



## **DDW**

# **DOMESTIC PUMPS**



**DDW400/750S**



**DDW750/1000V**

## **Installation & Operating Manual**

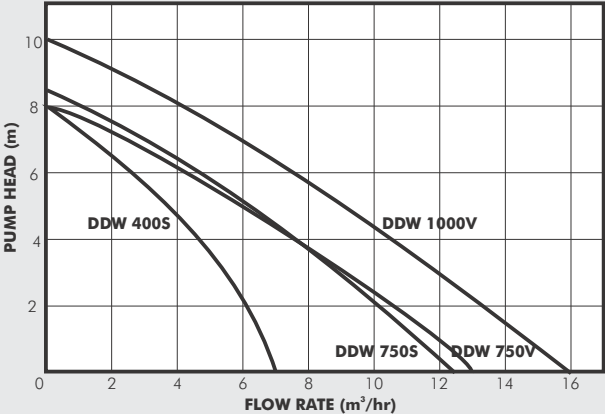


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**Congratulations on selecting a Dayliff DDW Domestic Pump. They are manufactured to the highest standards and if installed and operated correctly will give many years of efficient and trouble free service. Careful reading of this Installation Manual is therefore important, though should there be any queries they should be referred to the equipment supplier.**

## 1. PUMP SPECIFICATIONS



### PUMPS

The DAYLIFF DDW submersible pump range are centrifugal submersible pumps designed for small scale drainage, irrigation, fountain and water transfer applications. Two versions are available, the standard S version with open impeller for lightly turbid water and the vortex V version for water with higher silt loads.

Pump construction is of high strength engineering plastic for the pump casing, suction base and impeller and an external float switch is provided for automatic pump control. All pumps are supplied with 10m of waterproof power cable and a union connected outlet suitable for threaded or hose connection.

### MOTORS

Pumps are provided with integral non-overloading induction motors designed for continuous operation. A thermal cut-out is provided in the motor winding to protect against pump overload and the pump can be connected directly to the mains power supply through a 10A fuse or MCB.

**Enclosure Class:** IPX8  
**Speed:** 2900rpm

**Insulation Class:** F

**Voltage:** 1x240V

**OPERATING CONDITIONS**

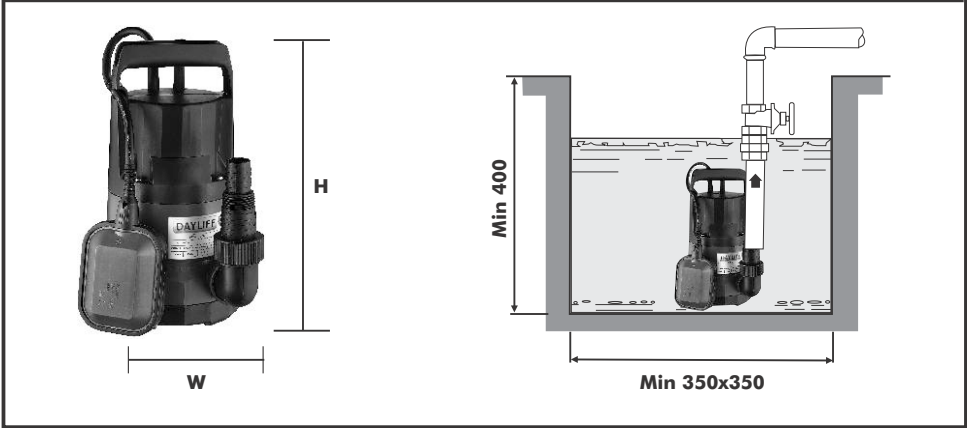
**Pumped liquid:** Thin, clean, chemically non-aggressive liquid containing some particles and fibres

**Max fluid temperature:** +35°C

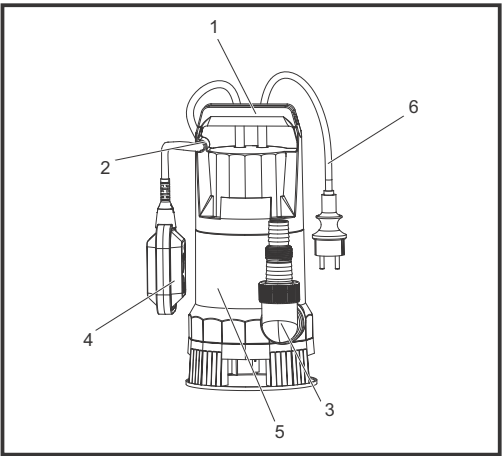
**Max Operating Depth:** 7m

**PUMP DATA**

Model	Motor		Dimensions (mm)		Max. Particle size (mm)	Outlet (")	Weight (kg)
	kW	Current (A)	W	H			
DDW 400S	0.4	1.7	220	370	5	1¼	5
DDW 750S	0.75	3.1		385	35		7
DDW 750V							6
DDW 1000V				1			4.2



1. Carrying handle
2. Float switch height adjustment
3. Hose adapter for pressure connection
4. Float Switch
5. Pump casing
6. Mains cable and plug



## 2. WARNINGS AND SYMBOLS



***Do not use the appliance in potentially explosive areas or in the vicinity of flammable liquids or gases.***



***Do not touch the mains plug with wet hands. Always disconnect the mains plug by pulling the plug and not the cable.***



***The connection must be made to earthed sockets which have been properly installed, earthed and tested. Mains voltage and fuse must comply with the technical data.***



***During operation for swimming pools, garden ponds and similar places, the appliance must be equipped with a residual current circuit breaker (RCCB) with a design fault current of not more than 30 mA.***



***Do not kink, crush, drag or drive over the mains cable; protect against sharp edges, oil and heat.***



***Extension cables must not be used.***



***Do not install the pump in swimming pools or ponds where they may be people using the water.***



***Repairs must be carried out only by a qualified electrician.***

### 3. INSTALLATION

- The pump can be used for various drainage and water transfer installations for tanks, ponds and basements. It is best installed in a sump of minimum 35cm square and 40cm deep to allow for float switch operation



***The float switch must be able to move to protect the pump from dry running.***

- Submerge the pump at an angle into the liquid to be pumped so that no air pocket forms on the underside of the appliance which affects suction. Once the pump is submerged, it may be straightened as desired.
- The pump should not be suspended by its cable or delivery pipe. It should either rest on a solid, level base or be suspended by steel cable or chain.
- The pump must be connected by either a rigid pipe or hose; diameter should be no less than the outlet connector.
- Ensure the pump is not resting on silt or sand during normal operation or impeller damage will occur.
- Adjust the low level control switch on its clip to ensure free float movement and sufficient time between start and stop cycles.



***In the case of continuous use of the pump with the rope, the condition of the rope must be checked regularly as it can decay and break over time.***



***Do not lift the pump with the cable or pressure hose as these are not designed for the tensile stress from the weight of the pump.***

### 4. ELECTRICAL CONNECTIONS



***The installer is responsible for making electrical connections to the mains supply in compliance with relevant local regulations. Ensure that a professional electrician carries out the electrical connections and that the following guidelines are followed.***

- All installations must be provided with an isolator to cut off mains power supply and coarse current protection in the form of a fuse or MCB rated at 2-3 times the full load current as given on the pump plate.
- Ensure that the power supply rating complies with the specification in these instructions.
- Effective earthing must be provided according to local regulations.
- Motors are protected against overloads by a thermal overload fitted in the motor windings.

## 5. MAINTENANCE

The pump requires no routine maintenance and if correctly installed, should give long term trouble free service. However, the following should be noted:-

- If pump performance drops check for debris in the impeller. If observed, flush with water to clean. If this action is insufficient, remove the suction cover and clean around the impeller.
- Particularly check the pump seating location and clear any debris and silt that may have accumulated.



***Before carrying out any maintenance ensure the electrical supply is isolated.***



***Before using the pump again, first "soak" it so that any possible dirt residues do not block the appliance.***



## 6. TROUBLE SHOOTING

Problem	Possible Cause	Solution
The pump does not run	No mains supply	Check mains supply
	Level switch not switching on	Check switch adjustment
		Low water level
Pump runs with no flow	Pump suction sieve clogged	Clean suction (see maintenance section)
	Delivery hose obstructed	Check delivery hose & rectify
Low flow	Pump suction obstructed	Check suction
	Delivery head too high	Reduce delivery head
		Specify different pump
Pump stops after short operating period	Thermal cutout tripped due to overload	Check pump suction
		Check mains power voltage
		Check water temperature is below 35°C

## 7. TERMS OF WARRANTY

### i) General Liability

- In lieu of any warranty, condition or liability implied by law, the liability of Davis & Shirtliff (hereafter called the Company) in respect of any defect or failure of equipment supplied **is limited to making good by replacement or repair** (at the Company's discretion) defects which under proper use appear therein and arise solely from faulty design, materials or workmanship within a specified period. This period commences **immediately after the equipment has been delivered to the customer** and at its termination all liability ceases. Also the warranty period will be assessed **on the basis of the date that the Company is informed of the failure.**
- This warranty applies solely to equipment supplied and **no claim for consequential damages**, however arising, will be entertained. Also the warranty specifically excludes defects caused by fair wear and tear, the effects of careless handling, lack of maintenance, faulty installation, incompetence on the part of the equipment user, Acts of God or any other cause beyond the Company's reasonable control. Also, any repair or attempt at repair carried out by any other party **invalidates all warranties.**

### ii) Standard Warranty

#### General Terms

If equipment failure occurs in the normal course of service having been competently installed and when operating within its specified duty limits warranty will be provided as follows:-

- **Up to six months - The item will be replaced or repaired at no charge.**
- **Over 6 months, less than one year - The item will be replaced or repaired at a cost to the customer of 50% of the Davis & Shirtliff market price.**

The warranty on equipment supplied or installed by others is conditional upon the defective unit **being promptly returned free to a Davis & Shirtliff office** and collected thereafter when repaired. No element of site repair is included in the warranty and any site attendance costs will be payable in full at standard chargeout rates. Also proof of purchase including the purchase invoice must be provided for a warranty claim to be considered.



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