supply side of the isolator.

Operation

Once all connections have been made, ensure the pipe termination point or valve is open to allow any trapped air to escape. Open the blue handled isolation valve located before the filter and turn on the pump electrical isolator. After a short while the pump should operate and pump water through the filter assembly and pipework. Once the water is flowing freely turn off the blue handled isolation valve and after a few seconds the pump should stop.

Maintenance

The system filter will need cleaning periodically, the frequency will depend upon the water quality.

- Turn off the blue handled isolator located before the filter housing.
- Open a downstream valve to evacuate any residual system pressure.
- Unscrew the filter housing anticlockwise and remove the disc insert.
- Pull the ends of the insert carefully apart and rinse between the discs with clean water.
- Use Vaseline or similar to lubricate the filter 'O' ring and re-assemble.
- Turn on the blue handled isolator and check pump switches on, close downstream valve and ensure pump switches off.

Winterisation

The system should be protected from periods of frost as follows:

- If the pump will remain fully submerged leave in position if not, it must be removed and drained of water.
- System pipework and filter assembly should be de-pressurised and drained of water.
- The pump electrical isolator can be locked in the off position to prevent inadvertent pump operation.

Troubleshooting

Below is a quick guide to the most obvious faults. Refer to manufacturers specific instructions if in doubt contact the Access service department for advice.

Problem	Cause
Pump not working when system valve open	Check electrical supply and pump isolator is turned on.
	Check system filter, if blocked pump will not operate.
	Check for blockage at pump inlet strainer.
	Pump has detected lack of water and initiated dry run protection – check above and ensure pump is fully submerged in water, carry out reset by turning pump electrical isolator off for a few seconds and then turn on, ensure pump switches off after reset.
Pump operating when system off	Check for leaks in pump outlet connections and system pipework.

Filter constantly blocking	The pumped water quality can be improved by: <ul style="list-style-type: none">• Replacing the pump inlet strainer with a floating inlet.• Replacing the 1" disc filter with a 1½" version.• Replacing the filter with a semi-automatic type.
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**Irrigation systems should only be
installed by a competent person**

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