













2004

# Marine Product Guide

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**ITT Industries**  
*Engineered for life*



# Water Pressure Systems

All the convenience of your 'at home' water supply



Photo: Sunseeker International Ltd

1. Sensor Max™ VSD



## 1. Sensor Max™ VSD

New pressure sensor controlled pumps with variable speed drive. With flow rates of up to 17 lpm (3.8 gpm), the Sensor Max™ VSD serves 1 to 5 13mm (1/2") outlets by electronically controlling the motor speed to maintain a steady flow and constant pressure eliminating the need for an accumulator tank. Sensor Max™ VSD accepts from 10 to 29 Volts dc for use with either 12 or 24 Volt dc power and conserves battery power by reducing amp draw as flow decreases making this new pump truly economical.

- ▼ 31750-0000 Sensor Max™ 14, 12-24 Volt dc.
- ▼ 31755-0000 Sensor Max™ 17, 12-24 Volt dc.

2. PAR-Max 4



## 2. PAR-Max 4

Super quiet quadruple diaphragm pump benefiting from such design characteristics of dry running, self priming, reliability, ease of maintenance and low amp draw. Snap-fit ports simplify installation and removal for routine service. Smooth flow rates of up to 16.3 lpm (3.6 gpm) serves 4 or more 13mm (1/2") outlets at any one time.

- ▼ 31620-0092 12 Volt dc, high pressure model.
- ▼ 31620-0094 24 Volt dc, high pressure model.
- ▼ 31620-0292 12 Volt dc, low pressure model.
- ▼ 31620-0294 24 Volt dc, low pressure model.

3. PAR-Max 3



## 3. PAR-Max 3

All the design features of the larger output PAR-Max 4 but with a 13.2 lpm (2.9 gpm) flow rate. Suitable for installations with 3 or more 13mm (1/2") outlets at any one time.

- ▼ 31600-0092 12 Volt dc, high pressure model.
- ▼ 31600-0094 24 Volt dc, high pressure model.
- ▼ 31600-0292 12 Volt dc, low pressure model.
- ▼ 31600-0294 24 Volt dc, low pressure model.

4. PAR-Max 2+



5. PAR-Max 1



6. Dual Max VSD Water System



## 4. PAR-Max 2+

New low flow, compact alternative to PAR-Max 4 with 10.6 lpm (2.3 gpm) flow output suitable for installations of 2 or more 13mm (1/2") outlets at any one time.

- ▼ 31595-0092 12 Volt dc, high pressure model.
- ▼ 31595-0094 24 Volt dc, high pressure model.
- ▼ 31595-0292 12 Volt dc, low pressure model.
- ▼ 31595-0294 24 Volt dc, low pressure model.

## 5. PAR-Max 1

New miniature multi outlet water pressure pump serves 1 or 2 10mm (3/8") outlets at any one time. Models include both automatic and manual pumps.

- ▼ 42630-2900 12 Volt dc automatic model.
- ▼ 42631-2900 12 Volt dc manual model.

## 6. Dual Max VSD Water System

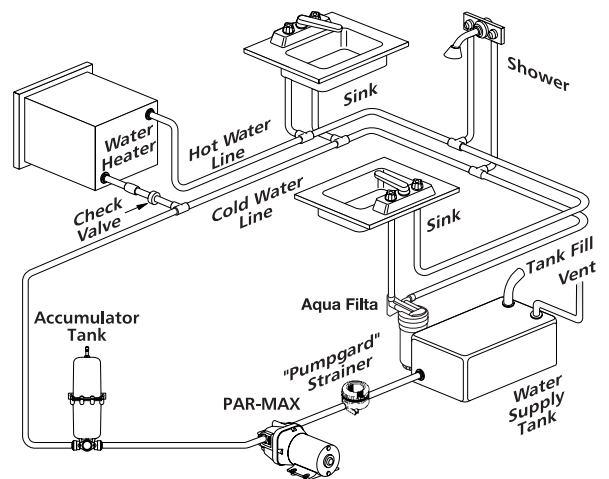
Designed for larger boats wanting the flexibility and reliability of a Dual pump system, the Dual Max VSD provides up to 27 lpm (6 gpm) output. This system combines a smooth flowing Sensor-Max VSD Pump with a PAR-Max 4 pump.

- ▼ 31765-0092 12 Volt dc.
- ▼ 31765-0094 24 Volt dc.

## WARNING

DO NOT use any Jabsco pump for petrol, petroleum products or any products with a flash point below 37°C (98°F).

## Multi-Outlet Water Pressure Systems



## 7-9. 36900, 36800, 36950

The original diaphragm water pressure pumps. Highly reliable, belt driven pumps with built in pulsation dampeners and flexible mounts for noise and vibration reduction. All three models can run dry. The 36900 gives 16 lpm (3.8 gpm), the 36800 gives 12.5 lpm (3 gpm) and the 36950 gives 11.4 lpm (2.7 gpm).

- ▼ 36900-0200 12 Volt dc.
- ▼ 36800-0200 12 Volt dc.
- ▼ 36950-2200 12 Volt dc.
- ▼ 36900-0210 24 Volt dc.
- ▼ 36800-0210 24 Volt dc.
- ▼ 36950-2210 24 Volt dc.

## 10. Pressurised 1 Litre Accumulator Tank

This tank comes complete with an internal membrane and valve - so its pressure can be fine tuned to your system and it can be mounted at any angle.

- ▼ 30573-0000

## 11. 8 Litre Accumulator Tank

Designed with the larger vessel in mind this steel bodied tank has an internal membrane, is completely adjustable and will hold a store of water under pressure sufficient for teeth brushing without the pump needing to start.

- ▼ 23240-2000

## 12. Pumpguards™

These compact pre filters prevent particles jamming valves and causing pump breakdowns - we've given them a screw off, transparent housing for easy inspection and quick, in place cleaning. Our new Universal model makes it easier than ever to install your pump by fitting directly into PAR-Max inlet port as well as benefiting from swivelled angled inlet port on a rotating body so inlet hose can approach from any direction!

- ▼ 46400-0000 Universal model for 13mm (1/2") id hose.
- ▼ 46400-0002 Inline model for 13mm (1/2") id hose.
- ▼ 46400-0004 Inline model for 13mm (1/2") female threads.
- ▼ 46400-0012 Model for 13mm (1/2") hose inlet 90° and direct plug into PAR-Max inlet port.
- ▼ 46400-0014 Model for 13mm (1/2") female threads inlet 90° and direct plug into PAR-Max inlet port.

### info

A modern marine pressurised water system is simple, quiet, easy to maintain and provides hot or cold water at the turn of a tap. It's also versatile enough to provide full flow or a trickle according to need.

**Diaphragm pumps** provide a quiet smooth flow of water with good pressure and are suitable for boats up to 18m (60ft) - simply choose a model suitable for the number of outlets on your boat.

Most systems need an **accumulator tank** to absorb pressure fluctuations and vibrations (which shorten pump life) and also to give better control of hot water systems.

## 13. Electric Galley Pump and Faucet

Economical and quiet centrifugal pump mounts below the water tank. Can be supplied with faucet with built-in pump switch. Flow rate of 3.8 lpm (1 gpm). Connections for 10mm (3/8") hose.

- ▼ 42510-0000 Pump 12 Volt dc.
- ▼ 42520-0000 Faucet.
- ▼ 42530-0000 Pump and faucet 12 Volt dc.

## 14. Topsider Galley Pump

Economical manual galley pump, easily fitted with instant self priming. Top mounting leaves maximum space under the counter top.

- ▼ 37220-1010

## 15. Aqua Filta™

Activated carbon water filter! We use more than 200 grammes of activated carbon to trap impurities, the design floods the water through the carbon from below improving its filtering ability. 180° rotating ports allow for more versatile installation, but most importantly we've made the annual replacement cheaper, easier and neater. Replacement is a simple job of changing a cartridge which is half the cost of a new unit! Internal valving means you don't need to drain the system down for replacement either!

- ▼ 59000-1000 Aqua Filta.
- ▼ 59100-0000 Replacement Cartridge.

## 16. Aqua Fresh!™

For fresh tasting, odour free drinking water from fibreglass, plastic or metal tanks. Simply deposit the contents of these handy packets into water tanks. Absolutely safe and non-toxic. 100% biodegradable earth-friendly formula.

- ▼ 830 Eight 0.6 kg (2 oz.) packets per box.

## 17. Aqua Clear®

For rust free water from potable water tanks. Forms a microscopic film over all surfaces it touches so that corrosion in metal pipes or tank is controlled. Colourless, odourless, harmless and non-toxic. 100% biodegradable earth-friendly formula.

- ▼ 835Q 946 ml (32 fl. oz.)



*Doesn't your boat deserve proper protection?*

## Non-Automatic Bilge Pumps

**Traditional non-automatic bilge pumps are operated by the use of a control switch to sense water and activate the pump. A selection of control and panel switches available can be found on the Bilge Switches and Controls page.**



1. Jabsco 450

2. Jabsco 750

3. Jabsco 1050

4. Jabsco 1950

5. Jabsco 3550

6. Rule 360

7. Rule 500

8. Rule 800

9. Rule 1100

10. Rule 1500

11. Rule 2000

12. Rule 3700

13. Rule 4000

### 1. Jabsco 450

Specifically designed for small craft, weekenders and speedboats, the new Jabsco 450 includes features normally found on much larger pumps such as anti airlock protection, stainless steel shafts and quiet operation. 19mm (3/4") discharge outlet. 1700 lph (375 gph) capacity at zero discharge head.

- ▼ 30220-2012 12 Volt dc.
- ▼ 30220-2024 24 Volt dc.

### 2. Jabsco 750

A new smaller pump from Jabsco with the high performance and quality of all our other models. The 750 is ideal for smaller cruisers wanting additional flow from their bilge pump. 19mm (3/4") discharge outlet. 2900 lph (625 gph) capacity at zero discharge head.

- ▼ 30222-2012 12 Volt dc.
- ▼ 30222-2024 24 Volt dc.

### 3. Jabsco 1050

The Jabsco 1050 is an exceptionally compact pump for its high output. Advanced design gives all the features expected in top of the range pumps whilst still having the ability to fit into the bilges of most smaller craft. 28mm (1 1/8") discharge outlet. 4050 lph (875 gph) capacity at zero discharge head.

- ▼ 30230-2012 12 Volt dc.
- ▼ 30230-2024 24 Volt dc.

### 4. Jabsco 1950

We developed the Jabsco 1950 from the largest selling higher capacity submersible bilge pump in the world to give high flow rates and long life pumping for mid sized yachts and motor cruisers. 28mm (1 1/8") discharge outlet. 7550 lph (1625 gph) capacity at zero discharge head.

- ▼ 30240-2012 12 Volt dc.
- ▼ 30240-2024 24 Volt dc.

### 5. Jabsco 3550

The really high capacity pump developed for larger yachts and commercial vessels. Rugged reliability and heavy duty construction ensure full performance at all times. 38mm (1 1/2") discharge outlet. 13000 lph (2800 gph) capacity at zero discharge head.

- ▼ 30250-2012 12 Volt dc.
- ▼ 30250-2024 24 Volt dc.

### 6. Rule 360

The Rule 360 provides outstanding quality and value. It is economically priced and designed for small boats. 19mm (3/4") discharge outlet. 1400 lph (300 gph) capacity at zero discharge head.

- ▼ 24 12 Volt dc.

### 7. Rule 500

The Rule 500 offers many design features while keeping size and cost to a minimum. Especially popular on smaller craft, Rule 500 pumps are unmatched in pumping power and longevity. 19mm (3/4") discharge outlet. 1925 lph (400 gph) capacity at zero discharge head.

- ▼ 25D 12 Volt dc.
- ▼ 26D 24 Volt dc.

### 8. Rule 800

Rule offers two 800 styles - square and round versions. The square model (20F) offers 36 mounting variations as well as a gas resistant strainer base. 19mm (3/4") discharge outlet. 3100 lph (650 gph) capacity at zero discharge head.

- ▼ 20F Square 12 Volt dc.
- ▼ 20R Round 12 Volt dc.
- ▼ 21R Round 24 Volt dc.

### 9. Rule 1100

The Rule 1100 offers impressive pumping power for its size and cost. Competitive models in this pumping range are much larger and far more expensive. 28mm (1 1/8") discharge outlet. 4250 lph (900 gph) capacity at zero discharge head.

- ▼ 27D 12 Volt dc.
- ▼ 28D 24 Volt dc.

### 10. Rule 1500

High pumping capacity and reliability at a lower cost. The Rule 1500 offers more pumping capacity and more exclusive design features than any comparable competitive pump. 28mm (1 1/8") discharge outlet. 5800 lph (1250 gph) capacity at zero discharge head.

- ▼ 02 12 Volt dc.
- ▼ 02-6 With 6' (1.8m) wire leads, 12 Volt dc.
- ▼ 03 24 Volt dc.

### 11. Rule 2000

Engineered to commercial standards. The Rule 2000 is the best selling high capacity submersible bilge pump in the world. 28.6mm (1 1/8") discharge outlet. 7750 lph (1675 gph) capacity at zero discharge head.

- ▼ 10 12 Volt dc.
- ▼ 10-6UL UL listed with 6' (1.8m) wire leads. 12 Volt dc.

### 12. Rule 3700

Heavy duty construction for both commercial and pleasure boat use; known for trouble free operation and reliability. 38mm (1 1/2") discharge outlet. 14350 lph (3100 gph) capacity at zero discharge head.

- ▼ 14A 12 Volt dc.
- ▼ 16A 24 Volt dc.

### 13. Rule 4000

Designed for the toughest applications, the 4000 pump optimises Rule's exclusive design features to produce the highest capacity available for a pump its size. 50mm (2") discharge outlet. 15500 lph (3350 gph) capacity at zero discharge head.

- ▼ 56D 12 Volt dc.
- ▼ 56D-24 24 Volt dc.



Photo: Sunseeker International Ltd

## Rule-Mate® Automated Bilge Pumps

The Rule-Mate® series of automated bilge pumps feature a pump and a non-mercury float switch in a single, compact housing. When the float rises, the pump turns on. There is no on/off cycling and therefore, no power use until the pump comes on. The pump remains on until the float drops and the pump senses no load against the impeller. Thoughtfully designed, Rule-Mate® pumps can be used in practically all bilge pumping applications.

### 1. Rule-Mate® 500

The smallest of the family offering 1925 lph (400 gph) capacity at zero discharge head. The compact size makes Rule-Mate® easy to fit - even in the smallest of bilge compartments. 19mm (3/4") discharge outlet.

- ▼ RM500 12 Volt dc.
- ▼ RM500-24 24 Volt dc.

### 2. Rule-Mate® 750

Ideal for small cruisers, Rule-Mate® 750 offers an impressive 2900 lph (625 gph) capacity at zero discharge head with 19mm (3/4") discharge outlet.

- ▼ RM750 12 Volt dc.
- ▼ RM750-24 24 Volt dc.

### 3. Rule-Mate® 1100

This mid-size model of Rule-Mate® offers an amazing 4250 lph (900 gph) capacity at zero discharge head yet impressively keeps the same compact size and footprint of the smaller models! 29mm (1 1/8") discharge outlet.

- ▼ RM1100 12 Volt dc.
- ▼ RM1100-24 24 Volt dc.

### 4. Rule-Mate® 1500

New high output model to the family offering a remarkable 5800 lph (1250 gph) capacity at zero discharge head. 29mm (1 1/8") discharge outlet.

- ▼ RM1500 12 Volt dc.

### 5. Rule-Mate® 2000

New high capacity model complete with all the benefits of Rule pumping technology. Offers an astounding 7750 lph (1675 gph) capacity at zero discharge head. 29mm (1 1/8") discharge outlet.

- ▼ RM2000 12 Volt dc.
- ▼ RM2000-24 24 Volt dc.

## Rule Automatic Bilge Pumps

Float switches are not required for these fully automatic pumps. Controlled by computerised operation, the pump will turn on every 2.5 minutes for about 1 second to sense for water. If water is present, the pump will sense resistance and continue to run until all water is removed. Power use in the checking mode is minimal for the peace of mind that this range of pumps offer.

### 6. Rule Automatic 500

Compact, efficient and offers 1925 lph (400 gph) capacity at zero discharge head. 19mm (3/4") discharge outlet.

- ▼ 255 12 Volt dc.
- ▼ 255-24 24 Volt dc.

### 7. Rule Automatic 800

Expanding on Rule's computerised pump technology, Rule introduces the 3100 lph (650 gph) fully automatic bilge pump. The 800 series now completes our line of fully automatic pumps ranging from 1925 lph (400 gph) up to 3100 lph (650 gph). The 800 series offers increased capacity over our 500 Series while maintaining the 19mm (3/4") discharge.

- ▼ 20RS 12 Volt dc.

### 8. Rule Automatic 1100

Impressive pumping power for its size and cost, offering up to 4250 lph (900 gph) capacity at zero discharge head. 29mm (1 1/8") discharge outlet.

- ▼ 27S 12 Volt dc.

### 9. Rule Automatic 1500

Reliable, efficient and offers 5800 lph (1250 gph) capacity at zero discharge head. 29mm (1 1/8") discharge outlet.

- ▼ 51S 12 Volt dc.

### 10. Rule Automatic 2000

Very popular mid range submersible pump offering 7750 lph (1675 gph) capacity at zero discharge head. 29mm (1 1/8") discharge outlet

- ▼ 53S 12 Volt dc.

### 11. Rule Automatic 3700

Heavy duty construction for both commercial and pleasure boat use offering 14350 lph (3100 gph) capacity at zero discharge head. 38mm (1 1/2") discharge outlet.

- ▼ 55S 12 Volt dc.

### 12. Rule Automatic 4000

Highest capacity available for a pump of its size, offering an astounding 15500 lph (3350 gph) capacity at zero discharge head. 38mm (1 1/2") discharge outlet.

- ▼ 56S 12 Volt dc.

1. Rule-Mate® 500



2. Rule-Mate® 750

3. Rule-Mate® 1100



4. Rule-Mate® 1500



5. Rule-Mate® 2000



6. Rule Automatic 500



7. Rule Automatic 800



8. Rule Automatic 1100



9. Rule Automatic 1500



10. Rule Automatic 2000



11. Rule Automatic 3700



12. Rule Automatic 4000



## WARNING

DO NOT use any Jabsco or Rule pump for petrol, petroleum products or any products with a flash point below 37°C (98°F).

1. PAR Max 4



2. Shower Drain/Bilge Pump



3-5. PAR Diaphragm Bilge Pumps



6. Water Puppy



7. Maxi Puppy



8. Utility Puppy 2000



9. Utility Puppy 3000



10. Clutch Pumps

# Self Priming Bilge Pumps

## 1. PAR-Max 4

New generation, continuous rated bilge pump with waterproof coating for harsh environments. 978 lph (258 gph) open flow output. Diaphragm design allows extended dry running. Build-in thermal overload protection. Complete with Pumpgard™ strainer.

- ▼ 31705-0092 12 Volt dc, fuse 10 amp.
- ▼ 31705-0094 24 Volt dc, fuse 7 amp.

## 2. Shower Drain/Bilge Pump

New and updated version of the famous 37202, the best selling small bilge and shower sump pump in the world. Now fully corrosion resistant and quiet running. 780 lph output and self priming to 2m (6ft). Supplied with Pumpgard™ strainer.

- ▼ 37202-2012 12 Volt dc.
- ▼ 37202-2024 24 Volt dc.

## 3-5. PAR Diaphragm Bilge Pumps

The original belt driven diaphragm pumps, Self priming and dry running. Belt drives, rubber mounting and internal pulsation dampeners reduce noise and vibration. The 34600 gives 2450 lph (540 gph), the 36600 1800 lph (400 gph) and the 36680 1250 lph (275 gph).

- ▼ 34600-0000 12 Volt dc.
- ▼ 34600-0010 24 Volt dc.
- ▼ 36600-0000 12 Volt dc.
- ▼ 36600-0010 24 Volt dc.
- ▼ 36680-2000 12 Volt dc.
- ▼ 36680-2010 24 Volt dc.

## 6. Water Puppy

The workhorse of our range! Designed for bilge pumping, or general transfer duty. Self priming up to 1.2m (4ft), with an output of 1920lph (420gph).

- ▼ 23680-4003 12 Volt dc.
- ▼ 23680-4103 24 Volt dc.

## 7. Maxi Puppy

A high pressure and flow pump for bilge pumping and deckwash. Self priming up to 2.4m (8ft) with an output of 2640 lph (580 gph). It's built to last with a bronze pump head and oil resistant nitrile impeller.

- ▼ 23610-3003 12 Volt dc.
- ▼ 23610-3103 24 Volt dc.

## 8. Utility Puppy 2000

This pump gives the same performance in all aspects as the Water Puppy but its clever pump design means it will run dry for up to 20 minutes without damage.

- ▼ 23920-2403 12 Volt dc.
- ▼ 23920-2503 24 Volt dc.

## 9. Utility Puppy 3000

The heavy duty Puppy pump. Suitable for commercial applications or prolonged hard use. Flow and performance are as per the Maxi Puppy, but the Utility Puppy 3000 boasts ten minutes dry running and an indestructible mechanical seal for long life.

- ▼ 23920-2313 12 Volt dc.
- ▼ 23920-2312 24 Volt dc.

## 10. Clutch Pumps

Jabsco clutch pumps are used world-wide for firefighting, bilge pumping, ballast transfer, emergency pumping and high capacity deckwash, so, if you're travelling offshore, working professionally or simply want the most enduring high output pump available read on!

Engine driven; these pumps give flow rates of up to 22,000 lph (4900 gph) at 2000 rpm. Easy to service and maintain, bilge debris and oil present no problems to these robust bronze bodied flexible impeller pumps. We manufacture clutch pumps with 1", 1 1/2" and 2" ports with manual or electromagnetic clutches.

Proven time and again from Volvo and BOC Round the World Race Boats to deep sea trawlers. Please consult your Jabsco dealer to select the model most suited to your needs and engine installation.

## WARNING

**DO NOT use any Jabsco pump for petrol, petroleum products or any products with a flash point below 37°C (98°F).**

### info

**Self Priming** means a pump can draw fluid up to itself. Where we quote self priming distances, they are the maximum vertical distance a pump can self prime.



Photo: Sunseeker International Ltd

# Manual Bilge Pumps

## 11. Amazon Warrior

If you have a larger yacht or commercial craft then the Warrior is for you. Made from robust alloy with twin diaphragms for added safety, the Warrior is capable of an amazing 135 lpm (30 gpm) and has a big 45cm (18") handle for easy pumping whether mounted on or through deck.

- ▼ 29280-0000 Warrior 38mm (1½") hose.
- ▼ 29279-0000 Optional Through Deck Kit.
- ▼ 29289-0000 Under deck bracket (required for installation with 29279-0000)

## 12. Amazon Universal

Our most versatile manual bilge pump which can be mounted on or through the bulkhead or deck. Designed for larger and medium sized boats with a flow rate of up to 100 lpm (22 gpm) the Universal is equally good at emptying holding tanks and has excellent solids handling ability.

- ▼ 29270-0000 Universal 38mm (1½") hose.
- ▼ 29279-0000 Optional through deck kit.

## 13. Amazon ThruDeck

The ThruDeck is available with 25mm (1") or 38mm (1½") ports giving 50 lpm (11gpm) or 75 lpm (17.5 gpm) output. The design allows unlimited variation of port direction and easy access to the whole pump chamber and valves.

- ▼ 29250-0000 25mm (1") hose.
- ▼ 29250-0010 38mm (1½") hose.

## 14. Amazon Bulkhead

The smallest pump in our range designed specifically for smaller boats but still giving a powerful output of 45 lpm (10 gpm). Suitable for mounting on bulkhead or deck it has multi-positioned ports and body which give an amazing 96 assembly variations.

- ▼ 29240-0000 25mm (1") hose.

## 15. Bilge Strainers

Strainers prevent bilge debris from blocking pump inlet hose and are fitted with a non-return valve to stop backflow of water into the bilge. Available for both 19mm, 25mm and 38mm (¾", 1" and 1½") hose. Outlet ports can be positioned from horizontal to vertical.

- ▼ 29290-0020 19mm (¾") hose.
- ▼ 29290-0000 25mm (1") hose.
- ▼ 29290-0010 38mm (1½") hose.

## 16. Non-return Valves

Non-return valves help priming and prevent backflow of water into the bilge. There are three sizes for 19mm, 25mm and 38mm (¾", 1" and 1½") hose.

- ▼ 29295-0011 19mm (¾") hose.
- ▼ 29295-0000 25mm (1") hose.
- ▼ 29295-0010 38mm (1½") hose.

11. Amazon Warrior



12. Amazon Universal



13. Amazon ThruDeck



14. Amazon Bulkhead



15. Bilge Strainers



16. Non-return Valves



### info

One essential component for any boat is a **Manual Bilge Pump** mounted in a position where it can be worked comfortably for long periods of time. Yacht racing rules state that at least one pump must be capable of being pumped from the cockpit with all hatches shut, and the best way to accomplish this is with a through deck kit which allows the pump to be installed safely below decks whilst the operator pumps from above. A well designed manual pump is very hard to block due to its large bore hose and valves and one piece diaphragm.

There are a variety of electric powered pumps available, each type has its own advantages and it's wise to know what a pump can and can't do to simplify selection of the correct model and size for your boat. Remember, electric pumps can be installed with an automatic bilge switch for unattended operation.

**Submersible Pumps** are specifically designed to be fitted in the lowest part of the bilge. These electric Centrifugal Pumps are extremely economical to buy and have huge flow rates. However, flow rates decrease more rapidly than other pump types as the discharge head increases, so do check our recommended maximum discharge heads and if in doubt always go up a size.

There are 2 types of self priming electrical pumps available - **Diaphragm** and **Flexible Impeller**. All self priming pumps can be mounted well away from damp or wet areas where they can be kept dry and easily maintained.

**Diaphragm Pumps** can be run dry for extended periods and so be used to Hoover up the last drops of water - especially useful on more modern hull types with shallower bilges.

The rugged simplicity of **Flexible Impeller Pumps** means they can handle bilge debris and are very easy to service, many yachtsmen are still using twenty five year old Water Puppies! But remember Flexible Impeller pumps cannot be run dry or you will damage the Impeller.

Chosen by professional mariners the world over Jabsco **Clutch Pumps** will last you a lifetime. They're not the cheapest to buy or install but they pump huge volumes, pass bilge debris and double as firefighting or deckwash pumps. As with all Flexible Impeller pumps they're easy to service but must not be run dry. Belt driven from your engine they are available with either manual or electromagnetic clutch for remote control.

# Bilge Switches and Controls

1. Bilge Pumpgard™ Strainers



1. **Bilge Pumpgard™ Strainers**

Inlet Strainer protects all electric diaphragm pumps. Pre-filter protects all electric diaphragm bilge pumps. Prevents unnecessary pump breakdowns caused by particles in the water. Transparent housing allows instant inspection. 46200-0000 model installs in-line between bilge strainer and pump. Quick in-place cleaning of the 20 mesh stainless steel filter screen.

- ▼ 46200-0000 Model for 19mm (3/4") id hose.
- ▼ 46200-0010 Model for 19mm (3/4") id hose, 90 degree inlet & direct plug into PAR-Max inlet port.



2. Jabsco CS20 Automatic Float Switch

2. **Jabsco CS20 Automatic Float Switch**

Automatic on/off control of any 12, 24 or 32 Volt dc electric bilge pump or alarm up to 20 amps. Integral guard protects against jamming in either on or off position by bilge debris. Clever switch design prevents rapid on/off cycling.

- ▼ 30297-2000 CS 20 Float Switch and Guard.

3. RS-14 Float Switch



3. **RS-14 Float Switch**

Float switch to automatically operate 12, 24 or even 32 Volt bilge pumps or alarms. For any bilge pump drawing up to 14 amps this switch offers dependable pump operation from its fully sealed components. Cover is available separately to guard against accidental jamming on of the switch by bilge debris.

- ▼ 30295-2000 Switch 12/24/32 Volt.
- ▼ 30294-2000 Cover.



4. Jabsco Hydro Air Switch

4. **Jabsco Hydro Air Switch**

Simply the most reliable automatic bilge switch available. Its unique design ensures no working parts need be located in the bilge. Rising bilge water pressurises air in the bell and tube and so activates the diaphragm switch. Innovative design, modern styling, and corrosion proof materials make the new Hydro Air the choice of anyone seeking long life and total reliability.

- ▼ 59400-0012 12 Volt dc.
- ▼ 59400-0024 24 Volt dc.

5. Jabsco Bilge Control Switch



5. **Jabsco Bilge Control Switch**

Our economy switch panel, designed for control of any 12 or 24 Volt dc bilge pump operated via float or 'Hydro Air' switches. The three way rocker switch is lit when the automatic mode is selected, there is also an option of manual override.

- ▼ 29145-0012 12 Volt dc.
- ▼ 29145-0024 24 Volt dc.



6. Jabsco Bilgemaster

6. **Jabsco Bilgemaster**

Designed to control any pump (12 or 24V up to 30 amps) operated via an automatic switch. 3 way switch with automatic "off" or "on" positions. An amber light shows when automatic is selected and a red light shows when the pump is operating. It's even water resistant and so can be mounted in exposed positions.

- ▼ 29140-0000

7. Vacuum Switch



7. **Vacuum Switch**

Especially useful to protect your Flexible Impeller pumps from damage through extended periods of dry running. The Vacuum Switch mounts directly to some Jabsco pumps and cuts power to the motor when there is no fluid in the inlet pipework. Suitable for both 12 and 24 Volt pumps.

- ▼ 4732-0000 Vacuum Switch.

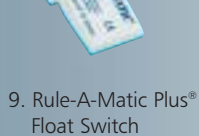


8. Rule-A-Matic® Float Switch

8. **Rule-A-Matic® Float Switch**

Year after year, the Rule-A-Matic® is the switch of choice of most selective yachtsmen, commercial fishermen, and boat builders the world over, which has made the Rule-A-Matic® the best selling float switch in the world. For use with pumps drawing up to 14 amps.

- ▼ 35 Rule-A-Matic®.
- ▼ 36 Switch Guard.



9. Rule-A-Matic Plus® Float Switch

9. **Rule-A-Matic Plus® Float Switch**

Compact, sleek and rugged, the Rule-A-Matic Plus® Float Switch has a strong, fully integrated, impact resistant cover, which protects against debris and jamming. New highly abrasion resistant wires exit the top keeping them out of the water and keeping wear and tear to a minimum. For use with pumps drawing up to 20 amps.

- ▼ 40 Rule-A-Matic Plus® Float Switch.



10. Rule 3-Way Rocker Panel Switch

10. **Rule 3-Way Rocker Panel Switch**

Controls any pump equipped with an automatic float switch. This unit features a black plastic panel, has a built-in fuse holder and an internally lit rocker switch with 3 positions (automatic, off, or manual) with the Rule "fail-safe" spring return to "off" from the "manual" position.

- ▼ 43 12 Volt dc.
- ▼ 44 24/32 Volt dc.

11. Automatic® Bilge Cleaner



11. **Automatic® Bilge Cleaner**

Heavy duty, concentrated formula for the toughest jobs. Protects hull from costly deterioration. Dissolves, emulsifies and combines grease, oil and scum with bilge water. Automatically reaches the most difficult places with the roll of the boat. Kills bilge odour; saves scrubbing time. 98% biodegradable earth-friendly formula.

- ▼ 800Q 946 ml (32 fl. oz.)





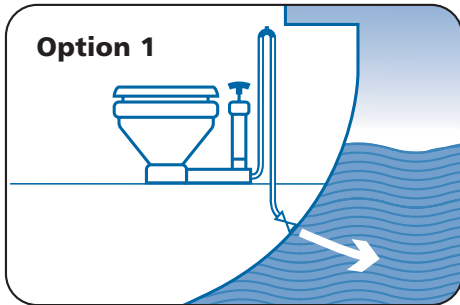
# Toilet & Waste Systems



Photo: Fairline Boats plc

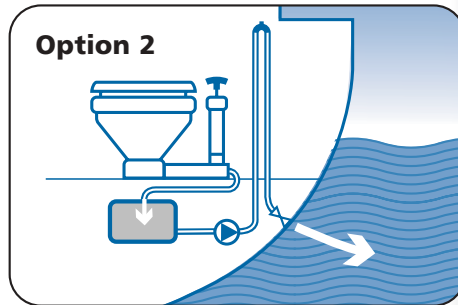
**At Jabsco we are the world's largest manufacturers and suppliers of small craft marine toilets - so we've built a fair degree of experience in heads systems and their design and installation.**

We at Jabsco all understand the importance of keeping the environment clean and free from waste. However it is unfortunate that there is no internationally accepted legislation to guide us on how to deal with the waste from our toilet systems. For this reason Jabsco have produced this guide which details the four most common ways of dealing with toilet waste. It is important to note that your choice of system may be governed by your own national and local rules and regulations.



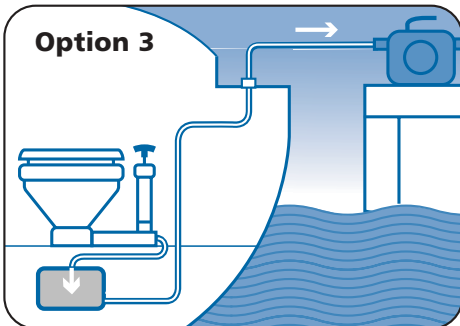
**Option 1**

Discharge waste directly into a non-restricted area of water using the toilet's own pump and an anti-syphon loop.



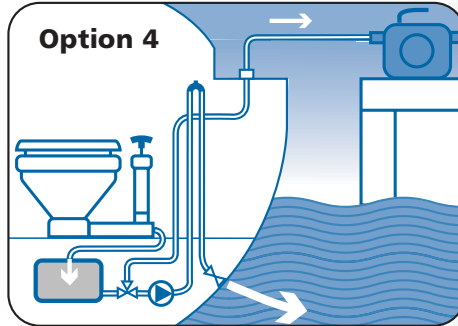
**Option 2**

Collect waste in an on-board holding tank so that it can be discharged later when you are in un-restricted waters using an electric or manual pump.



**Option 3**

Collect waste in an on-board holding tank for discharge later to a Shore Station using a dockside suction pump or portable utility pump.



**Option 4**

A combination of Option 2 and 3 to give you the flexibility of discharging waste wherever most convenient and without risk to the environment.



Manual Toilet



Electric Toilet



Designer Style Electric Toilet



29015 Vented Loop



38110 Waste Holding Tank



53080 Utility Pump



18590 Macerator



45490 Y Valve



59090 Waste Diaphragm Pump

# Toilet & Waste Systems



1. Compact & Regular Manual Toilets



Piston Rod Assembly



2. Conversion Kit - Manual to Electric



3. Economy Electric Compact & Regular Toilets

## 1. Compact & Regular Manual Toilets

The World's No. 1 Marine Toilet is now better than ever! - Better looking! - Stronger! - Easier to maintain!

- New wider seal housing offers easy access to the pump cylinder, simplifying maintenance, as well as quick, clean, seal replacement.
- Contoured handle and flush control lever conveniently positioned.
- Powerful swirl action for efficient flushing.
- Hygienic pure white vitreous china bowl for ease of cleaning.
- Choose Regular size bowl for added comfort and convenience, or Compact size when space is at a premium.
- Constant 38mm bore waste pipe.
- Crevice free contours and smooth mouldings for added hygiene.
- Reversible pump mounting for choice of right or left handed installation.
- New style seat and lid, ergonomically designed to improve the appearance and comfort of the toilet.
- Automatic vacuum breaker.
- Powerful self-priming pump for above or below waterline installation.
- Angled pump housing and long stroke for ease of operation.
- Multi-angled discharge elbow contributes to ease of installation.

- ▼ 29090-2000 Compact Bowl.
- ▼ 29120-2000 Regular Bowl.

## 2. Conversion Kit - Manual to Electric

Simple to install - Our Conversions replace the pump on your existing manual toilet using your current hose. Child's play to use - a spring return knob has two positions, one for bowl emptying and the other for bowl emptying and flushing. Supplied as standard to fit our Manual Toilets, adaptors can be supplied for many other manual toilets.

- ▼ 29200-0120 12 Volt dc.
- ▼ 29200-0240 24 Volt dc.
- ▼ 29060-0000 Adaptor to fit Brydon Boy and PAR 59128, RM69, Mansfield and Sealand 751, Simpson Lawrence 444, standard and large bowl models.
- ▼ 29080-0000 Adaptor to fit Groco HE, Groco HF.
- ▼ 29110-0000 Adaptor to fit Raritan Compact, Raritan PHII, Sealand 752.
- ▼ 29125-0000 Adaptor to fit Groco HC, Mansfield 750.
- ▼ 29128-0000 Adaptor to fit Wilcox Crittenden Head Mate 1460, Wilcox Crittenden Winner R4042C.

## 3. Economy Electric Compact & Regular Toilets

Our traditional style Electric Toilet. Self priming up to 1.2m (4ft) and can discharge through a maximum vertical head of 1.2m (4ft). Comes complete with a moulded splashguard and a simple switch. Available in Compact or Regular bowl sizes.

- ▼ 37010-0090 Compact bowl 12 Volt dc.
- ▼ 37010-0096 Compact bowl 24 Volt dc.
- ▼ 37010-1090 Regular bowl 12 Volt dc.
- ▼ 37010-1096 Regular bowl 24 Volt dc.

### info

At Jabsco we are the world's largest manufacturers and suppliers of small craft Marine Toilets - so we've built a fair degree of experience in waste systems and their design and installation.

With modern design and materials, **Manual Toilets** are easy to service, clean to use, and offer extremely good value for money. Remember there are two bowl sizes available and it's well worth checking how much space is available in your heads compartment for the comfort of a full sized bowl. Manual toilets can now be upgraded to electric operation by the use of our **Conversion**. This has been designed to bolt directly in place of the manual pump and use the same pipework already installed. A normal crew of four can expect to use less than one amp per day through electric toilet use.

37010-Series **Electric Toilets** have the motor sited at the rear of a narrow base, which gives a clean appearance from the front, and its push button control makes life simpler for newcomers and experienced crews alike.

Our **Quiet Flush Toilets** offer a new dimension in sophistication - water level can be adjusted to suit your

needs via a three way switch and by using a remote mounted pump and quiet diaphragm pump we have drastically reduced noise levels.

Our **Designer Style Toilets** combine all the sophistication of our Quiet Flush Toilets with a modern vitreous china exterior that hides all the working parts, so that you can enjoy the same style afloat as ashore. The Regular 17" high model is complemented by the lower Compact 14" model, ideal when space is at a premium.

Whichever toilet you choose you need to make sure your installation is fully in-line with local regulations concerning discharge. Many areas will heavily fine anyone caught discharging overboard. This means you need to install a **Holding Tank** to empty into until you can discharge into a dockside pump out station or directly overboard further out to sea. **Macerator Pumps** are designed to empty your holding tanks and include a cutter to grind waste down to small particle size. Choose a model suited to your tank size, or use a **Manual Pump** suitable for the purpose such as the Amazon Universal.

## 4. Quiet Flush Electric Toilets

We've used our long experience of electric toilets to dramatically reduce noise levels when the toilet is flushed - the Quiet Flush Toilet uses a remote mounted diaphragm pump to bring in flushing water. What's more, a new three-way switch allows operation of either the flush, or discharge pump, or both together, allowing water level to be adjusted for user comfort!

We supply Quiet Flush Toilets in either Regular or Compact bowl sizes, and in two models - either with their own intake pump for external water flushing, or with a special solenoid valve & syphon breaker to prevent contamination for those who prefer to connect to their drinking water pressure pump.

- ▼ **37045-0092** Compact bowl with solenoid valve 12 Volt dc.
- ▼ **37045-0094** Compact bowl with solenoid valve 24 Volt dc.
- ▼ **37045-1092** Regular bowl with solenoid valve 12 Volt dc.
- ▼ **37045-1094** Regular bowl with solenoid valve 24 Volt dc.
- ▼ **37245-0092** Compact bowl with in-take pump 12 Volt dc.
- ▼ **37245-0094** Compact bowl with in-take pump 24 Volt dc.
- ▼ **37245-1092** Regular bowl with in-take pump 12 Volt dc.
- ▼ **37245-1094** Regular bowl with in-take pump 24 Volt dc.

## 5. Quiet Flush Conversion Kit

If you already have our traditional 37010 Electric Toilet, our Quiet Flush Conversion Kit will give you all the benefits of our latest models - quiet operation, three-way switch for adjustable water level, plus the choice between fresh or raw water flushing.

- ▼ **37055-0092** Conversion kit with solenoid valve 12 Volt dc.
- ▼ **37055-0094** Conversion kit with solenoid valve 24 Volt dc.
- ▼ **37255-0092** Conversion kit with in-take pump 12 Volt dc.
- ▼ **37255-0094** Conversion kit with in-take pump 24 Volt dc.



## 6. DS14 & DS17 Designer Style Electric Toilets

Our Designer Style Toilets bring a new standard of appearance, quietness and ease of operation to affordable marine toilets. They combine all the sophistication of our Quiet Flush Toilets with a modern vitreous china exterior that fits neatly against a vertical bulkhead and conceals all wiring and plumbing, so that you can enjoy the same style afloat as ashore.

The Regular 17" high model is complemented by the lower Compact 14" model, ideal when space is at a premium. The same three way control system used in Quiet Flush Toilets enables the water level to be raised, lowered, flushed and discharged according to need. As with Quiet Flush, you have a choice of flushing with external water or drinking water.

- ▼ **37075-0092** Compact 14" height with solenoid valve 12 Volt dc.
- ▼ **37075-0094** Compact 14" height with solenoid valve 24 Volt dc.
- ▼ **37075-1092** Regular 17" height with solenoid valve 12 Volt dc.
- ▼ **37075-1094** Regular 17" height with solenoid valve 24 Volt dc.
- ▼ **37275-0092** Compact 14" height with in-take pump 12 Volt dc.
- ▼ **37275-0094** Compact 14" height with in-take pump 24 Volt dc.
- ▼ **37275-1092** Regular 17" height with in-take pump 12 Volt dc.
- ▼ **37275-1094** Regular 17" height with in-take pump 24 Volt dc.



4. Quiet Flush Electric Toilet (with solenoid valve)



4. Quiet Flush Electric Toilet (with pump)



5. Quiet Flush Conversion Kit



6. DS14 Designer Style Electric Toilet



6. DS17 Designer Style Electric Toilet

# Pumps and Accessories

1. Run-Dry Macerator Waste Pump



## 1. Run-Dry Macerator Waste Pump

The ideal answer to simple holding tank pump out. The 18590 macerator grinds waste into small particles so it easily passes through the 25mm (1") discharge port. Can discharge tanks up to 600 litres (130 gallons) in one operation and self primes up to 1.2m (4ft). In addition to these features the Jabsco Macerator is now fitted with an exclusive (patent pending) Run-Dry Protection Device. This new feature makes accidental run-dry impeller damage a thing of the past.

- ▼ 18590-1090 12 Volt dc.
- ▼ 18590-1091 24 Volt dc.

2. Waste Diaphragm Pump



## 2. Waste Diaphragm Pump

Our electric diaphragm pump is designed to empty holding tanks, handle solids with ease, and be extremely quiet in operation. Can discharge tanks up to 750 litres (160 gallons) in one operation and self primes up to 2m (6ft).

- ▼ 59090-0092 12 Volt dc.
- ▼ 59090-0094 24 Volt dc.

3. Utility Pumps



## 3. Utility Pumps

These heavy duty AC pumps are suitable for dockside pump out or general duty applications, with all the benefits of a flexible impeller pump.

- ▼ 53080-2063 220 Volt(50Hz)  
30 minute dry running ability.
- ▼ 6050-0003 115/230 Volt (60Hz)  
Open, drip proof motor.
- ▼ 6050-0013 115/230 Volt (60Hz)  
Totally enclosed, fan cooled motor.

4. Waste Holding Tank



## 4. Waste Holding Tank

A compact and rugged 23 litre (5 gallon) holding tank for small craft and overnights, supplied ready to install, with inlet, vent and outlet connections and mounting straps.

- ▼ 38110-0000

5. Solenoid Valve for Electric Toilets



## 5. Solenoid Valve for Electric Toilets

This Solenoid Valve is designed for 37010 Electric Toilets fitted with a vented loop on the inlet pipework which can restrict priming and flow. The solenoid valve is controlled by the toilet operation switch, restoring full performance.

- ▼ 37068-0000 Solenoid valve for 37010 electric toilets.  
For use with: 29015-0000 19mm (3/4")  
Vented Loop.

6. Vented Loops



## 6. Vented Loops

Vented loops guard against the danger of water syphoning over pipework loops in below the waterline installations of toilets and bilge pumps.

- ▼ 29015-0000 19mm (3/4") model.
- ▼ 29015-0020 25mm (1") model.
- ▼ 29015-0010 38mm (1 1/2") model.

7. Y-Valve



## 7. Y-Valve

This robust Y-Valve allows waste to be pumped directly overboard or into a holding tank. Rotating discharge ports simplifies installation. Both 25mm (1") and 38mm (1 1/2") inlet ports are included. Can be operated through a bulkhead using optional shaft extension and can be padlocked so that waste can only go to the holding tank to comply with some local regulations.

- ▼ 45490-1000 Y-Valve.
- ▼ 45500-1000 Extension for through-bulkhead operation.

8. Toilet Pumpgard™



## 8. Toilet Pumpgard™

The Pumpgard™ inlet strainer protects manual or electric toilets from pump malfunctions caused by debris. Connections for 19mm (3/4") hose. Quick in-place cleaning.

- ▼ 46400-0000 Toilet Pumpgard™.

9. Marine Toilet Conditioner



## 9. Marine Toilet Conditioner

Cleans, lubricates and deodorises. Keeps all parts of the marine toilet clean and in efficient working condition. Contains a special non-mineral oil that will not harm leather, rubber or fittings. Conditions by impregnating and lubricating all parts. Eliminates rather than masks odours. Non-caustic. For use with fresh or salt water. 95% biodegradable earth-friendly formula.

- ▼ 825Q 946 ml (32 fl. oz.)

10. Inlet Non-return Valve



## 10. Inlet Non-return Valve

A check valve gives quicker and easier flushing response on many manual and 37010-Series electric toilet installations. Simple fit in inlet suction hose, close to seacock.

- ▼ 29295-0011 19mm (3/4") Inlet Non-Return Valve.



Photo: Princess Yachts

Keep fumes and odours at bay



Photo: Fairline Boats plc

## 1. Jabsco Compact In-Line Blowers

Jabsco's range of high efficiency continuous duty in-take or extraction blowers are ideal for bilges, engine compartments, galleys and heads. These blowers feature our exclusive front and rear shaft seals and corrosion resistant motor housings for long life.

For 3.8m<sup>3</sup>/min (135 cfm) output.

- ▼ 30480-0000 12 Volt dc.
- ▼ 30480-0024 24 Volt dc.

For 6.7m<sup>3</sup>/min (235 cfm) output.

- ▼ 30500-0000 12 Volt dc.
- ▼ 30500-0024 24 Volt dc.

## 2. Jabsco Heavy Duty Flangemount & Flexmount Blowers

Our heavy duty blowers are available in either Flange or Flexmount form. Motor life of 5,000 hours is guaranteed for service in the toughest conditions. Designed for use wherever continuous ventilation is required. Outputs of 7.1m<sup>3</sup>/min (250 cfm). We also make a range of 115 and 220 Volt AC heavy duty blowers for general air circulation. These are not ignition protected and therefore not suitable for petrol or other explosive vapours, or for installation where they may be present.

- ▼ 35760-0092 12 Volt dc Flangemount.
- ▼ 35760-0094 24 Volt dc Flangemount.
- ▼ 35770-0092 12 Volt dc Flexmount.
- ▼ 35770-0094 24 Volt dc Flexmount.
- ▼ 36760-0115 115 Volt ac Flangemount.
- ▼ 36760-0220 220 Volt ac Flangemount.
- ▼ 36770-0115 115 Volt ac Flexmount.
- ▼ 36770-0220 220 Volt ac Flexmount.

## 3. Jabsco Flexmount Blowers

Designed to allow easy connection to ducting with corrosion resistant material throughout. Three sizes are available, with outputs of 3m<sup>3</sup>/min (105 cfm) (12V only), 4.2m<sup>3</sup>/min (150 cfm) (12 and 24V) and 7.1m<sup>3</sup>/min (250 cfm) (12 and 24V). The largest models are for 100mm (4") ducting and the two smaller variants have ports for 75mm (3") ducting.

- ▼ 35515-0010 3m<sup>3</sup>/min output, 12 Volt dc.
- ▼ 36740-0000 4.2m<sup>3</sup>/min output, 12 Volt dc.
- ▼ 36740-0010 4.2m<sup>3</sup>/min output, 24 Volt dc.
- ▼ 35440-0000 7.1m<sup>3</sup>/min output, 12 Volt dc.
- ▼ 35440-0010 7.1m<sup>3</sup>/min output, 24 Volt dc.

## 4. Jabsco Flangemount Blowers

Flangemount Blowers are available in the same sizes and outputs as Flexmount models and offer the same advantages of quiet running and low amp draw.

- ▼ 35115-0020 3m<sup>3</sup>/min output, 12 Volt dc.
- ▼ 34739-0010 4.2m<sup>3</sup>/min output, 12 Volt dc.
- ▼ 34739-0020 4.2m<sup>3</sup>/min output, 24 Volt dc.
- ▼ 35400-0000 7.1m<sup>3</sup>/min output, 12 Volt dc.
- ▼ 35400-0010 7.1m<sup>3</sup>/min output, 24 Volt dc.

## 5. Rule® In-line Blowers

Rule® in-line blowers provide ventilation for bilges, engine compartments, galleys and heads. Designed for efficient, high output operation, these blowers feature our exclusive front and rear shaft seals and corrosion resistant motor housings for long life. Compact and easily installed on any flat surface, Rule® in-line blowers provide higher air flow, lower amp draw and quieter operation than standard blowers.

For 3.8m<sup>3</sup>/min (135 cfm) output.

- ▼ 140 12 Volt dc.
- ▼ 140-24V 24 Volt dc.

For 6.7m<sup>3</sup>/min (235 cfm) output.

- ▼ 240 12 Volt dc.
- ▼ 240-24V 24 Volt dc.

### 1. Jabsco Compact In-Line Blowers



### 2. Jabsco Heavy Duty Flangemount Blower



2. Jabsco Heavy Duty Flexmount Blower

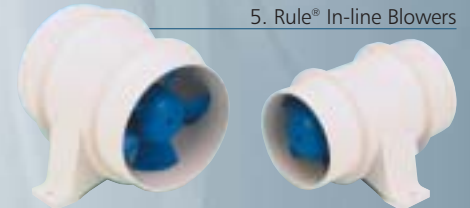
### 3. Jabsco Flexmount Blowers



4. Jabsco Flangemount Blowers



5. Rule® In-line Blowers



### info

Most Blowers were designed to remove fuel vapours and fumes from the engine compartments of petrol engined boats prior to start up, and to extract fumes and odours from galleys and heads, but they are not suitable for use as permanent ventilation units. However, our **Heavy Duty Blowers** have been designed specifically for the many people who want a ventilator to boost the supply or extraction of air from engine rooms whenever their engine is running. Their extra long life and heavy duty materials make them the correct choice whenever continuous duty is required.

Most simple installations use **In-Line Blowers** as they are the most economical and compact type available and still give high outputs. If however your ducting run is longer and likely to bend around obstructions you'll need a Radial Blower. Two types are available, **Flangemount** and **Flexmount**. **Flangemount Blowers** bolt directly to a bulkhead (with the discharge piping on the other side) to give a very neat installation. **Flexmount Blowers** are supplied with a mounting bracket inside which can be rotated to allow the most convenient ducting routes in confined spaces.



# Compasses from DANFORTH™

For a full range ask for our Compass Catalogue



1. Quest™



## 1. Quest™

Whether your fun takes you on the water or off-road, the new Danforth® Quest™ compass will point the way. The Quest™ Compass's unique bracket design provides the versatility to mount your compass at any angle—on horizontal, vertical and even overhead surfaces. Our exclusive NO-SPIN card technology gives you guaranteed accuracy and rock-steady readings in a small, sporty size. Hi-flux corrector magnets provide the added measure of adjustment often required for automobile, RV, ATV, snowmobile and certain marine installations. 12 Volt dc red night illumination is standard.

- ▼ **A91** Front Read, Black Finish. Bracket mount with Hood
- ▼ **A91G** Front Read, Blue Card, Gray Finish, Bracket mount with Hood.
- ▼ **A91W** Front Read, White Card, White Finish, Bracket mount with Hood.

2. Skipper™ Flush Mount



- ▼ **C100** Front Read, Black Card, Black Finish.
- ▼ **C101** Front Read, Blue Card, White Finish.
- ▼ **C102** Front Read, Blue Card, Gray Finish.
- ▼ **C103** Front Read, Black Card, Yellow Finish.

## 4. Skipper™ II Surface Mount

A93 features a unique swivel base for mounting on angled surfaces. A121 can be mounted on curved surfaces and can be easily removed for storage.

- ▼ **A93B** Front Read, Black Finish.
- ▼ **A93G** Front Read, Blue Card, Gray Finish.
- ▼ **A93W** Front Read, White Finish.
- ▼ **A121** Front Read, Black Finish.

3. Skipper™ Bracket Mount



## Skipper™ II Series

Skipper™ compasses have exclusive guaranteed no-spin front reading GLOBALBalance™ cards with 5° graduations for stable readings at high speeds or in rough weather. Full 30° card tilt angle. Other features include large illuminated 67mm (2 7/8") acrylic dome and high visibility bright yellow or red lubber line. All Skipper™ models have an expansion diaphragm, cross-bar compensating system, and night illumination.

## 5. Skipper™ II Panel Mount

A103PB is adjustable for mounting on surfaces from vertical to a 30° incline.

- ▼ **A103PB** Front Read, Black Finish.

4. Skipper™ Surface Mount



## 2. Skipper™ II Flush Mount

- ▼ **A92** Front Read, Black Finish with Hood.
- ▼ **A92G** Front Read, Blue Card, Gray Finish with Hood.
- ▼ **A92W** Front Read, White Finish with Hood.

## Cruiser™ Series

Cruiser™ compasses are available with (86mm) 3 3/8" apparent diameter, front or flat reading compass cards. Designed for cruising class boats in the 5.5m (18ft) to 9m (30ft) range, all Cruiser™ compasses have crystal clear spherical acrylic domes, cross-bar compensators, and red night illumination.

5. Skipper™ Panel Mount



## 3. Skipper™ II Bracket Mount

A91 compasses feature a unique ratcheting bracket for mounting on horizontal to vertical and overhead surfaces.

- ▼ **A80B** Front Read, Black Finish.
- ▼ **A80G** Front Read, Blue Card, Gray Finish.
- ▼ **A92W** Front Read, White Card, White Finish.

## 6. Cruiser™ Flush Mount

- ▼ **A154** Front Reading, Black Finish.
- ▼ **A154W** Front Reading, White Finish.
- ▼ **A154WB** Front Reading, White with Blue Card.
- ▼ **A156** Flat Card, Black Finish.

6. Cruiser™ Flush Mount



7. Cruiser™ Binnacle Mount

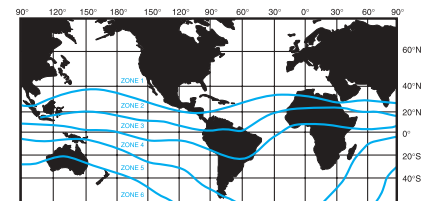


## 7. Cruiser™ Binnacle Mount

- ▼ **A152** Front Reading, Black Finish.
- ▼ **A155** Flat Card, Black Finish.

### info

**GLOBALBalance™ System.** Magnetic compasses normally require special card balancing for use in the Southern Hemisphere. The exclusive (patent pending) Danforth® GLOBALBalance™ system eliminates the need for latitude-specific card balancing. Only Danforth® offers a full range of compass models balanced for use world-wide.



GLOBALBalance™ models remain level in all six zones

## Corsair® IV Series

The Corsair® IV compasses offer you a choice of traditional flat card, front read and dual read card models. All models feature the GLOBALBalance™ NO-SPIN card design. Available in flush, binnacle or bracket mounting styles, for power or sail, these attractive 95mm (3<sup>3</sup>/<sub>4</sub>") compasses sport a unique telescoping hood which protects the compass when not in use. Corsair® IV compasses are available in Hi-Speed® powerboat models for planing hulls and fully gimballed models for sailboat installations. All Corsair® IV capsules are easily removable for winter storage. Navy red L.E.D. night illumination and built-in compensators are standard.

### 8. Corsair® IV Binnacle Mount

- ▼ C352-3 Binnacle Mount, Flat Black Card, Black Finish.
- ▼ C352F-3 Binnacle Mount, Front Reading Black Card, Black Finish.

### 9. Corsair® IV Bracket Mount

- ▼ C398-3 Bracket Mount, Flat Black Card, Black Finish.
- ▼ C398F-3 Bracket Mount, Front Reading Black Card, Black Finish.

### 10. Corsair® IV Flush Mount

- ▼ C399-3 Flush Mount, Flat Black Card, Black Finish.
- ▼ C399-3W Flush Mount, Flat White Card, White Finish.
- ▼ C399D-3 Flush Mount, Dual Reading Black Card, Black Finish.
- ▼ C399D-3W Flush Mount, Dual Reading White Card, White Finish.
- ▼ C399D-3WB Flush Mount, Dual Reading Blue Card, White Finish.
- ▼ C399F-3 Flush Mount, Front Black Reading, Black Finish.
- ▼ C399F-3W Flush Mount, Front White Reading, White Finish.

## Saturn® Series

The compact 95mm (3<sup>3</sup>/<sub>4</sub>") saturn compasses are available with a front reading card, flat card or dual-reading card. All models feature the GLOBALBalance™ NO-SPIN card design. Saturn® compasses feature an adjustable hood, compensators, and night illumination.

### 11. Saturn® Flush Mount

- ▼ A143 Front Reading, Black Finish.
- ▼ A143W Front Reading, White Finish.
- ▼ A143D Dual Reading, Black Finish.
- ▼ A143DW Dual Reading, White Finish.
- ▼ A144 Flat Card, Black Finish.

### 12. Saturn® Dual-Reading Card

- ▼ A140 Dual Read Red Card, Black Finish.
- ▼ A140W Dual Read White, White Finish.



Patent Pending

For 2003, Danforth® is pleased to unveil dramatic new styling for the 2<sup>5</sup>/<sub>8</sub>" (67mm) Skipper™ II and 3<sup>3</sup>/<sub>4</sub>" (95mm) Corsair IV compass lines. Available in flush, bracket and binnacle (surface) mounting styles, these attractive compasses feature our new NO-SPIN GLOBALBalance™ card system, which guarantees a perfectly balanced card anywhere in the world. This patent pending technology makes the balancing of cards for geographic locations a thing of the past. And, of course, our exclusive Danforth® NO-SPIN technology guarantees rock steady performance, even in the roughest conditions.



8. Corsair® Binnacle Mount



9. Corsair® Bracket Mount



10. Corsair® Flush Mount



11. Saturn® Flush Mount



12. Saturn® Dual-Reading Card

## info

**Flat Card Compasses** feature saucer-shaped compass cards. They are installed forward of the helm, and below eye level, so the skipper can glance down to read the course. GLOBALBalance™ models feature a card floatation chamber, providing exceptional card stability.

**Front reading Compasses** have dome-shaped compass cards which are read at the front edge. They are mounted forward of the

helm and are a good choice when the compass is mounted just below the skipper's line of sight. GLOBALBalance™ models feature a card floatation chamber, providing exceptional card stability.

**Dual reading Compasses** feature a modified flat card with an edge "skirt" for front reading as well. GLOBALBalance™ models feature a card floatation chamber, providing exceptional card stability.



Photo: Fairline Boats plc

# rule® Sudbury Boat Care Products

Maintenance made easy



## 1. Elastomeric Marine Sealant

A one-part, fast skinning (10 minutes) and fast curing (24 hours) multi-purpose marine grade sealant. Cures in temperatures of -28.9°C (-20°F) to -48.9°C (120°F) and can be wet sanded and painted after curing. Seals ports, beds hardware and stops leaks, for use above or below the waterline. Resistant to teak cleaners, oil, diesel fuel and salt water. Adheres tenaciously without primers to fibreglass, glass and all plastics.

- ▼ 300 White 296 ml (10 fl. oz.) Cartridge.
- ▼ 301 Clear 296 ml (10 fl. oz.) Cartridge.
- ▼ 302 Black 296 ml (10 fl. oz.) Cartridge.
- ▼ 320 White 89 ml (3 fl. oz.) Tube.
- ▼ 321 Clear 89 ml (3 fl. oz.) Tube.

## 2. Liquid Elastomeric Penetrating Sealant

Liquid version of Elastomeric Clear Sealant. Low viscosity sealant specially formulated for narrow joints where ordinary sealants cannot reach. Ideal for sealing windshields, portholes, hardware, hatches, vents, and fine deck and cabin seams with the same performance characteristics as Elastomeric Sealant.

- ▼ 350 Clear 89 ml (3 fl. oz.) Tube.

## 3. Miracle Coat Boat Wax

Miracle Coat Boat Wax is a premium protective coating that greatly enhances and extends the life of any fibreglass finish. Miracle Coat is available in two versions - liquid or paste. Either version performs equally well. A non-abrasive, easy on - easy off formula that will provide season long protection and shine.

- ▼ 412 473 ml (16 fl. oz.) Liquid.
- ▼ 415 325 ml (11 oz.) Paste.

## 4. One Step Fibreglass Restorer and Wax

One-Step Fibreglass Restorer & Wax is a heavy duty cleaner and wax that works better than many rubbing compounds without the gruelling effort or damaging effects of highly abrasive rubbing compounds. One-Step Fibreglass Restorer & Wax deep cleans and restores colour and depth to dirty or oxidised fibreglass or painted finishes.

- ▼ 413 473 ml (16 fl. oz.) Liquid.
- ▼ 410 325 ml (11 oz.) Paste.

## 5. Heavy Duty Fibreglass Powder Cleaner

Heavy duty, scratch-free, all purpose cleaner for fibreglass decks, hulls and transoms. Removes

waterline stains, algae, rust, exhaust, oxidation and grime. Reach for Sudbury Heavy Duty Powder Fibreglass Cleaner when liquid cleaners fail.

- ▼ 840Q .74 kg (1 lb. 10 oz.).

## 6. Boat Soap™

The most popular boat cleaner in the world. All-purpose, non-caustic cleaner that works well in fresh or salt, hot or cold water. Removes gull droppings and harbour scum. Excellent for washing sails. Leaves surface film free and sparkling clean.

- ▼ 805Q 946 ml (32 fl. oz.).
- ▼ 805G 3785 ml (128 fl. oz.).

## 7. Boat Soap™ Plus

Heavy duty, works like powders without the abrasion. Double-action emulsification removes scum, smudges, oil and grease. Ideal for fibreglass. Not for use on sails or fabrics.

- ▼ 810Q 946 ml (32 fl. oz.).

## 8. Mildew Cleaner & Stain Remover

Fantastic mildew cleaner and stain remover. Only double-action mildew product for boaters. Not only removes ugly mildew stains, but also cleans and restores soiled areas. Great on all mildew prone areas - showers, cushions, covers, galleys, etc. Fast acting spray on, wipe off formula.

- ▼ 850Q 946 ml (32 fl. oz.).

## 9. Hull Cleaner & Stain Remover

Penetrates and instantly removes deep stains, rust and growths from fibreglass and aluminum surfaces with no scrubbing. Strong and effective, but safe to use.

- ▼ 815Q 946 ml (32 fl. oz.).

## 10. Spray-All™

Spray-All™ is a highly effective, all-purpose cleaner with its use limited only by your imagination. Eliminates tough stains on fibreglass, vinyl, fenders, formica and canvas. Trigger spray top makes Spray-All™ easy and convenient to use. A must for every boater.

- ▼ 845Q 946 ml (32 fl. oz.).

## 11. Inflatable Boat Cleaner

Fast action formula designed specifically for inflatables. 100 % biodegradable, safe and effective on both hypalon and PVC.

- ▼ 855Q 946ml (32 fl. oz.).







Photo: Bavaria Yachts

## 1. PAR-Max 3 Shower Drain Pump

New generation, long life fully serviceable shower drain pump offering 792 lph (174 gph) output at 1m (3ft) head. Self priming up to 3m (10ft) allowing the pump to be mounted above wet bilges. Super quiet diaphragm design allows extended dry running whilst the continuous rated, heavy duty motor with waterproof coating makes it suitable for the harshest bilge environments. Highly reliable with thermal overload protection built in to avoid overheating. Supplied with Pumpgard™ filter.

- ▼ 31610-0092 12 Volt dc.
- ▼ 31610-0094 24 Volt dc.

## 2. Jabsco Shower and Bilge Pump

The best selling shower sump pump in the world! Now updated to be quiet running and fully corrosion resistant. Compact, dry running diaphragm pump, self priming up to 2m (6ft) and offering 780 lph (172 gph) output at 1m (3ft) head. Supplied with pumpgard™ filter.

- ▼ 37202-2012 12 Volt dc.
- ▼ 37202-2024 24 Volt dc.

## 3. Jabsco Multi-port Shower Sump System

The alternative system where it is preferred to drain one or more showers into a common sump box. We have done all the assembly for you, fitting a strainer, float switch and pump into a purpose designed sump that has connections for three inlets of between 19mm (3/4") and 38mm (1 1/2").

The sump pump unit also features a check valve to prevent back siphoning and a clear cover for easy inspection, as well as offering 2640 lph (581 gph) capacity at 1m (3ft) head.

- ▼ 30296-2012 12 Volt dc.
- ▼ 30296-2024 24 Volt dc.

## 4. Water Puppy Shower Drain Pump

Shower debris prevents no problem to this bronze bodied, flexible impeller design. Self priming up to 1.2m (4ft) allows mounting above wet bilges and offers 1920 lph (390 gph) output at 3m (10ft) head. The simple design means fewer wearing parts - all user serviceable.

- ▼ 23680-4003 12 Volt dc.
- ▼ 23680-4103 24 Volt dc.

## 5. Rule Shower Drain Systems

A compact, full capacity shower drain system. Automatically turns on after the water starts, and shuts off when the water is removed. Activated by a Rule-A-Matic® float switch. Available in single inlet and three inlet ports which offer varying combinations of inlet hose. The single port inlet pump offers 1925 lph (400 gph) capacity at zero discharge head. Whilst the multi-port inlet unit offers 3100 lph (650 gph). Other features include a clear screw down cover, a removable strainer for easy cleaning, and an internal check valve to prevent back flow.

- ▼ 97 Single Port Inlet Pump 12 Volt dc.
- ▼ 97-24 Single Port Inlet Pump 24 Volt dc.
- ▼ 98 Multi-Port Inlet 12 Volt dc.
- ▼ 98-24 Multi-Port Inlet 24 Volt dc.

1. PAR-Max 3 Shower Drain Pump



2. Jabsco Shower and Bilge Pump



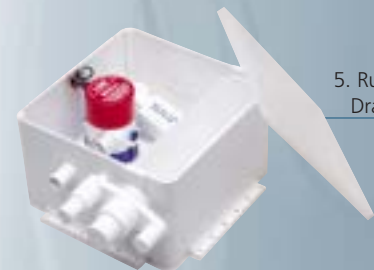
3. Jabsco Multi-port Shower Sump System



4. Water Puppy Shower Drain Pump



5. Rule Shower Drain Systems



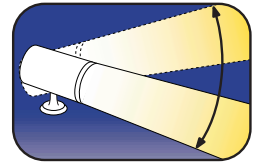
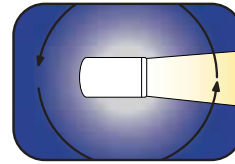
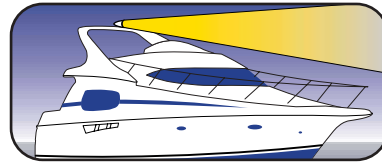
### info

We offer three different types of sink and shower drain pumps: self priming diaphragm pumps and a centrifugal sump/pump unit and Flexible Impeller pumps.

**Diaphragm pumps** like our 37202 and PAR-Max can be remote mounted for easy access as they are self priming and can run dry, to drain away the last drops of water. They are supplied with pumpgard™ strainers to protect against blockage and are very quiet in operation.

Our **sump/pump unit** are designed to allow up to three showers to drain into one common sump, which is then self emptying due to its internal pump and float switch. They are a compact and low cost method of emptying multiple showers.

**Flexible Impeller pumps** simple yet robust design and powerful flow rate makes it ideal for pumping shower waste from multiple systems. Does not require an inlet strainer.



320°-360° Rotation

60°-75° Vertical Sweep

## Remote Control Searchlights

The advantage of the Remote Control is that it allows you to direct the light in the best location for maximum effectiveness. They are an increasingly popular addition on power boats, helping locate buoys, moorings and channel markers. Control is by joystick or touchpad. Secondary remote control kits can be bought for most models which allow control from either the flybridge or main helm.

### 1. 155 SL RC Searchlight

Our new leading light for style, performance and value. Sweeping curves complement the latest pleasurecraft profiles. Fingertip control of the watertight halogen sealed beam will pick out hazards nearly 275m (900ft) away. 1 lux at 268m (885ft) with 100,000 candlepower 125mm (5") halogen sealed beam.

- ▼ 61050-0012 12 Volt dc.
- ▼ 61050-1224 12/24 Volt dc. (electronic control)

### 5. 255 SL RC Searchlight

This is the largest in our range of high quality plastic bodied lights. Twin bulbs give 10 lux at 100m (330ft) and 0.4 lux at 500m (1650ft) (200,000 candlepower) We supply the 255SL complete with a two speed watertight remote control plus 7.5m (24.6ft) of cable, and optional Dual Station Control Kits are available. The 255SL gives a full 360° horizontal rotation and 60° vertical sweep.

- ▼ 60010-2012 255SL 12 Volt dc.
- ▼ 60010-2024 255SL 24 Volt dc.

### 2. 150 (6'') RC Searchlight

Brilliant Remote Control Searchlights with digital multi-function processor control, plus option HID (High Intensity Discharge) light source. Truly the ultimate searchlight. 1 lux at 680 metres (2210ft) - HID models with 600,000 candlepower spot beam. 1 lux at 418 metres (1380ft) - Sealed beam models with 200,000/50,000 candlepower spot/flood beam.

- ▼ 63042-0012 12 Volt dc HID.
- ▼ 63042-0024 24 Volt dc HID.
- ▼ 63022-1224 12/24 Volt dc sealed beam.

### 6. 130 (5'')

The 130mm model is available in 12 volt only and operates in either flood or spot beam mode giving 72,000 (spot) or 30,000 (flood) candlepower and 9 lux at 100m (330ft) and 0.4 lux at 500m (1650ft).

- ▼ 62026-4002 12 Volt dc, 9 lux at 100m (330ft).

### 3. 135 SL Searchlight

Developed with the smaller boat in mind the 135SL has most of the benefits and performance of older equivalent units at a greatly reduced cost. This light delivers 100,000 candlepower providing 7 lux at 100m and 0.3 lux at 500m and 320° horizontal / 75° vertical rotation.

- ▼ 60020-0000 12 Volt.
- ▼ 60020-0024 24 Volt.

### 7. 180 (7'')

Our 180mm model is available in either 12 or 24 Volt. The 12 Volt model allows either spot or flood to be selected giving 250,000 candlepower and 18 lux at 100m (330ft), 0.7 lux at 500m (1650ft). The 24 Volt version is available in flood only but gives 330,000 candlepower.

- ▼ 62040-4002 12 Volt dc, 18 lux at 100m (330ft).
- ▼ 62040-4006 24 Volt dc, 18 lux at 100m (330ft).

### 4. 146 SL RC Searchlight

Our 175,000 candlepower single beam 146SL brings long range capability to mid sized boats giving 15 lux at 100m (330ft) and 0.6 lux at 500m (1650ft). Supplied with a two speed watertight control and 4.5m cable, the 146SL gives high performance at reasonable cost and 360° horizontal/ 75° vertical rotation. Dual Station Control Kit available.

- ▼ 60080-0012 146SL 12 Volt dc.
- ▼ 60080-0024 146SL 24 Volt dc.

### 8. 200 (8'')

The most powerful remote control light we manufacture is the 200mm model, available in 24 Volts giving huge 500,000 candlepower output and really long range illumination - 52 lux at 100m (330ft), and 2.1 lux at 500m (1650ft). The 200mm model is supplied with spot only bulb.

- ▼ 62042-4006 24 Volt dc, 52 lux at 100m (330ft).

## Accessories

### 9. Secondary Remote Control Kits

Our kits are the only way to achieve dual station control of a remote control searchlight. Available for 135SL, 155SL, 146SL, 255SL, 130mm, 180 and 200mm lights, 12 or 24 Volt. Also available for 155SL and 150mm Electronic Control Lights.

- ▼ 43670-0004 12 Volt dc (130mm, 180mm, 200mm, 135SL, 155SL, 146SL, 255SL).
- ▼ 18753-0335 24 Volt dc (180mm, 200mm, 255SL)
- ▼ 64044-0000 12/24 Volt dc (155SL, 150mm with Electronic Control)

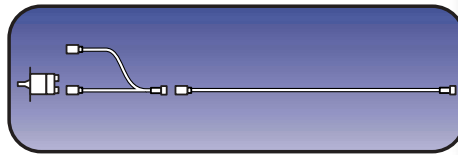


Control & 4.5m (15ft) cable included with all Remote Control Lights, Extension Cables also available.

### 10. Extension Harness

These wiring harnesses allow for remote control installations where cable lengths are greater than those supplied with the light. Available for standard and electronic control.

- ▼ 43990-0013 3m (10ft) Standard Control.
- ▼ 43990-0014 4.5m (15ft) Standard Control.
- ▼ 43990-0015 7.6m (25ft) Standard Control.
- ▼ 43990-0016 10.7m (35ft) Standard Control.
- ▼ 64042-1011 3m (10ft) Electronic Control.
- ▼ 64042-1007 4.5m (15ft) Electronic Control.
- ▼ 64042-1008 7.6m (25ft) Electronic Control.
- ▼ 64042-1009 15.2m (50ft) Electronic Control.



Dual Station Kits also available with 4.5m (15ft) cable

### 9. Secondary Remote Control Kits Standard Control



### 9. Secondary Remote Control Kits Electronic Control



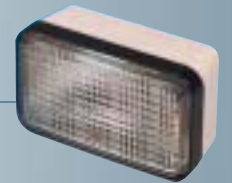
### 10. Extension Harness Standard Control



### 10. Extension Harness Electronic Control



### 11. 3" x 5" Deck Floodlights



### 12. 4" x 6" Deck Floodlights



### 13. Flush Mount Floodlights



## Deck Floodlights

Bracket mounted floodlights give good service in deck illumination, especially on small fishing boats and commercial craft.

Flush mount floodlights provide a clean installation ideally suited for leisure craft. Two beam shapes are available, trapezoidal for deck illumination and flood for transom mounting. In each case bulb adjustment allows the beam to be directed to the required area.

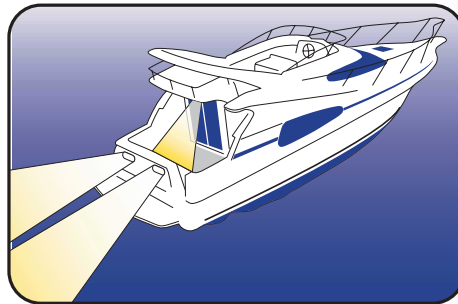
A range of compact, purpose designed floodlights for deck, cockpit or boarding point on leisure, commercial, fishing and safety craft available in two sizes.

### 11. 3" x 5"

- ▼ 45900-1000 12 Volt dc white.
- ▼ 45903-0002 Replacement sealed beam.

### 12. 4" x 6"

- ▼ 45900-4000 12 Volt dc Ultra Bright white.
- ▼ 45900-0000 12 Volt dc white.
- ▼ 45900-0001 24 Volt dc white.



## 13. Flush Mount Floodlights

Flush Mount Floodlights unobtrusively light up deck, cockpit or boarding point. Available with two bulb types - flood, for glare free below deck mounting or trapezoidal for deck illumination.

- ▼ 45960-0000 Floodlight with trapezoidal beam 12 Volt dc.
- ▼ 45960-0001 Floodlight with flood beam 12 Volt dc.

## info

A marine searchlight has to be capable of performing a range of tasks from locating buoys to illuminating a narrow channel and unfortunately, occasionally searching for a man overboard. To this end it needs to be designed to offer the best combination of beam spread (width) and intensity (length), for both shorter and longer range work.

A spot beam has a 7° beam spread as opposed to 40° on a flood beam and will consequently reach at least 3 times further. Sometimes a searchlight beam is defined at 2° but for anything less than a large stable ship this is not usable, being difficult to aim and offering too concentrated a beam for effective sweeping when mounted on a small craft. We quote performance of our searchlight range in two ways; Candlepower and Lux.

Candlepower is a useful guide to actual light produced but doesn't measure the efficiency of reflector design to actually project that light at the target. The most relevant comparison guide is LUX, which is the measurement of actual light available at a given distance (we quote at 100 and 500 metres (330ft - 1650ft)

Remote Control Searchlights are suitable for craft from 5m (16.4ft) upwards, and their main advantage is that they allow the light to be situated away from the helm in a position of maximum effectiveness. Control is via an eight way joystick and a Secondary Remote Control Kit is available for most lights allowing control from both flybridge and saloon.

Floodlights illuminate deck areas or can be mounted in the stern to provide a wide beam spread for local area lighting.



1. PAR-Max 3 Washdown



### 1. PAR-Max 3 Washdown

A really compact diaphragm pump which provides a powerful jet of water for really effective washdown. It's also super quiet, self primes to 3m (10ft) and is supplied with an adjustable spray nozzle and inlet strainer. PAR-Max 3 Washdown is supplied with snap-in ports for 13mm (1/2") id hose and offers 13.2 lpm (2.9 gpm) flow rate.

- ▼ 31605-0392 12 Volt dc.
- ▼ 31605-0394 24 Volt dc.

### 2. PAR-Max 4 Washdown

Designed for larger yachts, commercial vessels or any boat where sustained heavy use is expected. This variant of our PAR-Max washdown pumps comes with a heavy duty motor with a waterproof coating and sealed pressure switch to ensure the pump will survive in harsh environments. Complete with inlet strainer and trigger nozzle, this model is supplied with snap-in ports for 19mm (3/4") id hose and offers a powerful 16.3 lpm (3.6 gpm) flow rate.

- ▼ 31700-0392 12 Volt dc.
- ▼ 31700-0394 24 Volt dc.

### 3. HoseCoil Washdown Hoses

Introducing a neat and tidy way of keeping your boat in perfect condition! The standard HoseCoil set contains 10mm (3/8") ID Polyurethane self-coiling hose with solid brass fittings. This durable yet lightweight hose is available in 4.5m (15ft), 8m (25ft), 11m (35ft) and 15m (50ft) lengths.

- ▼ 31910-1015 4.5m (15ft).
- ▼ 31910-1025 8m (25ft).
- ▼ 31910-1035 11m (35ft).
- ▼ 31910-1050 15m (50ft).

### 4. Quick Release Connector Kits

A Quick Release Connector provides the perfect installation solution for your HoseCoil washdown kit. The Quick Release installs easily on your boat and allows you to stow your hose out of the way! The kits come complete with 8m (25ft) of HoseCoil hose, spray nozzle and a choice of one, two or three 3/4" Quick Release Connectors, giving you a complete washdown system straight from the box.

- ▼ 31910-1200 Quick Release Connector
- ▼ 31910-3215 Kit, containing 1 Quick Release Connector.
- ▼ 31910-3225 Kit, containing 2 Quick Release Connectors.
- ▼ 31910-3235 Kit, containing 3 Quick Release Connectors.

### 5. HoseCoil Cockpit Washdown Systems

The perfect solution for installing a washdown hose on your boat in an out-of-the-way location. These clever designs allow you to mount the enclosure into the bulkhead, cockpit or deck. Complete with all fittings, fasteners and spray nozzle these simple and convenient solutions mean you will never trip on a hose again!

- ▼ 31910-3115 Flush Mount Enclosure, complete with 4.5m (15ft) hose.
- ▼ 31910-2115 Horizontal Mount Enclosure, complete with 8m (25ft) hose.
- ▼ 31910-1115 Side Mount Enclosure, complete with 4.5m (15ft) hose.

2. PAR-Max 4 Washdown



3. HoseCoil Washdown Hoses



4. Quick Release Connector Kits



5. HoseCoil Cockpit Washdown Systems



### info

Washdown Pumps provide a supply of water at high pressure to blast mud, silt and dirt away from anchors, chains and decks. Anyone who's tried cleaning a filthy anchor chain with a bucket and brush as it's hauled on deck will appreciate the benefit of a jet to do the job for you!

Washdown sets should be controlled from on deck where the work is being done, so we supply both our pump types with trigger nozzles and pressure switches to shut down the pump the moment it's not required.

# Oil Change & Diesel Fuel Transfer Pumps

## 1. Oil Changer System

The Oil Change System consists of a robust self-priming flexible impeller pump mounted to an easy to install base and coupled to a five port manifold, factory fitted with three full flow ball valves. All are enclosed by a white plastic cover to dress-up the cleanest of engine rooms.

- ▼ 17820-0012 12 Volt dc.
- ▼ 17820-0024 24 Volt dc.

## 2. Oil Change Pump

The Oil Change Pump is the same high quality pump used in the Jabsco multi-engine Oil Change System. The powerful pump can change oil in a typical V-8 engine in just minutes.

- ▼ 17830-0012 12 Volt dc.
- ▼ 17830-0024 24 Volt dc.

## 3. Economy Oil Changer

A new, highly affordable, Engine Oil Changer with performance features demanded by professional mechanics. This new model has the same oil reservoir supplied with the heavy duty Porta-Quick so two typical V-8 engines can be serviced with just one trip to the boat. It is equipped with a 2m (7ft) power cord and 2.5m (8ft) dip stick probe.

- ▼ 17850-0012 12 Volt dc.

## 4. Porta-Quick™

The ultimate answer to hassle free oil change, this robust reversible pump is mounted on a 13 litre (3 gallon) container and supplied with cables, battery clips and hoses ready for use. Operating the pump one way empties the oil into the container and when you're ashore simply operating the pump switch the other way empties the container into a suitable receptacle. Self priming up to 1.2m (4ft).

- ▼ 17800-2090 12 Volt dc.
- ▼ 17800-2091 24 Volt dc.

## 5. Mini Puppy

Designed for permanent, on board installation the Mini Puppy will empty oil sumps into a suitable container. 7 lpm (1½") output, self priming up to 1.5m (5ft), and simple to service.

- ▼ 23620-3003 12 Volt dc.
- ▼ 23620-3103 24 Volt dc.

## 6. Handy Boy Utility Pump

A brass bodied hand pump supplied with a range of hoses and connectors (including dipstick probes) for different installations, giving up to 7 lpm (1½ gpm) output.

- ▼ 33799-0000 Handy Boy.

**WARNING** DO NOT use any Jabsco pump for petrol, petroleum products or any products with a flash point below 37°C (98°F).

### info

**Oil Change Pumps.** Regular Oil Changing is a vital part of engine maintenance especially for diesels, and most marine engine installations don't make it easy to empty oil sumps without spilling oil into the bilges or engine room. Whether manual or electric driven, oil change pumps make life easier and less messy by emptying oil sumps via the oil dipstick.

## 7. Little Pal Utility Pump

A compact brass hand pump for engine and gearbox oil drain, giving up to 5 lpm (1 gpm) output and supplied with a 13mm (½") outlet hose and 6mm (¼") dipstick probe for the inlet.

- ▼ 34060-0010 Little Pal.

## 8. 105 lpm Sliding Vane Pump

A continuously rated heavy duty diesel refuelling pump which is self priming up to 5m (16ft). Connections for 32mm (1¼") ID hose with switch and circuit breaker fitted as standard.

- ▼ VR100-1122 24 Volt dc.

## 9. 52 lpm Sliding Vane Pump

This model is rated for continuous use and gives 52 lpm (11.4 gpm), self priming up to 3m (10ft). Connections for 25mm (1") id hose.

- ▼ VR050-1012 12 Volt dc.
- ▼ VR050-1112 24 Volt dc.

## 10. 35 lpm Sliding Vane Pump

Suitable for medium duty, this pump is rated for 45 minutes continuous operation and self primes up to 2m (6ft) giving flow rates of 35 lpm (7.7 gpm). Connections for 19mm (¾") id hose.

- ▼ 23870-1200 12 Volt dc.
- ▼ 23870-1300 24 Volt dc.

## 11. Fuelmaster

This 'all-inclusive' diesel pumping system is ideal for dockside and boatyard refuelling. With trigger nozzle, hose, strainer and mountable carry case included as standard.

- ▼ 50140-0000 12 Volt dc.
- ▼ 50140-0100 24 Volt dc.

## 12. Junior Gear Puppy

A small and reliable gear pump designed for oil and diesel transfer in medium duty applications. Supplied complete with inlet filter it can provide 13.5 lpm (3 gpm) at 5m (16.4 ft) head.

- ▼ 23220-2012 12 Volt dc.
- ▼ 23220-2024 24 Volt dc.

## 13. Gear Puppy

A simple and reliable gear pump designed for oil and diesel transfer in medium duty applications. Supplied complete with inlet filter it can provide 24.5 lpm (5.4 gpm) at 5m (16.4 ft) head.

- ▼ 23230-2012 12 Volt dc.
- ▼ 23230-2024 24 Volt dc.

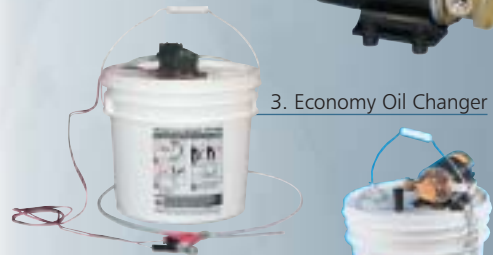


1. Oil Changer System

2. Oil Change Pump



3. Economy Oil Changer



4. Porta-Quick™



5. Mini Puppy

6. Handy Boy Utility Pump



7. Little Pal Utility Pump

8. 105 lpm Sliding Vane Pump



9. 2 lpm Sliding Vane Pump



10. 35 lpm Sliding Vane Pump



11. Fuelmaster



12. Junior Gear Puppy



13. Gear Puppy

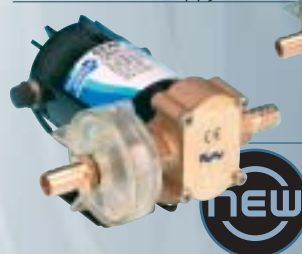




Photo: Fairline Boats plc

## Engine Cooling Pumps

*Flexible impeller pumps are self-priming and therefore, are ideal for engine cooling, wash-down, circulation and many general purpose on-board or dockside applications. The bronze bodies and stainless steel shafts are well suited for marine environments. They can operate in either rotational direction. A variety of models are available with flows from 11 lpm (3 gpm) to 314 lpm (83 gpm) and with different port orientations to suit virtually any pumping requirement.*

### 1. Flange Mounted Pumps

*The ideal solution for engine cooling due to its compact size and ease of installation. Fitted as original equipment by the majority of engine marinisers worldwide as it is adapted to specifically suit individual marine engines.*

### 2. Pedestal Pumps

*A favourite pump with DIY and smaller engine marinisers due to installation flexibility and simple design. The belt driven pump offers many choices of port size and flow rates.*

### 3. Crank Shaft Mounted Pumps

*Ideal for high speed applications due to its ability to run up to 5000rpm with various duty options. Mounts onto either the cam or crank shaft which avoids fitting additional belts and pulleys.*

## info

Using the latest in design, material specification and manufacturing methods, Jabsco is the leader in the development of Engine Cooling Pumps worldwide.

Invented in 1938, Jabsco's flexible impeller design was the pioneer of efficient cooling of marine diesel engines.

Ideal for heat exchanger, keel and direct cooling systems, Jabsco have the ability to cool engines from 10Hp to 1800Hp (7kW - 1300kW) with specifically designed pump models to suit various applications.

Jabsco offer a wide range of replacement parts that fit other makes of engine cooling pump, including Sherwood, Johnson, Mercuriser, Yanmar and Crusader.

The all new Jabsco centrifugal pumps are designed for multiple applications, from hot water circulation to diesel transfer. They should be mounted in a position where the inlet is continually flooded as they are not self priming.

## Circulation Pumps

*Jabsco has a range of circulation pumps for use in low pressure circulation applications such as marine central heating and ballast transfer systems.*

### 4. High Flow Cyclone Centrifugal Pump

*Long life continuously rated centrifugal pump which gives high flows up to 110 lpm (24 gpm) at low pressures. Ideal for hot water circulation duties such as engine cooling and central heating systems.*

- 50830-0012 12 Volt dc, 3/4" NPT connections.
- 50830-0024 24 Volt dc, 3/4" NPT connections.
- 50830-2012 12 Volt dc, 3/4" BSP connections.
- 50830-2024 24 Volt dc, 3/4" BSP connections.

### 5. High Pressure Cyclone Centrifugal Pump

*Long life pump which produces pressures up to 1.6 bar (24 psi) making it ideal for transferring diesel, water and mild chemicals over long or short distances. Can be used in conjunction with trigger nozzles.*

- 50870-0012 12 Volt dc, 3/4" NPT connections.
- 50870-0024 24 Volt dc, 3/4" NPT connections.
- 50870-2012 12 Volt dc, 3/4" BSP connections.
- 50870-2024 24 Volt dc, 3/4" BSP connections.

### 6. Magnetic Drive Circulation Pump

*A small compact pump specifically designed for circulation duties. Continuously rated, this pump provides trouble free operation for hot water circulation and raw water cooling applications.*

- ▼ 59500-0012 12 Volt dc.
- ▼ 59500-0024 24 Volt dc.

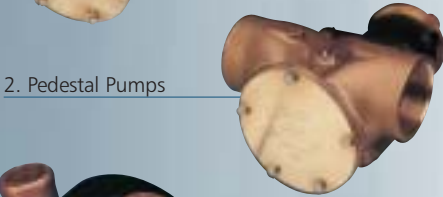
### 7. Wakeboard and Ski Boat Ballast Pump

*Wakeboarders will be pleased to learn that Jabsco now offer a water Ballasting Pump that can quickly add up to 40 kgs (88 lbs) of water per minute to ballast tank systems. The pump is reversible to both fill and empty ballast tanks and is self-priming and therefore will not air-lock.*

- ▼ 18220-1123 12 Volt dc.



1. Flange Mounted Pumps



2. Pedestal Pumps



3. Crank Shaft Mounted Pumps



4. High Flow Cyclone Centrifugal Pump



5. High Pressure Cyclone Centrifugal Pump



6. Magnetic Drive Circulation Pump



7. Wakeboard and Ski Boat Ballast Pump



# Flexible Impellers



Photo: Royal National Lifeboat Institution

## Jabsco - The Original Impeller

**Jabsco flexible impellers can be fitted to most makes and models of bronze flexible impeller engine cooling, bilge, transfer and general purpose pumps. Jabsco flexible impellers are subjected to rigorous quality processes to ensure reliable, efficient and long lasting performance.**

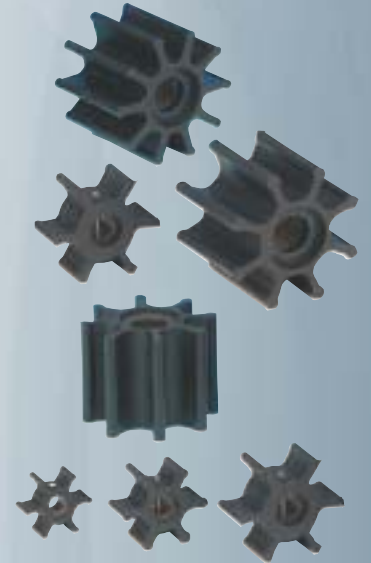
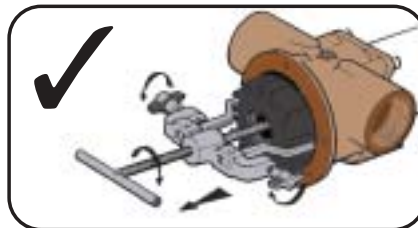
## Did you know?

- Impellers are wearing parts and should be replaced annually, a quick and simple job.
- Jabsco knows all there is to know about specialist pumps for cooling marine engines. We invented the flexible impeller pump back in 1938.
- Your engine's cooling system is highly dependent on the rubber impeller in your sea water pump - engine failure is the largest single cause of call-outs to emergency services.
- Identifying which Jabsco pump or impeller fits your engine is simple. Advice is readily available at your local stockist.
- Our expertise ensures that when you choose Jabsco as your replacement or spare, you can have complete confidence in our quality and suitability.

## Flexible Impeller Removal Tool

The Flexible Impeller Removal Tool is the easiest way to remove impellers, especially when the pump is mounted in tight and cramped conditions.

- ▼ 50070-0080 Compact version suitable for impellers up to 57mm (2 1/4")
- ▼ 50070-0040 Suitable for impellers up to 65mm (2 1/2") diameter
- ▼ 50070-0200 Suitable for impellers from 65mm (2 1/2") to 118mm (4 1/2") diameter



Flexible Impeller Removal Tool



Photo: Mack Engineering



Jabsco and Rule have served the world's marine market for well over half a century, when the Flexible Impeller pump was invented in the 1930's. Today Jabsco and Rule are part of ITT Industries Inc. ITT Industries, Inc. ([www.itt.com](http://www.itt.com)) supplies advanced technology products and services in key markets including: fluid and water management; electronic interconnects and switches; defense communications, opto-electronics, information technology and services and other specialty products. Headquartered in White Plains, New York, the company generated \$4.99 billion revenue in 2002.

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