



JOHNSON
A pump for every boat



JOHNSON PUMP



10

Aquafax Limited

14 Dencora Way, Sundon Business Park,
Luton, Beds LU3 3HP

Tel: (01582) 568700 Fax: (01582) 568720

e-mail: sales@aquafax.co.uk

website: www.aquafax.co.uk

Aquafax Limited (Hamble)

12-13 Mitchell Point, Ensign Business Park
Hamble, Southampton SO31 4RF

Tel: (023) 8045 7206 Fax: (023) 8045 7208

Aquafax Limited (Middlewich)

Unit 11, Valley Court, Sanderson Way,
Middlewich, Cheshire CW10 0GF

Tel: (01606) 841111 Fax: (01606) 841188

Aquafax Limited (Wroxham)

Unit 31 Littlewood Lane, Stalham Road Ind. Estate
Hoveton, Norfolk NR12 8DZ

Tel: (01603) 781881 Fax: (01603) 781981

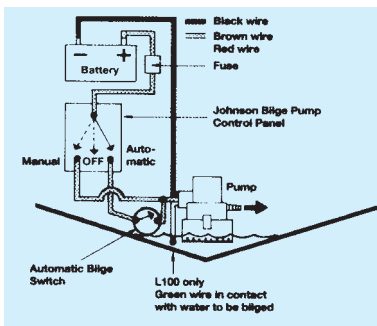
Aquafax Limited (Plymouth)

Unit 5, Plymouth Trade Park, 22 Macadam Road,
Plymouth PL4 0RU

Tel: (01752) 669944 Fax: (01752) 667764

2-3 & 9-11 14, 16	Bilge Pumps
4 & 7	Pump Accessories
5	Water Pressure Systems
6	Water Pressure & Washdown Pumps
8	Circulating Pumps
9, 11-12, 15	Impeller Pumps
10	Clutch Pumps
13	Spares & Service Kits
14	Aerating Pumps
15-16	Waste Water Pumps
16	Lavatory System Pumps
17	Additional Pumps & Accessories
18-20	Engine Cooling Pumps
	Impellers

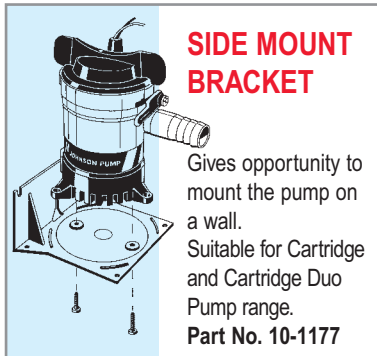
HEAVY DUTY SUBMERSIBLE BILGE PUMPS



With a variety of mounting options, capacities of 30 to 252 LPM and clip on optional automatic switch. Johnson Pump submersible pumps can handle most of the bilge pump applications. Heavy duty motors with stainless steel (SS2343) shaft and tough thermoplastic bodies provide for a long pump life. With the Johnson Pump automatic switch installed, the pump automatically comes on when there is water in the bilge and shuts off when it is dry. Submersible bilge pumps are not self-priming and must be installed in the deepest part of the bilge.

CE marked according to the following standards:

- EN55014: 1993/Radio disturbance
- ISO8846: Small Craft - Electrical devices - protection against ignition of surrounding flammable gases
- ISO8849: Small Craft - Electrically operated bilge pumps
- ISO10133: Small Craft - Electrical systems - extra low voltage DC installations



SIDE MOUNT BRACKET

Gives opportunity to mount the pump on a wall. Suitable for Cartridge and Cartridge Duo Pump range. Part No. 10-1177

THE JOHNSON CARTRIDGE PUMP

EASY TO CLEAN

Bilge pump cleaning & maintenance no longer call for complete disassembly. You can now leave the pump casing attached to both the boat & the hoses - Johnson cartridge pumps can be removed for cleaning or replacement without the use of a single tool.

WATER COOLED FOR EXTENDED SERVICE

The cartridge pumps are manufactured in the United States and the new line encompasses four compact pumps, each for a different capacity need. All of them use remarkable little electricity for the amount of water they pump. Their improved, more efficient motors also provide increased service life, thanks in part to an ingenious solution which circulates the discharge water around the motor for cooling. Includes "T" brackets for connecting Johnson automatic float. These pumps must not be run dry and are not self priming & must be installed in the deepest part of the bilge.



CARTRIDGE L450, L550, L650, L750 12/24V DC

The L650 & L750 incorporate some of the most advanced features in the industry, features developed from service in a wide variety of uses including racing, cruising, sport fishing, and demanding commercial duties.

For L450, L550 and L650, Johnson have improved the design with easy to install Dura-Port discharge ports to eliminate stress cracking caused by over-tightened hose clamps. The pumps include a straight and a 90° smooth elbow Dura-Port & a removeable check valve

Specifications:

Max dia:	70mm
Max height:	112mm
Shaft:	SS2343
Wire Size:	0.75mm ²

Model	Capacity 1.0m head (13.6V)	Capacity Straight (13.6V)	Weight	Hose Size	Amperage	Fuse Size	12V Part No.	Amperage	Fuse Size	24V Part No.
L450	38 LPM - 601 GPH	49 LPM - 778 GPH	0.27kg	3/4"	2.5	3A	10-0945	-	-	-
L550	45 LPM - 713 GPH	56 LPM - 884 GPH	0.27kg	3/4"	3A	5A	10-0955	-	-	-
L650	53 LPM - 844 GPH	61 LPM - 972 GPH	0.27kg	3/4"	3.2A	5A	10-0965	2A	3A	10-0966
L750	60 LPM - 952 GPH	73 LPM - 1150 GPH	0.32kg	1 1/8"	3A	5A	10-0975*	2A	3A	10-0976*

* Does not include Dura-Port connection



ULTIMA COMBO L450 UC, L550 UC, L650 UC, L750 UC 12/24V DC

The Ultima Combo combines the line of Cartridge Bilge Pumps with automatic operation. The Duo is equipped with the new Ultima switch.

For L450 UC - L650 UC, Johnson improved the design with easy to install Dura-Port discharge ports to eliminate stress cracking caused by over-tightened hose clamps.

The pumps include a straight and a 90° smooth elbow Dura-Port & a removeable check valve.

Specifications:

Max dia:	75 x 100mm
Max height:	112mm
Shaft:	SS2343
Wire Size:	0.75mm ²

Model	Capacity 1.0m head (13.6V)	Capacity Straight (13.6V)	Weight	Hose Size	Amperage	Fuse Size	12V Part No.	Amperage	Fuse Size	24V Part No.
L450 UC	38 LPM - 601 GPH	49 LPM - 778 GPH	0.40kg	3/4"	2.5	3A	10-1045	-	-	-
L550 UC	45 LPM - 713 GPH	56 LPM - 884 GPH	0.40kg	3/4"	3A	5A	10-1055	-	-	-
L650 UC	53 LPM - 844 GPH	61 LPM - 972 GPH	0.40kg	3/4"	3.2A	5A	10-1065	2A	3A	10-1066
L750 UC	60 LPM - 952 GPH	73 LPM - 1150 GPH	0.45kg	1 1/8"	3A	5A	10-1075*	2A	3A	10-1076*

* Does not include Dura-Port connection

HEAVY DUTY SUBMERSIBLE BILGE PUMPS

**NEW
HOSE SIZES**



L1600, L2200 & L4000 SUBMERSIBLE BILGE PUMP 12/24 V DC

The best choice when you are looking for a high performance, heavy duty bilge pump that is designed to meet & exceed the tough demands of commercial & recreational duty.

This pump has a liquid cooled, 12-pole motor with double ball bearings for extended service life. The L2200 motor is sealed off by a mechanical seal that eliminates shaft wear & allows for service & replacement, while the L1600 has a lip seal.

The L4000 high capacity, heavy duty bilge pump has been developed by Johnson Pump as the premier pump in our submersible bilge pump range. Featuring a robust motor design, mechanical shaft seal, high impact ABS plastic and unique threaded port design, the L4000 will out perform all other comparable pumps on the market. Universal base plate and a choice of 1½" or 2" ports makes for a simple installation. All pumps include a removable check valve.

Specifications:

Model:	L1600	L2200	L4000
Shaft	SS2343	SS2343	SS2343
Wire Size:	1.5mm ²	1.5mm ²	1.5mm ²
Max Dia:	108mm	108mm	121mm
Max Height:	149mm	177mm	216mm
Weight:	1.3kg	2.7kg	2.45kg

Part No.	Model	Voltage	Capacity 1.0m head (13.6V)	Capacity Straight (13.6V)	Amperage	Fuse Size	Hose Size
10-1600-01	L1600	12V	98 LPM - 1550 GPH	100 LPM - 1600 GPH	7A	10A	1½" & 1¼"
10-1600-02	L1600	24V	98 LPM - 1550 GPH	100 LPM - 1600 GPH	3.5A	6A	1½" & 1¼"
10-2200-01	L2200	12V	120 LPM - 1900 GPH	130 LPM - 2060 GPH	7.5A	12A	1½" & 1¼"
10-2200-02	L2200	24V	120 LPM - 1900 GPH	130 LPM - 2060 GPH	4.5A	6A	1½" & 1¼"
10-2240-01	L4000	12V	164 LPM - 2600 GPH	252 LPM - 4000 GPH	15A	25A	1½" & 2"
10-2240-02	L4000	24V	164 LPM - 2600 GPH	252 LPM - 4000 GPH	7.5A	15A	1½" & 2"

ULTIMA BILGE PUMP 12V

Integration of the patented Ultima "field effect" sensing technology into the bilge pump body creates a sleek, reliable compact, unit ready to install and run for years. For UltimaBilge™ 600GPH-1000GPH, Johnson have easy-to-install Dura-Port discharge ports to eliminate stress cracking caused by over-tightened hose clamps. These pumps will be delivered including both a straight and a 90° smooth elbow Dura-Port. For UltimaBilge™ 1250GPH it has a threaded 1¼" & 1½" discharge port. All version are delivered with a removable check valve.

Dimensions: L=142 mm, W=82 mm, H=105 mm
Weight: 0.66 kg

NEW



Part No.	Model	Voltage	Capacity 1.0m head (13.6V)	Capacity Straight (13.6V)	Amperage	Fuse Size	Hose Size
10-0906	600 GPH	12V	32 LPM - 500 GPH	38 LPM - 600 GPH	2.5A	5A	¾"
10-0908	800 GPH	12V	38 LPM - 600 GPH	51 LPM - 800 GPH	3.0A	5A	¾"
10-0910	1000 GPH	12V	44 LPM - 700 GPH	64 LPM - 1000 GPH	3.2A	5A	¾"
10-0912	1250 GPH	12V	51 LPM - 800 GPH	79 LPM - 1250 GPH	3.0A	5A	1½" & 1¼"

FOR FULL RANGE OF SIZES SEE SECTION 1

1½" ID STANDARD SUCTION & DELIVERY HOSE - 30m



Description: Very flexible suction and delivery PVC hose, reinforced with a rigid PVC spiral, for light applications. Smooth inner and outer surface and good flexibility at low temperatures.

Applications: For general purposes in agriculture, marine, general and building industries. Suitable for deck drains, pump outlets and low suction inlets. Conveyance of liquids, granules, dust and powder.

Part No.	ID Inch	ID mm	Weight g/m	Vacuum m.H2O	Working Pressure
1-90019*	1½"	28	320	32	7 bar

Colour: Black

* Temp range: -5°C + 35°C

FOR FULL RANGE OF SIZES SEE SECTION 3

1½" PLASTIC SKIN FITTINGS



To fit 1½" delivery hose (1-90019)

- Precision moulded in high strength glass reinforced plastic (Marelon®)
- Suitable for either above or below the water line

Part No. 3-80503A White



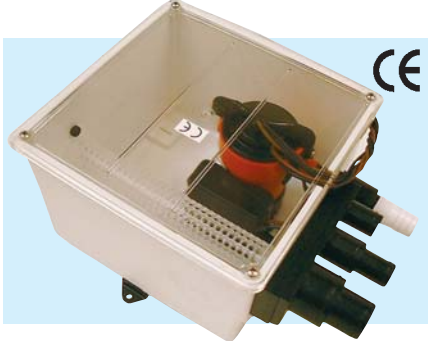
- Moulded in off-white nylon
- Long one size hose tail design
- Enables two clip fitting
- Thread: 1" BSP

Part No. 3-85560 Off-White

SHOWER SUMP PUMP

MULTIPLE INLET SHOWER SUMP PUMP 12/24V DC

This compact unit incorporates easily removable pump and inlet filter for cleaning which are visible through clear lid. The shower sump turns on/off automatically and has multiple inlet ports for handling waste water from more than one point. Built in check valve stops water coming back. Suitable for showers, sinks, drains etc. For baths the lid requires extra sealing & venting.



Technical Specifications

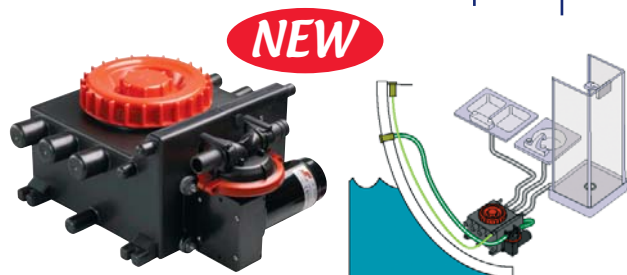
Container:	White thermoplastic
Lid:	Clear acrylic
Capacity, straight (13.6V):	61LPM
Capacity 1.0m head (13.6V):	53LPM
Pump & switch body:	Thermoplastic
Intake hoses:	1 x 3/4" ID 1 x 3/4" or 1 x 1" ID 1 x 1 1/8" or 1 x 1 1/2" ID
Discharge hose:	3/4" ID

Part No:	10-1202	10-1203
Voltage:	12V	24V
Amperage:	3.4A	2A
Fuse size:	5A	3A
Dimensions:		
Length max.:	290mm	290mm
Width max.:	210mm	210mm
Height max.:	145mm	145mm
Weight:	0.95kg	0.95kg

GREY WATER TANK

The grey water tank is designed to be used as collection tank for waste water from showers, sinks, dishwashing machines, etc with 19mm and 25mm and 38mm inlet ports, and 19mm and 25mm outlet ports. The tank includes an Ultima Switch for automatic operation and is easy to connect to any 12V/24V pump up to 20 amp. The tank is prepared for Viking Power 16, with pre-drilled holes for the pump. Dimensions: 185 x 280 x 340mm

Part No. 10-1206



PUMP ACCESSORIES

ULTIMA SWITCH™ 12/24V

New digital technology uses the patented Mirus field effect detector cells producing micro-electrical fields that detect disruptions caused by water and fluids. Detector cells are totally sealed & are never in contact with the water, will not corrode and are not affected by oil or foreign debris.

- No moving parts
- Clip to attach to any Johnson submersible bilge pump
- Totally sealed solid state electronics and field detectors
- No mercury and no exposed sensors eliminate corrosion possibilities and makes it environmentally sensitive
- Activates at a 50mm (2") fluid level and deactivates at a 20mm (3/4") fluid level
- A three second delay prevents false starts
- Rated to handle pumps up to 20 amps at 12 or 24 volts



Part No. 10-1901

BILGE ALERT™ 12/24V

High water alarm featuring new digital technology using the patented Mirus field effect cell.

- Totally sealed fluid detector is never in contact with water, will not corrode and is not affected by oil or debris
- Bilge Alert detects water and sends a signal to the alarm (100db) and LED warning light switch conveniently mounted on a panel
- Three way rocker switch allows alarm to be tested, turned off and armed.

12V Part No. 10-1904

24V Part No. 10-1905



NEW

AUTOMATIC SWITCH AS888

For full automatic bilge pumping operation, connect the automatic switch to your bilge pump. This automatic switch has a time-proven micro-switch without mercury. When water exceeds the acceptable level, the pump is turned on by a rolling steel ball, which changes the pressure on the micro-switch.

May be attached to any Johnson bilge pump through the slide on "T" - slot and can be used with 6, 12, 24 or 32V systems.

15 Amp max. Max operating height 95mm.

O.A. size: Length 115mm x width 75mm

Caution: Not to be used at more than 180 watts.



Part No. 10-1188

BILGE PUMP CONTROL SWITCH PANEL

Johnson switch panel gives full control of your equipment. Just push the button for manual or automatic bilge pumping. The automatic feature operates in combination with the automatic bilge switch or the electronic float switch.

The three-position switch panel in matt black has an integrated fuse holder and operating light.

For 12 or 24V systems. Supplied with fuses. Size: 73 x 60mm and depth 40mm.



12V Part No. 10-1224

24V Part No. 10-1225

AQUA JET WATER PRESSURE SYSTEMS

Quiet and pulsation-free even at low speeds, the Aqua Jet five-chamber diaphragm pump from Johnson Pump provides the perfect solution for both small and medium-sized leisure and commercial boats.

The enlarged five-valve, five-chamber design improves efficiency while reducing motor speed at the same time. Lower stress on the diaphragm increases its life, as does the fact the diaphragm snaps into place and is therefore not perforated anywhere by screws or bolts. A mounting bracket with hollow rubber cushioning is standard & makes it possible to install the AquaJet in virtually any position while assuring whisper-quiet operation.

It is recommended to install with pump protector inlet strainer & an accumulator tank.

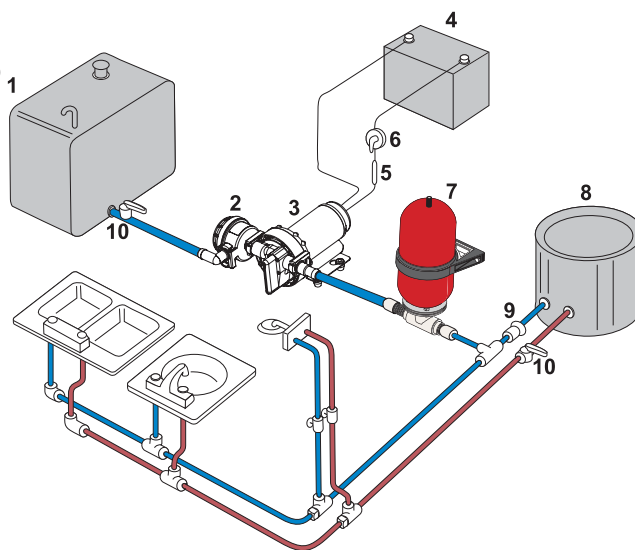
CE marked according to the following standards:

- EN55014: 1993/Radio disturbance
- ISO8846: Small Craft - Electrical devices - protection against ignition of surrounding flammable gases
- ISO10133: Small Craft - Electrical systems - extra low voltage DC installations

A TYPICAL PLUMBING SYSTEM

We recommend valves to be fitted on tank, and calorifier outlet side.

1. Water tank
2. Inlet strainer
3. Water pressure pump
4. Battery
5. Fuse
6. Switch
7. Accumulator tank
8. Water heater
9. Check valve
10. Shut-off valve



WATER PRESSURE SYSTEM - AQUA JET UNO & AQUA JET DUO

Built on the whisper-quiet and pulsation-free Aqua Jet series Water Pressure Systems. The WPS units combine all the elements needed for ease of installation as well as built-in pre-pressurized 2-litre accumulator tank and inline strainer. The new base design allows for installation in both vertical and horizontal positions, making the pump a true saving unit especially suited for today's modern marine needs.

NEW CAPACITIES

AQUA JET UNO

Medium demand unit with a single Aqua Jet WPS capacity 13 Lpm or 20 Lpm fixed on a base with PUMProtector inlet strainer and pre-pressurized 2-litre accumulator tank.



AQUA JET DUO

High demand unit with two parallel-connected Aqua Jet WPS capacity 40 Lpm fixed on a base with PUMProtector inlet strainer and pre-pressurized 2-litre accumulator tank.

If flow demand is low only the first pump will run & the second will cut in if demand increases.

- Pump 1:**
- Cut-in pressure: 1.4bar
 - Cut-off pressure: 2.1bar
- Pump 2:**
- Cut-in pressure: 1.7bar
 - Cut-off pressure: 2.8bar



Model	Cut-Off Pressure	Capacity	Connection	12V Part No.	Fuse Size	24V Part No.	Fuse Size
Aquajet WPS Uno 3.5	2.8 bar (41psi)	13 Lpm (3.5 gpm)	3/4" Hose	10-13408-01	10A	10-13408-02	5A
Aquajet WPS Uno 5.2	2.8 bar (41psi)	20 Lpm (5.2 gpm)	3/4" Hose	10-13408-03	15A	10-13408-04	8A
Aquajet WPS Duo 10.4	2.8 bar (41psi)	40 Lpm (10.4 gpm)	3/4" Hose	10-13409-01	25A	10-13409-02	15A

AQUA JET WPS UNO MAX

AQUA JET WPS UNO MAX

Medium demand unit with a single Aqua Jet WPS with capacity 11 or 13L/min fixed on a wooden panel for easy and efficient installation. The unit includes a PUMProtector inlet strainer and a two-litre pre-pressurized accumulator tank.

NEW CAPACITIES



Part No.	Model	Capacity	Cut-off Pressure	Fuse size	Connection
10-13410-01	WPS Uno-Max 2.9 12V	11LPM - 2.9GPM	2.8bar/41 psi	10A	1/2" hose
10-13410-02	WPS Uno-Max 2.9 24V	11LPM - 2.9GPM	2.8bar/41 psi	5A	1/2" hose
10-13411-01	WPS Uno-Max 3.5 12V	13LPM - 3.5GPM	2.8bar/41 psi	10A	1/2" hose
10-13411-02	WPS Uno-Max 3.5 24V	13LPM - 3.5GPM	2.8bar/41 psi	5A	1/2" hose

AQUAJET WATER PRESSURE & WASHDOWN PUMPS

NEW CAPACITIES

AQUA JET WATER PRESSURE SYSTEMS 2.9, 3.5, 4.0 & 5.2



The five chamber Aqua Jet WPS Series provides a reliable heart for small boat and recreational vehicle water pressure system. It's lower initial price is naturally attractive, but equally important, its readily serviceable design assures low maintenance costs and years of faithful service. It's recommended to install an accumulator tank. Always use a PUMProtector inlet strainer before the pump intake.

Model:	WPS 2.9	WPS 3.5	WPS 4.0	WPS 5.2
Length:	204mm	236.5mm	240mm	240mm
Width:	197mm	210mm	214mm	214mm
Height:	110mm	116mm	110mm	110mm
Weight:	1.6kg	2kg	2kg	2kg
Motor:	85W	85W	100W	150W
Body:	PP/PPA	PP/PPA	PP	PP
Valves:	EPDM	EPDM	EPDM	EPDM
Diaphragm:	Santoprene			
Connection:	3/8" BSP/hose 1/2", 1/2" BSP/hose 3/4"			

NEW WPS 3.5 fitted with a built-in pulsation dampening by-pass to control unwanted cycling and noise



PUSHFIT PIPE CONNECTOR
1 x 15mm OD
Part No: 09-46937

Model	Capacity	Cut-Off Pressure	12V Part No.	Fuse Size	24V Part No.	Fuse Size
WPS 2.9	11LPM (2.9GPM)	2.8bar/41psi	10-13405-03	10A	10-13405-04	5A
WPS 2.9	11LPM (2.9GPM)	2.1bar/30psi	10-13405-11	10A	10-13405-12	5A
WPS 2.9	11LPM (2.9GPM)	1.4bar/20psi	10-13405-19	10A	-	-
WPS 3.5	13LPM (3.5GPM)	2.8bar/41psi	10-13395-03	10A	10-13395-04	5A
WPS 3.5	13LPM (3.5GPM)	2.1bar/30psi	10-13395-11	10A	10-13395-12	5A
WPS 3.5	13LPM (3.5GPM)	1.4bar/20psi	10-13395-19	10A	-	-
WPS 4.0	15LPM (4.0GPM)	2.8bar/41psi	10-13406-03	10A	10-13406-04	5A
WPS 4.0	15LPM (4.0GPM)	2.1bar/30psi	10-13406-11	10A	10-13406-12	5A
WPS 4.0	15LPM (4.0GPM)	1.4bar/20psi	10-13406-19	10A	-	-
WPS 5.2	20LPM (5.2GPM)	2.8bar/41psi	10-13406-07	15A	10-13406-08	8A
WPS 5.2	20LPM (5.2GPM)	2.1bar/30psi	10-13406-15	15A	10-13406-16	8A

AQUA JET FLOW MASTER 5.0 WATER PRESSURE SYSTEM

The Flow Master 5.0 is a five chamber positive displacement diaphragm pump that is an ideal choice for pressurizing water in a closed system such as that found in a boat or recreational vehicles. The digital controller adjusts water flow as the demand is increased and decreased while maintaining a very smooth flow. The **unique variable flow feature** of the flow master pump allows the pump to be mounted without an accumulator tank and still maintain an even flow regardless if one or multiple taps are being used.

Specifications	
Dimensions:	239mm long x 209mm wide x 113mm high
Weight:	2kg
Motor:	WPS 5.0 - 150W (with built-in thermal protection)
Body:	Nylon/Polypropylene
Valves:	Santoprene/EPDM
Diaphragm:	Santoprene
Connection:	3/8" BSP/hose 1/2", 1/2" BSP/hose 3/4"



NOTE: ENSURE THE CALORIFIER IS 4 BAR OR MORE

Model	Capacity	Cut-Off Pressure	12V Part No.	Fuse Size	24V Part No.	Fuse Size
WPS FM 5.0	19LPM (5GPM)	3.5bar/50psi	10-13329-03	15A	10-13329-04	8A

AQUAJET WASHDOWN PUMPS 2.9, 3.5 & 5.2



As a washdown pump the Aqua Jet offers much higher pressures than competitive models making clean-up faster & easier than ever before. Complete with trigger nozzle, pump protector, inlet strainer & hose connectors for 1/2" hose.

NEW CAPACITIES

Model:	WD 2.9	WD 3.5	WD 5.2
Length:	204mm	236.5mm	240mm
Width:	197mm	210mm	214mm
Height:	110mm	116mm	110mm
Weight:	1.6kg	2kg	2kg
Motor:	90W	130W	185W
Body:	PA	PA	PA
Valves:	Nitrile	Nitrile	Nitrile
Diaphragm:	Santoprene	Santoprene	Santoprene
Connection:	3/8" BSP/Hose 1/2"	3/8" BSP/Hose 1/2"	3/8" BSP/Hose 1/2"

Model	Capacity	Cut-Off Pressure	12V Part No.	Fuse Size	24V Part No.	Fuse Size
WD 2.9	11LPM (2.9GPM)	2.8bar/41psi	10-24728-03	10A	10-24728-04	5A
WD 3.5	13LPM (3.5GPM)	5.0bar/70psi	10-13399-03	15A	10-13399-04	8A
WD 5.2	20LPM (5.2GPM)	5.0bar/70psi	10-13407-07	20A	10-13407-08	10A

PUMP ACCESSORIES

AQUA JET WASH DOWN PUMP KIT 12/24V



New 20 LPM (5.2 GPM) wash down kit conveniently includes a high capacity Aqua Jet WD 5.2, 5 bar (70psi), PUMProtector inlet strainer, spray nozzle, bulk head fitting with valve, 7.5 metres (25') of coiled wash down hose and an illuminated panel switch all in one package. Aqua Jets wash down pump kit makes it easy to add a wash down pump to any boat.

Part No. 10-13255-3 12V

Part No. 10-13255-4 24V

Part No. 09-10616 Spare Bulkhead fitting



NEW CAPACITIES

KLICKTITE™ PORT CONNECTORS

KlickTite™ port connectors are available for virtually any hose diameter and make it possible to remove the entire unit for thorough cleaning whenever it's most convenient.

They also make it possible to drain the system quickly for effortless winterizing without the use of any tools.



Part No.	Description
09-46783	2 x ½" hose and ⅜" BSP
09-46784	2 x ¾" hose and ½" BSP
09-46939	2 x 90°, ¾" hose
09-47087	2 x 90°, ½" BSP
09-46938	2 x 90°, ½" hose
09-47026	2 x 90°, ⅜" BSP
09-47096	2 x ⅜" BSP
09-47098	2 x ½" BSP
09-47092	1 x T-connection, ¼" barb
09-46937	1 x 15mm OD Pushfit Pipe Connector

PUSHFIT PIPE TO HOSE ADAPTOR KITS

NEW

- 9-84097 15mm Pushfit Pipe to ½" Barb Adaptor Kit
- 9-84099 22mm Pushfit Pipe to ¾" Barb Adaptor Kit



Overall Length: approx 30cm

PUMPROTECTOR™ STRAINER

The new PUMProtector™ strainers are designed to prevent debris and other particles from damaging the pump or passing through the system to the final outlet.

The strainers feature transparent covers for simple inspection, a wide variety of KlickTite™ port connectors for simple installation and removal, and high quality materials for simple maintenance. The new design and connectors make it possible to remove the entire unit for thorough cleaning wherever it's most convenient. We recommend 40 mesh for water pressure and wash down pumps and 20 mesh for general purpose pumps.



Diameter	80mm (3.15")
Height	60mm (2.35")
Weight	0.15kg (0.33lbs)
Mesh	S/S 20 or 40 mesh

Universal Strainer Kit

Part No.	Mesh	KlickTite™	Connector
09-24652-01	40	2x ½" hose	⅜" BSP
			½" BSP
09-24652-03	20	2x ½" hose	⅜" BSP
			½" BSP

Quad Port Inlet Strainer Kit

Part No.	Mesh	KlickTite™	Connector
09-24653-01	40	1x ½" hose	⅜" BSP
			½" BSP



Part No. Hose Connection
10-1331 ½"
10-1332 ¾"

ACCUMULATOR TANK

The use of an accumulator tank is recommended to ensure smooth & reliable system function reducing the intervals between pump cut-in & cut-out when only small amounts of water are drawn off.

The accumulator tank is precharged at 0.8 Bar. If your pump's cut in pressure is different you may have to customise the tank to best fit your installation.

Technical Specification:	
Body:	Corrosion protected tank with internal rubber bladder
Air valve:	Standard tyre valve
Volume:	2 Litres
Dim.:	315 x 160mm dia
Weight:	1.2kg
Max operating pressure:	12Bar
Pre-charge pressure:	0.8 Bar



INLINE STRAINER

Inline filter, with extractable and washable internal plastic gauze.

OA Length 230mm
Dia 32mm

Part No. 10-1335 for ½" ID Hose
Part No. 10-1336 for ¾" ID Hose
Part No. 10-1338 for ¾" BSP

CIRCULATING PUMPS

A line of compact centrifugal pumps which combine high flow rates with very low electric current consumption, making them ideally suited for circulating fresh water in live fish tanks, heating and cooling systems. **But not saltwater.**

CM10P7-1 MAGNETIC DRIVEN CENTRIFUGAL PUMP CM30P7-1 HEAVY DUTY MAGNETIC DRIVEN CENTRIFUGAL PUMP

- Withstand's dry running up to 30 mins
- 5000 hr service life rated
- Seal-less design makes 100% leak proof

Technical Specifications

Pump Body:	PPA thermoplastic
Impeller:	PPS thermoplastic
O-ring:	EPDM
Shaft:	Stainless Steel
Magnet housing:	PSU
Liquid temp.:	Min -40°C, Max+100°C
Motor:	12/24V DC enclosed (as per IP67) permanent magnet, ball bearing mounted motor, designed for continuous operation*

Pressure & Capacity Data (based on water at 20°C/68°F)

Model	Port	Bar	kPa	ft	LPM	USGPM	Ampere draw	
							12V	24V
CM10P7-1	16	0.1	10	3.3	15.0	4.0	1.2	0.6
	16	0.15	15	4.9	12.0	3.2	1.1	0.55
	16	0.2	20	6.7	7.3	1.9	0.9	0.5
CM10P7-1	20	0.1	10	3.3	18.5	5.0	1.2	0.6
	20	0.15	15	4.9	14.5	3.9	1.1	0.55
	20	0.2	20	6.6	9.0	2.4	1.0	0.5
CM30P7-1	20	0.1	10	3.3	26.0	6.9	2.2	1.1
	20	0.2	20	6.6	19.5	5.2	2.0	1.0
	20	0.3	30	9.8	9.5	2.6	1.7	0.75

* 5000 hr service life rated

Model	Volt	Port	Weight	Fuse	Part No.
CM10P7-1	12V	16mm	0.53kg	1.6A	10-24501-03
CM10P7-1	24V	16mm	0.53kg	0.8A	10-24501-04
CM10P7-1	12V	20mm	0.53kg	1.6A	10-24502-03
CM10P7-1	24V	20mm	0.53kg	0.8A	10-24502-04
CM30P7-1	12V	20mm	0.60kg	3.0A	10-24504-03
CM30P7-1	24V	20mm	0.60kg	1.6A	10-24504-04

Dimensions
Length: 177mm
Width: 68mm
Height: 85mm



Models CM10P7-1, CM30P7-1 & CM90

CE marked according to the following standards:

- EN55014: 1993/Radio disturbance
- ISO8846: Small Craft - Electrical devices - protection against ignition of surrounding flammable gases
- ISO10133: Small Craft - Electrical systems - extra low voltage DC installations
- 72/245/EEG, 95/54/EG Electromagnetic compatibility

CM90 HEAVY DUTY MAGNETIC DRIVEN CENTRIFUGAL PUMP

Combines high flow rates with very low electric current consumption.

Capacity:	90 LPM (23.7 GPM) at 0.25 bar
System pressure:	-0.3 to +3.0 bar; stationary max 4.0 bar
Liquid:	water/glycol mixture; max. 60% glycol
Motor service life:	More than 5,000 hours at nominal voltage 10,000 start/stops. Interchangeable motor
Motor, voltage:	Nominal 13.6V DC for use between 10-16V Nominal 27.2V DC for use between 20-32V
Input power:	Max. 125W
Dry running:	30 minutes
Dimensions:	244mm long x 120mm wide x 150mm high
Ports:	Ø38mm (1½")
Weight:	3.0kg
Body:	PPA glass fibre reinforced
Mounting:	Separate universal bracket for flat surfaces

NEW



Part No: Model
10-24664-01 CM90 12V
10-24664-02 CM90 24V

C090P5-1 HEAVY DUTY CENTRIFUGAL PUMP

Designed for continuous operation - 2500hr service life rated.

Dimensions
Length: 211mm
Width: 117mm
Height: 116mm

Technical Specifications

Pump Body:	PA66 thermoplastic
Impeller:	PA66 thermoplastic
Shaft:	Stainless Steel
Shaft seal:	Mechanical seal
Motor:	12/24V DC enclosed (as per IP31) permanent magnet, ball bearing mounted motor
Liquid temp.:	Min -30°C, Max+100°C



Pressure & Capacity Data (based on water at 20°C/68°F)

Bar	kP	ft	LPM	USGPM	Ampere draw	
					12V	24V
0.1	10	3.4	100	26.4	7.4	4.3
0.2	20	6.7	78.2	20.7	7.3	4.2
0.3	30	10.1	55.6	14.7	7.0	3.9
0.4	40	13.4	32.0	8.5	6.5	3.5
0.5	50	16.8	7.1	1.9	5.9	3.0

CE marked according to the following standards:

- EN55014: 1993/Radio disturbance
- 72/245/EEG, 95/54/EG Electromagnetic compatibility

Model	Volt	Port	Weight	Fuse	Part No.
C090P5-1	12V	38mm	1.75kg	10A	10-24190-1
C090P5-1	24V	38mm	1.75kg	6A	10-24190-2

DO NOT USE FOR PUMPING PARAFFIN OR OTHER THIN PETROLEUM PRODUCTS

IMPELLER PUMPS MUST NOT BE RUN DRY

DC DRIVEN FLEXIBLE IMPELLER PUMPS

F2P10-19, F3B-19, F4B-11 & F4B-19 are CE marked according to the following standards:

- EN50082-1: 1992/Generic EMS Standard
- EN55014: 1993/Radio disturbance
- ISO8846: Small Craft - Electrical devices - protection against ignition of surrounding flammable gases
- ISO8849: Small Craft - Electrically operated bilge pumps
- ISO10133: Small Craft - Electrical systems - extra low voltage DC installations
- IEC801-2: 1984/Electrostatic Discharge
- IEC801-3: 1984/Radiated Immunity Test

F2P10-19

Multi purpose self priming pump ideal for water, oils & chemicals. Applications include bilge, deck wash, shower tray emptying etc.

Motor: 0.12kw.
Weight: 1.6kg



Technical Specification

Pump body:	PTMT
Impeller:	09-1077B-9 Nitrile
Self primes:	Up to 1.5M
Seal:	Lip Seal
Connection:	½" Hose (dia13mm)
LxWxH:	172x117x78mm

12V Part No. 10-24180-1
24V Part No. 10-24180-2

Pressure & Capacity Data (based on water at 20°C/68°F)

Bar	kPa	ft	LPM	USGPM	Ampere draw	
					12V	24V
0	0	0	15.0	4.0	5.6	4.0
0.1	10	3.4	14.5	3.8	5.7	4.0
0.2	20	6.1	14.0	3.7	5.8	4.1
0.3	30	10.1	13.5	3.6	5.9	4.1
0.6	60	20.1	11.0	2.9	6.1	4.2
Fuse required					15A	8A

F3B-19

This has proven to be a very reliable pump. Universal mounting. General purpose self-priming flexible impeller pump with powerful electric motor suitable for refuelling, bilge pumping, irrigating etc. Connection for vacuum switch. **Motor:** 0.12kw. Can run continuously in certain conditions.



Technical Specification

Pump body:	Bronze
Impeller:	09-1052S-9 Nitrile
Self primes:	Up to 3M
Seal:	Lip Seal
Connection:	¾" BSP
LxWxH:	170x100x82mm
Weight:	2.0kg

12V Part No. 10-24516-01
24V Part No. 10-24516-02

Pressure & Capacity Data (based on water at 20°C/68°F)

Bar	kPa	ft	LPM	USGPM	Ampere draw	
					12V	24V
0	0	0	21.0	5.5	8.4	4.0
0.1	10	3.4	20.5	5.4	8.5	4.0
0.2	20	6.1	20.0	5.3	8.6	4.1
0.3	30	10.1	19.5	5.2	8.8	4.1
0.6	60	20.1	17.8	4.7	9.0	4.2
Fuse required					15A	8A

F4B-19

Heavy duty impeller pump for bilge pumping, deckwash, water circulation, oil and diesel refuelling at dockside service, etc. The motor is 12/24V DC, ball bearing mounted, ignition protected and has a thermal protection to prevent it from over-heating. Vacuum switch & deck wash as extra accessory. **Motor:** 0.25kw.



Technical Specification

Pump body:	Bronze
Impeller:	09-824P-9 Nitrile
Self primes:	Up to 4M
Seal:	Lip Seal
Connection:	1" Hose or ½" BSP
LxWxH:	202x120x90mm
Weight:	3.0kg

12V Part No. 10-24689-01
24V Part No. 10-24689-02

Pressure & Capacity Data (based on water at 20°C/68°F)

Bar	kPa	ft	LPM	USGPM	Ampere draw	
					12V	24V
0	0	0	48.0	12.7	12.2	6.5
0.1	10	3.4	45.0	11.9	12.3	6.7
0.2	20	6.1	44.5	11.7	12.2	6.8
0.3	30	10.1	41.0	10.8	13.1	7.1
0.6	60	20.1	34.0	9.0	14.9	7.5
Fuse required					15A	8A

F4B-11 ULTRA BALLAST PUMP

Designed to quickly fill or when reversed, drain a ballast tank at a rate of more than 45 L/min (12 GPM). Capable of pumping fresh or sea water the pump's robust design can handle the rigors of continues duty usage, is reversible, & has a built in thermal overload for added protection. Care not to run dry for extended periods of time will increase the pump longevity and ensure reliable performance for many years. **Note: Only for waterhandling.**

12V Part No. 10-24690-01 24V Part No. 10-24690-02



For technical specification see F4B-19 details above
Impeller: 09-824P-1



NEW

POLARITY REVERSING SWITCH KIT

For Ultra Ballast Pump F4B-11
Part No.: 09-47196



F5B-19

Heavy duty electric self priming impeller pump for commercial users, suitable for deckwashing, refuelling, etc. Connection for vacuum switch.

The motor can be run continuously up to 0.5 Bar* & for max 1 hour at 1 Bar*.

Motor: 0.27kw.

*at nominal voltage and room temperature



Technical Specification

Pump body:	Bronze
Impeller:	09-1027B-9 Nitrile
Self primes:	Up to 4M
Seal:	Mechanical Seal
Connection:	¾" BSP
LxWxH:	258x131x120mm
Weight:	8.0kg

12V Part No. 10-24188-1
24V Part No. 10-24188-2

Pressure & Capacity Data (based on water at 20°C/68°F)

Bar	kPa	ft	LPM	USGPM	Ampere draw	
					12V	24V
0	0	0	55.0	14.5	23.2	11.9
0.3	30	10.1	49.4	13.1	24.2	12.8
0.6	60	20.1	39.9	10.5	25.1	13.3
0.9	90	30.2	30.1	8.0	26.2	14.0
1.2	120	40.2	19.3	5.1	28.0	14.7
1.5	150	50.2	9.3	2.4	29.8	15.3
Fuse required					50A	25A
Recommended wire size					16mm ²	6mm ²

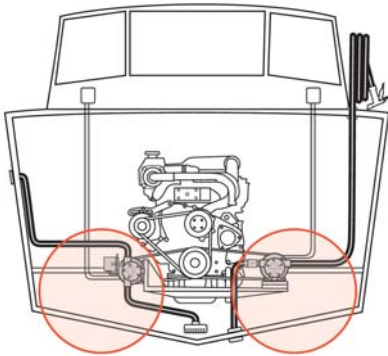
F5B-19 is CE marked according to the following standards:

- EN55014: 1993/Radio disturbance

SEE PAGE 11 FOR VACUUM SWITCH
SEE SECTION 1 FOR HOSES & PIPE FITTINGS

SELF-PRIMING FLEXIBLE IMPELLER CLUTCH PUMPS FOR BILGE & DECKWASH

Self priming impeller pumps with electromagnetic clutch giving remote or automatic control and if vacuum switch (accessory) fitted prevents dry running.



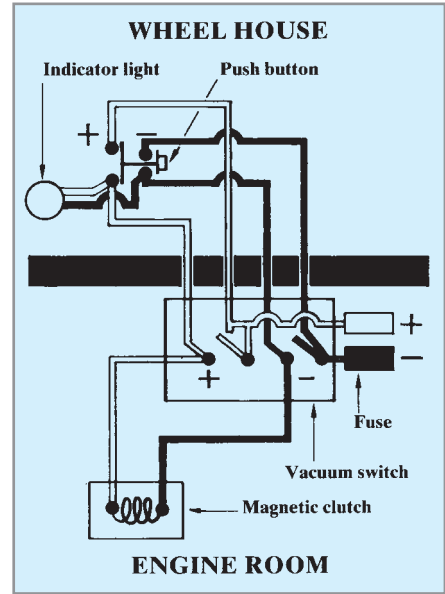
Two ranges available:

Dimensions available on request
Heavy Duty: Mechanical seal, heavy duty twin bearing housing

Technical Specifications

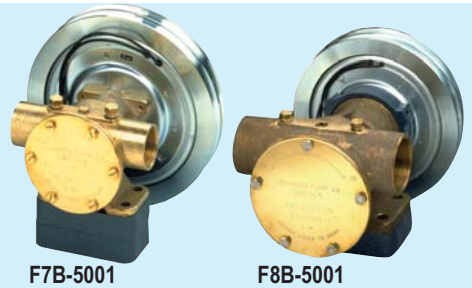
(Full details available on request)

Body:	Bronze with vacuum switch tapping
Shaft:	S/S double ball bearing mounted
Seal:	Mechanical Seal
Impeller:	Neoprene (standard) or Nitrile Model: F9B-5600 available with high pressure impeller
Cam:	Full (standard) or Reduced



AUTOMATICALLY CONTROLLED PUMPS

The pump can be switched on in the engine room by depressing the button on the vacuum switch or by remote control from wheelhouse etc. - see wiring diagram. Depress remote control button for 15 seconds and the pump engages. When the bilge is dry the pump automatically is shut down by vacuum switch. A control panel with lights and three position switch is advisable. See page 4.



STANDARD DUTY RANGE

Model	Table	Ports	Length	Width*	Height*	Impeller	Part No.
F7B-5001	D	1" BSP	156mm	120mm	93mm	09-1028B	10-24577-99*
F8B-5001	E	1½" BSP	225mm	160mm	124mm	09-819B	10-13022-99*

*excludes pulley

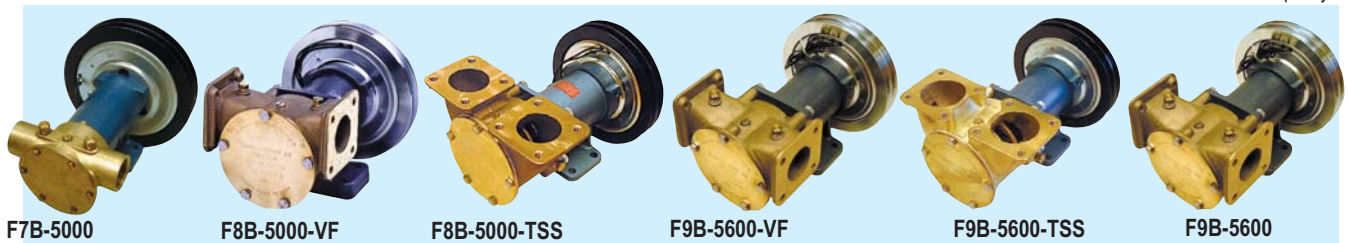
FOR PERFORMANCE FIGURES SEE PAGE 12 QUOTING TABLE APPLICABLE

HEAVY DUTY RANGE



Model	Table	Ports	Position	Length	Width*	Height*	Impeller	Part No.
F7B-5000	D	1" BSP	Horizontal	226mm	120mm	93mm	09-1028B	10-24116-99*
F8B-5000-VF	E	1½" Flange	Horizontal	265mm	152mm	154mm	09-819B	10-13025-99*
F8B-5000-TSS	E	1½" Flange	Vertical	265mm	198mm	151mm	09-819B	10-13176-99*
F9B-5600	G	2" BSP	Horizontal	290mm	192mm	157mm	09-819B	10-13027-99*
F9B-5600-VF	G	2" Flange	Horizontal	290mm	152mm	175mm	09-814B	10-13226-99*
F9B-5600-TSS	G	2" Flange	Vertical	290mm	200mm	151mm	09-814B	10-13178-99*
F95B-5000	H	2½" BSP	H or V	358mm	295mm	226mm	09-820B	10-13143-99*

*excludes pulley



THE CLUTCH PUMPS ARE SUPPLIED BARE SHAFTED



ELECTRO MAGNETIC CLUTCH

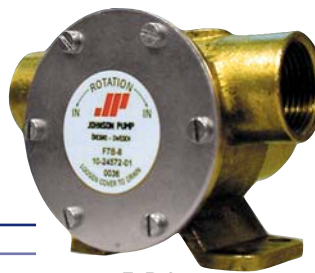
Order from the following clutches to suit your engine pulley groove

Voltage	Groove	Diameter	Part No.
12V DC	2 x A	178mm	05-32-1
24V DC	2 x A	178mm	05-32-2
12V DC	1 x B	178mm	05-32-3
24V DC	1 x B	178mm	05-32-4

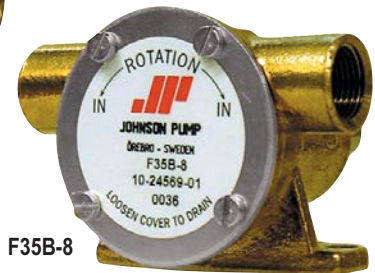
SELF-PRIMING BRONZE FLEXIBLE IMPELLER PUMPS

STANDARD DUTY FOOT MOUNTED PUMPS

Compact multi-purpose self priming impeller pumps. Pulley or in line driven. Ideal for engine cooling, bilge, deckwash, fresh water, fuel transfer etc. Also ideally suited for on shore to empty septic tanks, to flush clean and to fill water tanks. Vacuum switch as extra accessory for F8B-8 only. Now fitted with wear plates and S/S end covers



F7B-8



F35B-8

Technical Specifications (Full details available on request)

Body body:	Bronze
Shaft:	Stainless Steel, double ball bearing mounted
Seal:	Mechanical Seal
Impeller:	MC97 & Neoprene (standard) or Nitrile (on request)
Cam:	Full (standard) or Reduced (on request)

Model	Table	Ports	Shaft	Length	Width	Height	Weight	Impeller	Part No.
F35B-8	A	3/8" BSP	12mm	109mm	80mm	30mm	0.5kg	09-808B-1 (MC97)	10-24569-01
F4B-8	B	3/8" BSP	12mm	111mm	80mm	50mm	0.5kg	09-810B-1 (MC97)	10-24570-01
F5B-8	C	3/4" BSP	17mm	151mm	106mm	50mm	1.6kg	09-1027B-1 (MC97)	10-24571-01
F7B-8	D	1" BSP	17mm	170mm	120mm	50mm	1.9kg	09-1028B (Neoprene)	10-24572-01
F8B-8	E	1 1/2" BSP	24mm	217mm	160mm	65mm	5.9kg	09-819B (Neoprene)	10-13021-1

HEAVY DUTY FOOT MOUNTED PUMPS

Self priming impeller pumps designed for professional users like commercial boats, or industry, with larger shaft, mechanical seal, and heavy duty bearings. Pulley or in line motor driven. Vacuum switch as extra accessory.

Technical Specifications (Full details available on request)

Body:	Bronze
Seal:	Mechanical
Shaft:	Stainless Steel, with cast iron twin ball bearing housing
Impeller:	MC97 & Neoprene (standard) or Nitrile (on request) (Model F9B - 3000 available with high pressure impeller - 09-814B)
Cam:	Full (standard) or Reduced (on request)



F95B-3000



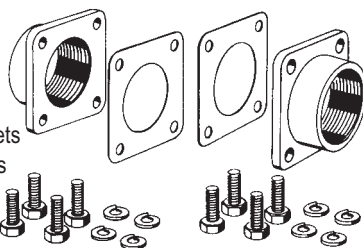
F5B-3000

Model	Table	Ports	Position	Shaft	Length	Width	Height	Weight	Impeller	Part No.
F5B-3000	C	3/4" BSP	Horizontal	17mm	195mm	106mm	88mm	2.9kg	09-1027B-1 (MC97)	10-24210-1
F7B-3000	D	1" BSP	Horizontal	17mm	213mm	120mm	93mm	3.1kg	09-1028B (Neoprene)	10-24209-1
F8B-3000-VF	E	1 1/2" Flange	Horizontal	24mm	255mm	152mm	154mm	7.6kg	09-819B (Neoprene)	10-13024-1
F8B-3000-TSS	E	1 1/2" Flange	Vertical	24mm	255mm	198mm	151mm	7.6kg	09-819B (Neoprene)	10-13175-01
F9B-3000	F	2" BSP	Horizontal	24mm	282mm	192mm	157mm	9.3kg	09-802B (Neoprene)	10-13026-1
F9B-3000-VF	F	2" Flange	Horizontal	24mm	282mm	152mm	175mm	9.3kg	09-802B (Neoprene)	10-13225-01
F9B-3000-TSS	F	2" Flange	Vertical	24mm	282mm	200mm	151mm	9.3kg	09-802B (Neoprene)	10-13177-01
F95B-3000	H	2 1/2" BSP	V or H	24mm	354mm	295mm	226mm	17.2kg	09-820B (Neoprene)	10-13121-01

FOR PERFORMANCE FIGURES SEE PAGE 12 QUOTING TABLE APPLICABLE

FLANGE ADAPTOR KIT

- Suitable flanged ports for pumps F8B-3000 to F9B-5600-TSS
- Cast gun metal
- Set contains 2 flanges, gaskets & machine screws & washers



BSP Thread	Flange Size	Part No.
1 1/2"	83mm ²	09-43112
2"	88mm ²	09-46557-01



VACUUM SWITCH

Diaphragm operated, reliable & advisable for all bilge pumping or refuelling to prevent dry running. With switch fitted, pump can be started by remote control (Electric 12/24V) or by manual lever on switch.

- Passivated steel body
- 1/4" BSP Pump Connector
- Size: Height 92mm Width 105mm



Part No. 09-45053

JOHNSON BRONZE IMPELLER PUMPS

Table	Ports	S/D ft mt	H/D ft mt	H/D Clutch	S/D Clutch
A	3/8" BSP	F35B-8	-	-	-
B	3/8" BSP	F4B-8	-	-	-
C	3/4" BSP	F5B-8	F5B-3000	-	-
D	1" BSP	F7B-8	F7B-3000	F7B-5000	F7B-5001
E	1 1/2" BSP/FL	F8B-8	F8B-3000	F8B-5000	F8B-5001
F	2" BSP/FL	-	F9B-3000	-	-
G	2 1/2" BSP/FL	-	-	F9B-5600	-
H	2 1/2" BSP	-	F95B-3000	-	-



A	700 rpm			900 rpm			1400 rpm			1750 rpm			2000 rpm			2500 rpm					
	Bar	kPa	ft	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM			
	0.3	30	10.1	0.06	5.2	1.4	0.09	6.8	1.8	0.13	11.2	3.0	0.16	14.0	3.7	0.18	16.0	4.2	0.18	20.5	5.4
	0.6	60	20.1	0.09	4.6	1.2	0.09	6.2	1.6	0.13	10.6	2.8	0.16	13.7	3.6	0.18	15.8	4.1	0.18	19.6	5.2
	1.0	100	33.5	0.09	4.0	1.1	0.09	5.6	1.5	0.18	9.2	2.4	0.18	11.8	3.1	0.18	13.6	3.6	0.18	17.0	4.5

B	700 rpm			900 rpm			1400 rpm			1750 rpm			2000 rpm			2500 rpm					
	Bar	kPa	ft	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM
	0.3	30	10.1	0.06	12.0	3.2	0.09	15.0	4.0	0.13	23.0	6.0	0.17	27.0	7.1	0.18	30.5	8.1	0.18	34.5	9.1
	0.6	60	20.1	0.09	11.0	2.9	0.09	14.0	3.7	0.13	21.0	5.5	0.17	25.0	6.6	0.18	28.0	7.4	0.18	33.0	8.7
	1.0	100	33.5	0.09	9.0	2.4	0.09	11.0	2.9	0.18	18.0	4.8	0.18	22.0	5.8	0.18	25.0	6.6	0.18	29.5	7.8
	1.5	150	50.3	0.09	4.5	1.2	0.09	7.0	1.8	0.18	13.5	3.6	0.18	17.0	4.5	0.18	20.0	5.3	0.24	25.0	6.6

C	700 rpm			900 rpm			1400 rpm			1750 rpm			2000 rpm					
	Bar	kPa	ft	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM
	0.3	30	10.1	0.13	16.0	4.2	0.18	21.0	5.5	0.37	33.0	8.7	0.37	41.0	10.8	0.37	46.0	12.2
	0.6	60	20.1	0.13	15.0	4.0	0.18	20.0	5.3	0.37	32.0	8.5	0.37	39.5	10.4	0.37	45.0	11.9
	1.0	100	33.5	0.13	14.0	3.7	0.18	19.0	5.0	0.37	30.0	7.9	0.37	37.0	9.8	0.37	42.0	11.1
	1.5	150	50.3	0.13	13.0	3.4	0.18	17.0	4.5	0.37	27.0	7.1	0.37	33.5	8.9	0.37	38.0	10.0
	2.0	200	67.1							0.37	22.0	5.8	0.37	28.5	7.5	0.37	33.0	8.7

D	700 rpm			900 rpm			1400 rpm			1750 rpm			2000 rpm					
	Bar	kPa	ft	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM
	0.3	30	10.1	0.37	36.0	9.5	0.37	46.0	12.2	0.75	74.0	19.6	0.75	98.0	25.9	0.75	107.0	28.3
	0.6	60	20.1	0.37	34.0	9.0	0.37	44.0	11.6	0.75	72.0	19.0	0.75	96.0	25.4	0.75	104.0	27.5
	1.0	100	33.5	0.37	29.0	7.7	0.37	40.0	10.6	0.75	67.0	17.7	0.75	87.0	23.0	0.75	98.0	25.9
	1.8	180	60.4	0.37	21.0	5.5	0.37	30.0	7.9	0.75	57.0	15.1	0.75	73.0	19.3	0.75	84.0	22.2
	2.5	250	83.8							0.75	37.0	9.8	1.1	52.0	13.7	1.1	63.0	16.6

E	700 rpm			900 rpm			1400 rpm			1750 rpm			2000 rpm					
	Bar	kPa	ft	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM
	0.3	30	10.1	0.37	87.0	9.5	0.75	114.0	30.1	1.1	188.0	50.0	1.5	241.0	63.7	1.5	279.0	73.7
	0.6	60	20.1	0.37	80.0	9.0	0.75	107.0	28.3	1.1	180.0	47.6	1.5	233.0	61.6	1.5	270.0	71.3
	1.0	100	33.5	0.37	73.0	7.7	0.75	101.0	26.7	1.1	177.0	46.8	1.5	228.0	60.2	1.5	264.0	69.7
	1.8	180	60.4				1.1	70.0	18.5	1.1	148.0	39.1	2.2	203.0	53.6	2.2	242.0	63.9
	2.5	250	83.8							1.1	108.0	28.5	2.2	166.0	43.9	2.2	208.0	55.0

F	700 rpm			900 rpm			1400 rpm			1750 rpm			2000 rpm					
	Bar	kPa	ft	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM
	0.3	30	10.1	0.75	129.0	34.1	0.75	170.0	44.9	1.5	268.0	70.8	1.5	331.0	87.5	2.2	388.8	102.7
	0.6	60	20.1	0.75	124.0	32.8	0.75	161.0	42.5	1.5	260.0	68.9	2.2	323.0	85.3	2.2	383.1	101.2
	1.0	100	33.5	0.75	118.8	31.4	1.1	156.0	41.2	1.5	255.6	67.5	2.2	315.2	83.3	3.0	379.2	100.2
	1.8	180	60.4	1.1	105.0	27.7	1.1	140.0	37.0	1.5	235.0	62.1	2.2	286.1	75.6	3.0	351.3	92.8
	2.5	250	83.8	1.1	83.7	22.1	1.5	102.0	26.9	2.2	208.0	55.2	3.0	266.0	70.3	3.0	304.1	80.3

G	700 rpm			900 rpm			1400 rpm			1750 rpm			2000 rpm					
	Bar	kPa	ft	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM
	0.3	30	10.1	0.75	129.0	34.1	1.1	170.0	44.9	1.5	270.0	71.3	1.5	331.0	87.5	2.2	376.0	99.3
	0.6	60	20.1	0.75	126.0	32.8	1.1	165.0	43.6	1.5	266.0	70.3	2.2	323.0	85.3	2.2	368.0	97.2
	1.0	100	33.5	0.75	123.0	32.5	1.1	161.1	42.6	2.2	260.0	68.7	2.2	314.0	83.3	3.0	361.0	95.4
	1.8	180	60.4	0.75	110.0	29.1	1.5	153.0	40.4	2.2	242.0	63.9	2.2	291.0	76.9	3.0	340.0	89.8
	2.5	250	83.8	1.1	90.0	23.8	1.5	130.0	34.3	2.2	218.0	57.6	3.0	269.0	71.1	3.0	312.0	82.4
	3.0	300	100.6	1.5	61.0	16.1	2.2	102.0	26.9	3.0	190.0	50.2	3.0	242.0	63.9	3.5	284.0	75.0
	3.5	350	117.4	-	-	-	-	-	-	3.0	160.0	42.3	3.5	205.0	54.2	3.5	235.0	62.1

H	700 rpm			900 rpm			1400 rpm			1750 rpm			2500 rpm					
	Bar	kPa	ft	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM	kw	LPM	USGPM
	0.5	50	16.8	0.75	182.6	48.2	1.1	236.5	62.5	1.5	384.2	101.5	2.2	483.6	127.8	4.0	626.7	165.5
	1.0	100	33.5	1.1	172.7	45.6	1.1	231.3	61.1	1.5	372.0	98.3	3.0	472.9	124.9	5.5	617.9	163.2
	1.5	150	50.3	1.1	160.1	42.3	1.5	214.5	56.7	2.2	350.4	92.6	3.0	444.1	117.3	5.5	583.8	154.2
	2.0	200	67.1	1.1	132.3	35.0	1.5	181.0	47.8	3.0	315.4	83.3	3.5	406.2	107.3	5.5	553.1	146.1
	2.5	250	83.8	1.5	79.5	21.0	2.2	137.8	36.4	3.0	267.6	70.7	4.0	361.3	95.5	7.5	506.4	133.8

PRESSURE AND CAPACITY DATA - IMPELLER NEOPRENE - FULL CAM
 (based on water at 20°C/68°F)
 Reduced cam: 30-40% lower capacity Impeller of nitrile:
 Adjust total head approx. 30% down

SPARES & SERVICE KITS

TECHNICAL

How to calculate cu metre capacity per hour of a pump
Example: at 2000 RPM & 0.5 Bar the flow is approx. 500 LPM

$$\frac{500 \times 60}{1000} = 30\text{m}^3/\text{hour}$$

SPARES AND SERVICE KITS FOR FOOT MOUNTED PUMPS

Part No.	Model	Service Kit	Impeller	End Cover	Wear Plate	Shaft
10-13021-1	F8B-8	09-45575	09-819B	01-42422-1	01-42423	01-35132
10-13022-99	F8B-5001	09-45575	09-819B	01-42422-1	01-42423	01-35136
10-13024-1	F8B-3000	09-45579	09-819B	01-42422-1	01-42423	01-35137
10-13025-99	F8B-5000	09-45579	09-819B	01-42422-1	01-42423	01-35138
10-13026-1	F9B-3000	09-45581	09-802B*	01-42422-1	01-42423	01-35137
10-13027-99	F9B-5600	09-45582	09-814B	01-42422-1	01-42423	01-35138
10-24116-99	F7B-5000	09-45590	09-1028B	01-42441	01-42443	01-35084
10-24180-1/2	F2P10-19	09-45594	09-1077B-9	21-4945 (Inner 21-4944, Outer 21-4946)	-	-
10-24188-1/2	F5B-19	09-45584	09-1027B-9	01-43252	01-42399	-
10-24209-1	F7B-3000	09-45590	09-1028B	01-42441	01-42443	01-35177
10-24210-1	F5B-3000	09-45583	09-1027B	01-42398	01-42399	01-35177
10-24453-04/5	TA3P10-19	09-45595	09-1052S-9	01-35719-1	37-3206221	-
10-24516-01/2	F3B-19	09-45595	09-1052S-9	01-43141	-	-
10-24569-01	F35B-9	09-46840	09-808B-1	01-46739-2	01-46676	01-46735-1
10-24569-13	F35B-9	09-45589	09-808B-1	01-46739-2	01-46676	01-46735-1
10-24570-01	F4B-8	09-46841	09-810B-1	01-46007-2	01-46737-2	01-46735-1
10-24570-03	F4B-8	09-45587	09-810B-1	01-46007-2	01-46737-2	01-46735-1
10-24571-01	F5B-8	09-46843	09-1027B-1	01-46747-2	01-42399-2	01-46744
10-24572-01	F7B-8	09-46845	09-1028B	01-46648-3	01-46798-2	01-46744
10-24577-99	F7B-5001	09-46868	09-1028B	01-46648-3	01-46798-2	01-46745
10-24689-01/02	F4B-19	09-46600	09-824P-9	01-42398	-	-

*Optional is 09-814B High Pressure Impeller

- All Service Kits contain Impeller, Gasket, 2 end cover screws, seal (water) & MC97 if required
- -1 after impeller signifies MC97 impeller (engine cooling) i.e. 09-808B-1
- -9 after impeller signifies Nitrile (oil resistant) i.e. 09-1077B-9
- Remaining impellers without a suffix are Neoprene (engine cooling) i.e. 09-819B

SPARES

Due to the wide and differing range we quote to order. Please specify full Part No. on end cover. i.e. 10-24180-1 alternatively specify exact engine make & model. If neither of above possible please specify, Port size and direction, shaft size, end cover size, & shape and number of screws.



LIVWELL AERATING PUMPS

AQUA JET 5.2 WASH DOWN / LIVWELL PUMP KIT 12V

A new wash down kit including a high capacity Aqua Jet WD 5.2, 5 bar (70 psi) pump, a 550 GPH Twin Port live well pump, PUMPProtector inlet strainer, spray nozzle, bulk head fitting with valve, 7.5 meters (25') of coiled wash down hose and two illuminated panel switches all in one package. Aqua Jets wash down/live well pump kit makes it easy to add a wash down and live well pump to any boat.

Part No: 10-64634



NEW



**500GPH
CARTRIDGE
AERATOR PUMP
STRAIGHT**

Smaller profiles to fit in more confined spaces. Easy to change motor cartridge. Johnson Pump cartridge aerator pumps offer the ease of convenience and years of reliable service.

Part No: 10-1280

NEW

VIKING PUMPS

Viking Pump Features:

- Quiet operation
- High-impact glass-fibre reinforced nylon body
- Ball-bearing supported transmission
- Can be run dry and can pump air/water mixture
- Robust single diaphragm
- Complies with ISO 15083 and small craft bilge pump standard for vessels above 12m (39.4ft)

CE CE marked according to following standards:

Recreational Craft Directive 94/25/EEC

ISO8846: Small Craft - Electrical devices - Protection against ignition of surrounding flammable gases

ISO10133: Small Craft - Electrical systems - Extra-low voltage DC installations

ISO8849: Small Craft - Electrically operated bilge pump

Electromagnetic Compatibility Directive 89/336/EEC

EN55014: 1993/Radio disturbance

VIKING POWER 32 & VIKING POWER VACUUM

Compact toilet handling and waste water pump

Thanks to its single-chamber design and non-choke valves, the Viking Power 32, can be used to pump un-macerated sewage to a holding tank or transfer it onwards to a septic tank. The Viking Power Vacuum has double check-valves and can therefore also be used in vacuum toilet systems. Naturally, pumping ordinary shower or sink drain water or bilge water is no problem for either pump.

Model	12V Part No.	24V Part No.
Viking Power 32	10-13373-03	10-13373-04
Viking Power Vacuum	10-13373-07	10-13373-08

Technical Specifications

Capacity:	32LPM (8.5GPM) open flow 30LPM (7.9GPM) at 0.1 bar
Max head:	4m (13.1ft)
Max lift:	VP32: 2.5m (8.2ft) VP Vacuum: 3.5m (11.5ft)
Dimensions:	VP32: 277mm long x 264mm wide x 192mm high VP Vacuum: 357mm long x 271mm wide x 192mm high
Ports:	38mm diameter (1½")
Weight:	VP32: 5.0kg (11.0lbs) VP Vacuum: 5.1kg (11.2lbs)
Motors:	3.5 amp (12V), 1.8 amp (24V) at 0.1 bar 12/24V DC (with built-in thermal protection)
Body:	Nylon
Valves:	Nitrile rubber
Diaphragm:	Reinforced nitrile rubber



10-13373-03



10-13373-07

Additional Features:

- Specifically engineered to pump black wastewater
- Uncompromising odour-prevention features
- Self-priming
- Non choke valves - no waste shredding required
- Pump head rotatable 360°
- Double check valves on Viking Power Vacuum
- Self-priming up to 2.5 metres (8.2 feet)
- Electric motor with power-out, manual-crank backup

VIKING POWER 16 WASTE WATER PUMP 12V & 24V

An ultra-modern, single-chamber, self-priming diaphragm pump that can be set up in several different pump/motor configurations. It is easy to install anywhere after the drain outlet in the wastewater system or as a bilge pump in any leisure craft - new or used.

Model	12V Part No.	24V Part No.
Viking Power 16	10-13350-03	10-13350-04

Technical Specifications

Capacity:	16 LPM (4.2GPM) open flow (15LPM at 0.1 bar)
Max. head:	3m (9.8ft)
Max. lift:	3m (9.8ft)
Max. head and lift:	4m (13.1ft)
Dimensions:	186mm long x 235/181mm wide x 118/204mm high
Connections:	KlickTite™ connectors for 1" hose or ¾" hose and ½" BSP threads; straight and 90° (optional)
Weight:	2.6kg (5.7 pounds)
Motor:	2.3 Amp (12V), 1.2 Amp (24V) at 0.1 bar 12/24V DC (with built-in thermal protection)
Body:	Nylon, glass-fibre reinforced
Valves:	Nitrile rubber
Diaphragm:	Reinforced nitrile rubber

Viking Power 16 Spare Connectors:

Descriptions	Part No.
2 x Straight ¾" hose	09-47116
2 x Straight 1" hose	09-47117
2 x 90° ¾" hose	09-47118
2 x 90° 1" hose	09-47119

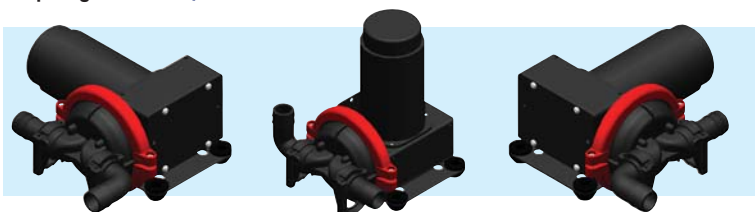


Viking Power 16 Additional Features:

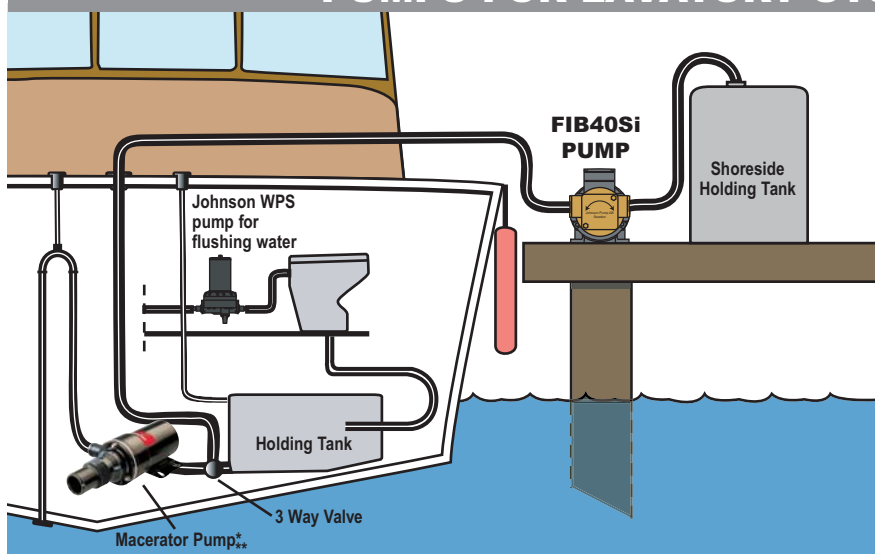
- Specifically designed to pump wastewater
- Easy to install, even in tight spaces
- Easy, low cost maintenance
- Non-choke valves - no filters required
- Self-priming up to 3m (9.8ft)
- KlickTite™ connectors standard
- Low power consumption



Perfect for installation in tight spaces, the Viking Power 16 shower drain pump can be incorporated into a small boat wastewater system in several different pump/motor configurations. Compact, robust and adaptable, this pump can be mounted virtually anywhere on board. The Viking Power 16 has KlickTite connectors fitted as standard, literally making hose connections a snap!



PUMPS FOR LAVATORY SYSTEMS



TA3P10-19 MACERATOR PUMP

This unit disposes of toilet waste with rotary cutter shredding waste before it is pumped by incorporated self-priming flexible impeller pump.

The macerator pump should be placed as close as possible to the holding tank to enable the tank to be emptied overboard, providing it is fitted at the tank base.

* Use TA3P10-19 macerator pump on installations with manual toilets or toilets without macerator fitted.

** Use Viking Power 32 on installations fitted with macerator toilets.

MACERATOR TA3P10-19 12/24V

This unit disposes of toilet waste with rotary cutter shredding waste before being put overboard or into a holding tank by incorporated flexible impeller pump. Self priming up to 0.8M and works with vacuum toilets. Steel cased with 4 hole mounting bracket.

**FIT AT TANK BASE LEVEL.
USE UNBLEACHED LAVATORY PAPER ONLY.
DO NOT RUN PUMP DRY.**



CE marked according to the following standards:

Recreational Craft Directive 94/25/EEC:

- ISO8846: Small Craft Electrical devices - protection against ignition of surrounding flammable gases
- ISO10133: Small Craft - Electrical systems - extra low voltage DC installations

Electromagnetic Compatibility Directive 89/336/EEC: • EN55014: 1993/Radio Disturbance

- EN55014: 1993/Radio Disturbance

Technical Specifications

Pump Body:	Phenol plastic
Shaft:	Stainless Steel
Impeller:	09-1052S-9 Nitrile
Seal:	Lip seal
Inlet:	38mm (1½") Hose or 1½" BSP
Outlet:	25.4mm (1") Hose
Motor:	12/24V DC
LxWxH:	230x108x82mm
Weight:	1.9kg

Pressure & Capacity Data

(based on water at 20°C/68°F)

Bar	kPa	ft	LPM	USGPM	Ampere draw	
					12V	24V
0.2	20	6.7	37	10.0	13	7
0.4	40	13.4	34	9.0	14	7
0.6	60	20.1	30	8.0	14	7
0.8	80	26.8	28	7.5	15	8
1.0	100	33.5	22	6.0	15	8
Fuse required					20A	12A

12V Part No. 10-24453-04

24V Part No. 10-24453-05

FOR JOHNSON PUMP AquaT™ TOILETS SEE SECTION 9

Available in a wide variety of different versions marketed under three basic models – standard and premium electric-powered or manual – the Johnson Pump AquaT™ marine toilet has been designed to meet virtually every conceivable lavatory installation situation onboard.



Compact Manual



Electric Comfort

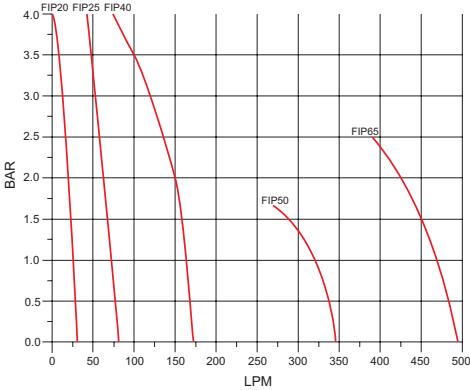


Premium Standard

PUMP FOR LAVATORY SYSTEMS

FIP40SI HEAVY DUTY FLEXIBLE IMPELLER PUMP 220V SINGLE-PHASE

This self-priming impeller pump is ideal for emptying on board holding tanks to dockside holding tanks. Also suitable for bilge pumping, wash-down for decks and equipment, emergency fire fighting, fish tank circulation & fish washing. **Part No. 10-13214-01/1F**



Technical Specifications

Pump Body:	Stainless Steel
Shaft:	Stainless Steel
Impeller:	Double flat S/S hub
Seal:	Mechanical seal
Cam:	Full
Connection:	1½" BSP
Motor:	90 IEC motor size, 1.5kw, 1400rpm, B3/B4 execution. Flanged version to be closed coupled to standard IEC motor, 220V 1ph (220/380V, 3 phase is optional)
LxWxH:	420x167x210mm approx. (full details on request)
Weight:	16.7kg



Capacity Data

Neoprene Impeller 1400 rpm - full cam (based on water at 20°C/68°F)

ADDITIONAL PUMPS AND ACCESSORIES

VIKING HAND OPERATED BILGE PUMP

Available in thru-deck or bulkhead mounting. Easy to install with built in nuts it can be mounted in 8 flow directions. All nitrile seals allow use for fuel or toilet pumping. Inspection cover for easy cleaning. Detachable lever. Weight: 2kg.



Technical Specifications

Pump Body:	PP
Shaft & Screws:	Stainless Steel AISI 316
Elastomers:	Nitrile
Lever:	Anodised aluminium

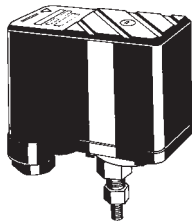
Capacity Data (Max suction height 4m)

(at 1m suction height: 0.9 L/stroke)	
60 stroke/min	54 Lpm
80 stroke/min	72 Lpm
100 stroke/min	90 Lpm

Description	Connection	Dia	Height	Width	Handle Length	Part No.
Thru-deck	1½" Hose	164mm	133mm	253mm	285mm	10-50005
Thru-deck	1" Hose	164mm	133mm	253mm	285mm	10-50025
Bulkhead	1½" Hose	164mm	133mm	253mm	285mm	10-50007
Bulkhead	1" Hose	164mm	133mm	253mm	285mm	10-50027

PRESSURE SWITCH

- For electrical control of pump
- Range 6-30 PSI (adjustable)
- Supplied with non return valve and ¾" BSP inlet-outlet
- Size approx. 100 x 100 x 60mm



Part No. 09-45073

F3P10 ELECTRIC DRILL PUMP

This universal tool is powered by your hand electrical drill. Suitable for water, diesel, oils, even chemicals makes it useful for industrial, agricultural, home and marine use. Applications include emptying drums, tanks, sumps, drains etc.

- Self primes up to 6' (2m) approx.
- Pressure 21 PSI. ½" ports.
- Phenolic plastic body nitrile impeller, lip seal, and stainless steel shaft.
- Not suitable for highly flammable liquids or gasoline.
- Do not run dry for more than 10 seconds



Part No. 10-32579-1

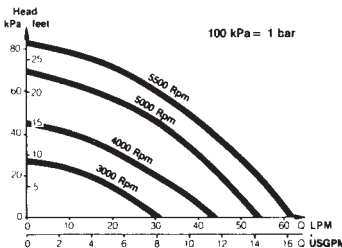
Capacity:

17L (2.7gall) per min at 2800 rpm.
10L (2.2gall) per min at 1400 rpm.



CIAL-3 CENTRIFUGAL PUMP

Available with (or without) pulley. Ideal as circulating pump or cooling water pump. **Not suitable for seawater.**
Part No. 10-35124-1



Technical Specifications

Body:	Aluminium
Shaft:	Stainless Steel
Seal:	Lip seal
Pulley:	1 x Z section pitch dia. 92mm
Hose connection:	Inlet dia. 22mm Outlet dia. 16mm

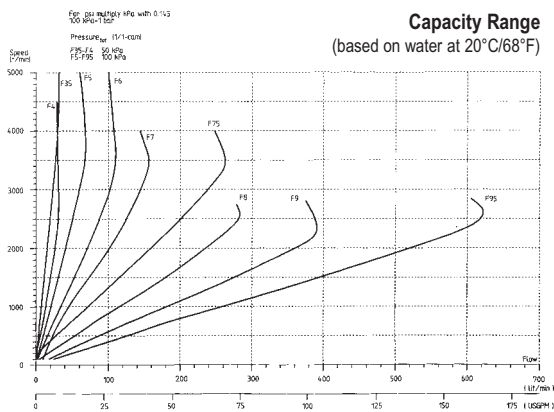
DECKWASH KIT

To suit pump model F4B-19. The kit consists of pressure switch, check valve, and trigger operated handgun outlet nozzle.

Part No. 09-46553



ENGINE COOLING PUMPS



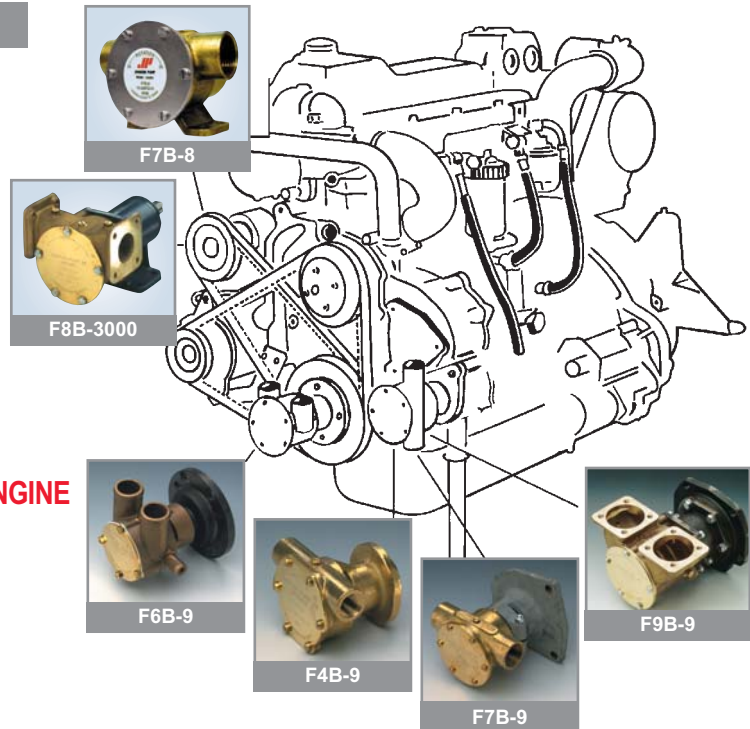
FLANGE MOUNTED, DIRECTLY DRIVEN ON ENGINE

Johnson pumps are fitted as standard by most European engine manufacturers. We keep many of the popular types in stock. Please specify engine make and model.

Examples:

- 10-24139-1 Ford 2720 6Cyl, without gear
- 10-24119-2 Perkins 4.108
- 10-24334-01 Nanni 3.110HE, 4.110HE, 4-190HE
- 10-35161-1 Vetus K3/K4, M310/M414
- 10-13165-02 M.A.N. D2842 Series
- 10-13080-01 M.T.U. 183 Series

Please note some engine manufacturers fit Johnson but the pumps (most spares available) are not available through distributors. i.e. Scania, Westerbeke, Yamaha, Yanmar.



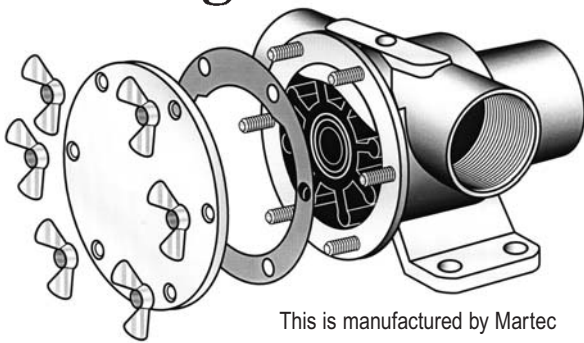
TECHNICAL

How to calculate cu metre capacity per hour of a pump.

Example: at 2000RPM and 0.5 Bar the flow is approx. 500 LPM

$$\frac{500 \times 60}{1000} = 30\text{m}^3/\text{hour}$$

PinWing®



This is manufactured by Martec

MAKE IMPELLER REPLACING EASY

PinWing solves the problem without tools. Changing impellers is often difficult with pumps in confined spaces out of sight. By simple method of replacing screw's with wing nuts on threaded studs it can be done easily by hand. All kits provided with easy to fit instructions.

Part No.	Kit	Description	No. of Screws
6-91350	A	8/32 M4	6 x 05-04-114
6-91351	B	M4 x M4	4 x 05-04-163
6-91352	C	M4 x M4	6 x 05-04-163
6-91354	E	M5 x M5	6 x 05-04-174
6-91355	F	M5 x M5	4 x 05-04-174
6-91356	G	10/32 x M5	6 x 05-04-117
6-91357	H	M6 x M6	6 x 05-04-178
6-91358	I	M6 x M6	4 x 05-04-178

A	B	C	E	F
Pumps with 6 bolts in the endcover	4 bolts in endcover	6 bolts in endcover	6 bolts in endcover	Pumps with 4 bolts in the endcover.
Volvo: MD1A,B MD2A,B MD3/17 MD6A MD2010A MD2020A MD2030A MD2040A MD22A TMD22A MB 10A MD 21A,B AQ 90 AQ 95 AQ 100	Volvo: AQ 105 AQ 110 AQ 115 AQ 120 AQ 130 AQ 165A AQ 170A,B,C AQ 200D AQ 225D AQ 255B AQ 260A AQ 280A AQ 290A BB 225A,AV,B BB 260A,AV,B	Volvo: MD 3/17 AQ 90 AQ 95 AQ 100 AQ 105 AQ 110 AQ 115 AQ 120 AQ 130 2003 T Yanmar: 2GM 3GM 3HM Yan YS	Volvo: MD 30 MD 31 MD 40 MD 41 KAD 42A KAMD 42A	Volvo: AQ 430A,B AQ 431A,B AQ 500A,B AQ 501A AQ 570A AQ 571A AQ 572A BB 225A,AV,B,C BB 231B BB 260A,AV,B BB 261B
	G 6 bolts in endcover Volvo: MD 32 MD21A Johnson: F7B-9		H 6 bolts in endcover Johnson: FB8 - F9B Yanmar: 4Cyl 6Cyl	I Pumps with 4 bolts in endcover Johnson: F8B - F9B

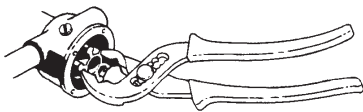
CHANGE TO A NEW IMPELLER EVERY YEAR!

IT IS JUST AS IMPORTANT AS CHANGING OIL & FUEL FILTERS!

We recommend that you change to a new impeller every season. But to be on the safe side, also make sure that you get a Johnson Pump original impeller. The impellers are illustrated in full scale which means that you can identify your impeller without knowing the part number.

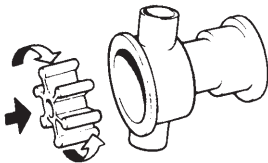
NEW MC97 IMPELLER

MC97 meets new environmental regulations for rubber manufacturing processes & replaces the Neoprene compound. MC97 impellers have an extended service life



HOW TO REMOVE THE OLD IMPELLER

Remove the impeller with a slip joint plier or an impeller puller. **Part No. 09-800** (not illustrated).

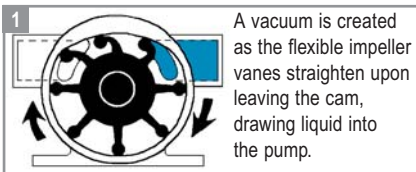


THIS IS HOW TO FIT THE NEW ONE

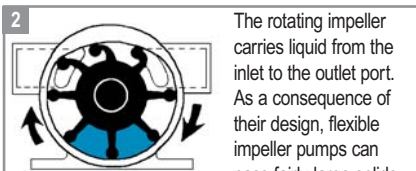
Lubricate the shaft & the inside of the pump body & end cover. Use Johnson Pump Lubrication to help develop prime & prevent damage from dry-running the pump at initial start-up. Mount the impeller by making a pushing & twisting movement in the rotating direction.

Warning! Do not use any petroleum-based products to lubricate the inside of the pump. Only use Johnson Pump Lubrication. Other products can damage the impeller, which will damage the pump and lead to engine failure.

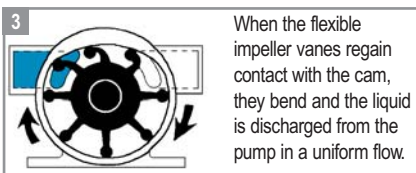
Do not run the impeller without water or lubricant, this can cause engine failure or a fire.



A vacuum is created as the flexible impeller vanes straighten upon leaving the cam, drawing liquid into the pump.



The rotating impeller carries liquid from the inlet to the outlet port. As a consequence of their design, flexible impeller pumps can pass fairly large solids.



When the flexible impeller vanes regain contact with the cam, they bend and the liquid is discharged from the pump in a uniform flow.

Liquids can be pumped in the opposite direction by reversing the rotation of the pump.

IMPELLER DISPLAY

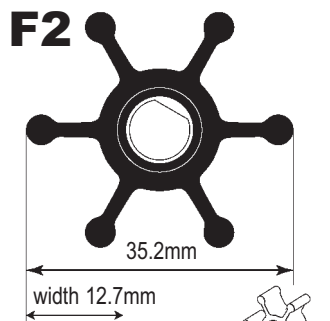
A rotating stand complete with 10 of Johnson Pumps most popular boxed impellers/gaskets up to size F7.

Display Size:
Height: 750mm (inc. toposign)
Width: 500mm

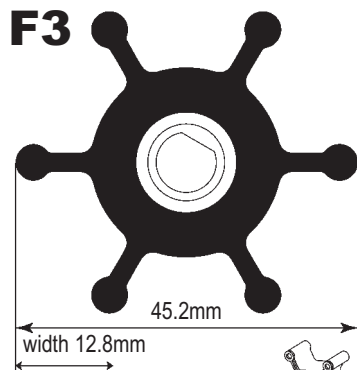
Part No. 09-46854

Includes:

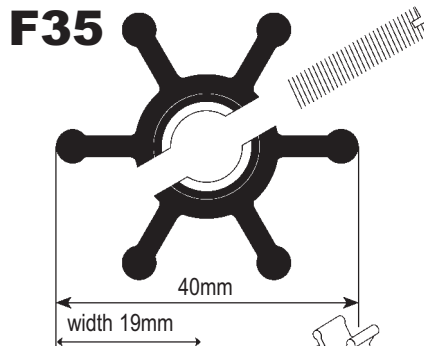
- Impeller guide with 1/1 size illustrations
- 5 x 09-806B-1
- 5 x 09-808B-1
- 5 x 09-810B-1
- 5 x 09-1026B-1
- 5 x 09-801B
- 5 x 09-1027B-1
- 5 x 09-1028B
- 5 x 09-1052S-9
- 5 x 09-1077B-9
- 5 x 09-824P-9



09-1077B-9 (Nitrile)

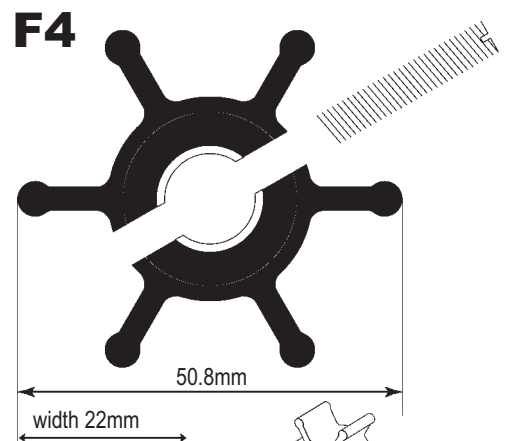


09-1052S-9 (Nitrile)



09-806B-1 (MC97) 9.5mmID
replaces Jabsco 4528-0001 Europe & USA

09-808B-1 (MC97) 12mmID
replaces Jabsco 22405-0001 Europe & USA

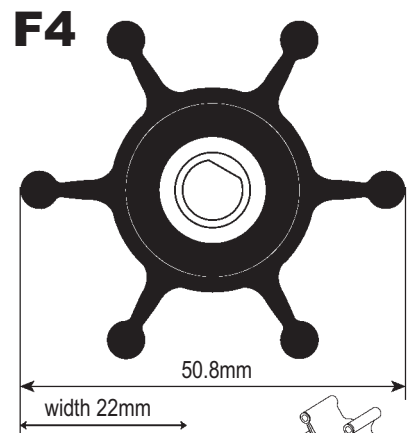


09-810B-1 (MC97) 12mm ID
replaces Jabsco 18653-0001 Europe & USA

09-810B-9 (Nitrile) 12mm ID

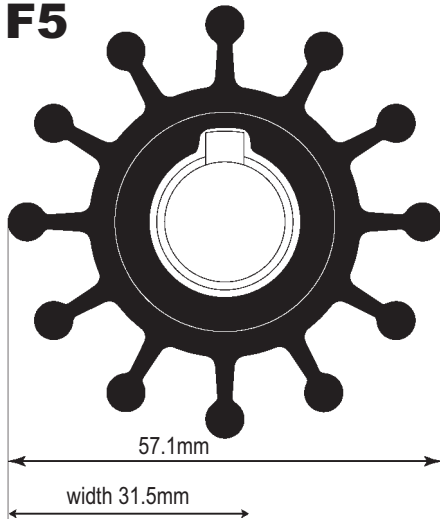
09-1026B-1 (MC97) 12.7mm ID
replaces Jabsco 673-0001 Europe & USA

09-1026B-9 (Nitrile) 12.7mm ID
replaces Jabsco 673-0003 Europe & USA



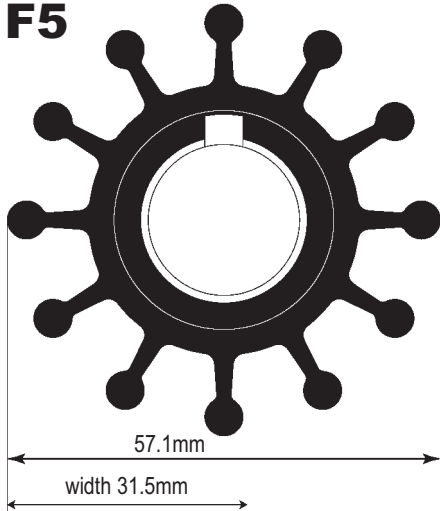
09-824P-9 (Nitrile)
replaces Jabsco 6303-0003 Europe & USA

F5



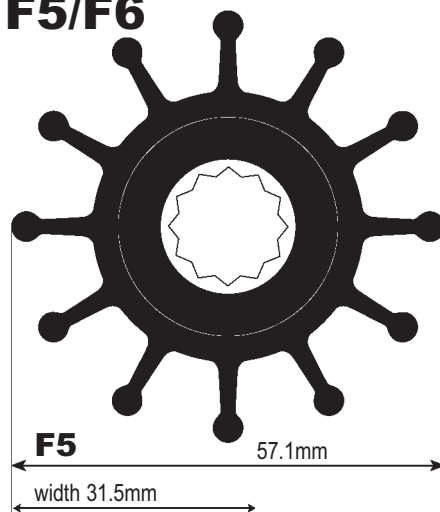
09-801B (Neoprene) replaces Jabsco 4568-0001 Europe & USA

F5



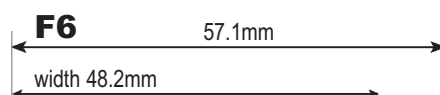
09-804B-9 (Nitrile)

F5/F6



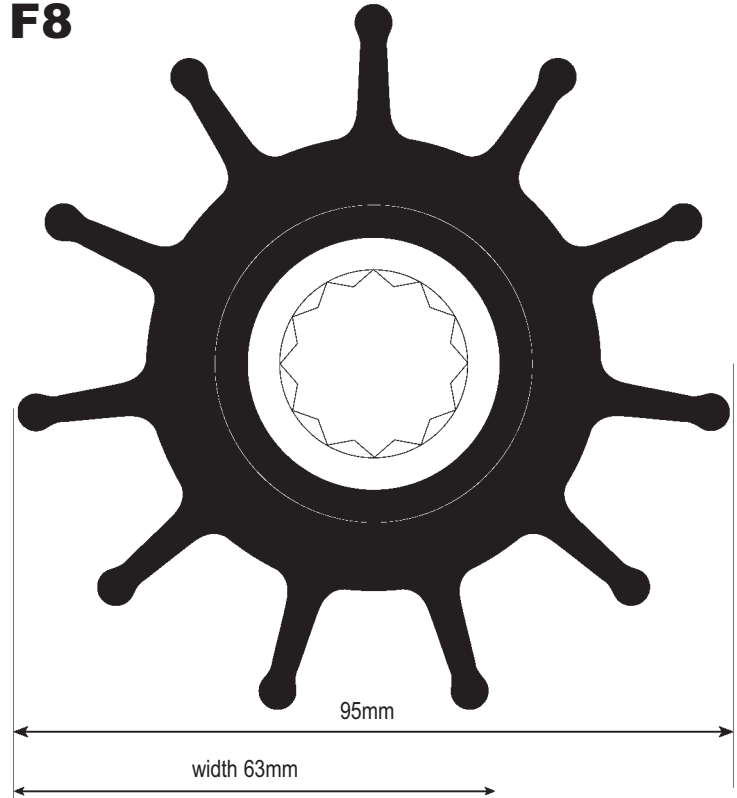
09-1027B-1 (MC97) replaces Jabsco 1210-0001 Europe & USA

09-1027B-9 (Nitrile) replaces Jabsco 1210-0003 Europe & USA



09-812B-1 (MC97) replaces Jabsco 13554-0001 USA

F8



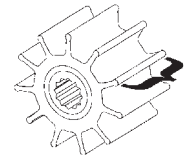
09-819B (Neoprene) replaces Jabsco 836-0001 Europe & 17935-0001 USA

09-819B-9 (Nitrile) replaces Jabsco 836-0003 Europe & 17935-0003 USA

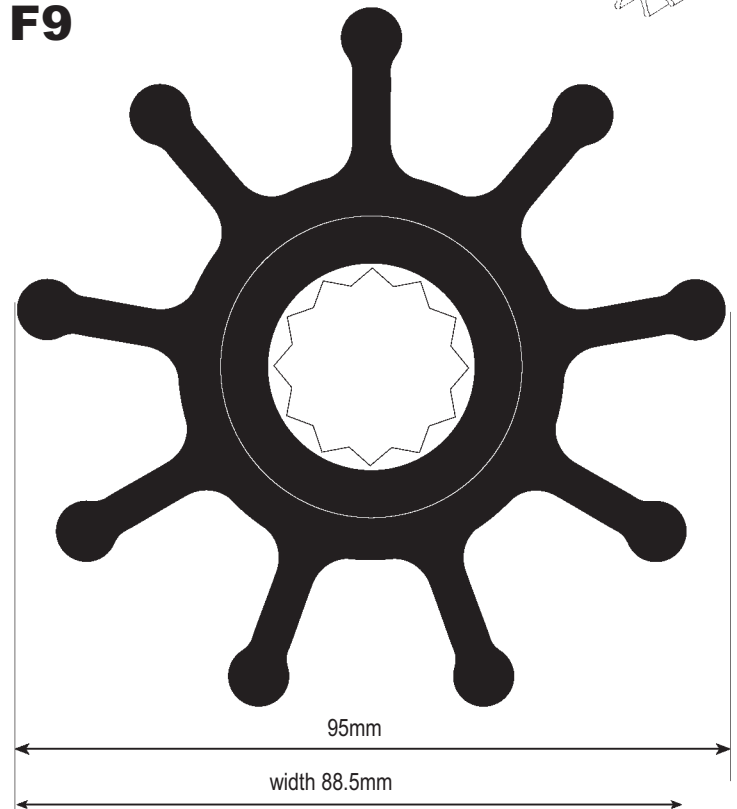
PLEASE NOTE:

09-819B supercedes 09-1029B

09-819B-9 supercedes 09-1029B-9



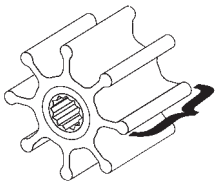
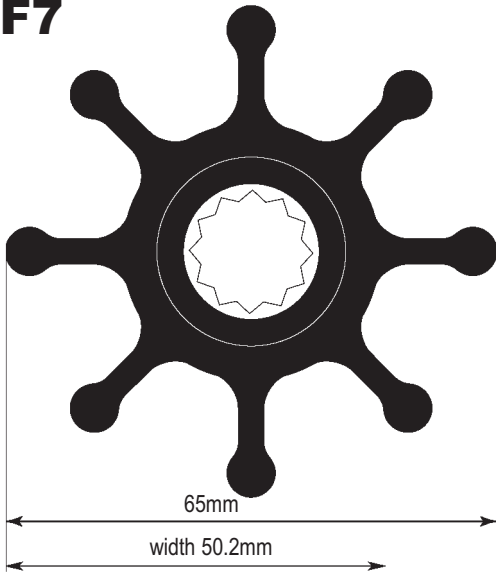
F9



09-802B (Neoprene) replaces Jabsco 6760-0001 Europe & USA

B-1	MC97	- ENGINE COOLING
B	NEOPRENE	- ENGINE COOLING
B-9	NITRILE	- OIL RESISTANT

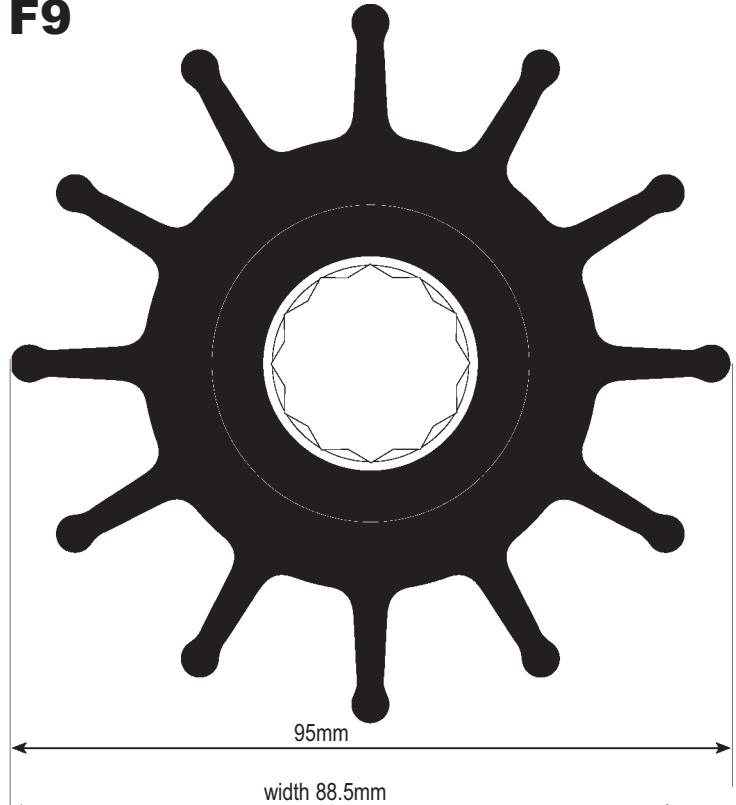
F7



09-1028B (Neoprene)
replaces Jabsco 17937-0001 Europe & USA

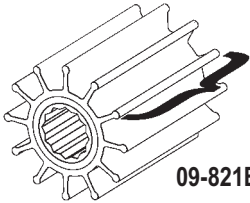
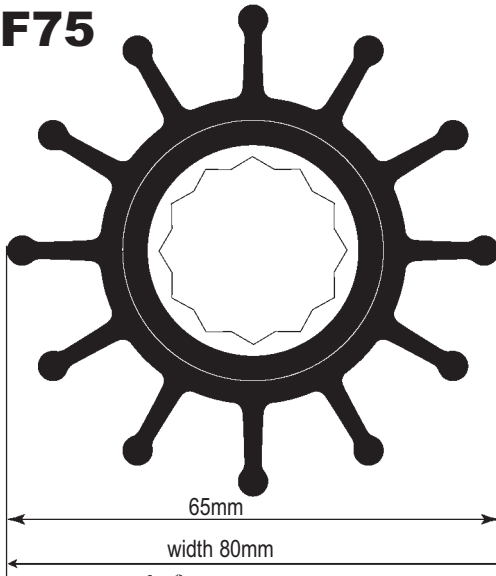
09-1028B-9 (Nitrile)
replaces Jabsco 17937-0003 Europe & USA

F9



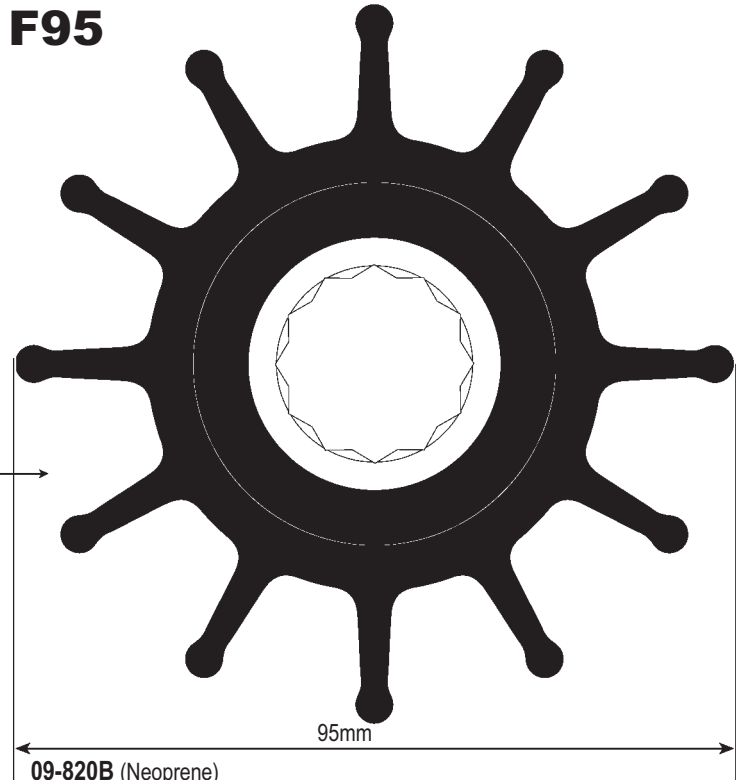
09-814B (Neoprene) replaces Jabsco 21676-0001 Europe & 17936-0001 USA

F75



09-821B (Neoprene)

F95



09-820B (Neoprene)

IMPELLER LUBRICATION

Lubricate with Johnson Pump Impeller Lubricant, optimize the priming ability at first start or after seasonal storage.

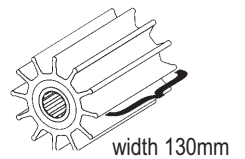


Part No.	Description
09-47086	Box of 150 packets
09-47086/10	Bag of 10 packets
09-47086P	Display pack with 1 packet

HIGH PRESSURE IMPELLERS

We also stock Hi-Pressure Impellers for industrial applications.

Normal	High Pressure
09-1028B	09-816B Brass Inner
09-1028B	09-816S S/S Inner
09-819B	09-818B Brass Inner



width 130mm