

Product Selection Handbook

INTERNATIONAL • ISSUE NO. 14



DEPEND ON
DAVEY

WATER PRODUCTS



Quality Endorsed Company
ISO 9001 Lic 10685
Standards Australia

DAVEY WATER PRODUCTS

We're now Davey Water Products!

We believe Davey Water Products better reflects our total product range and business focus.

Davey Water Products manufactures and distributes a comprehensive range of water transfer, conservation and filtration products which have earned their stripes throughout the world over the past seventy years.

Our export markets now number more than 60 separate countries where Davey Water Products match or exceed the world's best and achieve results in some of the toughest environmental and climatic conditions on the globe.

Over the past year Davey Water Products has made significant business acquisitions which add important new opportunities as well as rounding out our product range.

The business acquisitions include Spa-Quip, the New Zealand based manufacturer of spa pool products, which complements the range of Davey swimming pool and spa bath products.

Quite recently we have purchased Contamination Control, another New Zealand based company, whose range of water treatment products for domestic, rural, industrial and commercial water supply applications holds a dominant position in that market.

We have also maintained our significant commitment to research and development which has created innovative new products servicing specific and emerging market opportunities.

Many of these products have received multiple awards for innovation and product excellence and have directly led to our recent induction into the Manufacturing Hall of Fame for the State of Victoria.

Davey Water Products is a wholly owned subsidiary of GUD Holdings, a 'Top 200' Australian public company whose shares are listed on the Australian Stock Exchange.

Now more than ever "Depend on Davey Water Products" reflects a business culture of leadership, innovation, quality products and an accredited agent and reseller network committed to meeting the best expectations of our customers.





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About this Booklet

This booklet has been designed to make your pump or pressure system selection easy. The information you require to make your selection will depend on the particular purpose for which your pump system is needed. However, the basic consideration of anyone selecting a pump is: how much water do you need to pump and at what head or pressure do you need to pump it?

Your local Davey dealer can advise you about which Davey product will best suit your needs.

All technical data in this guide is for 220-240 volt 50Hz single phase or 380-415 volt 50Hz three phase. For other voltages (eg 110 volt 60Hz) consult the appropriate Davey office as shown on the back of this guide.

HOME PRESSURE SYSTEMS

Flow and Pressure

There is a Davey Home Pressure System to suit virtually every home and budget. Choosing the most appropriate model for your application depends on a number of factors:

- How much water will be required?
This is often considered in terms of the number of taps or outlets that are likely to be on at the one time.
- How much pressure will be needed?
Pumping through long runs of piping or to elevated places such as multi-storey buildings requires more pressure than flat sites or compact plumbing systems.

The following chart is a quick guide to selecting a Davey Home Pressure System to suit your flow and pressure requirements. Reference to the detailed product information on the following tables will enable you to select the type of pump and control system that best matches your particular situation.

DAVEY HOME PRESSURE SYSTEMS						
PRESSURE ↑	Premium models for the luxury of high pressure with multi-level dwellings and long runs of piping.			Dynafllo HS50-06T M3051T M3061T	Dynafllo HS60-08T M6041T	M6051T M6061T M8041T
	Higher pressure for long runs of pipe and double storey buildings.			Dynafllo HS50-05T	Dynafllo HS60-06T Dynajet X70 Dynajet XJ70T	Dynajet X90 Dynajet XJ90T
	Adequate pressure for most single storey buildings.	Aquamate	XP350T XP350P8C	HP45-05T Dynajet X50 Dynajet XJ50T	HP65-06T	HP85-08T
	Cottages & Weekenders ☺☺	Small to average homes ☺☺☺	Average sized homes with modern appliances ☺☺☺☺	Larger homes with more than one bathroom ☺☺☺☺☺☺☺	Large homes and families with capacity for garden watering as well ☺☺☺☺☺☺☺☺☺	
	FLOW →					

Control System

Since Davey made constant flow devices popular, most consumers have chosen the comfort such a controller provides. Davey's new Torrium® is the ultimate controller available today.

For consumers who want a more traditional system, Davey also offer a range of pressure switch controlled Home Pressure Systems.



HOME PRESSURE SYSTEMS



The Torrium® delivers flow-on benefits

It's not easy living with water pressure problems. Poor or inconsistent water pressure can result in a broad range of problems, especially where the pump is the sole source of pressure to the household. Plus, no-one wants their pump cycling overnight because of a drop in water pressure. That's why Davey invented the extremely clever Torrium® Pressure System Controller. Five years in the making and thousands of hours of world-wide, in the field testing have culminated in a Pressure System Controller that can actually think for itself. The Torrium® can automatically adapt to changing conditions...because it has an in-built titanium mounted 'brain' that can out-smart everyday problems. It also means there are fewer installation and maintenance issues. This unique ability to respond to changing circumstances ensures a steady, reliable flow of water is virtually guaranteed day after day, year after year.

CONSTANT FLOW

With a Torrium® system you'll hardly notice the pump start. Better still, while you are using water, say in the shower, the pump doesn't cycle, overcoming those annoying temperature and pressure changes.

LOSS OF PRIME PROTECTION

If you run out of water, the last thing you need is a pump that continues to run without water. The Torrium® detects a loss of water supply (prime) and shuts the system down. What's more it will Auto retry to re-establish prime if possible and Auto-restart on water flow return.

ADAPTIVE PRESSURE SWITCH

Torium® measures the system pressure and adapts the cut-in pressure according to circumstances, thus providing a more reliable system with improved comfort and convenience.

SIMPLIFIED FAULT FINDING

Torium® is equipped with a status indicator to make system fault finding quicker and more accurate. Torrium® can tell you if you have a slow filling toilet cistern, a loss of prime, a slow leak, low supply voltage, water over-temperature, even if someone has tried to override the Torrium® protection system.

AUTO RETRY

Auto retry in Torrium® allows the system to reset itself after a loss of prime, thus helping reduce system downtime.

LOW PRESSURE DROP

Torium® has been designed to get the most from your pump, including pressure. The Torrium® has a very low water pressure loss through it, so that you can get the best performance at your outlets. Torrium® is available complete as part of a Davey Home Pressure System or can be purchased separately to upgrade an existing pump.



HOME PRESSURE SYSTEMS

Davey Jet Pump Home Pressure Systems

For many years, Davey jet assisted centrifugal home pressure systems have been the benchmark for reliable household pressure. Jet Pumps are an excellent and robust choice, especially for smaller systems up to 35 litres per minute, or for larger systems with long suction lines or suction lifts.

Davey Jet Pumps have excellent wear resistance and air handling ability, contributing to their well earned reputation for reliability.

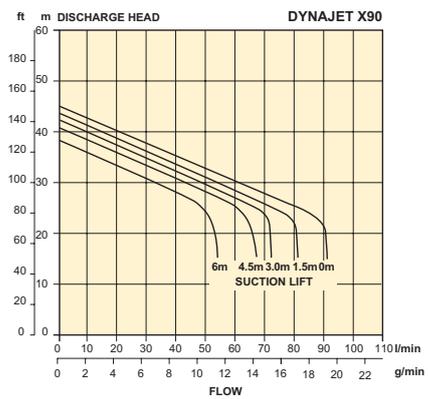
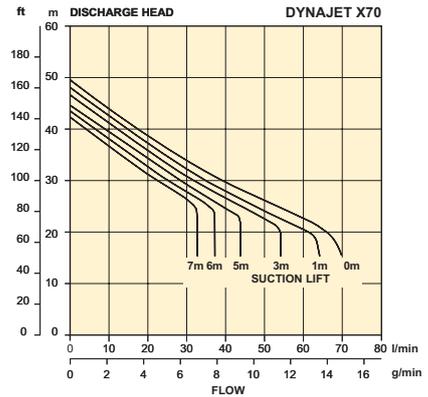
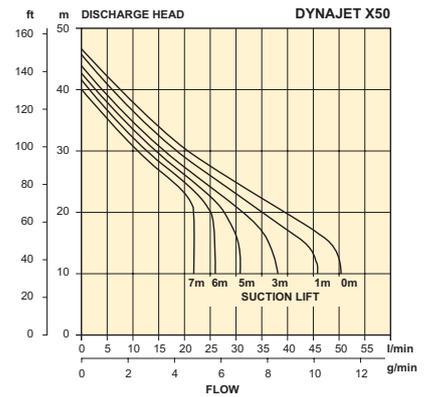
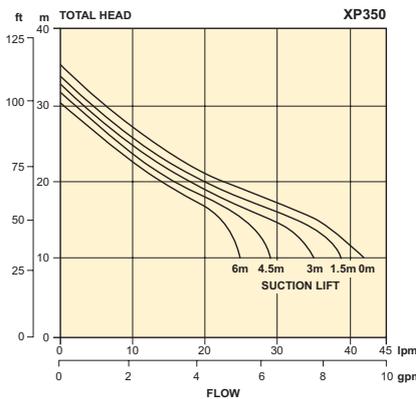
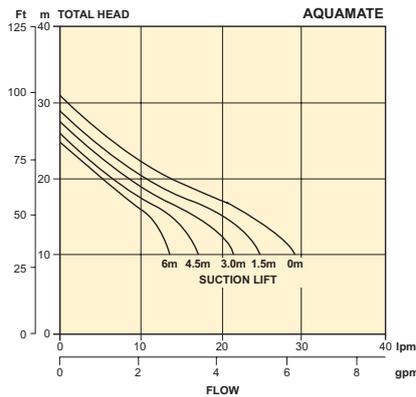
Customers prefer and trust a Davey Jet Pump for their home.



XP350T



Dynajet X70



JET PUMP HOME PRESSURE SYSTEMS

Model	Type of Controller	Pressure Tank	Nominal Operating Pressure kPa psi	Suction Lift in metres/feet					Pressure Switch Settings kPa
				0	1	3	5	6	
				0	3.3	9.8	16.4	19.7	
Output in litres/minute gals/hour									
Aquamate* Cottages & weekenders	Pressure Switch	In-built 0.25 litre	140/20	25/330	24/316	18/238	15/189	13/172	140-280
XP350T	Torium	Not required	140/20	35/462	33/436	30/398	24/317	22/297	Adaptive
XP350P8C*	Pressure Switch	Top mounted 8 litre	140/20	35/462	33/436	30/398	24/317	22/297	140-280
XJ350P	Pressure Switch	Purchase separately	140/20	35/462	33/436	30/398	24/317	22/297	140-280
Small to average homes									
Dynajet XJ50T	Torium	Not required	180/26	45/594	43/567	36/475	30/398	27/356	Adaptive
Dynajet X50	Pressure Switch	Base mounted 35 litre	180/26	45/594	43/567	36/475	30/398	27/356	180-390
Dynajet Ultra	Pressure Switch	Purchase separately	180/26	45/594	43/567	36/475	30/398	27/356	180-390
Average sized homes with modern appliances									
Dynajet XJ70T	Torium	Not required	210/30	66/871	62/818	57/752	45/594	40/528	Adaptive
Dynajet X70	Pressure Switch	Base mounted 35 litre	210/30	66/871	62/818	57/752	45/594	40/528	210-420
Dynajet XJ70P	Pressure Switch	Purchase separately	210/30	66/871	62/818	57/752	45/594	40/528	210-420
For larger families and two storey homes									
Dynajet XJ90T	Torium	Not required	210/30	92/1214	90/1188	82/1082	68/898	58/766	Adaptive
Dynajet X90	Pressure Switch	Base mounted 35 litre	210/30	92/1214	90/1188	82/1082	68/898	58/766	210-350
Dynajet XJ90P	Pressure Switch	Purchase separately	210/30	92/1214	90/1188	82/1082	68/898	58/766	210-350
For large double storey homes and farms									

*Also available with Loss of Prime pressure switch.

HOME PRESSURE SYSTEMS

Davey HP Horizontal Multistage Systems with Torrium®

Davey's latest and most compact systems really pack a performance punch. Utilising Davey's patented floating neck ring system, the new HP models offer outstanding performance with whisper quiet operation.

Coupled to the NEW Torrium® controller, the complete system offers strong even pressure, whether it's one shower or multiple outlets at once.

These systems are easy to install with the convenience of the 360 degree rotatable Torrium® mounting flange and union. The new HP range will provide you with years of comfortable and dependable water pressure.



HP with Torrium®

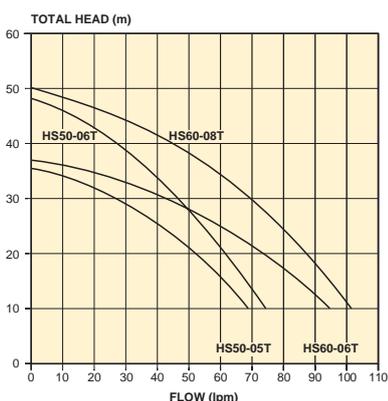
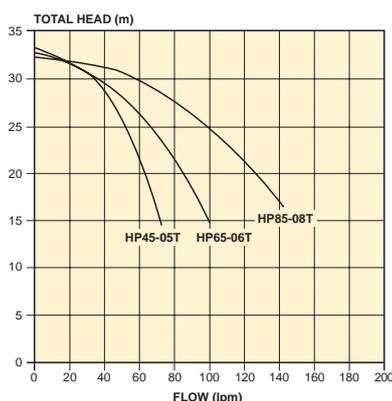
Davey HS Horizontal Multistage Systems with Torrium®

Davey's HS systems have established a name for powerful yet quiet performance, and now they are available with the NEW Torrium® controller. HS models provide even higher pressures than the HP models, making them ideal for installation on multi-storey homes or where the pump may be some distance from the dwelling.

HS models feature specially designed pump end components to provide outstanding performance coupled with low power consumption and noise output.



Dynaflor® HS with Torrium®



HP & HS TORRIUM® HOME PRESSURE SYSTEMS

Model	Motor kW		Type of Controller	Pressure Tank	Nominal Operating Pressure kPa psi	Suction Lift in metres/feet					Pressure Switch Settings kPa	Connection Size BSPP inlet/outlet
	Input (P1)	Output (P2)				0	1	3	5	6		
	Output in litres/minute gals/hour											
HP45-05T Average sized homes with modern appliances	0.83	0.58	Torrium	Not required	200/29	63/831	61/805	57/752	52/686	48/634	Adaptive	1½"/1" M
HP65-06T For larger families and two storey homes	0.9	0.6	Torrium	Not required	200/29	85/1122	81/1069	75/990	66/871	62/818	Adaptive	1½"/1" M
HP85-08T For large double storey homes and farms	1.15	0.80	Torrium	Not required	200/29	125/1650	121/1597	111/1465	98/1293	92/1214	Adaptive	1½"/1" M
Dynaflor HS50-05T Average sized homes with modern appliances	.74	.53	Torrium	Not required	210/30	48/634	47/620	42/554	38/502	35/462	Adaptive	1½"/1" M
Dynaflor HS50-06T Average sized homes with two storeys or long runs of plumbing	.89	.60	Torrium	Not required	290/42	48/634	46/647	42/554	39/515	37/488	Adaptive	1½"/1" M
Dynaflor HS60-06T Larger homes and families. Power to run garden sprinklers as well	.82	.57	Torrium	Not required	210/30	68/897	65/858	59/779	54/713	50/660	Adaptive	1½"/1" M
Dynaflor HS60-08T Large double storey homes and garden watering	1.1	.76	Torrium	Not required	290/42	68/897	66/871	61/805	56/739	54/713	Adaptive	1½"/1" M

HOME PRESSURE SYSTEMS

Davey M Series Horizontal Multistage Pumps & Pressure Systems

For larger systems requiring higher flow or pressure, or where the preference is for all stainless steel pump components, inside and outside, Davey M Series pumps are the answer. A choice of control systems include a Torrium® controller for anti-cycling operation and protection against dry running, with extra tank requirement or as a standard pressure switch and tank operation. M Series can also be packaged with our Davey Monsoon 3C with up to 3 pumps operating (refer Packaged Pump Sets pg 41).

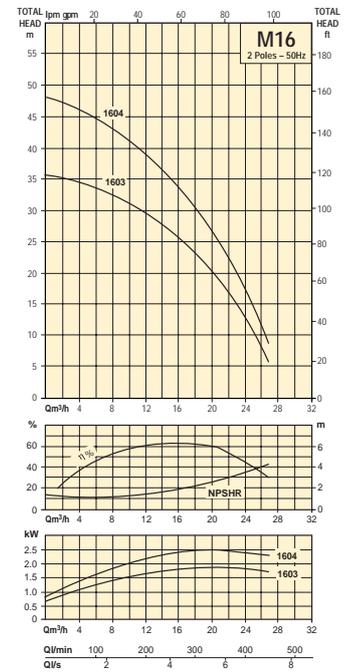
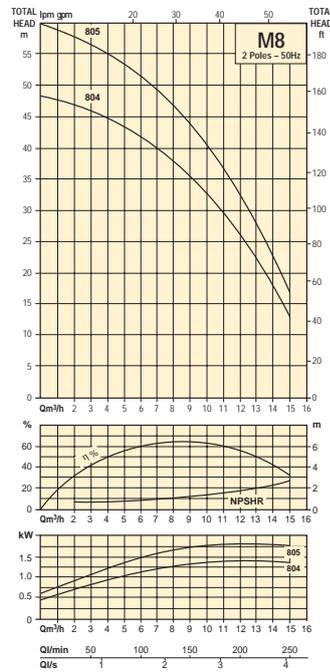
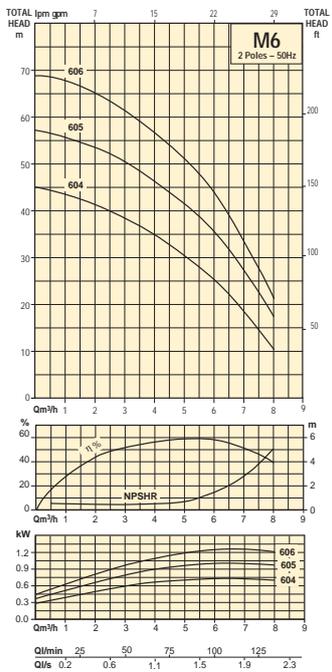
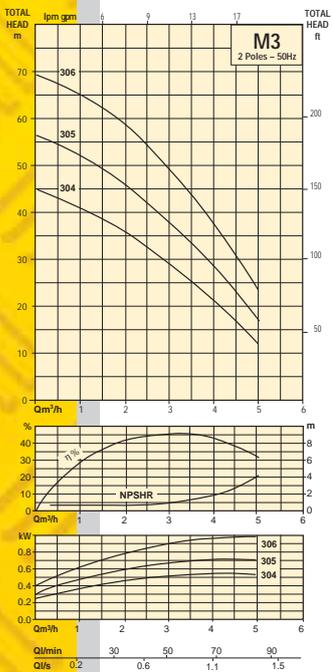
Note: Torrium® maximum flow rate up to 170lpm.



Torrium® Controlled



Pressure Switch Operated



M SERIES HORIZONTAL MULTISTAGE PRESSURE SYSTEMS

Model	Motor kW (P ₂)	Nominal Operating Pressure kPa/psi	Suction lift in metres/feet			Pressure Settings/Range	Connection Size BSP inlet/outlet
			0	3	5		
			Output in litres/minute, gallons/hour				
M3041 Average sized homes with modern appliances and double storeys	0.55	250 36	58 767	51 674	N/R	200 - 400 kPa	1" F/1" M
M3051 Average sized homes with modern appliances and double storeys	0.75	300 43	61 806	55 727	N/R	250 - 500 kPa	1" F/1" M
M3061 Multi level homes with modern appliances and long runs of piping	1.10	400 58	60 793	56 740	N/R	300 - 600 kPa	1" F/1" M
M6041 Large multi storey dwellings, livestock, irrigation and commercial use	0.75	200 29	108 1427	98 1295	90 1189	150 - 275 kPa	1 1/4" F/1" M
M6051 Large two storey dwellings and garden water supply	1.10	300 43	108 1427	101 1335	97 1282	250 - 500 kPa	1 1/4" F/1" M
M6061 Large multi storey dwellings, livestock, irrigation and commercial use	1.50	350 51	108 1427	101 1335	98 1295	300 - 550 kPa	1 1/4" F/1" M
M8041 Farm & garden water supply, irrigation, commercial premises	1.50	300 43	175 2313	160 2115	148 1956	200 - 425 kPa	1 1/2" F/1" M

PRESSURE TANKS

Supercell Pressure Tanks



For the best performance from your pressure system Davey recommend you check the air pressure in the tank every six months. For further details see your Installation and Operating Instructions or consult your Davey dealer.

NOMINAL DRAW OFF CAPACITY IN LITRES

Tank Model	Tank Capacity (litres)	Max Pressure Rating (kPa)	Pressure Switch Range kPa (psi)								Diameter (mm)	Height (mm)	DIMENSIONS		
													Inlet		
			150-250 (22-36)	150-300 (22-44)	200-400 (29-58)	250-400 (36-58)	250-500 (36-73)	300-600 (44-88)	500-1000 (73-145)	700-1200 (101-174)			1000-1600 (145-232)	Size (BSP male)	Position
Supercell 8C	8	700	2.2	3.0	3.2	2.4	3.3	3.4	N/A	N/A	N/A	200	300	3/4"	Bottom
Supercell 18C	18	700	5.0	6.7	7.2	5.4	7.4	7.6	N/A	N/A	N/A	274	360	1"	Bottom
Supercell 35C	35	700	10.0	13.3	14.0	10.5	14.6	14.7	N/A	N/A	N/A	380	400	1"	Bottom
Supercell 50C	50	700	14.3	18.8	20.0	15.0	20.8	21.0	N/A	N/A	N/A	380	570	1"	Side
Supercell 105C	105	700	30.0	39.4	42.0	31.5	43.7	44.1	N/A	N/A	N/A	500	680	1 1/2"	Side
Supercell 24HP+	24	1600	6.3	8.3	9.0	6.3	9.4	10.3	10.5	9.1	8.4	270	485	1"	Bottom
Supercell HP105C	105	1050	30.0	39.4	42.0	31.5	43.7	44.1	47.7	N/A	N/A	500	680	1 1/2"	Side

SUPERCCELL PRESSURE TANKS

Davey Supercell Pressure Tanks are designed to provide many years of reliable service. These robust, hydro-pneumatic water pressure vessels are manufactured from the highest quality materials in compliance with the strict requirements of ISO 9001:2000 quality standards.

All models (except Supercell 24HP+) are of the captive diaphragm design, and all tanks feature heavy duty butyl diaphragms that comply with international standards for potable water applications. Supercell 24HP+ tanks have replaceable diaphragms with high quality stainless steel closing flanges.

Not only do they look good from the outside but, inside, the tank shell is protected from corrosion by a safe potable grade epoxy coating. For added peace of mind, each tank is individually tested to guarantee its reliability.

These dependable tanks are available in a variety of sizes and in three pressure ratings. They can be used for a variety of accumulator functions, such as:

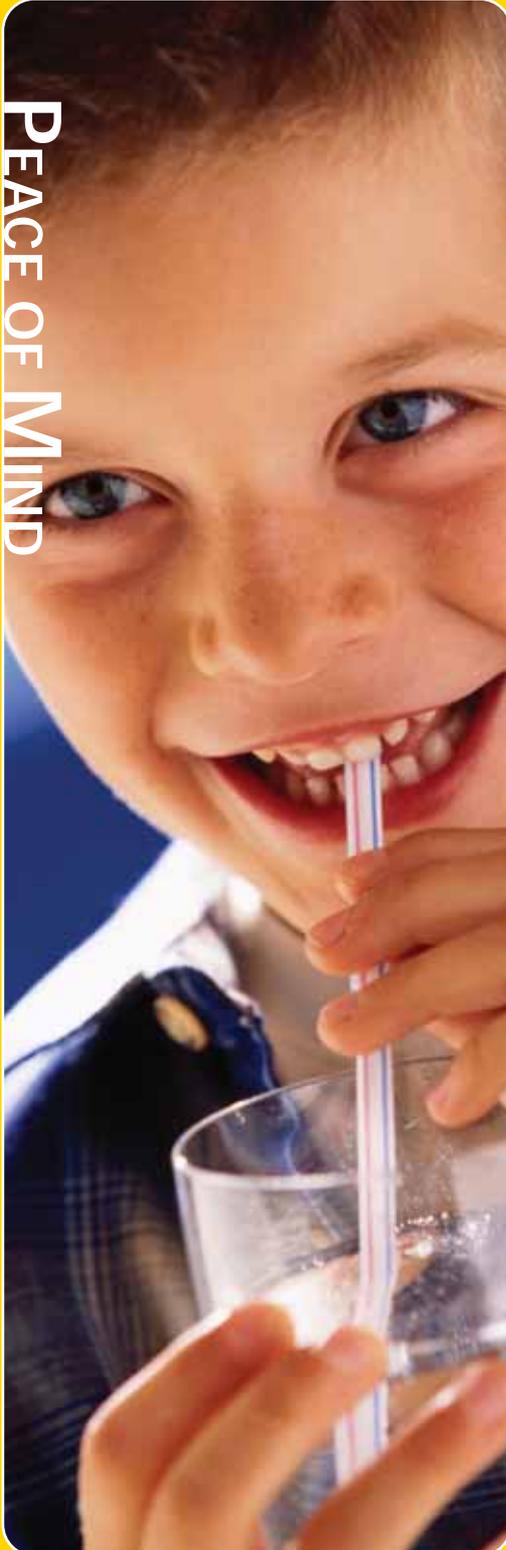
- Household, farm or industrial pressure systems
- Hydronic heating system expansion tanks
- Water hammer arrestor systems

WATER FILTRATION & TREATMENT



STERIFLO®

PEACE OF MIND



Filterpure® and Steriflo® Peace of Mind

Water is essential for life, a healthy lifestyle is promoted with water free from contamination and impurities.

For clean, safe and fresh tasting water in unlimited volumes right in your home, a simple three process system will ensure a reliable supply, for your peace of mind.

FILTRATION

Water can be discoloured and tainted by particles such as: dust, rust, sediment, hair, algae, and parasitic cysts (Giardia & Cryptosporidium). Water is swiftly cleared of these particles once passed through an appropriate Filterpure cartridge, rejuvenating the sparkle in truly clean water. Ideally, a coarse and then a fine cartridge will be installed together.



NEW

Filtration
Rejuvenating the sparkle in truly clean water.
Removes: dust, rust, sediment, hair, algae.

DISINFECTION

Microscopic living organisms can thrive in water such as: bacteria, mould, viruses, yeast, and parasitic cysts (Giardia & Cryptosporidium). Exposure to Ultra Violet light is a safe and effective way to neutralise these unhealthy organisms in your water. Davey Steriflo® UV units are ideal for domestic water disinfection.



NEW

Disinfection
Ultra Violet light for safe, chemical free disinfection of water.
Neutralise: bacteria, mould, viruses, yeast & parasitic cysts.

PURIFICATION

Dissolved impurities that affect the taste, odour and safety of your water can include: chlorine, pesticides, herbicides, and solvents. Filterpure cartridges containing activated carbon absorption media are an effective tool to purify water of these unwanted substances. Purification is most effective at the point of use, like the kitchen tap. Bacteriostatic cartridges inhibit the growth of organisms within the element fabric.



NEW

Purification
Dissolved impurities are best tackled with activated carbon.
Removes: taste, odour, chlorine, pesticides, herbicides and solvents.

WATER FILTRATION & TREATMENT

Davey Filterpure® & Steriflo® systems offer clean, safe and healthy water, without using chemicals for one tap or for the entire house. Wherever you get your water, be it mains water, rainwater, bore or even dam water, there is a Davey Filterpure and Steriflo system for you.

Design of your Water Process

The size of housing is determined simply by how many taps or appliances you want to provide water to ie. regular 10" for a single tap and jumbo 10" and 20" for anything larger - up to whole of house. A clever installation will have two jumbo 10" or 20" cartridge filters installed on the main cold water line entering your house followed with a UV disinfection system. Drinking and cooking taps are then protected with a standard 10" purification filter.

The ideal sequence of elements would start with a coarse 20 micron PP cleanable element to remove large particles and increase the life of secondary elements. A second, finer PS element of 1 or 5 micron as stage two will really start to produce pure clear water. For individual outlets such as kitchen taps a smaller purification filter with activated carbon and a bacteriostatic media will ensure that you have great water and peace of mind.

Cartridge Element Types



PLEATED POLYESTER (PP SERIES)

Pleated polyester cartridges offer reduced operating costs for many applications as the pleated construction allows them to be rinsed clean and reused. In addition the cartridges have a high surface area and can handle higher flows than disposable depth cartridges.

The availability of Jumbo sized PP cartridges means that high flows can be economically filtered.

The 20 micron is an outstanding prefilter, easy to clean with a high dirt holding and flow capacity.

SPUN POLYPROPYLENE (PS SERIES)

These are pure polypropylene with no fillers, binders, adhesives or surfactants, so are ideal for food and drinking water use and any applications where high purity is important. The melt blown fibres give a graduated pore structure allowing for depth capture in the matrix. Generally used as a second stage for finer micron filtration.

PURIFICATION CARTRIDGES

Activated Carbon purification cartridges are typically for the removal of taste, odour, chlorine, pesticides, and other organic chemicals. They are best used at the final point of use stage in your water process.

Filterpure cartridges need to be replaced and /or cleaned at regular intervals to ensure they are performing correctly.

CARTRIDGE ELEMENT TYPES							
Filtration Cartridges Polyester Pleated (cleanable)	Part No.	5PP10	20PP10	5PP10J	20PP10J	5PP20J	20PP20J
	Micron Size	5	20	5	20	5	20
	Max. Flow Rate	20 lpm	30 lpm	50 lpm	75 lpm	100 lpm	120 lpm
Filtration Cartridges Polypropylene Spun Melt	Part No.	1PS10	5PS10	20PS10	1PS10J	1PS20J	PSDG10J
	Micron Size	1*	5	20	1*	1*	25 & 1*
	Max. Flow Rate	15 lpm	15 lpm	15 lpm	35 lpm	70 lpm	35 lpm
Purification Cartridges Activated Carbon	Part No.	AC10	ACB10	ACB10J	ACB20J	BPAC10	SBPAC10
	Micron Size	5	5	5	5	0.5#	0.5#
	Max. Flow Rate	8 lpm	8 lpm	20 lpm	40 lpm	4 lpm	4 lpm

Note: Cartridges marked * are suitable for cyst reduction, cartridges marked # are suitable for cyst removal. Davey recommend UV disinfection as part of a water treatment programme.

■ Suits 10" Standard housing.

■ Suits 10" Jumbo housing.

■ Suits 20" Jumbo housing.

UV DISINFECTION			
Steriflo® Models	Model No.	UV40-20	UV75-25
	Max. Flow*	40 lpm	75 lpm
	Inlet/Outlet	3/4" BSP(M)	1" BSP(M)
			UV130-40
			130 lpm
			1 1/2" BSP(M)

*Maximum flow is for clean and clear water - prefiltration and post filtration may be required depending on installation.

FARM & COMMERCIAL SYSTEMS

SHALLOW WELL PRESSURE PUMPS

Surface Mounted Shallow Well Pumps

For depths to 7.5 metres

The Davey range of quality Australian-made shallow well pumps and pressure systems is ideal for supplying high pressure water for garden sprinklers, through to stock watering and washdown applications.

The 95S, 125S and 165S models feature a unique pump casing, cast in strong marine grade aluminium with a Rilsan® lining. This ensures extremely high corrosion and abrasion resistance for simple, trouble-free operation in the years to come.

They also feature IP56 Rated TEFC (Totally Enclosed Fan Cooled) motors to help exclude dust, water and vermin.

Top of the range is the powerful and rugged Prime Jet 240 pump, capable of delivering flows to 240 lpm, or developing discharge pressures in excess of 66 metres.

Shallow well pumps offer versatility of performance. Simply by changing the jet and venturi, the performance of the pump can be altered to compensate for alterations to pipework systems, trough elevations or other specific needs.

Davey's shallow well pumps and systems can be mounted on the surface close to the water source and can handle suction lifts down to 7.5 metres.

They come as both a pump only for manual operation or, alternatively, can be converted to an automatic pressure system by combining with a free standing Supercell 50C or Supercell 105C tank. Davey also has smaller Supercell tanks available for mounting on top of the pump, where applicable (refer page 9).



Prime Jet 240

165S

FARM & COMMERCIAL SYSTEMS

Pump Model	Jet Kit No	Total Suction Head m. ft.		Delivery Head in metres/feet																Maximum Shut-Off Pressure kPa psi		Pressure Switch Setting kPa psi			
				26	85	28	92	34	112	38	125	41	135	48	157	55	180	62	203					66	217
				Delivery Head in kPa/psi																					
				260	38	280	41	340	49	380	55	410	59	480	70	550	80	620	90					660	96
Output per minute in litres/gallons																									
95S 1ph	22690*	0	0	95	20.8	91	20.0	60	13.1	42	9.2	29	6.3							480	70				
	Jet-Black	1.5	5	86	18.9	83	18.2	55	12.0	40	8.7	27	5.9							476	69	260	38		
	Venturi-Green	4.0	13	70	15.3	69	15.1	45	9.8	30	6.5	17	3.7							450	65	to	to		
		6.0	20	55	12.0	55	12.0	37	8.1	22	4.8	10	2.1							430	62	380	55		
1.6kW *		7.5	25	42	9.2	42	9.2	34	7.4	15	3.2									412	60				
1.1kW ☉ 7.2A	22691	0	0					65	14.2	53	11.6	46	10.1	31	6.8	19	4.1			680	98				
	Jet-Brown	1.5	5					60	13.1	50	10.9	43	9.4	29	6.3	17	3.7			670	97	340	49		
	Venturi-White	4.0	13					48	10.5	41	9.0	35	7.6	24	5.2	14	3.0			645	93	to	to		
		6.0	20					38	8.3	37	8.1	32	7.0	21	4.6	11	2.4			630	91	510	74		
		7.5	25					31	6.8	31	6.8	28	6.1	20	4.3	10	2.1			620	90				
125S 1ph	22693*	0	0	126	27.7	126	27.7	100	21.9	72	15.8	51	11.2							482	70				
	Jet-Black	1.5	5	113	24.8	113	24.8	84	18.4	64	14.0	45	9.8							470	68	260	38		
	Venturi-Black	4.0	13	93	20.4	93	20.4	70	15.3	50	10.9	28	6.1							445	64	to	to		
		6.0	20	70	15.3	70	15.3	59	12.9	36	7.9	11	2.4							425	62	380	55		
		7.5	25	57	12.5	57	12.5	43	9.4	18	3.9									400	58				
2.1kW * 1.4kW ☉ 8.5A	22694	0	0					90	19.7	78	17.1	67	14.7	47	10.3	28	6.1			660	96				
	Jet-Green	1.5	5					82	18.0	73	16.0	63	13.8	43	9.4	24	5.2			650	94	340	49		
	Venturi-Brown	4.0	13					67	14.7	66	14.5	56	12.3	37	8.1	19	4.1			630	91	to	to		
		6.0	20					53	11.6	53	11.6	52	11.4	34	7.4	16	3.5			615	89	510	74		
		7.5	25					44	9.6	44	9.6	44	9.6	33	7.2	15	3.2			605	88				
165S 1ph 2.4kW * 1.8kW ☉ 10.0A	22697*	0	0	165	36.2	164	36.0	105	23.0	77	16.9	62	13.6							490	71				
	Jet-White	1.5	5	144	31.6	144	31.6	90	19.7	67	14.5	53	11.6							480	70	260	38		
	Venturi-Yellow	4.0	13	120	26.3	120	26.3	82	18.0	58	12.7	38	8.3							454	66	to	to		
		6.0	20	90	19.7	90	19.7	76	16.7	52	11.4	26	5.7							440	64	380	55		
		7.5	25	70	15.3	70	15.3	60	13.1	32	7.0									415	60				
2.3kW * 1.8kW ☉ 4.2A	22698	0	0					112	24.6	88	19.3	76	16.7	51	11.2	26	5.7			630	91				
	Jet-Red	1.5	5					100	21.9	82	18.0	71	15.6	47	10.3	22	4.8			622	90	340	49		
	Venturi-Red	4.0	13					88	19.3	75	16.4	64	14.0	41	9.0	16	3.5			598	87	to	to		
		6.0	20					70	15.3	64	14.0	57	12.5	32	7.0	8	1.7			572	83	510	74		
		7.5	25					54	11.8	54	11.8	50	10.9	26	5.7					552	80				
Prime Jet 240	22680	0	0																	470	68				
	Jet- P/No 6076-11	1.5	5																	455	66	240	35		
	Venturi P/No 6075-8	4.0	13																	435	63	to	to		
		6.0	20																	415	60	370	54		
		7.5	25																	405	59				
3.2kW * 2.5kW ☉ 14.0A	22681	0	0	234	51.5	192	42.2	178	39.1	157	34.5	128	28.1	78	17.1					570	83				
	Jet- P/No 6076-4	1.5	5	211	46.4	170	37.3	164	36.0	146	32.1	114	25.0	64	14.0					555	80	300	44		
	Venturi - P/No 6075-5	4.0	13	167	36.7	134	29.4	127	27.9	118	25.9	88	19.3	45	9.8					535	78	to	to		
		6.0	20	133	29.3	108	23.7	104	22.8	98	21.5	74	16.2	34	7.4					515	75	470	68		
		7.5	25	108	23.7	86	18.9	86	18.9	86	18.9	66	14.5	22	4.8					500	73				
3.0kW * 2.3kW ☉ 5.1A	22682	0	0									130	28.5	110	24.1	78	17.1	46	10.1	735	107				
	Jet- P/No 6076-7	1.5	5									117	25.7	98	21.5	66	14.5	36	7.9	710	103	400	58		
	Venturi P/No 6075-9	4.0	13									94	20.6	81	17.8	48	10.5	19	4.1	670	97	to	to		
		6.0	20									75	16.4	68	14.9	36	7.9	6	1.3	635	92	590	86		
		7.5	25									62	13.6	58	12.7	28	6.1			610	88				
5.1A	22683	0	0											101	22.2	77	16.9	50	10.9	790	115				
	Jet- P/No 6076-8	1.5	5									90	19.7	74	16.2	46	10.1	35	7.8	770	112	500	73		
	Venturi- P/No 6075-10	4.0	13									72	18.8	58	12.7	34	7.4	25	5.6	740	107	to	to		
		6.0	20									57	12.5	48	10.5	26	5.7	18	4.0	720	104	690	100		
		7.5	25									34	7.4	45	9.8	21	4.6	13	2.9	700	102				

* Input kW (P₁)

☉ Output kW (P₂)

Important Information

- * Denotes standard configuration. Models 95S, 125S & 165S may be converted to higher pressure by fitting relevant Jet & Venturi. Specify Jet Kit No. when ordering Prime Jet 240.
- Plumbing Connections: Inlet – 1 1/2" (38 mm) BSPP Female. Outlet – 1 1/4" (32mm) BSPP Female – all models.
- Pumps are supplied with pressure switches connected, suitable for automatic pressure system operation.
- To convert litres/minute to gallons/hour multiply by 13.2. All imperial data is an approximation of metric figures. Specifications subject to change without notice.
- All single phase models supplied with plug and lead for 220/250 volt 50Hz operation. Prime Jet 240 only may be re-connected for use on nominal 480 volt 50Hz single phase supply. For 3 phase nominal 415 volt, specify when ordering (available for 165S and Prime Jet 240 only).

FARM & COMMERCIAL SYSTEMS

DEEP WELL PRESSURE PUMPS

Surface Mounted Deep Well Pumps

For depths to 50 metres

The Davey range of quality Australian-made deep well pumps and pressure systems is ideal for handling suction lifts beyond 7.5 metres.

By submerging the jet and venturi down the bore, flows can be provided from as deep as 50 metres. To make installation and servicing easier, the pump is conveniently installed at ground level.

The 95D, 125D, 165D and Prime Jet 240 are able to retrieve water from depths to 50 metres and can produce flows up to 194 lpm from shallower depths.

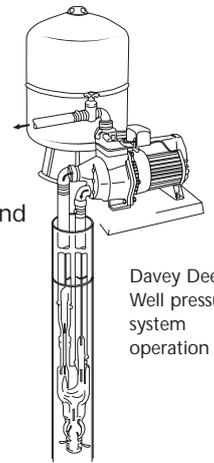
The 95D, 125D, 165D models feature a unique pump casing cast in marine grade aluminium, lined with a strong engineering plastic to ensure extremely high corrosion resistance and the ability to withstand the harsh operating conditions often encountered in pumping water from bores, wells, etc. The powerful Prime Jet 240 is made of cast iron to cater for the higher operating pressures.

Davey deep well pumps are fitted with the Davey automatic demand response (ADR) valve to ensure peak performance at all times and help protect against loss of prime.

Davey deep well systems can also be installed in horizontally offset situations to draw water from distant dams, rivers, etc. This allows the pump to be mounted away from the source of water to gain access to power, or in places where there is the possibility of flooding.

All Davey deep well pumps feature IP56 Rated TEFC (Totally Enclosed Fan Cooled) Motors to help exclude dust, water and vermin.

Where electric power is not available, a Davey engine driven pump can be combined with a deep well injector to deliver water from deep bores. For fitting configurations refer page 25.



Davey Deep Well pressure system operation



Prime Jet 240



165D



JY30-90 Kuant Jet

Pump Model	Nominal Bore Size	*Max. Shut Off Pressure		Outlet Pressure		Depth to water metres/feet											
		kPa	psi	kPa	psi	6		10		15		20		26		30	
						20	33	50	66	85	100						
Output per minute in litres/gallons																	
JY20-75 1ph / 4.5A 1.1kW ★ 0.75kW ☼	(4") 100mm	470	68	220	32	35	462	31	409	27	356	22	290	15	198		
				320	46	27	356	24	317	20	264	15	198	10	132		
				360	52	16	211	13	171	10	132	8	105	5	66		
JY30-90 1ph / 5.4A 1.3kW ★ 0.9kW ☼	(4") 100mm	510	73	220	32	44	580	39	515	35	462	30	396	24	316	15	198
				320	46	36	475	32	422	28	370	20	264	15	198	5	66
				360	52	25	330	19	250	15	198	12	158	5	66		

RAINWATER HARVESTING



CHERISH THE RESOURCE AND MANAGE IT WISELY!

RainBank® is an automatic controller for rainwater harvesting. Incorporated into the design of new homes or retrofitted to existing properties, RainBank® controls the water supply for toilet and laundry applications by automatically switching the water source from the domestic mains to rainwater when a demand is sensed and rainwater is available in the storage tank.

RainBank® is the first product to use rainwater as the water supply for toilet and laundry applications in metropolitan areas and control it automatically. It can save up to 40 per cent of a household's drinking quality water which is normally used in these applications thereby helping conserve Australia's precious water reserves.



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ATS 5200.466-2004
IPC20009

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SEAMLESS AND CONVENIENT

RainBank® does the thinking for you by automatically switching the water source from the domestic mains to the rainwater supply stored in the tank whenever a toilet is flushed or a washing machine used. If the rainwater supply is depleted at any time or in the case of a power failure, RainBank® automatically supplies mains water as the back up.

ENVIRONMENTALLY FRIENDLY

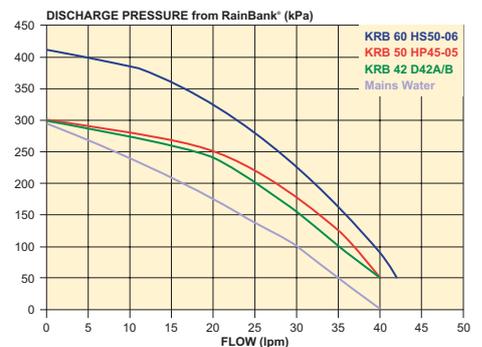
RainBank® only operates the pump to pressurise the rainwater when required. Energy costs are minimised as there is no double handling or re-pressurising of the mains water. Daily power consumption figures for a pump and RainBank® system supplying toilet cisterns in a three person dwelling is the equivalent to the operation of a reverse cycle 2,400W air conditioner for 3 minutes a day.

EASY TO INSTALL

RainBank® can be incorporated into the design of new homes or retrofitted to existing properties. RainBank® is available in kit form with a selection of three pumps.

SAFE

RainBank® has achieved the requirements of Standards Australia's draft Technical Specification ATS 5200.466—2004, for Rainwater tank connection devices. RainBank® also complies with AS3500, AS4020 and features Water Mark approval license number IPC20009, for connection to a drinking water supply.

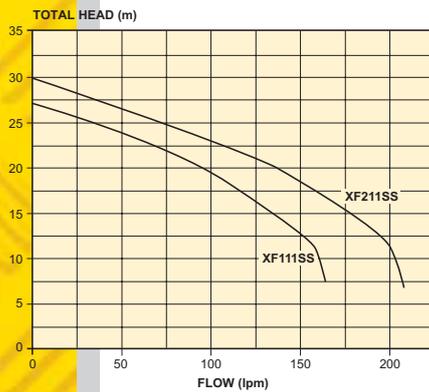


RainBank® on
HP45-05 Pump

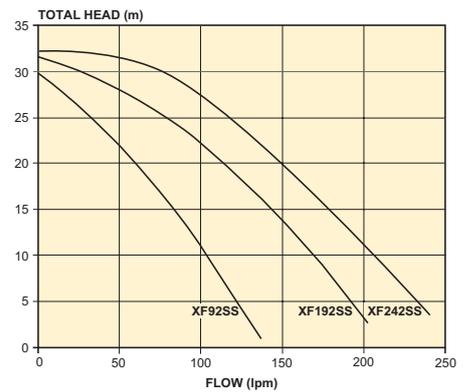
ELECTRIC TRANSFER PUMPS



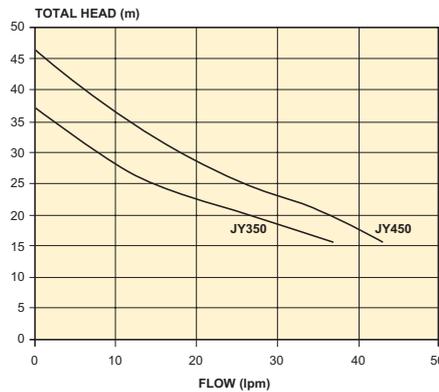
XF111SS / XF211SS



XF92SS / XF192SS / XF242SS



JY350 / JY450



Stainless Steel Transfer Pumps

The NEW XF111SS and XF211SS single stage centrifugal pumps feature simplicity of design coupled with an all stainless steel pump end. Teflon neck rings provide long lasting performance and excellent suction capability.

The NEW XF92SS, XF192SS and XF242SS twin impeller centrifugal multistage pumps add that extra pressure you often need in a high efficiency package. These super quiet pumps feature all stainless steel impellers and casings with Davey's unique patented floating neck ring arrangement for outstanding performance.

The new single and two stage models are ideal for pumping cold and even hot water* for a variety of applications:

- Domestic water supply
- Washing systems
- Irrigation
- Pressure boosting
- Water Transfer
- Heat exchanges

*Up to 85°C dependent upon model. Refer datasheets for full details.

Stainless Steel Jet Pumps

The NEW compact JY single stage jet assisted centrifugal pumps are ideal pumps for a variety of consumer applications, like:

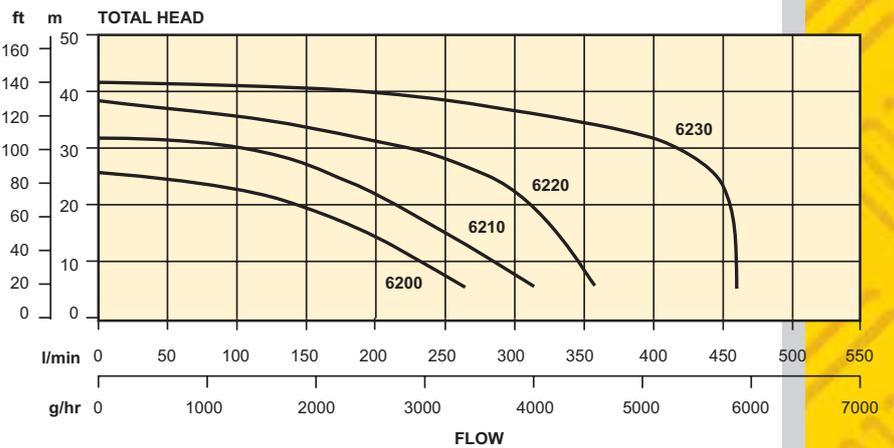
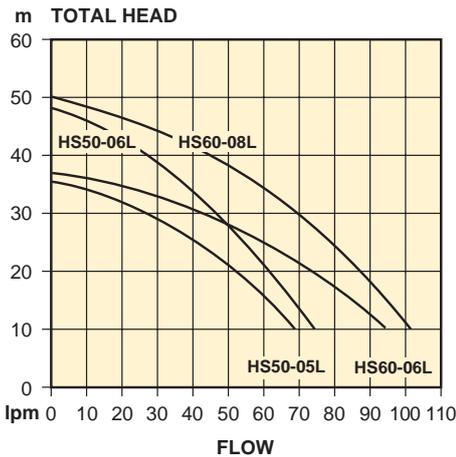
- Transferring water to elevated storage tanks
- Boosting low pressure mains water supplies
- Providing pressure for domestic water usage in homes
- Operating small scale irrigation systems

The NEW JY models feature high quality 304 stainless steel pump casing and impeller for long reliable life.

XFSS & JY SERIES PERFORMANCE

Model	Motor (kW)		Impellers (Stages)	Total Head metres/feet												Connection Inlet/Outlet BSP						
	Input (P ₁)	Output (P ₂)		10	32.8	15	49.2	20	65.6	25	82	30	98.4	35	114.3		40	131.2				
				Capacity in litres/minute, gallons/hour																		
XF111SS	1.1	0.75	1	161	35.4	134	29.5	94	20.7	31	6.8							1 1/2" F / 1" F				
XF211SS	1.1	0.75	1	203	44.7	176	38.7	136	29.9	72	15.8							1 1/2" F / 1" F				
XF92SS	0.75	0.54	2	103	22.7	83	18.3	62	13.6	34	7.5							1 1/2" F / 1" F				
XF192SS	1.1	0.78	2	170	37.4	143	31.5	116	25.5	86	18.9	26	5.7						1 1/2" F / 1" F			
XF242SS	1.44	1.08	2	211	46.4	183	40.3	155	34.1	125	27.5	58	12.8						1 1/2" F / 1" F			
JY350	0.78	0.53	1 jet assisted			37	8.1	26	5.7	15	3.3	8	1.8	2	0.4					1" F / 1" F		
JY450	1	0.7	1 jet assisted			43	9.5	36	7.9	26	5.7	18	4.0	12	2.6	6	1.3					1" F / 1" F

ELECTRIC TRANSFER PUMPS



Dynaflor® HS Stainless Steel Horizontal Multistage Pumps

For applications requiring higher pressure with quiet and reliable operation, the Dynaflo HS Series offers the proven advantages of Davey quality coupled with Davey innovation.

Available in three and four stage models with pressures up to 50 metres, and flows up to 100 lpm, the Dynaflo HS models are ideal for a wide range of applications including:

- High tank filling
- Sprinkler system supply
- Mains boosting (subject to local regulations)
- Industrial water supply
- Household pressure systems - refer page 7 for details

Dynaflor® 6000 Series Models

Designed for medium flow applications, Davey Dynaflo pumps are ideal for such applications as dairy washdown, spearpoints, small irrigation systems and general water transfer.

Manufactured to the highest standards, Davey Dynaflo pumps provide high capacity, efficient and reliable water supply for applications which demand flows up to 457 litres/min, or heads up to 41 metres.

Dynaflor models are built to last and come complete with performance matched IP56 TEFC (Totally Enclosed Fan Cooled) Davey motors. Davey 6200 and 6210 Dynaflo pumps utilise a highly corrosion resistant Noryl pump body. 6220 and 6230 Dynaflo models utilise the strength of cast iron to handle even higher pressure duties, with a special internal and external powdercoat finish for added corrosion protection.

HS PERFORMANCE

Model	Motor (kW)		Impellers (Stages)	Total Head metres/feet												Connection Inlet/Outlet BSPP				
	Input (P ₁)	Output (P ₂)		10	32.8	15	49.2	20	65.6	25	82.0	30	98.4	35	114.3		40	131.2	45	147.6
				Capacity in litres/minute Gallons per hour																
HS50-05L	0.74	0.53	3	69	15.2	61	13.4	51	11.2	49	10.8	27	5.9	4	0.9			1 1/2" F / 1" F		
HS50-06L	0.89	0.60	4	74	16.3	67	14.7	61	13.4	53	11.7	46	10.1	37	8.1	27	5.9	14	3.1	1 1/2" F / 1" F
HS60-06L	0.82	0.57	3	96	21.1	85	18.7	75	16.5	60	13.2	43	9.5	18	4.0					1 1/2" F / 1" F
HS60-08L	1.1	0.76	4	101	22.2	94	20.7	87	19.1	77	16.9	68	15.0	58	12.8	44	9.7	26	5.7	1 1/2" F / 1" F

DYNAFLO® PERFORMANCE

Model	Motor (kW)		Max Total Head (m)	Total Head metres/feet												Connection Inlet/Outlet BSPP				
	Input (P ₁)	Output (P ₂)		5	16.4	10	32.8	15	49.2	20	65.6	25	82.0	30	98.4		35	114.8	40	131.2
				Capacity in litres/minute Gallons per hour																
6200	1.57	1.0	25.5	269	3550	233	3075	193	2547	142	1874	24	317							1 1/2" F / 1 1/2" F
6210	2.1	1.6	31.6	314	4144	283	3735	248	3273	212	2798	167	2204	100	1320					1 1/2" F / 1 1/2" F
6220	3.2	2.4	38.7	356	4699	344	4540	327	4316	309	4079	280	3696	212	2798	115	1518			2" F / 1 1/2" F
6230	3.9	3.0	41.2	457	6032	457	6032	457	6032	454	5992	442	5834	407	5372	323	4263	176	2323	2" F / 1 1/2" F

6200 available in 1 phase only, 6210/6220 available in 1 phase or 3 phase, 6230 available in 3 phase only.

PERIPHERAL TURBINE & POND PUMPS

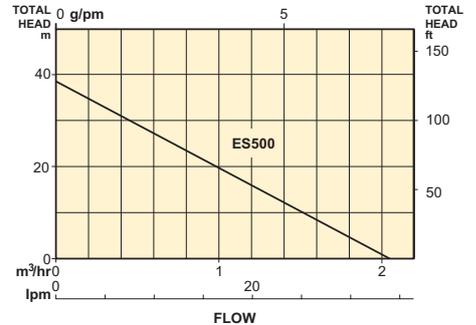
Peripheral Turbine Pumps

Davey's compact ES500 peripheral turbine pumps have been designed for specific uses in commercial and industrial applications such as:

- Pressure boosting
- Dishwashers
- Boiler feed
- Jacking pump, etc.

Economical and quiet, these pumps provide high pressure at temperatures up to 90°C. Solid brass liquid ends and quiet TEFC motors (rated IP44) give long and reliable operating life.

Motor kW input - (P₁) 0.57
Motor kW output - (P₂) 0.37



Dynapond Pond Pumps

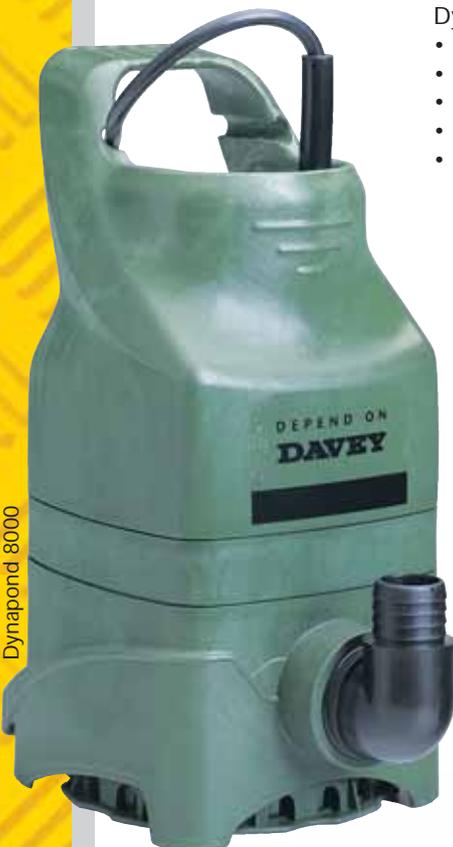
Davey's Dynapond Pond Pumps are specially designed for fully submerged, 24 hour a day, 7 day a week operation.

The Dynapond is ideal for large domestic and commercial fountains and waterfalls, Koi and fish ponds, as well as recirculation applications in freshwater aquaculture.

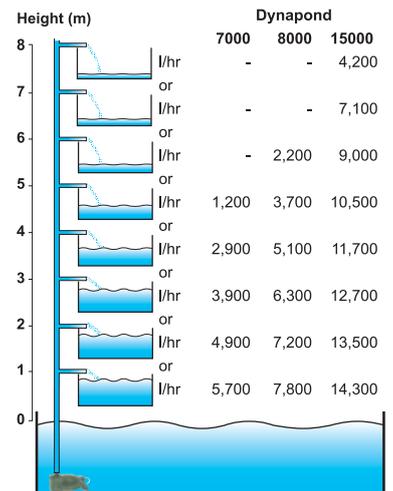
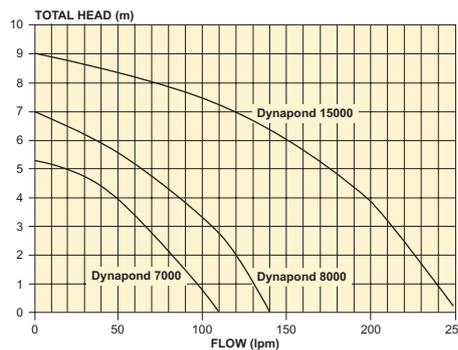
The pump can be installed with the outlet facing vertically or horizontally, making it easier to install and conceal in your water feature.

Dynapond models feature:

- Open impeller allowing the passage of small soft solids
- Adjustable inlet strainer holes (10mm or 5mm) to control what goes through the pump
- Oil free motor, so they are safe for fishponds
- Maximum submergence of up to 3 metres
- 1 1/4" BSP female outlet and discharge elbow for hose connection

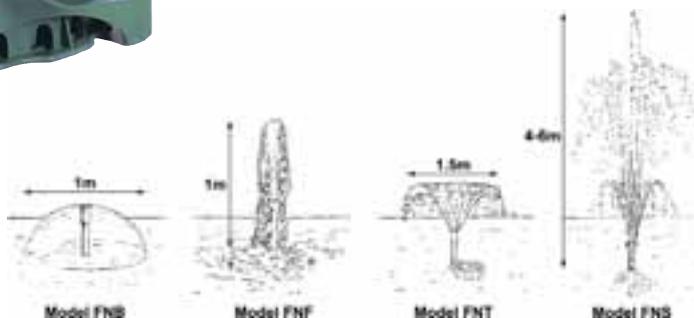


Dynapond 8000



FLOW REQUIRED PER METRE WIDTH OF WATERFALL

Depth of Water at Top of Waterfall	FLOW	
	(lpm)	(l/hr)
5mm	45	2700
10mm	100	6000
15mm	200	12000
20mm	300	18000



ENGINE DRIVEN SELF PRIMING PUMPS

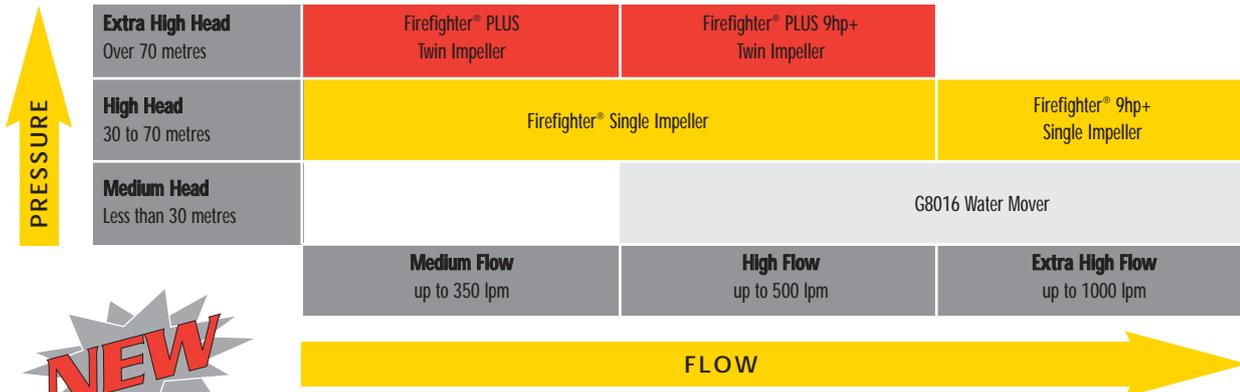
The Davey range of engine driven self priming pumps offers you versatility for a variety of applications:

- Firefighting
- Water transfer
- Irrigation
- Boom spraying
- Agricultural spraying such as sheep jetting
- Deep well jet pump applications



For easy identification, all single stage Firefighter models have YELLOW casings. Firefighter Plus two stage models have RED casings.

Depending on the required flow and pressure, you can select which type of pump in the engine driven self priming pump range suits your needs:



5 Series Firefighter® and Firefighter Plus

Depend on Davey to take yet another quantum leap forward with their NEW 5 Series Firefighter® range. These new pumps offer a host of new features to make installation, operation and maintenance easier, quicker and more dependable.

Designed with the needs of the end user in mind, the NEW 5 Series single and twin impeller models set new standards for convenience and durability.

The NEW 5 Series range also offer class leading performance and not just in the workshop. The NEW models provide superior self priming and performance at suction lifts, providing you with confidence when lifting water from a river or dam!

The NEW 5 Series also includes a larger capacity single impeller range of Firefighter® 9hp+ models.



5255H with Honda GX160 Engine

5155H with Honda GX160 engine

ENGINE DRIVEN SELF PRIMING PUMPS



SUCTION CONFIGURATION

The pump inlet is incorporated into a compact suction housing, with easy access to the suction flap valve and the other pump internals.

CHOICE OF SUCTION SIZES

The suction housing comes standard as 1½" BSP, but is available as 2" for larger horsepower models, and in NPT threads for selected markets.

LARGER CAPACITY TWIN IMPELLER CASINGS

To ensure the fastest self priming times, the new twin impeller models feature a larger suction housing.

LARGER PRIMING AND DRAIN PORTS

Not only does this make it easier to fill your pump for priming, but also makes it easier to drain and flush the pump out after use.

BAYONET STYLE PRIMING AND DRAIN PLUGS

Incorporating a decompression function and a safety retention system, these new plugs make it easy to safely access the priming and drain ports.

With no tools required, a simple 90 degree twist of the wrist and the plug can be released.

INTEGRAL HANDLE

Conveniently positioned and comfortable to grip, the new handle saves on weight without compromising strength.

FOUR-WAY DISCHARGE

Allows for easy installation and more connection options with 2 x 1½" and 2 x 1" outlets. Standard on all single and twin impeller models up to 7hp.

THREE-WAY DISCHARGE

Allows for easy installation and more connection options with 1 x 2" and 2 x 1" outlets, plus a huge 1½" priming port which can also be used as a discharge port. This discharge is standard on all 9hp, 10hp and 13hp models.

DUAL FLOATING NECK RINGS

Patented independently floating neck rings are fitted both front and rear of the impeller to ensure optimal pump performance is maintained, even after weeks of abuse.

THRUST BALANCE

All centrifugal pumps are capable of subjecting axial (parallel to the shaft) thrust to the engine. The higher the pressure the greater thrust potentially created, which can shorten engine life. The NEW 5 Series Firefighter® range incorporate a thrust balance drum and pressure equalization holes in the impeller. This special design helps extend engine life.

PATENTED CLAMPED IMPELLERS

Davey's unique clamped impeller design allows for optimum impeller shape and internal surface finish for increased performance. Amazingly this patented feature also makes it possible to quickly disassemble the impeller/s, making cleaning accidental obstructions easier.

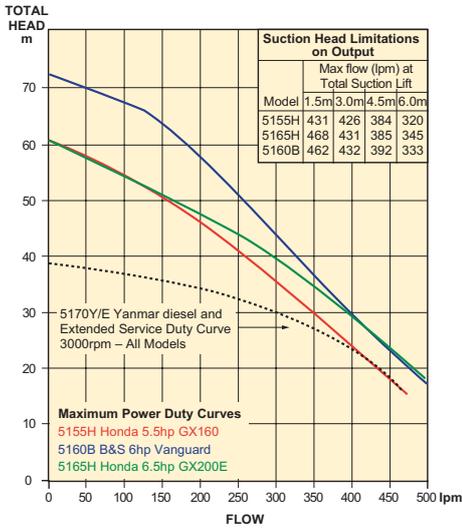
HIGH QUALITY EPOXY POWDER COATED CASINGS

Not only do the NEW 5 Series Firefighter® pumps feature the high quality Davey powder coat finish on the outside, they also have the same high quality finish on the inside! This resilient finish helps to extend the life of your NEW Davey pump.

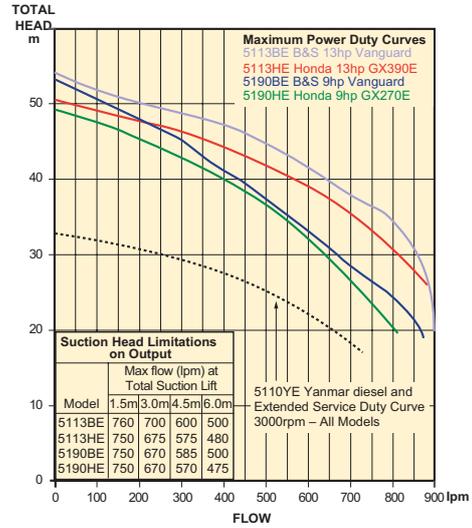


ENGINE DRIVEN SELF PRIMING PUMPS

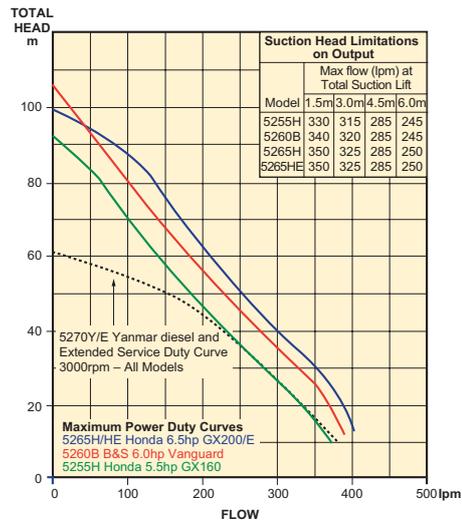
FIREFIGHTER® SINGLE IMPELLER 5.5 TO 6.5hp PERFORMANCE



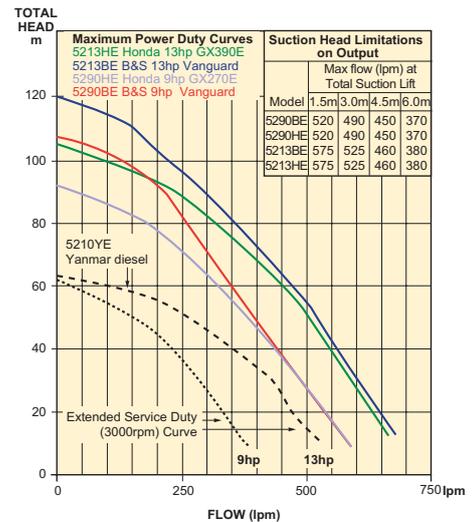
FIREFIGHTER® 9hp + SINGLE IMPELLER 9 TO 13hp PERFORMANCE



FIREFIGHTER® PLUS TWIN IMPELLER 5.5 TO 6.5hp PERFORMANCE



FIREFIGHTER® PLUS 9hp + TWIN IMPELLER 9hp TO 13hp PERFORMANCE



Model Choices	Overhead Valve Petrol Engine Options							Yanmar Diesel Engine Options	
	Briggs & Stratton			Honda				7hp L70A/E	10hp L100A/E
	6hp Vanguard	9hp Vanguard	13hp Vanguard	5.5hp GX160	6.5hp GX200	9hp GX270	13hp GX390		
Firefighter Single Impeller	5160B	5190BE	5113BE	5155H	5165H 5165HE	5190HE	5113HE	5170Y 5170YE	5110YE
Firefighter Plus Twin Impeller	5260B	5290BE	5213BE	5255H	5265H 5265HE	5290HE	5213HE	5270Y 5270YE	5210YE
Max rated hp @ 3600 rpm	6	9	13	5.5	6.5	9	13	7	10
Displacement (cc)	182	296	391	163	196	270	389	296	406
"Out of box" governed max engine speed @ no load	4200 rpm			3800 rpm			3000 rpm		
Fuel tank (litres)	4	6	7.9	3.6	3.6	6	6.5	3.5	5.5
Running time per tank @ full load @ 3600 rpm	1.93 hours	1.9 hours	1.7 hours	1.73 hours	2.05 hours	1.9 hours	2 hours	1.6 hours	2.5 hours
Low oil protection	YES							NO	
Exhaust spark arrestor YES NO - optional from engine dealers	YES			NO					
dBa @ 3600 rpm @ full load	75 @ 4m	79 @ 4m	81.5 @ 4m	85 @ 4m	86 @ 4m	79 @ 7m	78 @ 7m	80.5 @ 7m	82.5 @ 7m

ENGINE DRIVEN SELF PRIMING PUMPS

3" Water Mover models

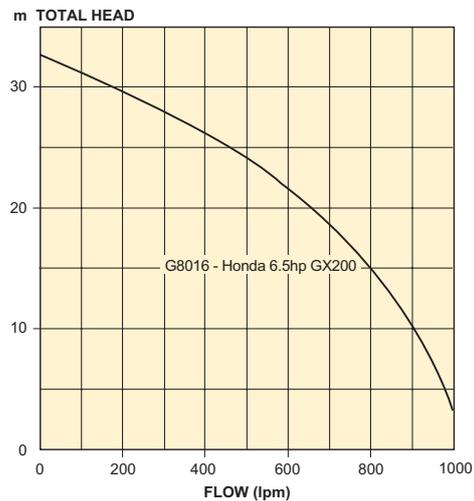
Davey's 3" Water Mover models are designed to handle those high volume pumping jobs with ease. Featuring heavy duty close grain cast iron impellers and diffusers, with large open vanes, these robust pumps can even handle soft solids in suspension.

They suit applications such as:

- Water harvesting
- Tanker filling and emptying
- Drainage
- Grey or septic water disposal



G8016
3" Water Mover

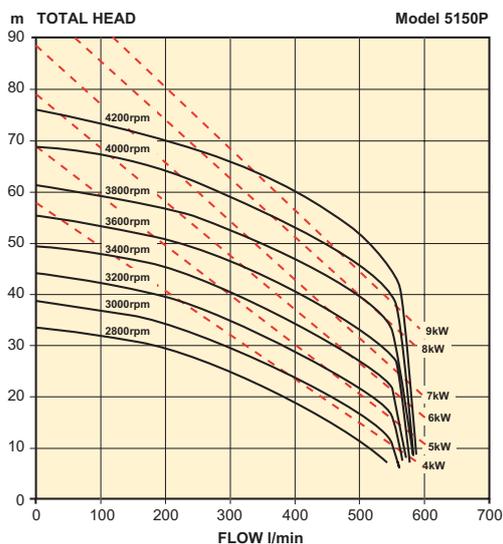


5150P Bare Shaft
Single Stage

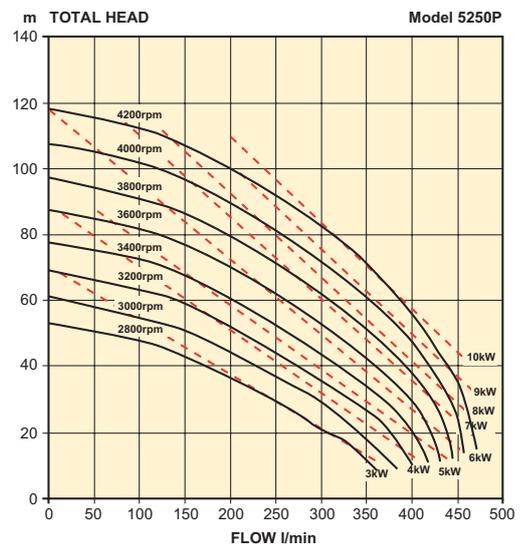
Bare Shaft Pumps

The Davey range of bare shaft pumps feature the new twin impeller high pressure model 5250P and the single impeller model 5150P. These self priming pumps can be direct coupled or belt driven by petrol or diesel engines, an electric motor or a stationary tractor. All models feature high grade aluminium casings and stainless steel shafts for high corrosion resistance. These units are ideal for tank filling, irrigation, firefighting and more.

SINGLE STAGE BARE SHAFT PUMP PERFORMANCE



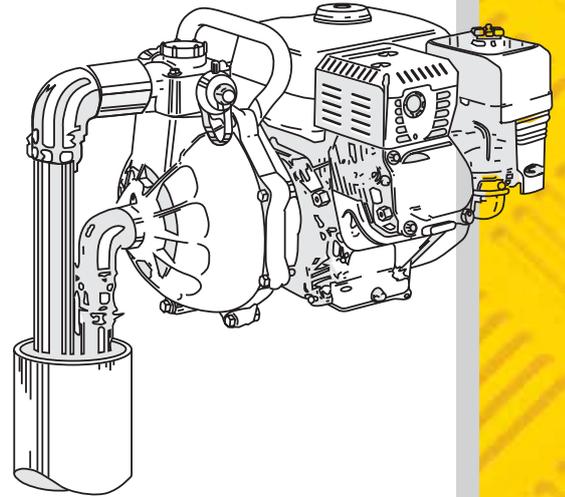
TWIN STAGE BARE SHAFT PUMP PERFORMANCE



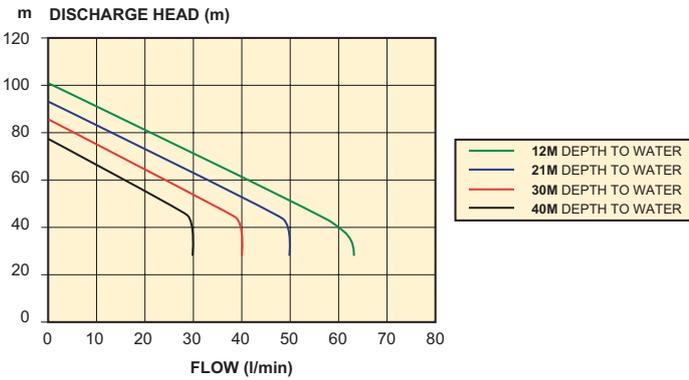
ENGINE DRIVEN SELF PRIMING PUMPS

Borehole Applications

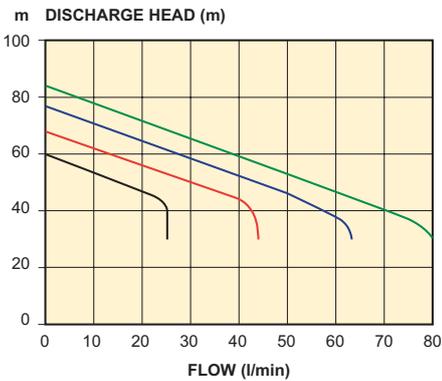
Firefighter® and Firefighter® Plus models can be fitted with a deep well injector to draw water from bores where no electrical power is available. Three different jet/venturi kits are available for use with either a 4" or 5" injector body kit. The performance shown is indicative for a 5155H at full speed or a 5255H at 3000rpm throttle setting.



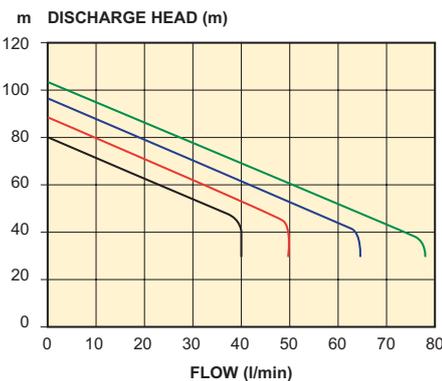
JET/VENTURI KIT No. 29429 & 4 INCH INJECTOR BODY No. 23300



JET/VENTURI KIT No. 29468 & 4 INCH INJECTOR BODY No. 23300



JET/VENTURI KIT No. 29569 & 5 INCH INJECTOR BODY No. 23301



RECOMMENDED MINIMUM DEEP WELL FIREFIGHTER PIPE SIZES

Model Injector	Injector Body No.	Drive Pipe	Suction Pipe
29429	23300	1 1/4" Class B poly or 40mm PN6 poly	1 1/2" Class B poly or 50mm PN6 poly
29468	23300	40mm PN6 poly	2" Class B poly or 63mm PN6 poly
29569	23301	1 1/2" Class B poly or 50mm PN6 poly	

If used in difficult installations consult your Davey dealer for technical advice and assistance.

CIRCULATORS & EFFLUENT PUMPS



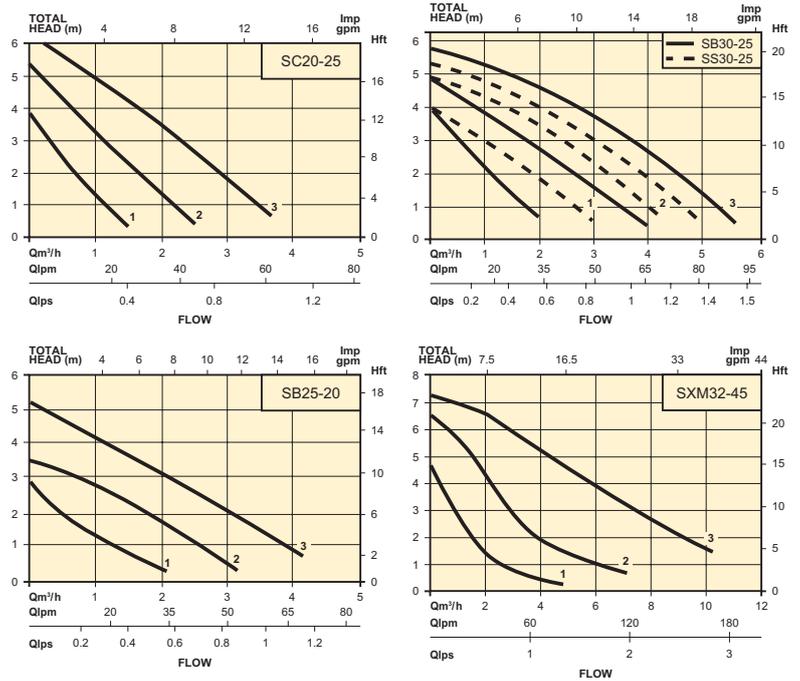
Circulator Pumps

Davey circulator pumps are ideal for domestic heating applications, secondary hot water services, air conditioning or cooling systems.

The advanced multi-speed, canned motor, provides long, reliable operating life. The pump has a maximum operating temperature of 120°C and a maximum service pressure of 1000 kPa.

To make it easier to install, Davey offers five different sizes, as well as including the unions and gaskets with each pump.*

*SXM 32-45: Unions and gaskets ordered separately. Note: These units are not to be used for swimming pool or spa applications.



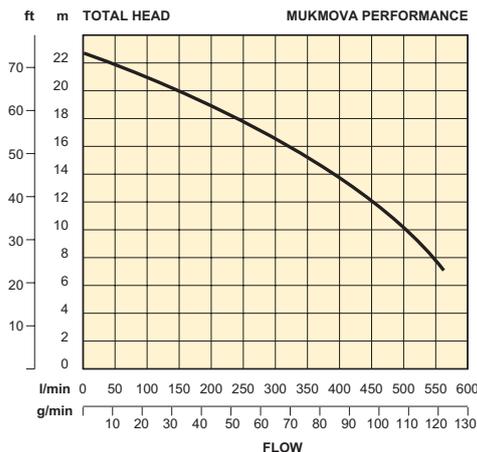
Mukmova - Effluent Pump

Features:

- Thick section cast iron pump body
- Fast self priming capability
- Can be made automatic with float switch
- Large inspection port with quick release toggles
- Shims fitted on inspection port for optimising suction capabilities
- Can be installed outside pit
- Totally enclosed fan cooled motor
- Two models available with single phase (240/480v) or three phase (415v) motor



Mukmova



MUKMOVA PERFORMANCE

	Total Head		Output	
	Metres	Feet	Litres/Min	Gal/Min
10	33	492	108	
12	39	435	95	
14	46	365	80	
16	52	292	64	
18	59	215	47	
20	66	130	28	

Model	Motor kW	
	(P ₁)	(P ₂)
Single Phase	2.6	2.1
Three Phase	2.4	2.0

Note: Pump output capacities are based on clean water. Performance may be lower when pumping dirty water.

4" SUBMERSIBLE BOREHOLE PUMPS

Submersible J & SR Series

Slimline submersible borehole pumps suitable for 4" or larger boreholes. Manufactured from corrosion and abrasion resistant materials. Close coupled to a submersible electric motor.

Applications

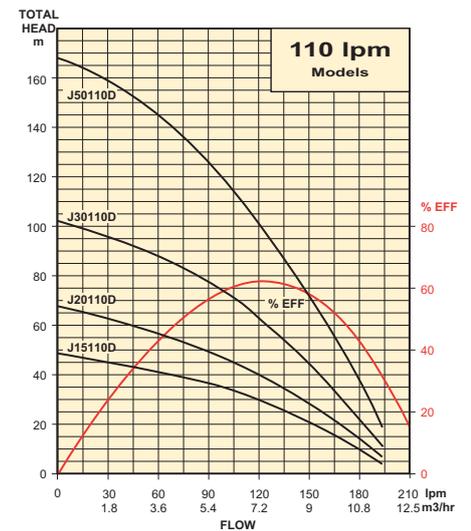
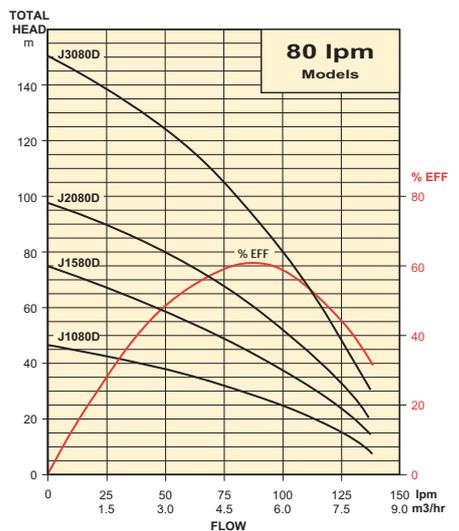
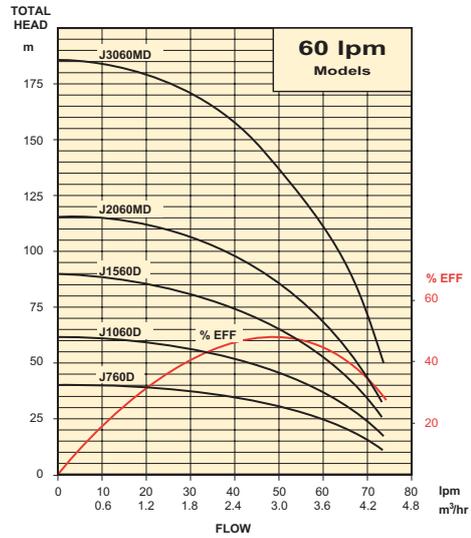
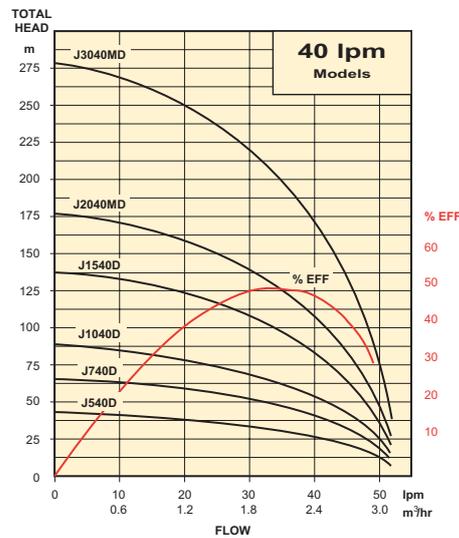
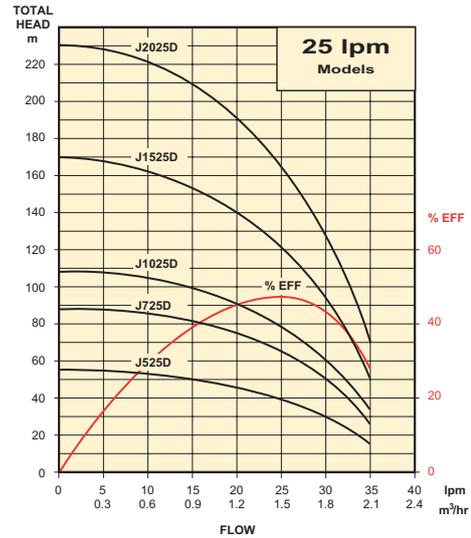
- Domestic water supply
- Turf watering
- Irrigation
- Stock watering
- De-watering

Features

- Precision stainless steel outer (2mm thick)
- Stainless steel thrust rings, lead guard and suction screen
- Standard 2 pole speed motor (2850 rpm)
- Abrasive resistant internal shaft bearings
- Cast stainless steel discharge head with in-built check valve

Benefits

- Proven and reliable design for Australian conditions
- Standard speed operation for long life
- Manufactured from high quality corrosion resistant materials
- Teflon impregnated polyester staging, in models up to 60 lpm, allows the J Series to handle low yielding bores and sandy well conditions
- 25, 40 & 60 lpm models feature independently floating centrifugal impellers to provide easy starting and trouble free long life, automatically adjusting to the pumping conditions of each application
- 80, 110, 160, 250 & 300 lpm models feature locked stack partial mixed flow polycarbonate impellers with open waterways to provide trouble free starting and longer operating life



4" SUBMERSIBLE BOREHOLE PUMPS

SPECIFICATIONS

25 lpm	Motor kW (P ₂)				
	0.37	0.56	0.75	1.1	1.5
Model	J525D	J725D	J1025D	J1525D	J2025D

40 lpm	Motor kW (P ₂)					
	0.37	0.56	0.75	1.1	1.5	2.2
Model	J540D	J740D	J1040D	J1540D	J2040MD	J3040MD

60 lpm	Motor kW (P ₂)				
	0.56	0.75	1.1	1.5	2.2
Model	J760D	J1060D	J1560D	J2060MD	J3060MD

80 lpm	Motor kW (P ₂)			
	0.75	1.1	1.5	2.2
Model	J1080D	J1580D	J2080D	J3080D

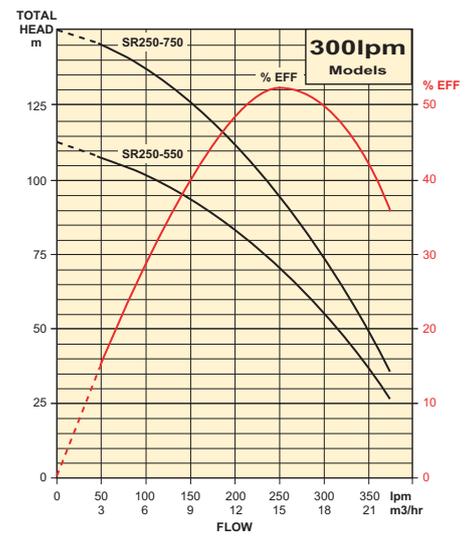
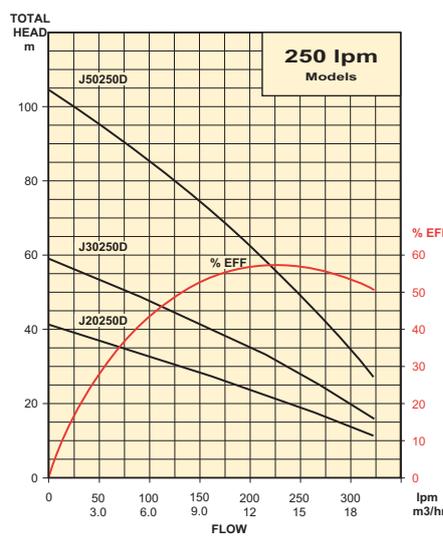
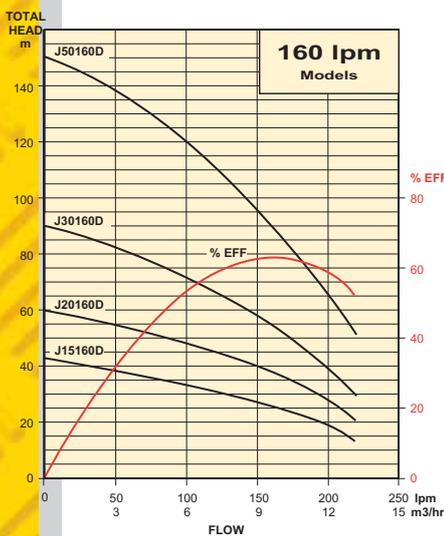
110 lpm	Motor kW (P ₂)			
	1.1	1.5	2.2	3.7
Model	J15110D	J20110D	J30110D	J50110D

160 lpm	Motor kW (P ₂)			
	1.1	1.5	2.2	3.7
Model	J15160D	J20160D	J30160D	J50160D

250 lpm	Motor kW (P ₂)		
	1.5	2.2	3.7
Model	J20250D	J30250D	J50250D

300 lpm	Motor kW (P ₂)	
	5.5	7.5
Model	SR250-550	SR250-750

4" SR Series High Flow Submersible



6" SUBMERSIBLE BOREHOLE PUMPS

SS 6" Series

Advanced stainless steel manufacturing technology results in state of the art 6" submersible pumps.

Applications

- Water supply - domestic, rural & industrial
- Turf watering & irrigation
- Mining applications
- Firefighting systems
- Agricultural & farming

Features

- Full 316 stainless steel construction
- Unique sand handling design
- Easy to install and service
- Fluted SiC/Nitrile bearings and floating PTFE neck rings
- Check valve assembly incorporated into discharge head
- Lifting lugs in-built to pump head

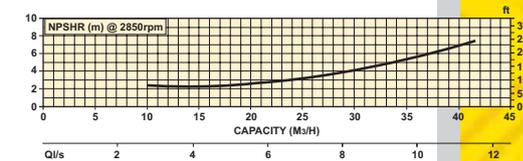
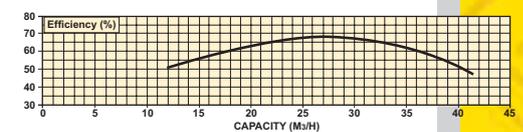
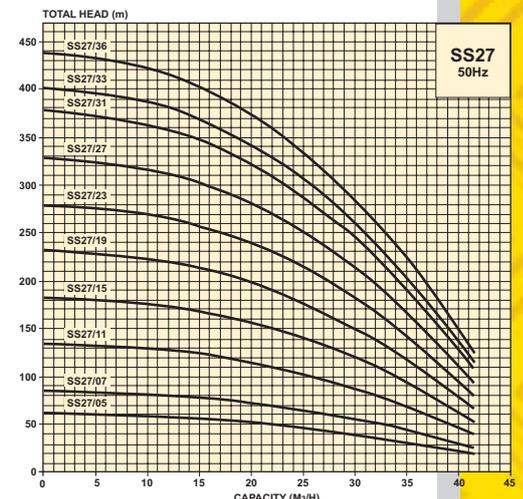
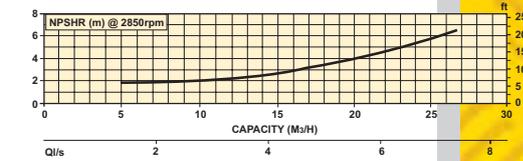
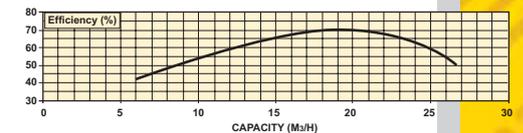
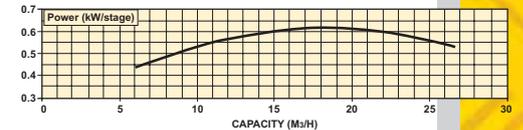
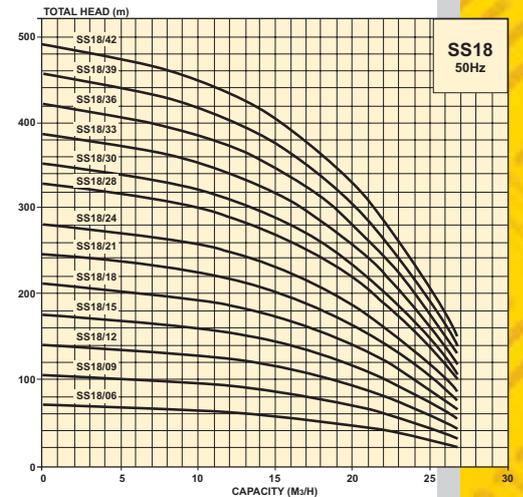
Benefits

- Full 316SS construction for excellent corrosion & abrasion resistance
- Floating teflon neck ring allows abrasive handling & wear resistance
- Simple hydraulic design ensures all parts are easily dismantled minimising down time
- Pump can work continuously both vertically and horizontally
- Flexible design allows removal of impellers to match duty requirements
- High efficiency impeller designs incorporating radial flow impellers for models SS18 & SS27 and axial flow impellers for models SS45 & SS60, providing maximum efficiency, reducing power consumption and overall running costs.

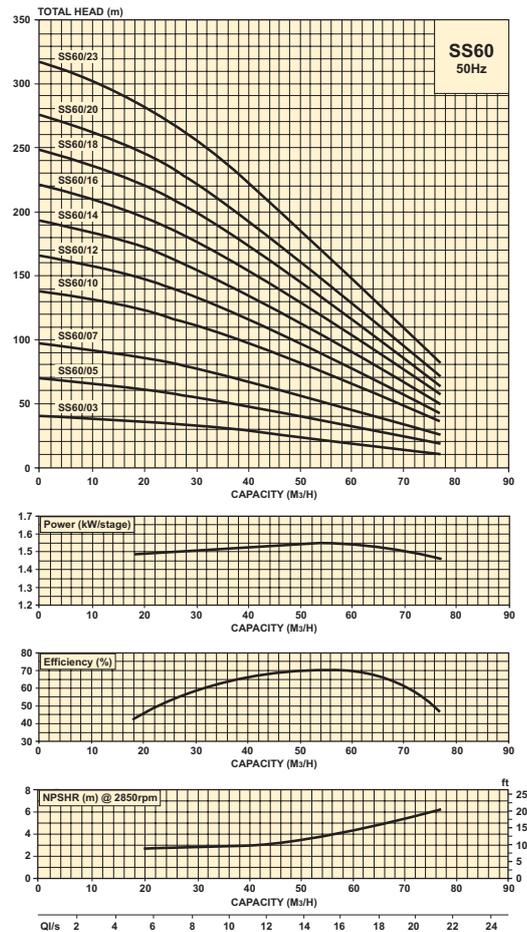
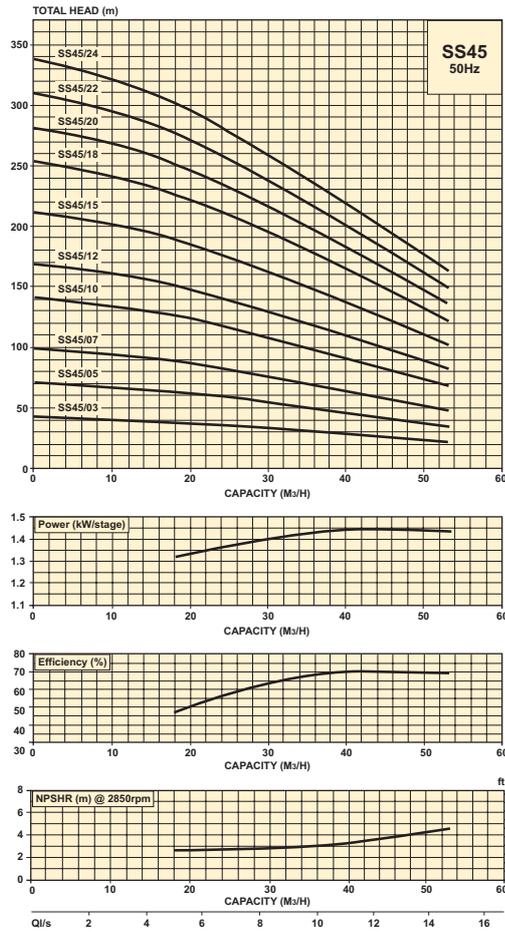
Specifications

- Capacities up to 80m³/hr
- Heads to 450m
- Coupling with NEMA standard motors
- Water temperature up to 90°C*
- Maximum sand handling 50 grams/m³

* For use with 6" Franklin HI-Temp motor range.



6" SUBMERSIBLE BOREHOLE PUMPS



Unless stated, all motor frames are to suit Nema 6" motor.
 *Units are fitted with 4" motor adaptor to suit 4" Nema framed motors.

Model	Pump Stages / Motor Power kW (P ₂)								
	4	5.5	7.5	11	15	18.5	22	30	37
SS18 Series	6*	9*	12	15/18	22/24	28/30	33/36	39/42	-
SS27 Series	-	5*	7	11	15	19	23	27/31	33/36
SS45 Series	-	3*	5	7	10	12	15	18/20	25
SS60 Series	-	3*	5	7	10	12	14	18	24

8" SUBMERSIBLE BOREHOLE PUMPS

SS 8" Series

Advanced stainless steel manufacturing technology results in state of the art 8" submersible pumps.

Applications

- Water supply - domestic, rural & industrial
- Turf watering & irrigation
- Mining applications
- Firefighting systems
- Agricultural & farming

Features

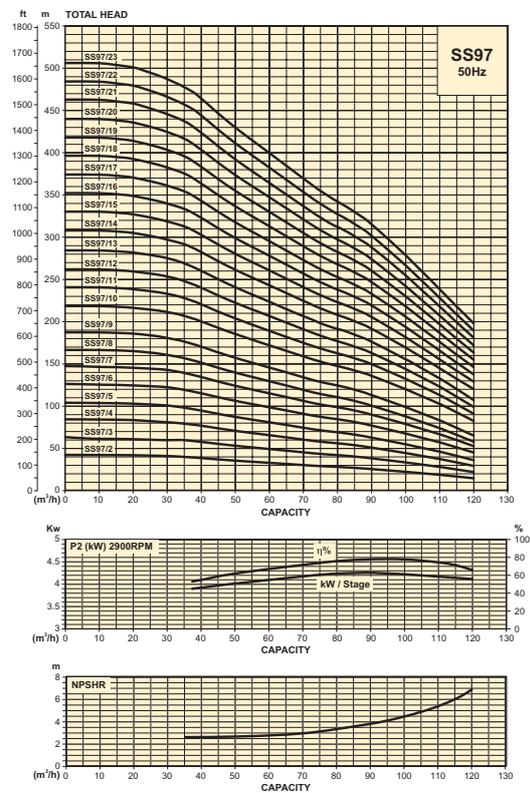
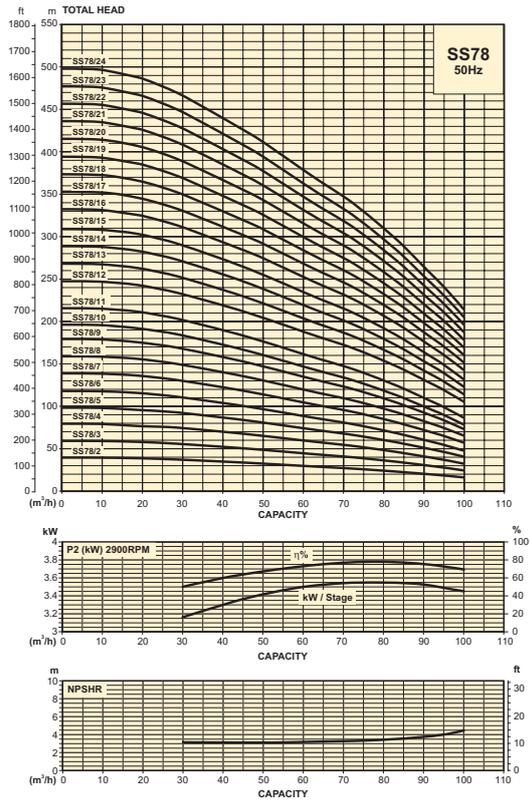
- Full stainless steel construction
- Unique sand handling design
- Easy to install and service
- Fluted SiC/Nitrile bearings and floating PTFE neck rings
- Check valve assembly incorporated into discharge head

Benefits

- Full 316SS construction for excellent corrosion & abrasion resistance
- Floating neck ring allows abrasive handling & wear resistance
- Simple hydraulic design ensures all parts are easily dismantled minimising down time
- Pump can work continuously both vertically and horizontally
- Flexible design allows removal of impellers to match duty requirements

Specifications

- Capacities up to 120m³/hr
- Heads to 500m
- Coupling with NEMA standard motors
- Water temperature up to 50°C
- Maximum sand handling 50 grams/m³



Model	Pump Stages / Motor Power kW (P ₂)										
	2	3	4	5	6	7-8	9-11	12	13-14	16-21	22-24
SS78 Series	7.5	11	15	18.5	22	30	37	45	55	75	93
Model	Pump Stages / Motor Power kW (P ₂)										
	2	3	4	5	6-7	8-9	10	11-13	14-17	18-21	22-23
SS97 Series	9.3	15	18.5	22	30	37	45	55	75	93	110

SUMP PUMPS

	Double Cased Models DC10	Double Cased Models DCS40	Twin Impeller Models D12	Dewatering Models D10	Dewatering Models & larger D15	Vortex Models (V)	Single Channel Impeller Models (S)	Cutter Models (K)	Grinder Models (G)
Removal of clean nuisance water	✓	✓	✓	✓	✓	✓	✓	-	-
Light duty fountains	✓	✓	✓	✓	✓	✓	✓	-	-
Continuous fountain usage	X	✓	✓	X	✓	✓	✓	-	-
Grey Water with nil or few small soft solids e.g. septic tank pumpouts	X	✓	✓	X	✓	✓	✓	✓	✓
Dirty Water with less than 1% small hard solids – some wear should be expected	X	✓	✓	X	✓	✓	✓	X	X
Water with up to 10% soft solids in suspension – sized 80% of discharge	X	X	X	X	X	✓	✓	✓	✓
Water with medium volumes of hair in suspension	X	X	X	X	X	✓	X	✓	X
Water with stringy materials in suspension	X	X	X	X	X	X	X	✓	✓
Semi-screened sewage	X	X	X	X	X	✓	✓	✓	✓
Raw sewage including sanitary products	X	X	X	X	X	X	X	X	✓

✓ Suitable Selection

X Not Recommended

Models available - kW Rating

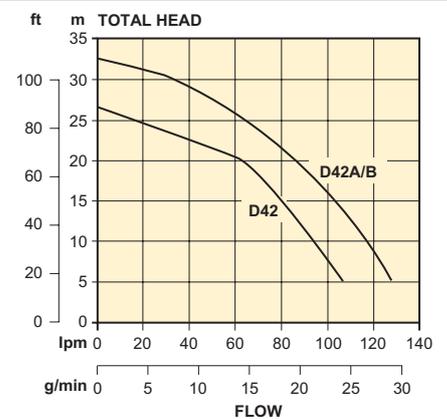
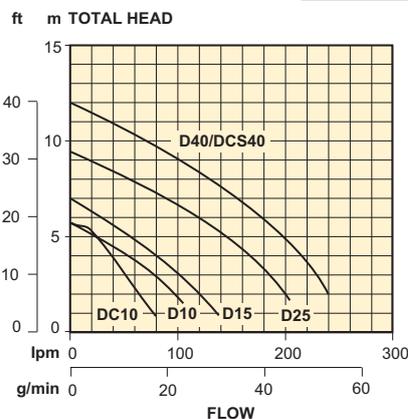
Automatic Single Phase 220/240 V	0.1	0.4	0.6	0.1	0.15 to 0.75	0.15 to 0.75	0.75	0.75	-
Manual* Single Phase 220/240 V	0.1	0.4	0.6	0.1	0.15 to 0.75	-	-	-	1.2 to 1.5
Manual* Three Phase 415 V	-	-	-	-	0.75 to 3.7	0.75	0.75 to 3.7	0.75 to 3.7	1.2 to 1.5

*Automatic float switches & control boxes available

Note: All single phase models up to and including 0.6kW come complete with a 10amp 3 pin plug



DCS40
Stainless Steel
Sump Pump



DEWATERING

Double Cased Stainless Steel Sump Pump

The new DCS40 models are ideally suited to operate in partially submerged installations for long periods. The double case design forces all the pumped water past the motor, thus ensuring cool operation.

The high quality, stainless steel shell retains its good looks and function for added satisfaction.

SUMP PUMPS

D15VA Vortex Sump Pump



Davey offers a wide selection of submersible Sump Pump models to suit commercial, rural and domestic applications.

Davey Sump Pumps are tough suckers, with robust designs for long service life, featuring:

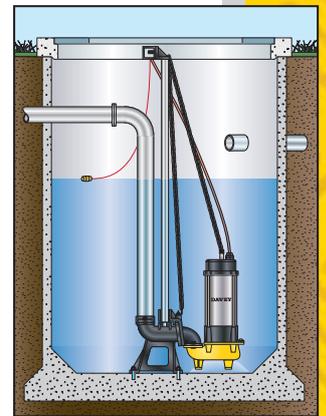
- High grade stainless steel and cast iron construction for long life
- Compliance with Australian and International Electrical Requirements for peace of mind
- In-built thermal overload protection to safeguard the motor
- Multiple level shaft seals for more security and endurance
- All models have a first stage lip seal to reduce the ingress of abrasives to the main shaft seal/s, plus:
 - 100 & 150 watt models have single Silicon Carbide hard-face seals in an oil bath.
 - All other models have double mechanical seals with Silicon Carbide hard-face seals pump side and Carbon/Ceramic seals motor side, running in a large volume oil bath

Davey offers a range of controls to make installation easier.

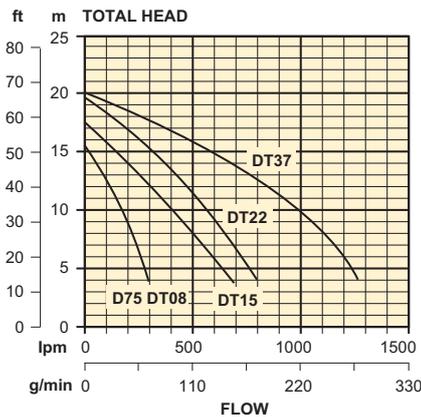
Automatic float switches are available on models up to 750 watt single phase. Selected single phase models are also available as manual switched models. Manual switched models can be fitted with a variety of control systems, including multiple pump controllers - ask your Davey dealer which model suits your application best.

Davey Slide Rail kits make installation and removal for servicing easier.

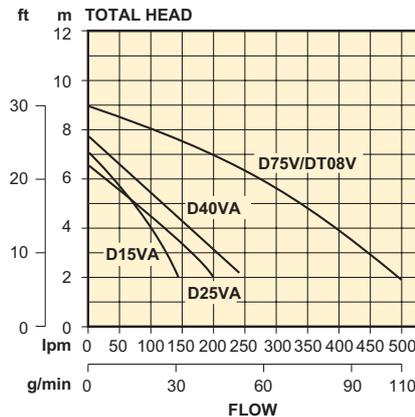
Davey slide rail kits are available to suit Vortex, Single Channel, Cutter and Grinder models. The rail kits allow simple connection or disconnection to permanent pipework in the pit or well. A slide rail system is highly recommended in commercial, grey water or black water installations as it can save time and overcome some OH&S concerns during routine maintenance.



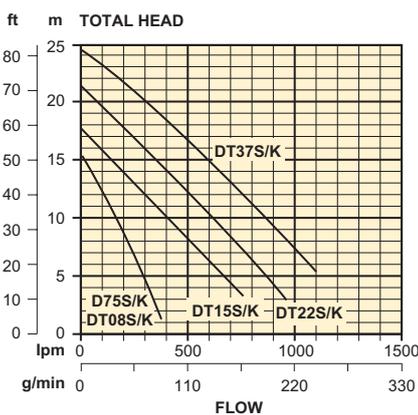
DEWATERING



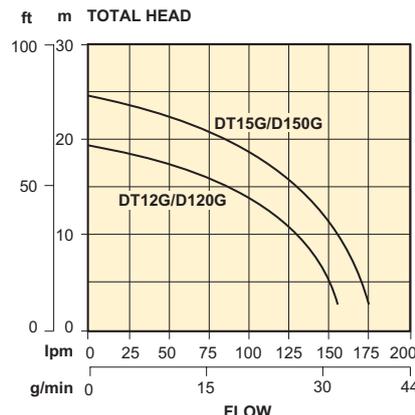
VORTEX



SEWAGE



GRINDER



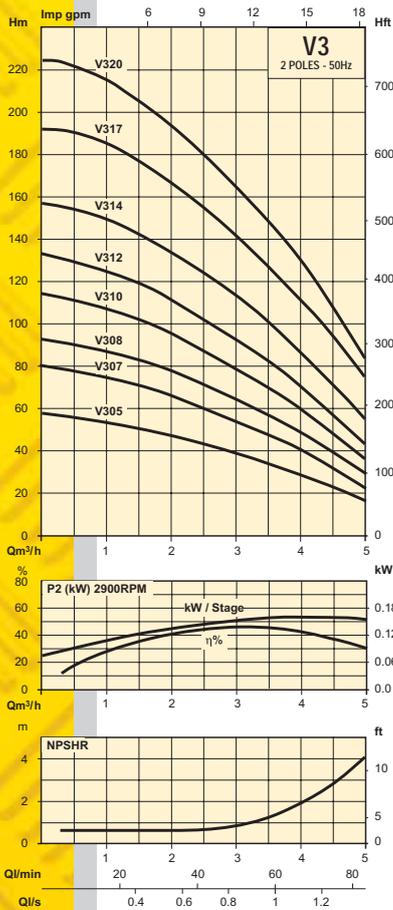
DT22K Sewage Pump



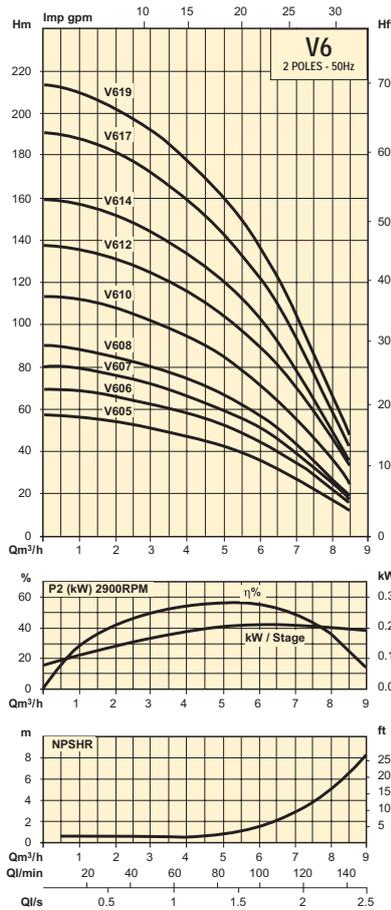
D120G Grinder Sump Pump



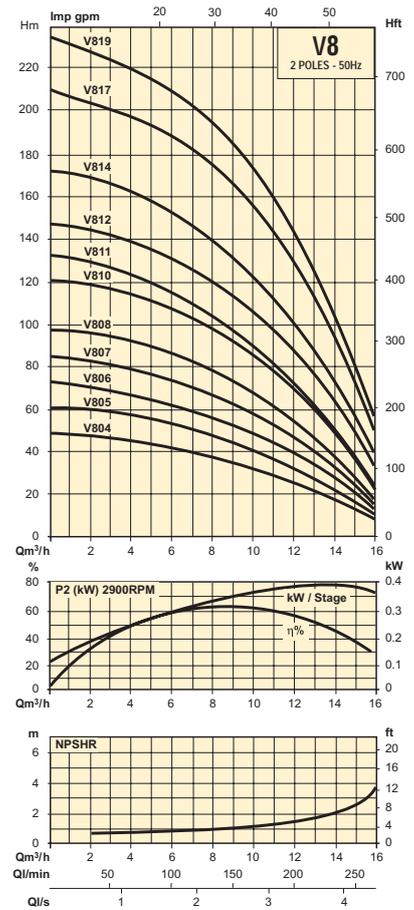
VERTICAL MULTISTAGE PUMPS



V3 Series - Motor kW (P ₂)				
0.75	1.1	1.5	2.2	3.0
5	6-7	8-10	12-14	17-20



V6 Series - Motor kW (P ₂)				
1.1	1.5	2.2	3.0	4.0
4-5	6-7	8-10	12-14	17-19



V8 Series - Motor kW (P ₂)					
1.5	2.2	3.0	4.0	5.5	7.5
4	5-6	7-8	10-11	12-14	17-19

V3 / 6 / 8 Series

Vertical mounted in-line multistage centrifugal pumps with all stainless steel hydraulic parts, available from 5 up to 20 stages

Applications

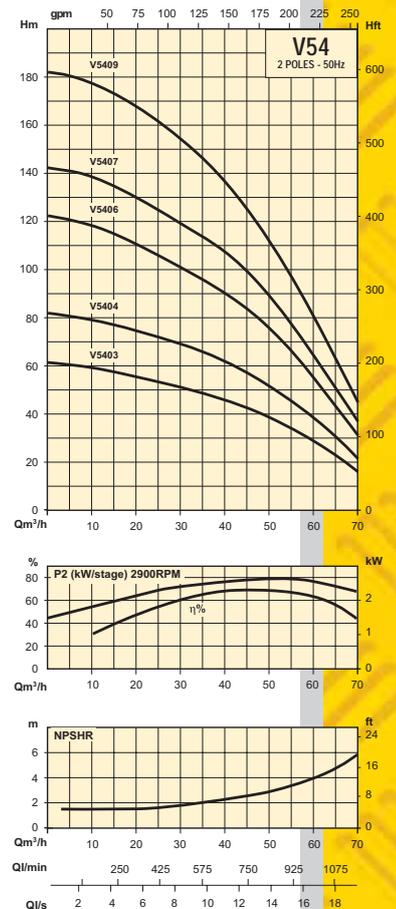
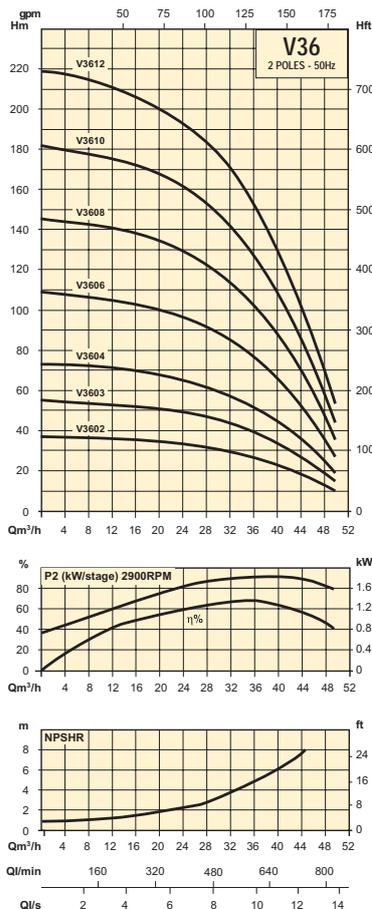
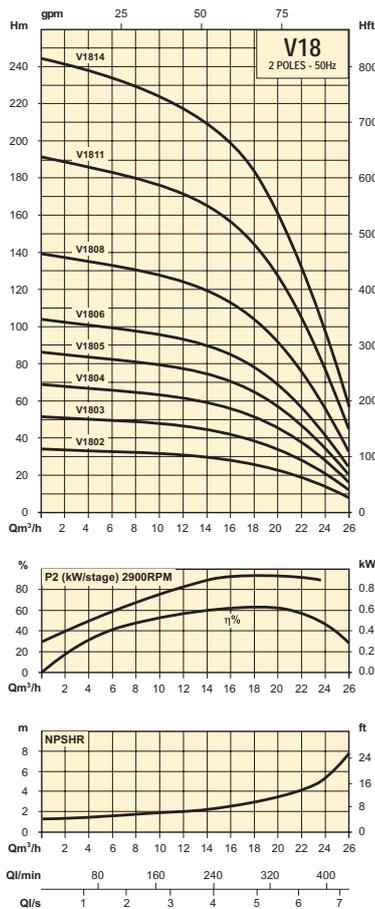
- Water supply – domestic, rural & industrial
- Pressure boosting
- Agriculture and farming
- Turf watering and irrigation
- Commercial - high pressure washing
- - water treatment
- - boiler feed

Features & Benefits

- All hydraulic parts, made from stainless steel, for corrosion resistance and longer pump life
- Thick impeller sealing rings between stages ensure insensitivity to thermal expansion and eliminates risk of seizing up
- Vertical axis with in-line suction and discharge ports, enabling easy installation with minimum floor space required
- Cast iron pump head providing rigid, motor mounting assembly
- In-built, oversized thrust bearing for longer motor bearing life - no upthrust transferred to the motor and enabling easier assembly
- IP55 motor rating for outdoor applications (standard motors without modification)
- Raised lower bearing for longer life
- Larger shaft diameter minimising deflection
- Tungsten carbide intermediate bearing to control and eliminate vibration and stabilise the rotor with a large number of stages
- O-ring case gaskets for ease of disassembly and re-assembly, preventing downtime whilst performing maintenance



VERTICAL MULTISTAGE PUMPS



V18 Series - Motor kW (P ₂)						
2.2	3.0	4.0	5.5	7.5	11.0	15.0
2	3	4	5-6	8	11	14

V36 Series - Motor kW (P ₂)						
4.0	5.5	7.5	11.0	15.0	18.5	22.0
2	3	4	6	8	10	12

V54 Series - Motor kW (P ₂)					
5.5	7.5	11.0	15.0	18.5	22.0
-	3	4	6	7	9

V18 / 36 / 54 Series

Vertical mounted in-line multistage centrifugal pumps with stainless steel hydraulic parts, available from 2 up to 14 stages

Applications

- Water supply – domestic, rural & industrial
- Pressure boosting
- Agriculture and farming
- Turf watering and irrigation
- Commercial – high pressure washing and water treatment
- Boiler feed

Features & Benefits

- Major hydraulic parts, made from stainless steel, for corrosion resistance and longer pump life
- Thick impeller sealing rings between stages ensure insensitivity to thermal expansion and eliminate risk of seizing up
- Vertical axis with in-line cast iron suction and discharge housing, enabling easy installation with minimum floor space required
- Cast iron pump head providing rigid, motor mounting assembly
- In-built, oversized thrust bearing for longer motor bearing life - no upthrust transferred to the motor and enabling easier assembly
- IP54 motor rating for outdoor applications (standard motors without modification)
- Raised lower bearing for longer life
- Larger shaft diameter minimising deflection
- Tungsten carbide intermediate bearing to control and eliminate vibration and stabilise the rotor with a large number of stages
- O-ring case gaskets for ease of disassembly and re-assembly, preventing downtime whilst performing maintenance



ISOspec[®] DAVEY BARESHAFT CF SERIES

Davey ISOspec[®] CF Series bareshaft pump range has been designed to international standard ISO2858 ensuring a sturdy & reliable, long lasting high performing product that consumers have come to depend on from Davey. ISOspec[®] Series pumps are interchangeable with other similar pumps, conforming to the same standards.

Operating Conditions

Maximum flow	900m ³ /hr
Maximum total heads	160m
Liquid temperature	-15 to 140°C

Bronze wear rings - fitted as standard, replaceable front & rear wear rings with optional materials, for a trouble free lifecycle.

Bronze impeller - in a closed design is fitted as standard. This helps to prevent corrosion in stationary or inactive situations. Cast 304SS or 316SS are available on request. The use of 3-D solid model (CAD) Computer Aided Design and (CFD) Computational Fluid Dynamics ensures **high efficiencies**, reducing overall running costs. Impeller diameters can be trimmed to suit specified performance.

Pump casing - high efficiency cast iron volute casings, with flanges rated to PN1.6MPa (16bar), drilled to AS2129, Table E. Material: 316SS.

Casing o-ring - re-usable o-rings in Nitrile for ease of re-assembly (optional materials available).

Back pull-out design - allowing for easy removal of rotating element without disturbing the pipe work, lagging, motor or pump volute casing. This is proven to reduce downtime whilst performing routine maintenance.

Enlarged shaft - reduces shaft deflection. Standard in 420SS and as an option in 316SS. Tapered & keyed shaft design allowing ease of removal in maintenance & positive locking whilst in operation.

Shaft seal - single, high quality John Crane or approved equivalent mechanical seal with **carbon vs ceramic** fitted as standard with other options such as silicone vs silicone or high temp also available.

Tappings - convenient suction & discharge pressure gauge tappings plus volute drain, fitted as standard to all ISOspec[®] Series pumps.

Bearings - heavy duty SKF or approved equivalent, greased for life, reducing maintenance. Housed within removable bearing cap cover assembly, protected by a quality manufactured lip seal reducing ingress of moisture or foreign matter.

Bearing housing - Robust / heavy duty, manufactured in high strength cast iron providing trouble free life cycle.



CF Bareshaft Pump

CM Motor Pump on Baseplate

ISOspec[®] DAVEY MOTOR PUMP CM SERIES

Davey ISOspec[®] CM Series motor pump range has been designed to international standard ISO2858 ensuring a sturdy & reliable, long lasting high performing product that consumers have come to depend on from Davey. ISOspec[®] Series pumps are interchangeable with other similar pumps, conforming to the same standards.

All standard motors are MEPS compliant ensuring minimum efficiency requirements to AS/NZS 1359.5.2000.

Operating Conditions

Maximum flow	375m ³ /hr	Liquid temperature	-15 to 140°C
Maximum total heads	160m	Operating pressure	16 Bar

Bronze wear rings - fitted as standard, replaceable front & rear wear rings with optional materials, for a trouble free lifecycle.

Bronze impeller - in a closed design is fitted as standard. This helps to prevent corrosion in stationary or inactive situations. Cast 304SS or 316SS are available on request. The use of 3-D solid model (CAD) Computer Aided Design and (CFD) Computational Fluid Dynamics ensures **high efficiencies**, reducing overall running costs. Impellers are dynamically balanced preventing premature bearing failure and diameters can be trimmed to suit specified performance.

Pump casing - high efficiency cast iron volute casings, with flanges rated to PN1.6MPa (16bar), drilled to AS2129, Table E. Material options: Cast Iron, Bronze, 304SS or 316SS.

Casing o-ring - re-usable o-rings in Nitrile for ease of re-assembly (optional materials available).

Back pull-out design - allowing for easy removal of rotating element without disturbing the pipe work, lagging or pump volute casing. This is proven to reduce downtime whilst performing routine maintenance.

Adaptor housing - heavy duty, flanged to IEC accepting AS 1359 standard designed motors.

Stub shaft - standard in 316SS, attached via a heavy duty muff coupling assembly. Tapered & keyed shaft design allowing ease of removal in maintenance & positive locking whilst in operation.

Shaft seal - single, high quality John Crane or approved equivalent mechanical seal with **carbon vs ceramic** fitted as standard with other options such as silicone vs silicone or high temp also available.

Tappings - convenient suction & discharge pressure gauge tappings plus volute drain, fitted as standard to all ISOspec[®] Series pumps.

Bearings - heavy duty SKF or approved equivalent, greased for life, reducing maintenance. Protected by a quality manufactured lip seal reducing ingress of moisture or foreign matter.

Suitable Applications for ISOspec[®] Pumps

Water Supply

Commercial irrigation, booster stations, municipal water supply, flood irrigation, general transfer.

Industry

Cooling tower transfer, refrigeration systems, commercial fountains, condensate recovery, dairy wash down packages.

Environmental

Dust suppression in mining & quarry applications, fume scrubbers for odour control, water treatment transfer & filtration.

Leisure

Water circulation in large aquatic centres, backwash filtration in commercial pools, water features & commercial fountains.

Building Services

Commercial heating, air conditioning systems, pressure boosting, cooling tower & fire service applications.

Pumped Liquids

Non aggressive & non combustible liquids. Clean low viscous liquids free of fibres or particles.

ISOspec[®] **DAVEY** PACKAGED PUMP SETS

High quality, fully packaged diesel driven ISOspec[®] pumpset.

Operating Limits

Flow to	450m ³ /hr
Maximum total head	160m
Liquid temperature	1 to 95°C
Operating pressure	16 Bar

Applications

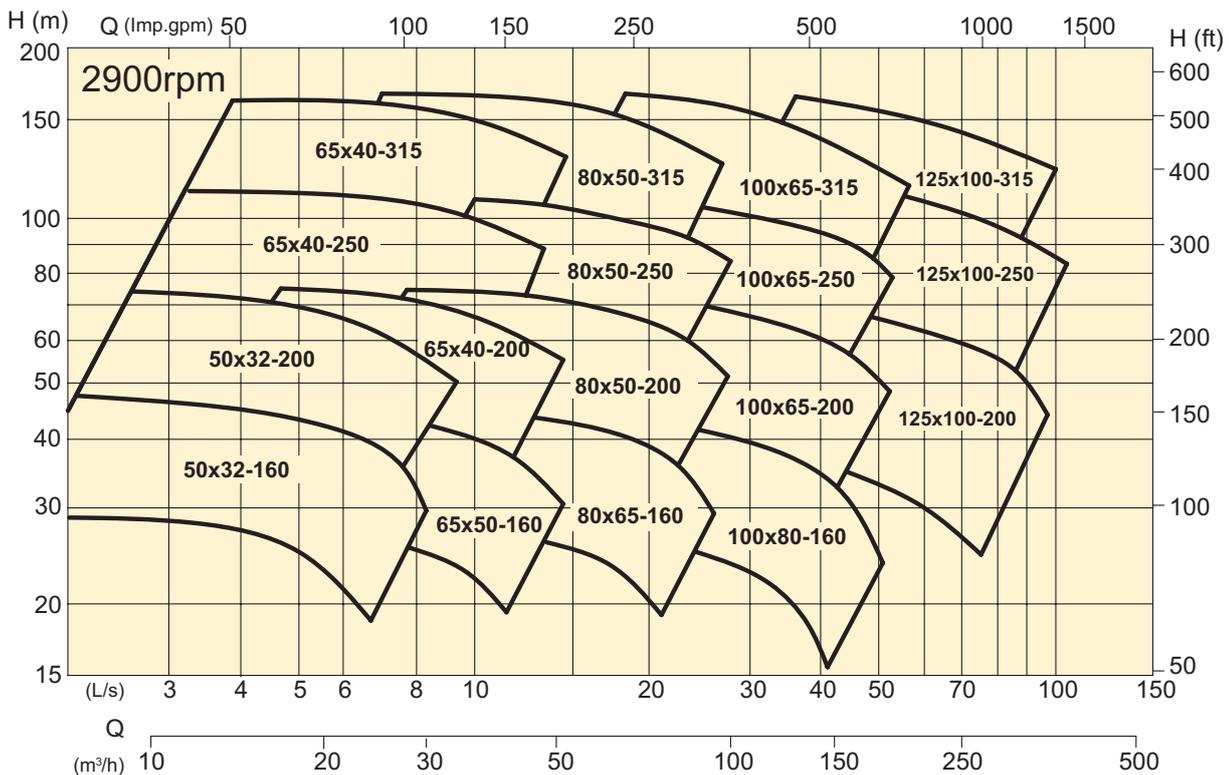
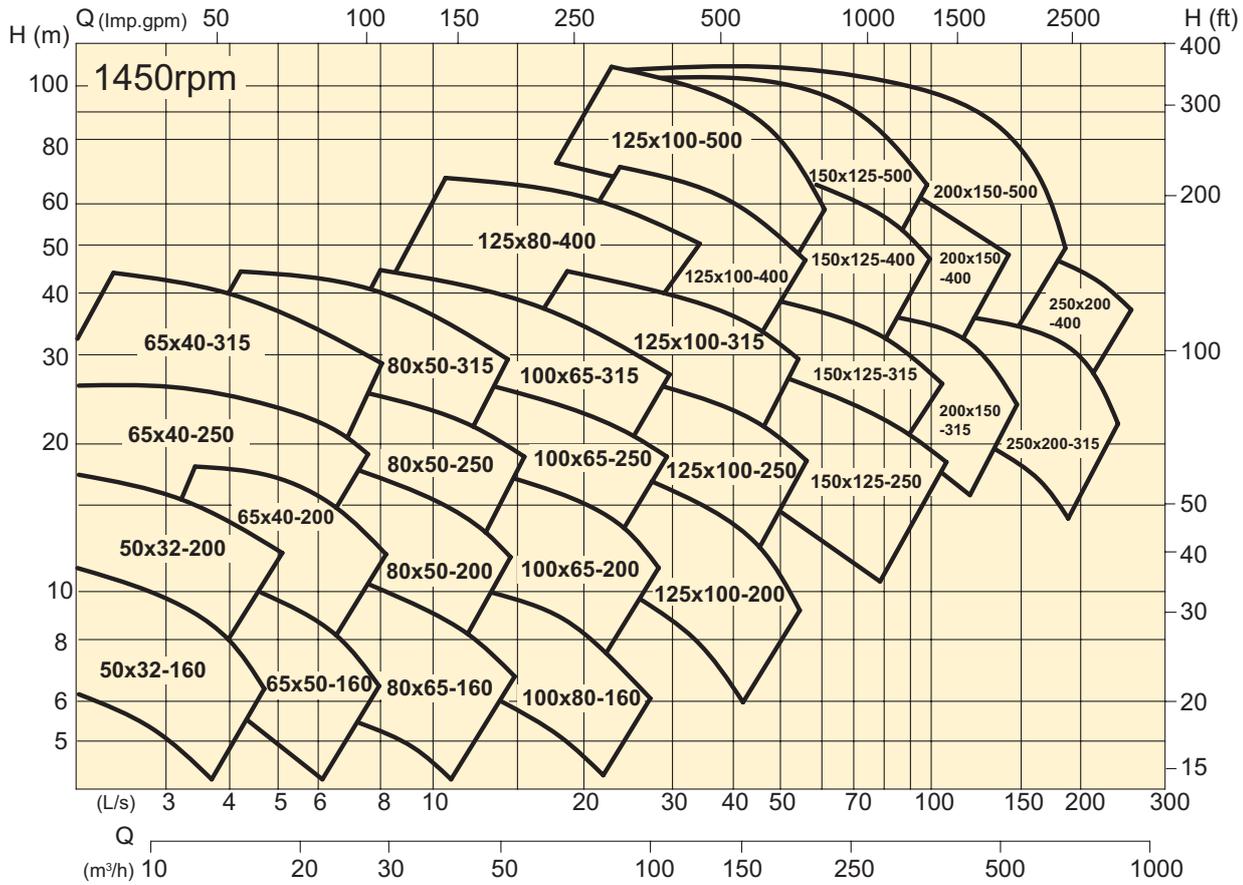
- Irrigation
- Water supply
- Dewatering

Features & Benefits

- Driven via Yanmar Diesel engine, fully mounted on a purpose built, heavy duty steel skid base allowing easy on site installation.
- Easy to view control panel and engine protection kit incorporating :-
 - Rev tachometer
 - Low oil pressure
 - High water temperature
 - Low radiator fluid level
 - 24 hour timer
 - Pump high/low liquid level switch - loss of prime
- Manual variable engine speed controller providing total pump performance control.



ISOspec[®] DAVEY SERIES RANGE CURVES



For individual CF or CM Series performance curves, please consult your local Davey dealer or download from www.davey.com.au

PACKAGED PUMP SETS

Packaged water pressure system consisting of a Davey stainless steel vertical multistage pump with pressure tank, adjustable pressure switch, liquid filled pressure gauge, all mounted on a common base plate.

Operating Limits

Flow to	250lpm / 15m ³ /hr
Pressure heads to	98m
Maximum liquid temperature	+70°C (tank)
Maximum ambient temperature	+40°C

Applications

- Household & commercial applications
- Multi-dwelling water supply system
- Turf watering & irrigation
- Water supply, boosting & transfer
- Water treatment

Features & Benefits

- Davey vertical multistage centrifugal pump with superior hydraulic design. Powered by Davey's renowned Australian manufactured IP56 TEFC motor suitable for some of the most harsh conditions.
- All hydraulic parts manufactured in stainless steel, providing corrosion protection.
- Compact in-line suction & discharge for ease of installation.
- Utilising the Davey Supercell range of captive diaphragm pressure tanks which feature a long lasting, bacteria resistant, crease free Butyl rubber diaphragm.
- Completely assembled on a galvanised common Davey base plate for easy mounting.
- Discharge manifold assembly in copper and brass, complete with isolation gate valve with an easy to read quality liquid filled pressure gauge.
- Pressure adjustment is made simple with a fully adjustable pressure switch, providing a smooth on/off operation.



PACKAGED PUMP SETS

Davey Monsoon packaged pump systems offer the choice and flexibility to best suit your application. An extensive choice of standard configurations is complimented by tailor made options.

Monsoon systems can be supplied utilising V Series vertical multistage pumps, M Series horizontal multistage, Dynaflo, ISOspec® end suction centrifugal pumps, Davey Sump Pumps and even borehole submersible models.

Flexibility of system design can allow the best combination of pumps to be chosen to ensure maximum operating range & high efficiencies are met, thereby reducing overall running costs.

Davey Monsoon systems can be built to suit your needs from one pump up to six pumps. Monsoon systems can be operated via pressure, level or temperature. They can include constant speed controls or variable frequency drives. Monsoon systems are easy to operate, allowing full system status at the press of a button.

All Davey manifolding is manufactured using stainless steel as standard, providing high corrosion properties with options of either screwed or flanged connections.

Monsoon systems are designed and assembled with the accreditation of ISO9001, giving the peace of mind you have come to expect from an all Australian company that has pioneered pumping solutions since 1934.

Monsoon 3C

System Up to three pumps

Operation Automatically controlled depending on system duty. Pumps can be automatically rotated to ensure equal operating hours for each pump.

Pumps Up to three same or hydraulically similar pumps, maximum 110kW each pump

System includes

- Microprocessor controlled pump system with electronic pressure sensing
- All pumps operate on same pressure points to maximise performance from each pump
- Easy access menus to enable adjustment to suit any operation
- Adjustable parameters include cut-in pressure, cut-out pressure, low pressure cut-out, high pressure cut-out & minimum run timer
- Status display includes system pressure, calculated flow rate, calculated total flow, hours run per pump, start meter per pump & system starts last hour
- System protection includes low-pressure protection & high pressure protection with adjustable delay timer
- Adjustable timer allows the system to be easily tuned to suit any pumping system
- Selectable automatic or manual rotation of lead pump
- Additional inputs include system pause, individual pump protection plus 8 additional, programmable inputs
- System outputs include four configurable relays

Options

- Individual pump protection, system no flow & system pause
- Operation via switched inputs – floats, pressure switch
- Level or temperature control mode



Monsoon 3C
Pump Set

PACKAGED PUMP SETS

Monsoon 3V

System Operation Monsoon 3V controller starts and stops pumps according to information collected from a pressure transducer and compares this to the reference set point. The controller maintains the system pressure at the set point by varying the speed of the VFD pump and switching other pumps ON and OFF. When the system detects NO flow it will shut down until the pressure drops below a restart point. The controller displays real pumping intelligence and offers very high running cost savings for variable flow reticulations.

Pumps Up to three same or hydraulically similar pumps, maximum 90kW each pump

System includes

- Constant pressure control system with electronic pressure sensing
- Easy access menus to enable adjustment to suit any operation
- Adjustable parameters include cut-in pressure, set point, low pressure cut-out, high pressure cut-out & minimum run timer
- Status display includes system pressure, calculated flow rate, calculated total flow, hours run per pump, start meter per pump & system starts last hour
- System protection includes low pressure protection & high pressure protection with adjustable delay timer
- Adjustable timer allows the system to be easily tuned to suit any pumping system
- Selectable automatic or manual rotation of lead pump
- Additional inputs include system pause, individual pump protection plus 8 additional inputs
- Four configurable output relays

Options

- Individual pump protection, system no flow & system pause
- Soft start manual back-up
- Soft start lag pumps
- Remote start / stop
- 7 day time clock



PACKAGED PUMP SETS

CASCADING VFD

The Monsoon 3V cascade system starts the first pump via the VFD and continues to accelerate until the pump reaches full speed. If the system is not at the set point the controller then cycles the VFD to the next pump and switches the initial pump to full speed. This operation continues until the set point is reached or all pumps are running. The reverse occurs as the demand reduces. One VFD and bypass contactors are supplied for this option.

LEAD LAG

The Monsoon 3V lead lag system starts the first pump via the VFD and continues to accelerate until the pump reaches full speed. If the system is not at the set point the controller starts a LAG pump to make up for the flow demand. This is typically via a soft starter. This operation continues until the set point is reached or all pumps are running. The reverse occurs as the demand reduces. One VFD and one backup soft starter per lag pump are supplied for this option.

LEAD LAG AUTOROTATE

The Monsoon 3V lead lag auto rotate system starts the first pump via the VFD and continues to accelerate until the pump reaches full speed. If the system is not at the set point the controller starts a LAG pump to make up for the flow demand. This is typically via a soft starter. This operation continues until the set point is reached or all pumps are running. The reverse occurs as the demand reduces.

This option varies from the Lead Lag by rotating the lead pump each time the system restarts. One VFD and one backup soft starter per pump are supplied for this option.

ALL VFD

The Monsoon 3V VFD per pump system starts the first pump via the VFD and continues to accelerate until the pump reaches full speed. If the system is not at the set point the controller then cycles the VFD to the next pump and switches the initial pump to full speed. This operation continues until the set point is reached or all pumps are running. The reverse occurs as the demand reduces. One VFD per pump is supplied for this option.



Dual V36 Pump Set

USEFUL INFORMATION

Here are some common average water requirements

Shower	= 15lpm at 140kPa (20psi)	Lawn Sprinkler	= 15lpm at 140kPa (20psi)	1/2" tap	= 12-15lpm at 140kPa (20psi)
3/4" hose & 1/4" nozzle	= 40lpm at 210kPa (30psi)	1" hose & 3/8" nozzle	= 75lpm at 210kPa (30psi)	Cattle	= 30-55 litres/day
Milking cows	= 70 litres/day	Sheep	= 5-10 litres/day	Pigs	= 10 litres/day
Horses	= 55-60 litres/day	100 Chickens	= 25 litres/day		

The average water requirements, shown above, may vary due to specific application concerns, and you are recommended to discuss these with your Davey Dealer. Daily requirements should be supplied within acceptable daily running times. This will vary according to the nature of the application.

Suction Lift

Pumps do not actually suck; rather, pumps create a partial vacuum into which atmospheric pressure pushes water via the suction pipework.

There are a number of factors which affect suction lift:

- **ALTITUDE:** As altitude increases, atmospheric pressure decreases, thus exerting less "push" on the water entering the pump suction.
- **PUMP SUCTION PERFORMANCE:** Generally, the higher the flow rate from a pump, the less the partial vacuum created by that pump.
- **WATER TEMPERATURE:** The higher the water temperature, the more likely it is to boil when exposed to a partial vacuum, thus reducing suction lift.
- **FRICTION LOSS:** Friction loss in the suction pipe reduces the vertical lift possible.

In practical terms, a maximum suction lift of 6.7 metres at sea level is common, but all of the items above will reduce this figure. Pump performance tables and the tables attached are a good guide. Your Davey Dealer can assist with assessment of suction lifts.

Elevation	Max. Practical Suction Lift	Absolute atmospheric pressure (cold water)	Water Temp °C	Suction Lift Reduction - Metres
Sea Level	6.7m	10.35m	15°	0
500m	6.1m	9.75m	20°	0.06
750m	5.8m	9.46m	30°	0.22
1000m	5.5m	9.19m	40°	0.52
1500m	5.0m	8.64m	50°	0.98
2000m	4.5m	8.13m	60°	1.73
			70°	2.85
			80°	4.51

Flow Conversion				
lpm	lps	m³/hr	Imperial	
			gpm	gph
7.6	0.13	0.45	1.7	100
10	0.17	0.60	2.2	132
16.7	0.28	1	3.7	220
45.5	0.76	2.73	10	601
60.0	1	3.60	13.2	793
75.7	1.26	4.54	16.7	1000
83.3	1.39	5.00	18.3	1101

Pressure/Head Conversion				
Metres	kPa	Bar	Feet Head	
			PSI	PSI
1	9.81	0.10	3.28	1.42
10.0	98.1	0.98	32.8	14.2
10.2	100	1	33.4	14.5
15.2	149.5	1.5	50.0	21.6
30.5	299.0	3.0	100	43.3
35.2	354.4	3.5	115.5	50.0
70.4	690.8	6.9	231.0	100
101.9	999.6	10.0	334.2	144.7

Volume Conversion				
Litres	Cubic Metres	Imp. Gals	US Gals	Cubic Feet
1000	1	220	264	35.3
4.546	0.0045	1	1.2	0.1605
3.785	0.0038	0.833	1	0.1337
28.32	0.0283	6.23	7.48	1

Length Conversion			
Inch	Foot	Yard	Metres
1	0.08	0.028	0.025
12.0	1	0.33	0.305
36.0	3.00	1	0.91
39.4	3.28	1.09	1

CALCULATING SUCTION LIFT

Hs = Pa - NPSHR - Pvp. - Safety	
Hs	Maximum suction lift including friction loss in suction pipe
Pa	Absolute atmospheric pressure at site
NPSHR	NPSH required by pump at specific flow rate
Pvp	Vapour pressure of liquid with specific temperature

CALCULATING PUMP POWER

Water Power (kW) = Flow (lpm) x Head (m) / 6122.4
Pump Power (P ₂ , kW) = Water Power / Pump Efficiency %
Input Power (P ₁ , kW) = Pump Power / Motor Efficiency %



Variable Speed Performance

Changing the speed of a pump changes the flow and pressure output of the pump as well as the power required by the pump to deliver the new duty point.

Flow (Q) changes directly proportional to speed (N) change
 Head / pressure (H) changes proportional to speed change squared
 Power changes (P) proportional to speed change cubed

$$Q_1 / Q_2 = N_1 / N_2$$

$$H_1 / H_2 = (N_1 / N_2)^2$$

$$P_1 / P_2 = (N_1 / N_2)^3$$

Q₁ / H₁ / P₁ are current flow, head & power at speed N₁

Q₂ / H₂ / P₂ are the new flow, head & power at speed N₂

USEFUL INFORMATION

Pipe Friction

Pipe friction is the resistance to flow caused by the pipe. As a general principle, it is better to use the largest practical pipe size to avoid losses in pump performance.

Note: Flow rates for which friction loss has not been calculated involve velocities which may cause water hammer.

Flow In		Friction Loss for Poly Pipe - 20mm to 63mm (m/100 metres of pipe)																												
		Medium Density Polythene Pipe																												
Litres/min.	Gals/hr.	Rural Class B Pipe					PE80/PN8					PE80/PN10					PE80/PN12.5					PE80/PN16								
		3/4"	1"	1 1/4"	1 1/2"	2"	20mm	25mm	32mm	40mm	50mm	63mm	20mm	25mm	32mm	40mm	50mm	63mm	20mm	25mm	32mm	40mm	50mm	63mm	20mm	25mm	32mm	40mm	50mm	63mm
10	132	2.7	0.7	0.2	0.1	-	3.9	1.1	0.3	0.1	-	-	4.5	1.4	0.4	0.1	-	-	5.3	1.8	0.5	0.2	0.1	-	6.8	2.2	0.7	0.2	0.1	-
20	264	9.8	2.4	0.8	0.3	0.1	14.2	4.0	1.2	0.4	0.1	-	16.4	5.1	1.5	0.5	0.2	0.1	19.0	6.4	1.8	0.6	0.2	0.1	24.4	8.0	2.4	0.8	0.3	0.1
30	396	20.8	5.1	1.7	0.7	0.2		8.5	2.6	0.9	0.3	0.1		10.7	3.2	1.0	0.4	0.1		13.6	3.8	1.3	0.4	0.1		17.0	5.2	1.7	0.6	0.2
40	528		8.7	2.9	1.2	0.3			4.5	1.5	0.5	0.2			5.4	1.7	0.6	0.2			6.5	2.2	0.8	0.2			8.8	2.9	1.1	0.3
50	660		13.2	4.5	1.8	0.5			6.8	2.3	0.8	0.3			8.1	2.6	0.9	0.3			9.8	3.4	1.1	0.4			13.3	4.4	1.5	0.5
60	792		18.5	6.2	2.6	0.6			9.5	3.2	1.1	0.4			11.4	3.7	1.3	0.4			13.7	4.8	1.6	0.5			18.0	6.2	2.0	0.7
80	1056		30.1	10.6	4.4	1.1				5.5	1.8	0.6				6.3	2.3	0.7				8.1	2.7	0.9				10.5	3.5	1.2
100	1320			16.1	6.6	1.6				8.3	2.7	0.9				9.5	3.4	1.1				12.2	4.1	1.3				15.9	5.3	1.7
120	1584				9.3	2.3					3.8	1.3					4.8	1.5					5.8	1.9					7.4	2.4
140	1848				12.3	3.0					5.1	1.7					6.4	2.0					7.7	2.5					9.8	3.2
160	2112					3.9					6.5	2.2					8.1	2.6					9.8	3.2					12.6	4.2
180	2376					4.8						2.7						3.3						3.9						5.2
200	2639					5.9						3.3						4.0						4.8						6.3
220	2904					7.0						3.9						4.7						5.7						7.5
240	3168					8.2						4.6						5.6						6.7						8.8
250	3300					8.9						5.0						6.0						7.2						9.5

Friction Loss for Poly Pipe (m/100 metres of pipe)																			
Flow Rate			25mm O.D.		32mm O.D.		40mm O.D.		50mm O.D.		63mm O.D.		75mm O.D.		90mm O.D.		110mm O.D.		
lps	lpm	m ³ /hr	PN 6.3	PN 12.5	PN 6.3	PN 12.5													
0.2	12	0.72	2.12	2.97	0.56	0.90	0.02	0.32											
0.5	30	1.80	10.53	14.83	2.78	4.45	0.86	1.58	0.27	0.55									
0.8	48	2.88	24.24	34.17	6.37	10.20	1.97	3.62	0.61	1.25									
1.0	60	3.60			9.46	15.17	2.92	5.38	0.91	1.85	0.33	0.61	0.14	0.26					
1.6	96	5.76			21.88		6.73	12.41	2.08	4.25	0.75	1.13	0.33	0.49					
2.0	120	7.20					10.02	18.50	3.10	6.33	1.11	2.07	0.48	0.89	0.20	0.37			
3.0	180	10.8							6.39	13.07	2.29	4.27	0.99	1.83	0.42	0.76	0.16	0.29	
4.0	240	14.4							10.70		3.82	7.15	1.65	3.05	0.69	1.27	0.27	0.49	
5.0	300	18.0									5.70		2.46	4.55	1.03	1.89	0.40	0.72	
6.0	360	21.6									7.92		3.42	6.32	1.43	2.63	0.55	1.00	
7.0	420	25.2											4.51		1.88	3.46	0.72	1.32	
9.0	540	32.4											7.09		2.96	5.45	1.14	2.07	
10.0	600	36.0													3.58	6.59	1.37	2.50	
15.0	900	54.0															2.85	5.20	
20.0	1200	72.0																4.80	

Friction Loss for PVC Pipe (m/100 metres of pipe)																
Flow Rate			25mm		32mm		40mm		50mm		80mm		100mm		150mm	
lps	lpm	m ³ /hr	PN 9	PN 12	PN 9	PN 12	PN 9	PN 12	PN 9	PN 12	PN 9	PN 12	PN 9	PN 12	PN 9	PN 12
0.2	12	0.72	0.43	0.49	0.14	0.16	0.08	0.42								
0.5	30	1.80	2.15	2.40	0.70	0.80	0.37	0.97	0.13	0.14						
0.8	48	2.88	4.91	5.50	1.61	1.82	0.84	1.43	0.29	0.33						
1.0	60	3.60	7.29	8.16	2.38	2.70	1.24	3.30	0.42	0.48	0.07	0.08				
1.6	96	5.76	16.85	18.87	5.49	6.23	2.86	4.90	0.97	1.11	0.15	0.18				
2.0	120	7.20			8.17	9.27	4.25	10.12	1.42	1.65	0.23	0.26	0.07	0.05		
3.0	180	10.8					8.77	16.98	2.97	3.40	0.46	0.53	0.14	0.08		
4.0	240	14.4							4.98	5.68	0.77	0.89	0.23	0.16		
5.0	300	18.0							7.43	8.49	1.15	1.32	0.34	0.26		
6.0	360	21.6									1.60	1.83	0.48	0.39	0.09	0.11
7.0	420	25.2									2.11	2.42	0.63	0.55	0.12	0.14
8.0	480	28.8									2.68	3.07	0.80	0.72	0.16	0.18
9.0	540	32.4									3.31	3.80	0.98	0.91	0.19	0.22
10.0	600	36.0									4.00	4.59	1.19	1.13	0.23	0.27
15.0	900	54.0											2.47	1.36	0.48	0.55
20.0	1200	72.0													0.81	0.93

Friction Loss for Rubber Hose (m/100 metres of hose)							
lps	Flow		Friction Loss (m/100 metres of hose)				
	lpm	m ³ /hr	20mm	25mm	32mm	40mm	50mm
0.2	12	0.72	4.29	1.14	0.37	0.15	
0.5	30	1.8	22.81	5.88	1.9	0.77	0.2
1	60	3.6		21.11	6.71	2.67	0.7
2	120	7.2			24.37	9.56	2.47
3	180	10.8				20.43	5.21
4	240	14.4				35.22	8.9
4.5	270	16.2					11.1

POOL SELECTION GUIDE

Industry accepted standards for water quality in swimming pools recommend that filtration equipment is able to turn over the entire body of water within these time periods.

Swimming pool Domestic:	6 Hours
Swimming pool Commercial:	4 Hours
Spa pool Domestic:	1 Hour
Spa pool Commercial:	1/2 Hour with a 1 hour filtration cycle after bathing

Actual operating time per day is dependant on debris load, number of bathers and sanitation method.

Davey has made product selection easy by labelling their equipment with flow rates for average operating pressures, and converted these with domestic swimming pools turnover rates into a simple table.

To select the right equipment for your pool follow steps 1,2,3 & 4.

1. CALCULATE YOUR POOL VOLUME

How to calculate pool volume
The formulae below requires all dimensions to be in metres. If the depth of the pool varies, the average depth should be used.
RECTANGULAR POOLS length x width x depth x 1000 = volume in litres
ROUND POOLS diameter x diameter x depth x 785.5 = volume in litres.

Circular above ground pools	
3.7m x 0.9m (12' x 3') = 10,000 litres	4.5m x 0.9m (15' x 3') = 14,000 litres
4.5m x 1.2m (15' x 4') = 19,000 litres	5.5m x 1.2m (18' x 4') = 29,000 litres
6m x 1.2m (20' x 4') = 34,000 litres	6.7m x 1.2m (22' x 4') = 42,000 litres

Rectangular above ground pools
4.9m x 3.7m x 1.2m (16' x 12' x 4') = 22,000 litres
6m x 3.7m x 1.2m (20' x 12' x 4') = 27,000 litres
7.3m x 3.7m x 1.2m (24' x 12' x 4') = 32,000 litres
9.8m x 3.7m x 1.2m (32' x 12' x 4') = 44,000 litres
5.8m x 4.5m x 1.2m (19' x 15' x 4') = 31,000 litres
8.2m x 4.5m x 1.2m (27' x 15' x 4') = 44,000 litres
9m x 4.5m x 1.2m (30' x 15' x 4') = 49,000 litres

Rectangular in ground pools
6m x 3.7m x 1.4m (20' x 12' x 4'6") = 31,000 litres
7.3m x 3.7m x 1.4m (24' x 12' x 4'6") = 38,000 litres
9m x 3.7m x 1.4m (30' x 12' x 4'6") = 47,000 litres
9m x 4.5m x 1.4m (30' x 15' x 4'6") = 57,000 litres
12m x 4.5m x 1.4m (40' x 15' x 4'6") = 76,000 litres
12m x 6m x 1.4m (40' x 20' x 4'6") = 101,000 litres
15m x 7.5m x 1.4m (50' x 25' x 4'6") = 158,000 litres
1.4m (4'6") = average depth

2. SELECTING THE RIGHT SIZE PUMP OR FILTER

In Ground Swimming Pools				
Pool Volume	Power Ace® CR Pumps	Power Master® Pumps	Crystal Clear® Sand Filters	Easy Clear® Cartridge Filters
30,000 litres	PA CR 100	-	CC 120	EC 500
45,000 litres	PA CR 150	-	CC 190	EC 750
70,000 litres	PA CR 200	PM 200	CC 250	EC 1000
90,000 litres	PA CR 300	PM 250	CC 330	EC 1500
110,000 litres	PA CR 300	PM 350	CC 400	EC 1750
160,000+ litres	-	PM 450	-	2 x EC 1500

In Ground Swimming Pools				
Pool Volume	Power Ace® CR Pumps	Power Chief® CR Pumps	Crystal Clear® Sand Filters	Easy Clear® Cartridge Filters
30,000 litres	PA CR 100	PC CR 100	CC 120	EC 500
50,000 litres	PA CR 150	PC CR 150	CC 190	EC 750

Note: It is possible to use larger sized cartridge filters to minimise the element cleaning required.

POOL SELECTION GUIDE

3. SELECTING THE RIGHT FILTER TYPE

	Sand Filter		Cartridge Filter
	Sand	Zelbrite	
Filtration Clarity	Good	Excellent	Very Good
Smallest Particle Removal (micron)	15-20	3-5	5-10
Media Type	Granular media which is re-used for several years.		Mesh element which is regularly cleaned & replaced after 3-5yrs.
Cleaning Method	Backwash-Reverse flow of water through filter to flush out dirt.		Remove element and hose down. Acid wash once a year.
Loss of Pool Water	Yes, due to backwashing.		No, as backwashing not required.
Ease of Operation	Very simple as the media is not handled and is re-useable. Recharge Zelbrite® once a year.		Requires more attention as the element should be removed and cleaned often.
Operating Cost	Low, as media is virtually permanent. Replace every 5 years.		High, as elements are relatively expensive to replace.
Initial Cost	Medium		Low

4. SELECTING THE RIGHT SIZE CHLORINATOR

The appropriate chlorinator size for your pool is dependent on the local climate and the amount of use the pool gets. Note that chlorinator cell life can be increased with shorter running times during winter and lower output settings. Davey recommends that a chlorinator is run for between 6-8 hours a day during summer and between 2-4 hours during winter. A 24 hour super-chlorination after heavy use is also a good idea.

Model	Chlorine Gas Production per hour	Calcium Hypochlorite Equivalent per hour	Maximum Pool Volume for Chlorinators		
			Maximum Pool Size (litres)		
			Cool Climate	Temperate	Hot / Tropical
D24T	24gm	37gm	144,000	96,000	72,000
D30T	30gm	46gm	180,000	120,000	90,000
D40T	40gm	62gm	240,000	160,000	120,000
Minimum Run Time	Summer		6 hrs	7 hrs	8 hrs
	Winter		2 hrs	3 hrs	4 hrs

Correct water chemistry is important for the life of your equipment and your enjoyment of the pool, so be sure to have your water chemistry checked regularly by your local pool shop.



AQUACULTURE & POOL PUMPS

Aquaculture Pumps

Built from corrosion resistant materials and engineered to give high water turnover rates, Davey pumps and filters are ideal for marine and freshwater aquaculture.

Power Master® Pumps

Davey's premium range - robust and powerful, featuring Davey's own manufactured TEFC motor with safe IP56 rating, massive front mounted fan for superior cooling and high performance C3 bearings. The range features carbon ceramic seals and stainless steel shafts, ideal for salt water applications.

Power Ace® CR Pumps

Compact, powerful and efficient, Davey's Power Ace CR range features carbon ceramic seals, stainless steel shafts and Davey manufactured IP55 TEFC motors. An additional fan between the pump & motor keeps bearings cool for long life and protects vital motor components from moist air. Not suitable for seawater.

Power Chief® CR Pumps

Compact, powerful and efficient, Davey's Power Chief CR range features are identical to the Power Ace® CR range. They are ideal for solar hot water boosters.



Power Master®



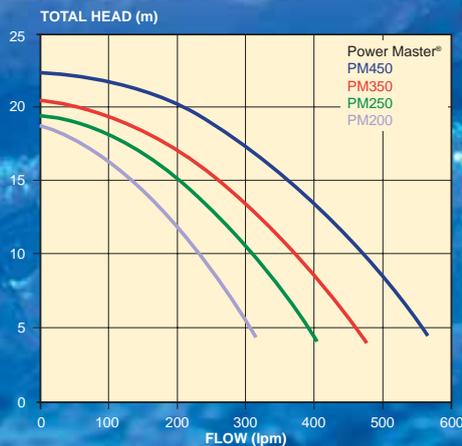
Power Ace® CR



Power Chief® CR

Pump Model	Input (w)	Output (w)	Maximum Pressure (m)	Total Head (metres)				Inlet / Outlet (mm)
				5	10	15	20	
Power Master 200	1280	900	18	280	230	130	-	40 & 50 / 40 & 50
Power Master 250	1430	1050	19.5	380	310	200	-	40 & 50 / 40 & 50
Power Master 350	1670	1200	20	460	375	260	50	40 & 50 / 40 & 50
Power Master 450	2250	1700	22.5	60	480	370	190	50 / 50
Power Master 4503	2040	1750	22.5	560	480	370	190	50 / 50

Pump Model	Input (w)	Output (w)	Maximum Pressure (m)	Total Head (metres)						Inlet / Outlet (mm)
				4	6	8	10	12	14	
Power Ace CR100	760	530	16	215	190	165	140	105	60	40&50/40&50
Power Ace CR150	1000	720	17	280	260	230	200	160	110	40&50/40&50
Power Ace CR200	1060	790	19	315	295	265	235	200	160	40&50/40&50
Power Ace CR300	1500	1170	20	385	365	340	305	260	220	40&50/40&50
Power Chief CR100	760	530	16	215	190	165	140	105	60	40&50/40&50
Power Chief CR150	1000	720	17	280	260	230	200	160	110	40&50/40&50



POOL PUMPS

Magnum Pool Pumps

The Magnum range of pool pumps gives you strong pumping performance and quiet operation in a compact, convenient to install package.

Magnum Booster Pool Pumps

The Magnum Boosters are specifically designed to circulate swimming pool water for filtration and solar heating applications. They are ideal for above ground pools, water features and spa pools.

Monster High Head Pool Pumps

The Monster range is specifically designed to circulate swimming pool water for filtration and solar heating applications. They are ideal for automatic cleaners and heating systems.

Standard Valves

Two and three port full flow valves specially designed for use in the swimming pool and irrigation industries. They are non corrosive, made from injection moulded ABS to fit either 40mm or 50mm PVC pressure pipe. The handle is spring loaded and locks in position to ensure a positive no creep setting.

Teflon Valves

40 and 50mm full flow valves are available with 'no lube' Teflon seals - to ensure easy free rotation of the handle over the life of the valve. You can identify the Teflon seal version by the red handle, black lid and sticker.

Check Valves

A genuine full flow 40mm check valve with a see-through lid that is easily removed for servicing without disturbing the plumbing.

Every valve is pressure tested and guaranteed against manufacturing defects.



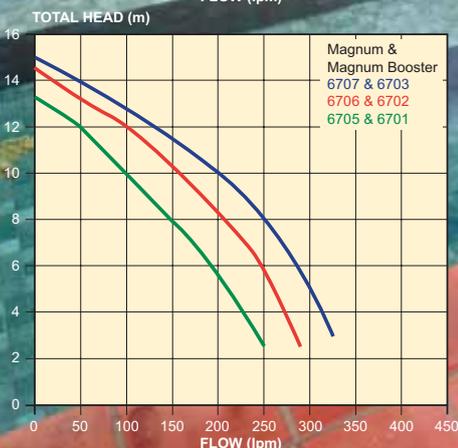
Magnum Pool Pump



Magnum Booster Pool Pump



Monster High Head Pool Pump



Standard Valves



Teflon Valves

FILTRATION

Crystal Clear® Filters

Tough, sea-water resistant polyethylene filter tank with Davey's unique T-shaped laterals for high efficiency filtration and easy back-washing.

Easy Clear® Cartridge Filters

Depend on Davey Easy Clear® cartridge filters for the ideal choice for the filtration of spas, swim spas, hot tubs and swimming pools.

Featuring a reinforced polyester element designed to maximise filtration area, Davey Easy Clear® filters ensure you'll always have sparkling clear water. When the filter element needs cleaning, simply take it out, hose it down and you're back in business within minutes. You can depend on years of service out of your Davey Easy Clear® filter as only the best in corrosion and U.V. resistant materials are used.

Zelbrite® Filter Media

More surface area than sand for finer filtration. Has ability to capture ammonium ions in fresh water for extra purity and healthier water.

Salt Water Chlorinators

Special Features

- World leading sanitisation technology
- Constructed of strong corrosion and U.V. resistant materials for long and reliable working life
- Easy to remove salt cell
- Complies with electrical standards for safe installation in the pool zone
- A.B.S. Quick connect couplings make installation simple
- Every unit is pressure and performance tested in factory to ensure quality and reliability
- Time clock included as standard for automatic operation of the filtration system
- Advanced self cleaning cell for low maintenance
- Super chlorinate function
- Huge digital display and touch pad controls for easy programming
- Automatic self cleaning cell reduces maintenance and extends cell life



OPERATING PERFORMANCE & MEDIA REQUIRED

Model	Sand Required (kg)	Zelbrite Required (kg)	Max Flow Rate (lpm)	Min Backwash Flow Rate	6 Hour Turnover (litres)	Filtration Area (sq metres)
Crystal Clear 120	60	45	120	100	43,200	0.166
Crystal Clear 190	90	60	180	135	64,800	0.223
Crystal Clear 250	140	105	240	180	86,400	0.292
Crystal Clear 330	200	150	330	240	116,000	0.397
Crystal Clear 400	280	210	400	300	144,000	0.507

Zelbrite®
Filter Media



Model	Maximum Flow Rate	Filter 6 Hour Turnover	Matching Davey Pump	Inlet / Outlet (mm)
Easy Clear 500	205 l/min	73,800 litres	PACR100	40 / 40
Easy Clear 750	270 l/min	97,200 litres	PACR150	40 / 40
Easy Clear 1000	340 l/min	122,400 litres	PACR200 / PM 200	40 / 40
Easy Clear 1500	450 l/min	162,000 litres	PACR300 / PM 250	40&50 / 40&50

OPERATING LIMITS

Maximum Water Temperature (degrees C)	35
Maximum Operating Pressure (kPa)	280

SPA BATH PUMPS



Celsior®

New generation spa bath pumps

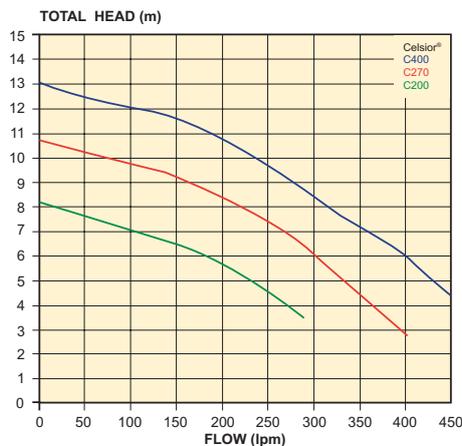


Quiet: 50% quieter than other pumps which provides a more enjoyable spa experience that will not disturb your well deserved relaxation.

Powerful: With pumps as large as 2 horsepower, and three unique patented features Celsior® pumps deliver greater water flow and pressure, enlivening your spa for a complete massaging effect.

Smart: Davey Heat Recovery technology maintains the temperature of your spa for longer by utilising waste energy which is otherwise lost when using traditional style spa pumps. Environmentally friendly & highly efficient with up to 97% effective energy usage. Lower running costs that delivers savings of up to 15% over older style spa bath pumps.

Easy: Quick and easy to install using the Davey Flexibrax. IP56 protective enclosures make Celsior® ideal for outdoor installation without the need for expensive covers. Designed to exceed standards for electrical safety and hygiene for your peace of mind.



OPERATING LIMITS

Maximum Water Temperature*:	50°C
Maximum Ambient Temperature*:	55°C
Sound Power Levels:	60 dBa



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Available from:

NOTE: This is not a complete guide to product usage or guarantee conditions. Further information is available from your Davey Dealer, and from the relevant product Installation and Operating Instructions.

Information & specifications subject to change without notice.

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DEPEND ON
DAVEY

WATER PRODUCTS