# Submersible Impeller Range

## Whale's high flow long life submersible impeller galley pumps Watertight electrics sonic welded cable Simple plumbing connection suitable for 10mm (3/8") or 13mm (1/2") flexible hose Simple and Whale compact design SUBMERSIBLE Standard Pump 10 LPM 12V D.C. Pump • Simple, compact and an economical solution CE Ideal for basic, one outlet application Premium Pump 13 LPM Reliable, general purpose and suitable for multiple outlets Long life, very quiet with low power consumption · An inexpensive way to update a manual to an electric system **High Flow Pump 14 LPM** Market leading submersible pump for flow performance suitable for showering Read Instructions Narrow design before use ideal to drop into your water tank Do not run dry **Protected Robust ABS** strainer prevents pump housing debris entering pump\* Product code: see table

\*Strainer included on Premium and High Flow models only

# **Features and Benefits**

- Simple, compact economical solution
- Long life, very quiet with low power consumption
- An inexpensive way to update a manual to an electric system
- Choose the pump to suit your freshwater needs on board from 3 flow options
- 12 V d.c. / 24 V d.c. models available
- Compact, quiet, lightweight design suitable for use with pressure switch and microswitch systems
- Also suitable for pumping diesel

# **1 Year Warranty**

### Awards and Accreditations

- EMC compliant
- CE marked

### **COMPLETE YOUR SYSTEM**

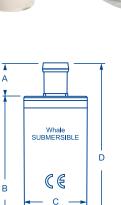
Freshwater system accessories such as water filters, and pipework connections

### YOU MAY ALSO LIKE

Standard Model

Whale water filters Watermaster Automatic Pressure Pumps Whale Quick Connect plumbing - Pipework and fittings





### WARNING Note: Not suitable for petrol, low flash point liquids and aggressive chemicals. This pump must not be used for pumping petrol or any highly inflammable or corrosive liquids.

### 4645-881 4645-991 4645-882 4645-394 4645-921 4645-692

Model	Standard	Standard Premium			High Flow		
Voltage	12V d.c.	12V d.c.		24V d.c.		12V d.c.	
Pump	Sub	Sub	Inline	Sub	Inline	Sub	Inline
Submersible Pump Old Code	GP1002	GP8815	GP9955	GP8825	GP9965	GP9216	GP9255
Submersible Pump New Code	GP1002	GP1352	GP1392	GP1354	GP1394	GP1652	GP1692
Fuse Size	5 amp automotive			3 amp automotive 5 amp automotive		utomotive	
Weight	0.15kg ( 0.3 lbs)						
Hose Connections	Suitable for 10 mm (3/8") or 13 mm (1/2") Flexible Hose						
Connection to Quick	Use WX1511B (Stem Adaptor 11 mm-15 mm)						
Connect Plumbing	Connect WX1504 (15 mm Equal Straight) see page 84-87						
Materials in contact with liquid	Pump Body: ABS, Seals: Nitrile <sup>®</sup> , Strainer: Polypropylene, Impeller: PBT, Cable: PVC						

Note: Each pump performance will depend on the plumbing system and restrictions on outlets in your boat. Note: New Model codes are direct replacement for pre 2006 model part numbers.

### Performance Data

TOPLICHT Art-Nr.

Model Specifications

Discharge Head	Flow Rate Per Minute / Current Draw			
Model	Standard 12V d.c	12 V d.c Prem	ium 24V d.c	High Flow 12V d.c
0 m (0 ft)	10.3 ltrs	13.2 ltrs	13.2 ltrs	15.8 lts
	2.4 amps	3.6 amps	1.8 amps	3.8 amp
1 m (3 ft)	8.75 ltrs	11.75 ltrs	11.75 ltrs	14.8 lts
	2.2 amps	3.3 amps	1.6 amps	3.7 amps
3 m (9 ft)	5.75 ltrs	9.75 ltrs	9.75 ltrs	12.8 lts
	2.0 amps	2.9 amps	1.45 amps	3.5 amps

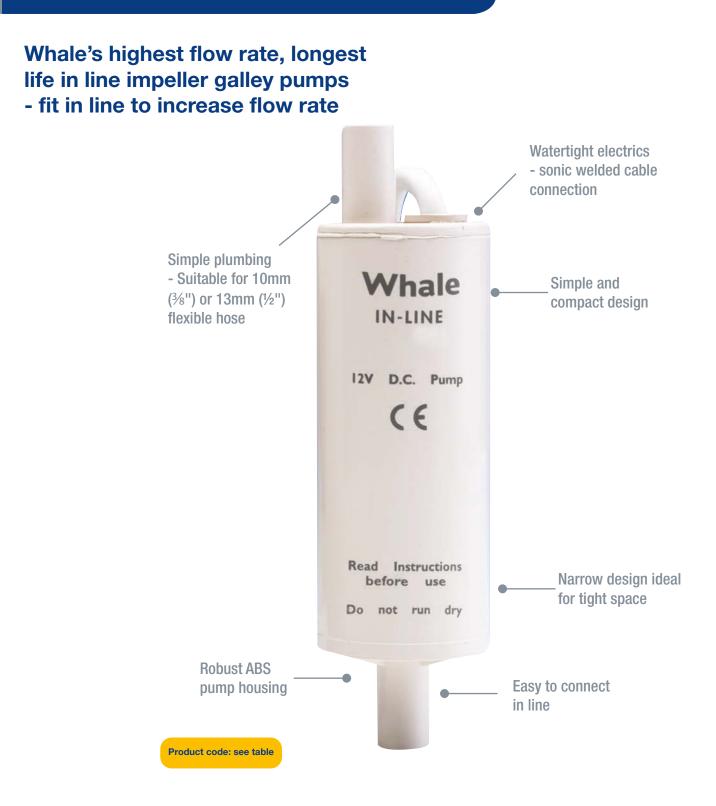
Note: Each pump performance will depend on the plumbing system and restrictions on outlets in your boat.

### Dimensions Table

	А	в	с	D
Standard	20 mm	88 mm	36 mm	108 mm
	( <sup>13</sup> ⁄16")	(3 1/16")	(1 1⁄16")	(4 ¼")
Premium/High Flow	20 mm	109 mm	36 mm	129 mm
	( <sup>13</sup> ⁄ <sub>16</sub> ")	(4 <sup>5⁄</sup> 16")	(1 7⁄16")	(5 ¼16")

Note: These specifications are retail items only. For details of our bulk pack range for boat builders and wholesalers - contact Whale Support. **Electric Freshwater Galley Pumps** 

# **In-Line Booster Pump**



TOPLICHT Tel.: +49 (0)40 - 8890 100 www.toplicht.de

Schiffsausrüster

# **Features and Benefits**

**Compact Electric In-Line Pump** 

- Simple, compact and an economical solution
- Long life, very quiet with low power consumption
- An inexpensive way to enhance your water system on board
- Choose the pump to suit your freshwater needs on board from 2 flow options
- Lightweight design
- · Ideal for pumping freshwater and saltwater
- Straight forward installation
  fits unsupported into pipework
- Available in 12 and 24 V d.c. models

# **1 Year Warranty**

## Approvals and standards

- EMC compliant
- CE marked

### **COMPLETE YOUR SYSTEM**

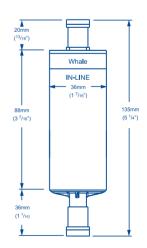
Freshwater system accessories such as water filters, and pipework connections – page 76-77

### YOU MAY ALSO LIKE

Watermaster Automatic Pressure Pumps – page 54 Whale Quick Connect plumbing - Pipework and fittings – page 90-93 Whale's manual galley foot pump range – Gusher Galley – page 64, Tiptoe – page 66, Babyfoot- page 65

# Product Information

Model Specifications	TOPLICHT Art-Nr. 4645-991 In-Line Premium	TOPLICHT Art-Nr. 4645-394 In-Line Premium	TOPLICHT Art-Nr. 4645-692 In-Line High Flow	
Product Code	GP1392	GP1394	GP1692	
Voltage	12 V d.c.	24 V d.c.	12 V d.c.	
Recommended Fuse Size	5 amp automotive	3 amp automotive	5 amp automotive	
Weight	0.15 kg (0.3 lbs)			
Hose Connections	Suitable for 10 mm (¾") or 13 mm (½") Flexible Hose			
Connection to Quick	Use WX1511B (Stem Adaptor 11 mm-15 mm)			
Connect Plumbing	Connect WX1504 (15 mm Equal Straight) see page 84-87 and then 15 mm Plumbing			
Materials	Pump Body: ABS, Seal: Nitrile®, PBT			



WARNING Note: Not suitable for petrol, low flash point liquids and aggressive chemicals. This pump must not be used for pumping petrol or any highly inflammable or corrosive liquids.

### Performance Data

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Discharge Head	Flow Rate Per Minute Current Draw			
0 m (0 ft)	13.2 ltrs	13.2 ltrs	15.75 ltrs	
	3.6 amps	1.8 amps	3.8 amps	
1 m (3 ft)	11.75 ltrs	11.75 ltrs	14.75 ltrs	
	3.3 amps	1.6 amps	3.7 amps	
3 m (9 ft)	9.75 ltrs	9.75 ltrs	12.75 ltrs	
	2.9 amps	1.45 amps	3.5 amps	

Note: Each pump performance will depend on the plumbing system and restrictions on outlets in your boat.

Note: These specifications are retail items only.

For details of our bulk pack range for boat builders and wholesalers - contact Whale Support.



# Self-Venting Submersible & In-Line Booster Pumps 12V d.c. & 24V d.c.



# Self-Venting Submersible & In-Line Booster Pumps 12V d.c. & 24V d.c.

Read carefully before Installation and Use;

### To The Fitter

Ensure all the relevant personnel read the points listed below and that a copy is passed on to the end user.

### To The User

Read the points listed below before installation and use of equipment.

### Application

The Whale Submersible pump is designed to be run fully submerged in water. The Whale In-Line Booster pump is designed to be run in the pipe line between the water supply and the outlet. If they are intended for any other purpose or for use with any liquid other than clean cold water it is the users responsibility to ensure that the materials are fully compatible with the liquids to be used and that a system of safe working practice is applied to installation and use.

#### Installation

The pumps are rated for intermittent use only.\* The Standard pump is available as a 12V d.c submersible model. The Whale Premium pump is available in 12V d.c. or 24V d.c. submersible and in-line booster models. The Whale High Flow pump is available as 12v d.c. submersible and in-line booster models.

The Whale Submersible and In-Line Booster pumps have  $3/_8$ " (10mm) hose tails. They can be adapted for  $1/_2$ " (13mm) hose by pushing on the  $1/_2$ " adaptors supplied with the pump (Does not come with Standard Pump available separately as part AK1330).

#### \* Maximum continuous operation should not exceed 15 minutes.

Note: Ensure that the 1/2" adaptors are pressed on firmly. Once fitted the 1/2" adaptors cannot be removed.

For connection to Whale Semi-Rigid pipe systems, Quick Connect fittings are available separately: Part No. WU1211 for 12mm pipe and WX1511B for 15mm pipe.

Installation of the Whale Submersible pump is extremely simple. Fit the required length of hose to the pump and then fully immerse the pump in the water tank. Connect to an appropriate 12 or 24 Volt power supply and switch.

The whale submersible Pumps may be used with a Whale In-Line Pressure Switch, (WU7207) as long as an isolator switch is installed to protect the pump from accidental switch-on when the system is not in use. The pressure switch should be fitted on to the hose, close to the pump before any other fittings (see Fig. B).

The Whale In-line Booster Pump must be installed in the following ways;

- 1. Below the level of the water tank such that the pump is constantly primed by gravity (fig. A)
- OR 2. In conjunction with:
- a) a hand-operated pump (fig. A 2)
- b) a foot operated pump (fig. A 3)

#### c) in-line to boost a submersible pump (fig. A - 4)

#### Notes:

- The pump outlet should be higher than the inlet.
- Position the In-Line Booster pump in the suction pipe between the foot pump and the water tank, not between the foot pump and faucet.
- The Whale In-Line Booster pump is light enough to suspend in the pipework.
- The Whale In-Line Booster Pump is a sealed unit and can be submersed in water.
- To avoid entry of air or water leaks it is important that all hose connections (to pump, tank, water heater and taps or faucets) should be securely fastened.

# Warranty

This Whale product is covered by 1 years warranty.

Please see the enclosed document for details of our statement of limited warranty.

### Exclusions

Nothing in this clause shall be deemed to exclude or restrict the Company's liability for death or personal injury resulting from its negligence.

The Company shall not be liable for any indirect loss or for any special, incidental, punitive or consequential damages suffered by the Purchaser and/or any other person whether this loss arises from breach of a duty in contract or tort or breach of a statutory duty or in any other way including without limitation loss arising from the negligence, default, breach of duty, non-delivery, delay in delivery or defects or errors in the work undertaken by the Company pursuant to the terms of this statement or in connection with any other claim. In particular the Company shall not be liable (without limitation) for: loss of profits, increased production costs or other economic injury or loss; loss of contracts or opportunity; damage to property of the purchaser or anyone else; personal injury to the purchaser or anyone else except insofar as such injury is attributable to the Company's negligence;

The Company shall under no circumstances be liable for any loss, damage, detention, delay or failure to perform hereunder (other than failure to pay money) resulting from causes beyond its control including but not limited to fires, strikes, lockouts, insurrection or riots, terrorism or civil disorder, embargoes, wreaks or delays in transportation, requirements or regulations of any governmental authority, tempest, earthquake or other natural disaster, flood, bursting or overflowing of water tanks, failure or shortage of power, fuel or other utilities, or loss of data and/or communications due to causes such as those referred to in this clause, outside the Company's control. This statement sets out the Company's entire liability in respect of the products and the Company's liability under this statement shall be in lieu of all other warranties, conditions, terms and liabilities, express or implied, statutory or otherwise howsoever except any implied by law which cannot be excluded.

The above does not affect the statutory rights of the consumer.

The Company shall NOT be liable for any condition, warranty or representation made by a Distributor or other person acting on behalf of the Company unless expressly authorised by the Company to do so. This statement shall be governed and construed in accordance with Northern Irish law and all disputes arising in connection with the statement shall be submitted to the jurisdiction of the Northern Irish Courts.

### Ref.No. 181.01\_v5\_0512

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# Self-Venting Submersible & In-Line Booster Pumps 12V d.c. & 24V d.c.



# Self-Venting Submersible & In-Line Booster Pumps 12V d.c. & 24V d.c

### Operation

When fully immersed in water the Submersible pump is primed and gives instant delivery of water. Where there is a long run of pipe between the pump and the faucet it is helpful to insert a non return valve (FV1227) in the pipe close to the faucet.

As the Whale In-Line Booster pump is not self-priming, it is necessary to prime the system with either.

- a) a hand pump (as in fig. A 2) Pump until full flow from faucet is seen
- b) a foot pump (as in fig. A 3). Pump until full flow from faucet is seen
- c) by gravity (as in fig. A 1)

Once primed, the valves in the hand or foot pump should maintain prime and enable repeated use of the In-Line Booster pump without further priming. As an additional safeguard, a Whale ½" non return valve (FV1227) can be inserted in the suction pipe. (fig. 2) Only when the water supply has been completely drained and the tank refilled should re-priming be necessary.

When using a Whale Tiptoe pump, it is preferable to leave the plunger in the "locked down" position whilst operating the In-Line Booster Pump.

#### Notes:

- " Do not run the pump dry. (without water)
- " Do not use the pump in water temperature above 60°C (140°F)
- " It is best to stand the submersible pump vertically in the tank.
- \* Maximum continuous operation should not exceed 15 minutes.

### Maintenance

Pumps fitted with a strainer (not in-line type) should be inspected and cleaned at frequent intervals. Ensuring the water supply is free of debris especially from tanks will reduce the likelihood of pump clog. These pumps are sealed units, so no further maintenance is required.

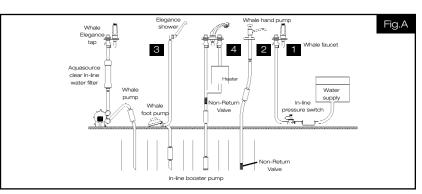
Winterizing: To protect against damage as a result of freezing, drain the entire water system.

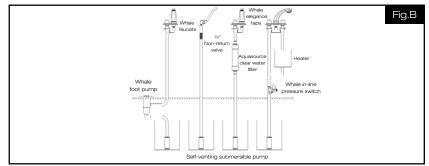
### Helpful Hints

Helpful Hints:

- To obtain efficient running and maximum life note the following points;
- a) For Submersibles -Before switching on, place the pump in water and shake for a few seconds in a horizontal or inverted position to release trapped air. This will ensure successful priming and should be repeated after refilling the water tank.
- b) For the Whale In-Line Booster pump Before switching on check that there is water in the tank and that the system has been primed. (There is a full flow of water using the manual or foot pump.)
- c) Check that all hose connections are secure and airtight. Note: It is possible to have an air leak without having a water leak!
- d) Check that the power supply is at or is close to 12 or 24 volts depending on the model. Reduced voltage (ie a weak battery) or wire of a thickness of less than AWG #16 will give reduced pump performance.
- e) Ensure that there is adequate ventilation in the water tank to prevent a vacuum building up, causing restricted water flow. Any cap fitting must have a ventilation hole of at least 3/16" (5mm) diameter.
- f) For Submersibles The Whale Tiptoe pump (GP1309) can be fitted in-line and used as a manual back up

Check that the polarity is correct i.e. brown to '+' and blue to '-'.





### EC Declaration of Conformity

Description of Equipment: Standard, Premium and High Flow pumps

We hereby declare, under our sole responsibility, that the above equipment complies with the provisions of the following EC Directives. Electromagnetic Compatibility Directive 89/336/EEC, amended by 92/31/EEC and 93/68/EEC on the approximation of the laws of the Member States relating to electromagnetic compatibility.

CE mark affixed: 20/9/06

Basis on which conformity is declared

The above equipment complies with the protection requirements of the EMC Directive.

### Standards applied

EN60335-1:2002 Safety of household and similar electrical appliances.

EN60335-2-41:2003 Particular requirements for pumps.

EN55014-1:2000 Electromagnetic compatibility. Requirements for household appliances, electric tools and similar apparatus. Emission

R. S. M. Jurland . Signed (Authorised person)

Stanley McFarland **Engineering Director** 

Engineering [