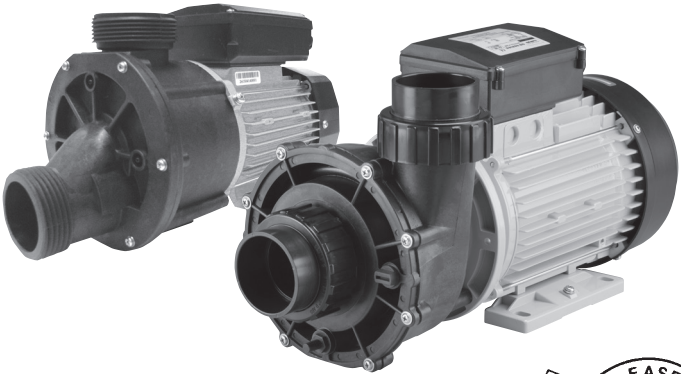




QB SERIES SPA POOL PUMP Installation and Operating Instructions



WARNING: Failure to follow these instructions and comply with all applicable codes may cause serious bodily injury and/or property damage.

The installation of this product should be carried out by a person knowledgeable in spa pool plumbing requirements following the Installation Instructions provided in this manual.

Please pass these instructions on to the operator of this equipment.

Prior to using this pump you must ensure that:

- The pump is installed in a safe and dry environment
- The pump enclosure has adequate drainage in the event of leakage
- Any transport plugs are removed
- The pipe-work is correctly sealed and supported
- The pump is primed correctly
- The power supply is correctly connected
- All steps have been taken for safe operation

Appropriate details for all of these items are contained in the following Installation and Operating Instructions. Read these in their entirety before switching on this pump. If you are uncertain as to any of these Installation and Operating Instructions please contact your Davey dealer or the appropriate Davey office as listed on the back of this document.

Your Davey QB Series

Congratulations on your purchase of a quality product from the Davey range of Pool and Spa Equipment. You are assured of many years of reliable and efficient performance from your Davey QB Series backed by Davey's two year guarantee.

Davey QB Series have been designed to circulate swimming pool and spa water in conditions set out in the Australian Standard for swimming pool water quality (AS 3633) or equivalent. They should not be used for any other purpose without first consulting your Davey Dealer or the Davey Customer Service Centre.

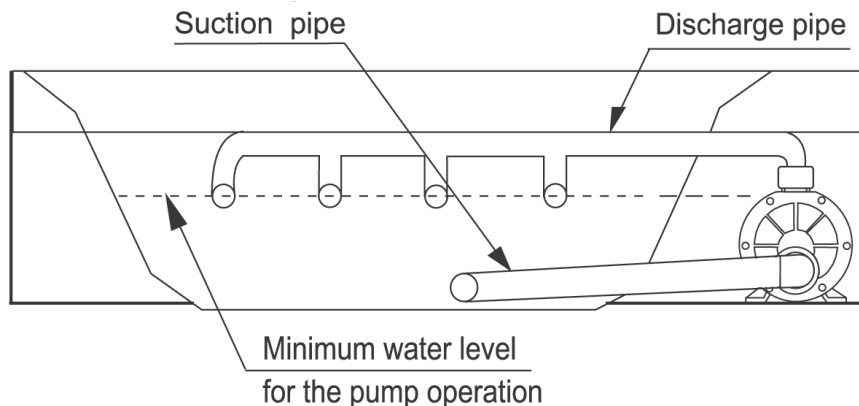
The matched motor and "pumping end" are designed to provide dependable operation while delivering maximum water flow.

Every Davey QB Series is thoroughly tested during manufacture.

Location

The pump should be located as close to the water as practicable and mounted on a firm base in a well drained position, high enough to prevent any flooding. It is the installer's/owners responsibility to locate the pump such that the nameplate can be easily read and accessed for service.

Installation Diagram



Weather Protection

It is recommended that the pump is protected from the weather.

Power Connection



IMPORTANT INFORMATION: Your Davey pump is Double Insulated to Water Circuit. If equipotential bonding structure is required, then a Equipotential Bonding Point is provided. (Please refer to your local Electrical Wiring standards).

Davey QB Series are suitable for connection to a nominal 240 volt 50Hz power supply and are equipped with a flex lead and 3 pin plug or AMP plug to allow connectability to a Davey Spa controller. If a power outlet is not available within 3 metres of the pump, a 3 pin power point in a safe, dry place, may need to be provided by an electrician. Extension cords are unsafe around pools or spas - and should be avoided. If the supply cord of this product is damaged it must be replaced by the dealer or manufacturer, with genuine Davey spares.



Davey Water Products recommends that all installations are fitted with earth leakage or residual current protection devices.

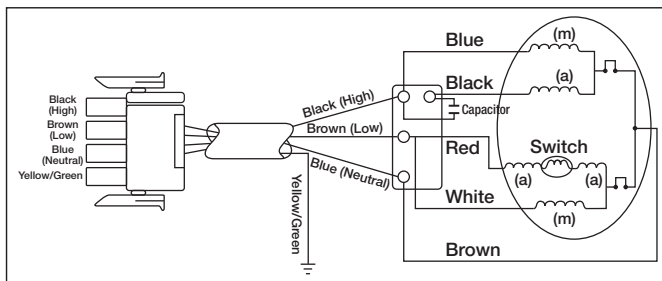


CAUTION: In the interest of safety, we advise that all brands and types of spa pool pumps must be installed in accordance with AS3000 wiring rules or your local wiring standards.



POWER CONNECTIONS AND WIRING MUST BE CARRIED OUT BY AN AUTHORISED ELECTRICIAN.

Wiring Diagram



In accordance with EN60335.2.41 we are obliged to inform you that this appliance can be used by children aged from 8 years and above and persons with reduced physical, sensory or mental capabilities or lack of experience and knowledge if they have been given supervision or instruction concerning use of the appliance in a safe way and understand the hazards involved.

Children shall not play with the appliance.

Cleaning and user maintenance shall not be made by children without supervision.



If the pump and filter are located below pool water level, it is necessary to fit isolating valves in the pipe between the pump and the skimmer box or suction inlet and in the return pipe from the filter to the pool.



Warning! Ensure that an electrical isolation switch is located with easy access so that the pump can be switched off in an emergency.

Pipe Connection

A set of barrel unions are provided for connecting to the piping from the spa or pool.

The pumps are designed to accept 50mm PVC pipes by fitting the pipe to the inside of the union tail.

The use of any pipe smaller than 50mm PVC pressure pipe not recommended. Suction piping should be free from all air leaks and any humps and hollows which cause suction difficulties.

The suction and discharge pipe should have a constant gentle slope of at least 2% to facilitate adequate purging of air.



Barrel unions need to be hand tightened. No sealant, glues or silicones are required.

Starting the Pump

To operate efficiently and prevent pump damage there must be a free flow of water to and from the pump. Before starting ensure that:

- all pipework is correctly sealed.
 - the pool/spa water level is at the correct height.
 - that all appropriate valves are open and there is nothing preventing the flow of water through the system.
1. First prime the pump by ensuring that the pump is below the water level of the spa pool.
 2. Connect to the power supply or spa controller as applicable and switch on.
 3. Allow the pump to run, so that any air trapped may be expelled.
 4. If prime is not established within less than a minute, as evidenced by a strong flow of water, switch off the pump and repeat the procedure.

Pump Operation

The water level of the spa or spa pool should always be maintained to at least the spa jets, thus ensuring water is in the pump at all times.



Never run pump dry. Running the pump with no water may damage the mechanical seals, causing leakage and flooding. Dry running damage and associated damage is not covered under warranty.



Failure to undertake regular maintenance may cause damage not covered by warranty.

Trouble Shooting

If the pump runs but there is no water flow or water flow is reduced, the following condition may apply:

1. The pump is not primed. Re-prime as per instruction in 'Starting the pump'
2. There are air leaks in the suction piping. Check all piping and eliminate leaks. Air bubbles in the water flowing back to the pool would indicate a leak in the suction to the pump allowing air to enter the pipework.
3. A leaking pump shaft seal may also prevent operating. Evidence of this would be water on the ground under the pump.
4. The pump is not able to get water from the pool. Check that the valves to the pump are fully open and that the pool water level is up to the spa jets.
5. Blockage in the piping or pump.

If the pump does not operate, the following conditions may apply:

1. The power is not connected. Where a spa controller is used, check to see if the controller touchpad is illuminated and the pump is connected to the correct AMP socket. Also check fuses and the main power supply switch
2. Automatic overload is tripped following an overheating period. The pump motor has an in-built thermal overload which will re-set after the motor has cooled. Determine the cause of the overload tripping and rectify.
3. Blockage is preventing the pump from rotating.
4. Motor is burnt out - burning smell is evident. Replacement is required.

If you are unable to resolve any installation or operation difficulties with your QB Series pump, contact the supplier from whom it was purchased or your nearest Authorised Davey Pool Equipment Service Centre. If any further assistance is required, contact the Davey Customer Service Centre at the address indicated in this manual.

Removal of the Pump from Pipework

Should it be necessary to remove the pump, follow these instructions:

1. Switch off the power and remove the plug from the power source.



NOTE: If the pump is hard wired into a time clock or another automatic control, the wiring should be removed by a qualified electrician.

2. Close the water valves on the pool return and the pump inlet pipework.
3. Remove the discharge & suction barrel unions taking care not to lose the o-rings.
4. Move the pipework with the barrel unions attached until the pump can be pulled clear.



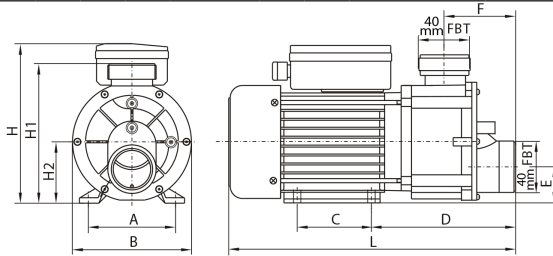
NOTE: When making any enquiries about your Davey QB Series be certain to quote the model number from the nameplate located on motor.

Water Quality

Maintaining balanced water chemistry is important to the life of your spa pool pump. This pump is designed to be used with Pool & Spa water, balanced in accordance with Langelier Saturation Index, with a pH level of between 7.2 and 7.8 and is regularly treated with a chlorine sanitising agent with the level not exceeding 3PPM. Please consult your local pool shop regularly to have your water tested.

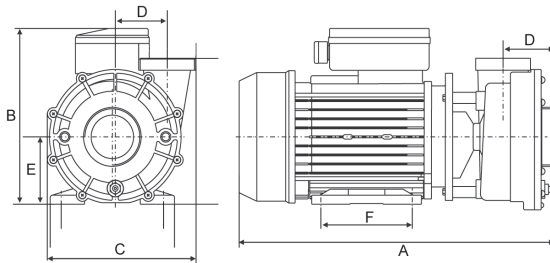
Pump Dimensions

DIMENSIONS (mm)



Type	A	B	C	D	E	F	L	H	H1	H2	Mounting Holes Dia.	Inlet/Outlet PVC	Net Weight (kg)
QB035	100	153	80	164	33	89	317	183	168	63	8	40/40	5.1
QB1501	125	186	90	215	38	120	402	220	201	90	10		11.5

DIMENSIONS (mm)



Type	A	B	C	D	E	F	Mounting Holes Dia.	Inlet/Outlet PVC	Net Weight (kg)
QB2001	414	235	202	71	90	125	10	50/50	13.5
QB2501*									14.6
QB3001									15.7
QB2002									14.7
QB2502									15.9
QB3002	17								

Note: Available in either thread pitch 3.175mm FBT or Davey 4.23mm FBT. See Thread Type table.

Model	Qmax (L/min)	Hmax (m)	Power(P)	
			kW	HP
QB035	150	8	0.25	0.35
QB1501	380	16	1.10	1.5
QB2001	620	14	1.50	2.0
QB2501*	670	16	1.85	2.5
QB3001	730	18	2.20	3.0
QB2002	620	14	(Low speed) 0.35	3/8
			(high speed) 1.50	2.0
QB2502	670	16	(Low speed) 0.40	1/2
			(high speed) 1.85	2.5
QB3002	730	18	(Low speed) 0.45	5/8
			(high speed) 2.20	3.0

THREAD TYPE	
Type	Thread Type (Available)
QB035, QB1501	40mm FBT (Pitch 3.175mm)
QB2001AUS, QB2501AUS, QB3001AUS, QB2002AUS, QB2502AUS, QB3002AUS	50mm FBT (Pitch 3.175mm)
QB2001, QB2501, QB3001, QB2002, QB2502, QB3002	50mm Davey FBT (Pitch 4.23mm)
QB25013AUS*	50mm FBT (Pitch 3.175mm)
QB25013S*	50mm Davey FBT (Pitch 4.23mm)

NOTE: QB2002, QB2502 & QB3002 with 2 speed V/Hz esp: see pump nameplate. Liquid temperature: 4°C ~ 50°C. Storage temperature: -10°C ~ +50°C. Relative Air humidity: 95% Max.

*Available in 3 phase.



DANGER - Hazardous suction. Do not block water entry into filtration system with any part of your body as the pressure can trap hair or body parts, causing severe injury or death. Do not block suction. Turn off pump immediately if someone becomes trapped.



Caution! Do not add chemicals directly to the pool skimmer or suction. Adding undiluted chemicals may damage pump and filter and void warranty.



Routine Maintenance tasks – to maximise the life of your pool equipment & personal safety, use this checklist once a week. Turn pump off first.

- a. Make sure that any pressure gauges are in working condition and the operating pressure is within limits as specified on the product.
- b. Make sure that each suction inlet, and main drain has a cover that is securely attached and in safe working condition.
- c. Make sure that all skimmer covers are securely attached and in safe working condition. These should be replaced every 3 to 4 years.
- d. Remove any obstructions or debris from the main drain cover.
- e. Ensure the skimmer baskets and any pump hair and lint pots are free of leaves and debris at least once a week.
- f. Remove obstructions and combustibles from around the pump motor.
- g. Make sure all wiring connections are clean and that all wiring and electrical equipment is in good condition. Damaged wiring must be repaired or replaced by a qualified electrician as soon as damage is discovered.
- h. Check water balance and sanitiser levels at your local pool shop.



WARNING! Pump suction is hazardous and can trap and drown or disembowel bathers. Do not block suction. Do not use or operate swimming pools, spas or spa baths if a suction cover is broken, missing or loose. Two suction covers and inlets must be provided into every pump to avoid suction entrapment.

Davey Repair or Replacement Guarantee

In the unlikely event in Australia or New Zealand that this Davey product develops any malfunction within two years of the date of original purchase due to faulty materials or manufacture, Davey will at our option repair or replace it for you free of charge, subject to the conditions below.

Should you experience any difficulties with your Davey product, we suggest in the first instance that you contact the Davey Dealer from which you purchased the Davey product. Alternatively you can phone our Customer Service line on 1300 367 866 in Australia, or 0800 654 333 in New Zealand, or send a written letter to Davey at the address listed below. On receipt of your claim, Davey will seek to resolve your difficulties or, if the product is faulty or defective, advise you on how to have your Davey product repaired, obtain a replacement or a refund.

Your Davey Two Year Guarantee naturally does not cover normal wear or tear, replacement of product consumables (i.e. mechanical seals, bearings or capacitors), loss or damage resulting from misuse or negligent handling, improper use for which the product was not designed or advertised, failure to properly follow the provided installation and operating instructions, failure to carry out maintenance, corrosive or abrasive water or other liquid, lightning or high voltage spikes, or unauthorized persons attempting repairs. Where applicable, your Davey product must only be connected to the voltage shown on the nameplate.

Your Davey Two Year Guarantee does not cover freight or any other costs incurred in making a claim. Please retain your receipt as proof of purchase; you **MUST** provide evidence of the date of original purchase when claiming under the Davey Two Year Guarantee.

Davey shall not be liable for any loss of profits or any consequential, indirect or special loss, damage or injury of any kind whatsoever arising directly or indirectly from Davey products. This limitation does not apply to any liability of Davey for failure to comply with a consumer guarantee applicable to your Davey product under the Australian or New Zealand legislation and does not affect any rights or remedies that may be available to you under the Australian or New Zealand Consumer Legislation.

In Australia, you are entitled to a replacement or refund for a major failure and for compensation for any other reasonably foreseeable loss or damage. You are also entitled to have the goods repaired or replaced if the goods fail to be of acceptable quality and the failure does not amount to a major failure.

Should your Davey product require repair or service after the guarantee period; contact your nearest Davey Dealer or phone the Davey Customer Service Centre on the number listed below.

For a complete list of Davey Dealers visit our website (davey.com.au) or call:



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* Installation and operating instructions are included with the product when purchased new. They may also be found on our website.