

WATERCO

Water, the Liquid of Life



Pumps

Aquamite Pumps

Small in stature - big on power

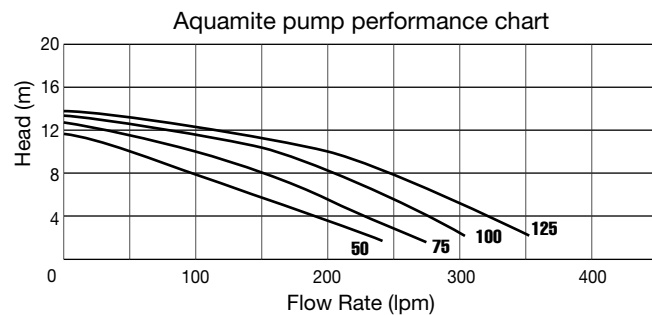


The Aquamite is an ideal pump for swimming pools and small recirculation systems including ponds and small water features.

- 0.9 litre strainer basket.
- Protected by secondary seal.

AQUAMITE PUMPS

Part Number	Product Description	Nominal Size
2402050	Aquamite 50	0.50hp
2402075	Aquamite 75	0.75hp
2402100	Aquamite 100	1.00hp
2402125	Aquamite 125	1.25hp



Specifications

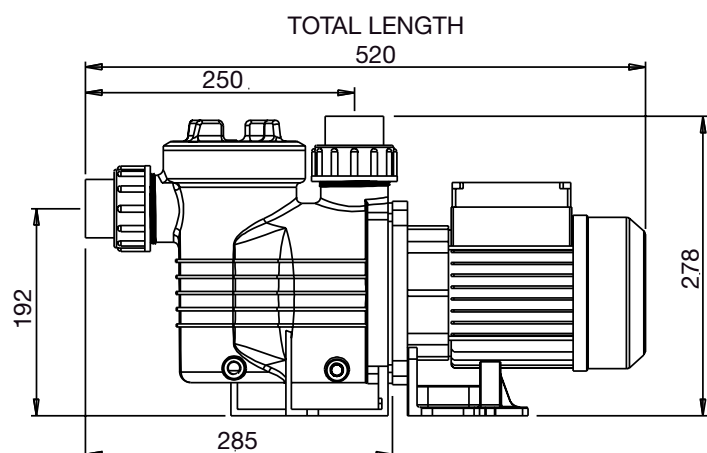
Model	Flow Rate (lpm)		Nom. HP	kW	Amps	Total Length (mm)	Motor Frame (mm)	Inlet/Outlet
	8m	10m						
Aquamite 50	112	61	0.50	0.58	2.50	497	63	40mm ports x / 40mm unions
Aquamite 75	156	99	0.75	0.65	3.00	497	63	40mm ports x / 40mm unions
Aquamite 100	197	147	1.00	0.76	3.33	497	63	40mm ports x / 40mm unions
Aquamite 125	252	208	1.25	0.88	3.90	497	63	40mm ports x / 40mm unions

Phase	Volts	Cycle	RPM
1	220- 240	50	2860

Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

* Please refer to Waterco's warranty terms and conditions

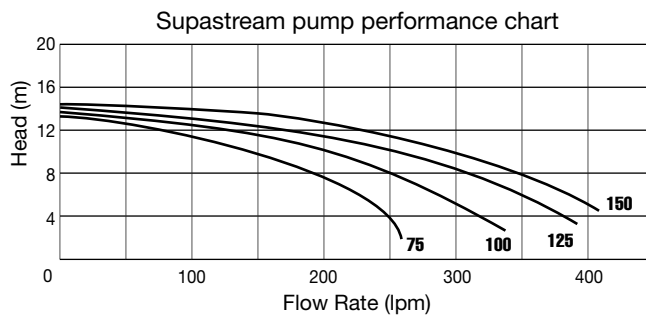


Supastream Pumps

State-of-the-art power and design

SUPASTREAM PUMPS

Part Number	Product Description	Nominal Size
2403075	Supastream 075	0.75hp
2403100	Supastream 100	1.00hp
2403125	Supastream 125	1.25hp
2403150	Supastream 150	1.50hp



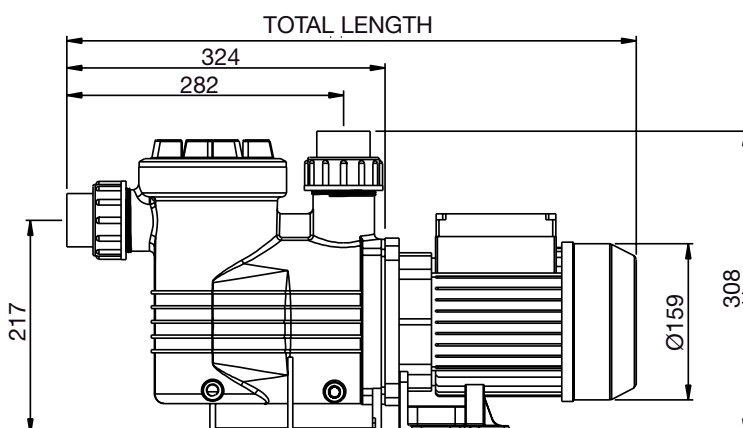
Supastream pumps are general purpose pumps designed for use in swimming pools and low pressure water re-circulation applications.

- 1.5 litre strainer basket.
- Protected by secondary seal.

Specifications

Model	Flow Rate (lpm)		Nom. HP	kW	Amps	Total Length (mm)	Motor Frame (mm)	Inlet/Outlet
	8m	10m						
Supastream 075	190	154	0.75	0.61	2.80	536	63	40mm ports x / 40mm unions
Supastream 100	251	205	1.00	0.82	3.60	559	71	40mm ports x / 40mm unions
Supastream 125	295	241	1.25	0.88	3.90	559	71	40mm ports x / 40mm unions
Supastream 150	332	272	1.50	1.09	4.90	580	83	40mm ports x / 40mm unions

Phase	Volts	Cycle	RPM
1	220- 240	50	2860



Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

* Please refer to Waterco's warranty terms and conditions

Hydrotuf Pumps

High performance pumps

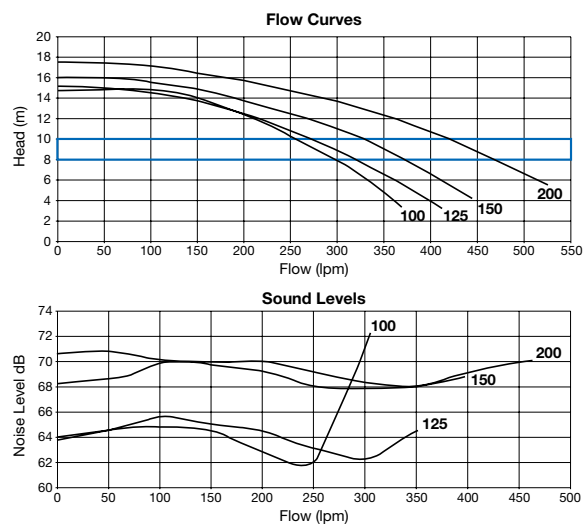


Equipped with an innovative lid and lock ring for easy access to a large capacity strainer basket, Hydrotuf pump is ideal for large domestic swimming pools.

- 2.25 litre strainer basket.
- Innovative lid and lock ring.

HYDROTUF PUMPS

Part Number	Product Description	Nominal Size
2411005	Hydrotuf 100	
2411255	Hydrotuf 125	
2411505	Hydrotuf 150	
2412005	Hydrotuf 200	

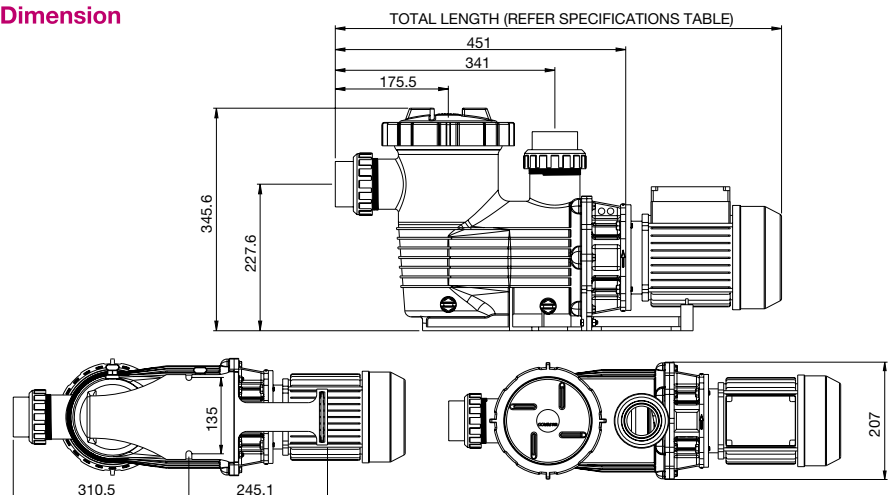


Specifications

Model	Flow Rate (lpm)		Nom. Power (hp)	Motor Input (kW)	Amps	Weight (kg)	Total Length (mm)	Motor Frame (mm)	Inlet/Outlet
	8m	10m							
Hydrotuf 100	225	190	1.00	0.86	4.0	9.60	651	71	50mm ports x / 50mm unions
Hydrotuf 125	280	240	1.25	0.95	4.0	9.60	651	71	50mm ports x / 50mm unions
Hydrotuf 150	325	285	1.50	1.10	4.7	12.60	691	80	50mm ports x / 50mm unions
Hydrotuf 200	400	355	2.00	1.50	6.8	12.60	691	80	50mm ports x / 50mm unions

Phase	Volts	Cycle	RPM
1	220- 240	50	2860

Dimension



Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

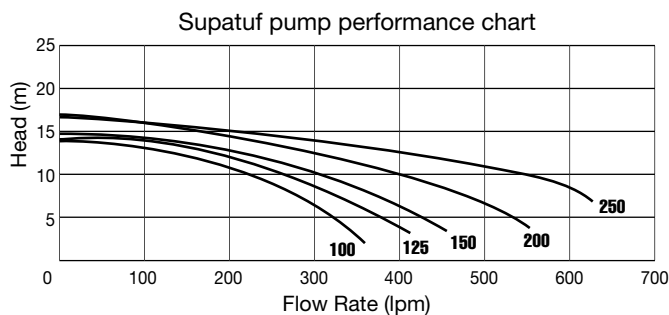
* Please refer to Waterco's warranty terms and conditions

Supatuf Pumps

Extra power for extra large pools

SUPATUF PUMPS

Part Number	Product Description	Nominal Size
241100	Supatuf 100	1.00hp
241125	Supatuf 125	1.25hp
241150	Supatuf 150	1.50hp
241200	Supatuf 200	2.00hp
241250	Supatuf 250	2.50hp



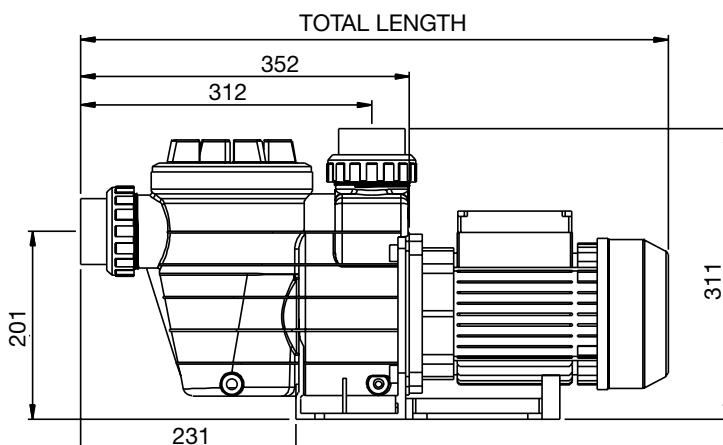
The Supatuf pump is ideal for large domestic swimming pools with ancillary systems such as heating, infloor cleaning, fountains, vacuum cleaning and swim jets.

- 2.1 litre strainer basket.
- Protected by secondary seal.

Specifications

Model	Flow Rate (lpm)		Nom. HP	kW	Amps	Total Length (mm)	Motor Frame (mm)	Inlet/Outlet
	8m	10m						
Supatuf 100	269	229	1.00	0.84	3.70	587	71	50mm ports x / 50mm unions
Supatuf 125	309	265	1.25	0.96	4.20	587	71	50mm ports x / 50mm unions
Supatuf 150	342	295	1.50	1.15	5.30	608	80	50mm ports x / 50mm unions
Supatuf 200	442	380	2.00	1.50	7.20	629	80	50mm ports x / 50mm unions
Supatuf 250	596	530	2.50	1.81	8.50	653	90	50mm ports x / 50mm unions

Phase	Volts	Cycle	RPM
1	220-240	50	2860



Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

* Please refer to Waterco's warranty terms and conditions

Hydrostorm Pumps

Extra power, higher performance

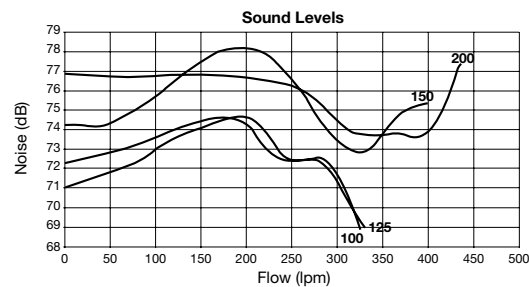
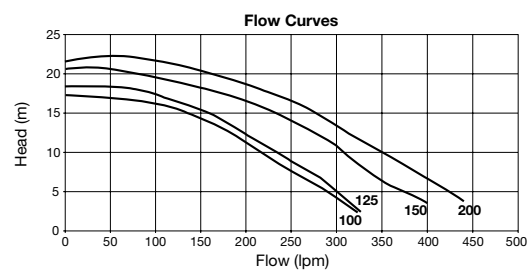


The Hydrostorm is designed to have all the extra power you need to cope with modern day swimming pool designs.

- 2.25 litre strainer basket.

HYDROSTORM PUMPS

Part Number	Product Description	Nominal Size
244100	Hydrostorm 100	1.00hp
244125	Hydrostorm 125	1.25hp
244150	Hydrostorm 150	1.50hp
244200	Hydrostorm 200	2.00hp

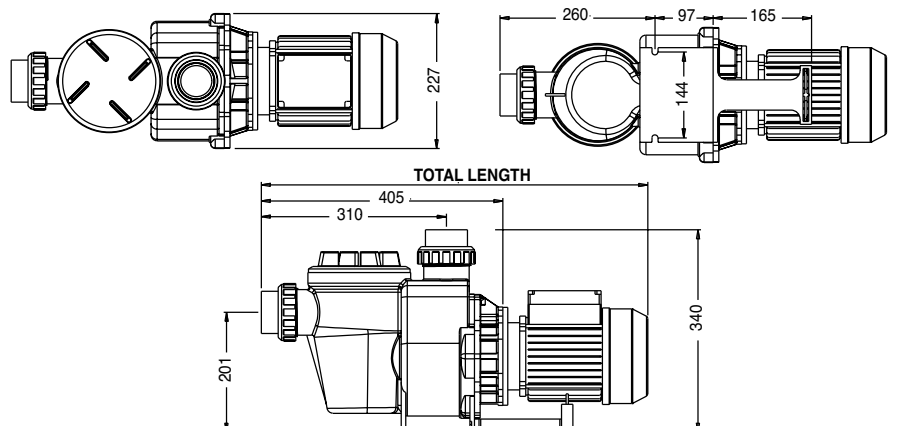


Specifications

Model	Flow Rate (lpm)		Nom. HP	kW	Amps	Phase	Total Length (mm)	Motor Frame (mm)	Inlet/Outlet
	8m	10m							
Hydrostorm 100	248	219	1	0.91	4.00	1	600	71	50mm ports x / 50mm unions
Hydrostorm 125	267	237	1.25	1.08	4.80	1	600	71	50mm ports x / 50mm unions
Hydrostorm 150	336	309	1.5	1.31	5.80	1	647	80	50mm ports x / 50mm unions
Hydrostorm 200	379	250	2	1.46	6.60	1	647	80	50mm ports x / 50mm unions

Phase	Volts	Cycle	RPM
1	220- 240	50	2860

Dimension



Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

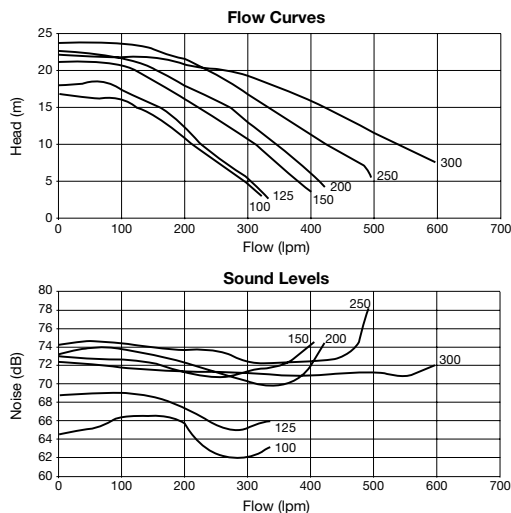
* Please refer to Waterco's warranty terms and conditions

Hydrostorm Plus Pumps

Extra power, higher performance

HYDROSTORM PLUS PUMPS

Part Number	Product Description	Nominal Size
2405100	Hydrostorm Plus 100	1.00hp
2405125	Hydrostorm Plus 125	1.25hp
2405150	Hydrostorm Plus 150	1.50hp
2405200	Hydrostorm Plus 200	2.00hp
2405250	Hydrostorm Plus 250	2.50hp
2405300	Hydrostorm Plus 300	3.00hp



The Hydrostorm plus has all the proven features of the Hydrostorm with the addition of an innovative lid & lock ring for easier maintenance and a larger strainer basket for increased capacity.

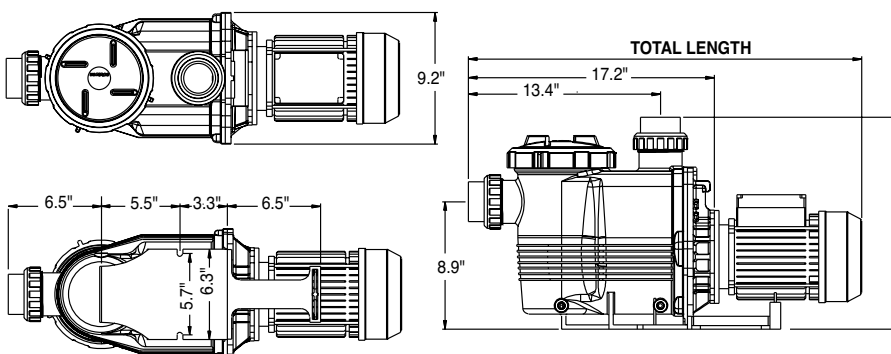
- 2.25 litre strainer basket.

Specifications

Model	Flow Rate (lpm)		Nom. HP	kW	Amps	Phase	Total Length (mm)	Motor Frame (mm)	Inlet/Outlet
	8m	10m							
Hydrostorm Plus 100	248	220	1	0.96	4.2	1	631	71	50mm ports x / 50mm unions
Hydrostorm Plus 125	267	237	1.25	1.02	4.5	1	631	71	50mm ports x / 50mm unions
Hydrostorm Plus 150	336	309	1.5	1.40	5.8	1	678	80	50mm ports x / 50mm unions
Hydrostorm Plus 200	379	350	2	1.51	6.3	1	678	80	50mm ports x / 50mm unions
Hydrostorm Plus 250	479	449	2.5	1.85	7.8	1	678	80	65mm ports x / 50mm unions
Hydrostorm Plus 300	588	549	3	2.08	9.0	1	730	90	65mm ports x / 50mm unions

Phase	Volts	Cycle	RPM
1	220- 240	50	2860

Dimension



Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

* Please refer to Waterco's warranty terms and conditions

Hydrostar Pumps

Power performance pumps

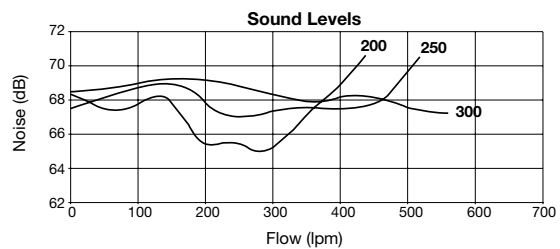
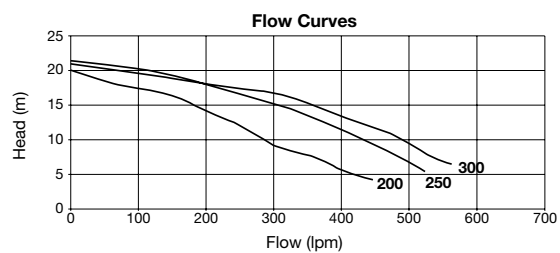


Built with an innovative quarter lid & lock ring and extra large strainer basket, the Hydrostar is ideal for large domestic and commercial sized swimming pools.

- 6 litre strainer basket.

HYDROSTAR PUMPS

Part Number	Product Description	Nominal Size
2404200	Hydrostar 200	2.00hp
2404250	Hydrostar 250	2.50hp
2404300	Hydrostar 300	3.00hp
2404300B	Hydrostar 300	3.00hp



Specifications

Model	Flow Rate (lpm)		Nom. HP	kW	Amps	Phase	Total Length (mm)	Motor Frame (mm)	Inlet/Outlet
	8m	10m							
Hydrostar 200	340	286	2	1.46	6.5	1	771	80	65mm ports x / 50mm unions
Hydrostar 250	475	438	2.5	1.96	9.3	1	771	80	65mm ports x / 50mm unions
Hydrostar 300	524	488	3	2.33	10.9	1	792	90	65mm ports x / 50mm unions
Hydrostar 300	524	488	3	2.33	10.9	1	792	90	80mm ports x / 80mm unions
Hydrostar 200 (3 phase)	340	286	2	1.41	2.5	3	770	90	65mm ports x / 50mm unions
Hydrostar 250 (3 phase)	475	438	2.5	1.92	3.8	3	770	90	65mm ports x / 50mm unions
Hydrostar 300 (3 phase)	524	488	3	2.25	4.1	3	792	90	80mm ports x / 80mm unions

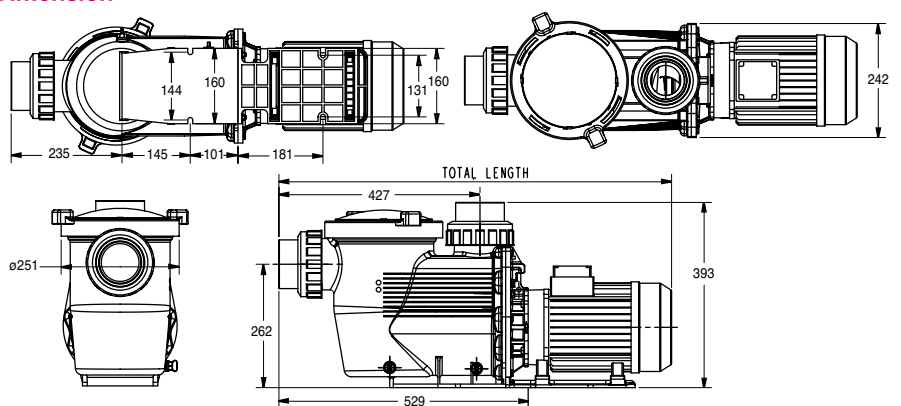
Phase	Volts	Cycle	RPM
1	220- 240	50	2860
3	380- 420	50	2860

Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

* Please refer to Waterco's warranty terms and conditions

Dimension



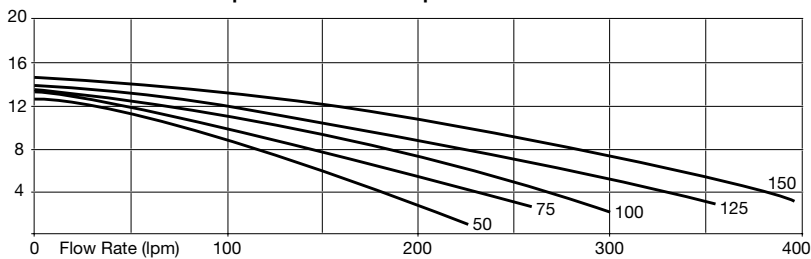
Aquastream Solar Pumps

High performance solar pumps

AQUASTREAM SOLAR PUMPS

Part Number	Product Description	Nominal Size
24530500	Aquastream MKII Solar 050	0.50hp
24530750	Aquastream MKII Solar 075	0.75hp
24531000	Aquastream MKII Solar 100	1.00hp
24531250	Aquastream MKII Solar 125	1.25hp
24531500	Aquastream MKII Solar 150	1.50hp

Aquastream Solar Pump Performance Chart



Aquastream solar pumps incorporate essential features required to make them compatible with solar pool heating systems.

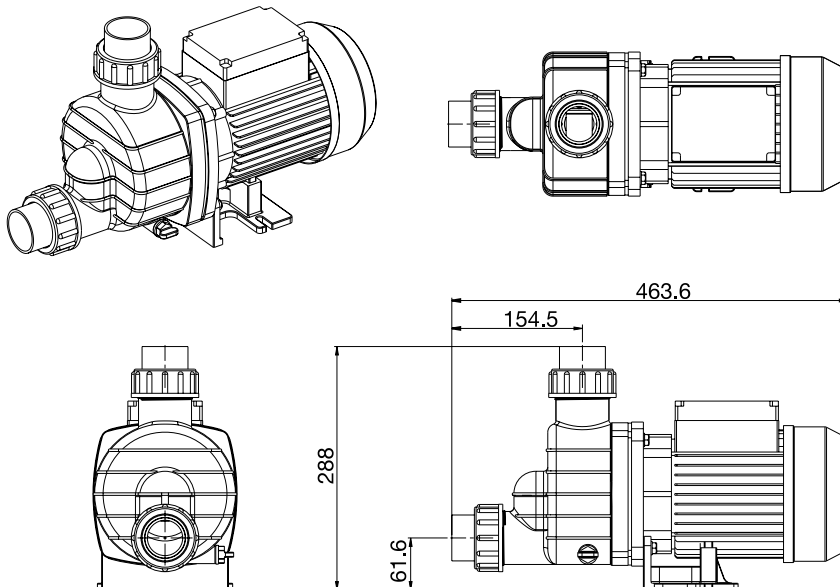
- Protected by secondary seal.

Specifications

Model	Nominal HP	kW	Amps	Total Length (mm)	Motor Frame (mm)	Inlet/Outlet
Aquastream Solar 50	0.5	0.58	2.5	465	63	40mm ports x / 40mm unions
Aquastream Solar 75	0.75	0.65	3.0	465	63	40mm ports x / 40mm unions
Aquastream Solar 100	1.00	0.76	3.33	465	63	40mm ports x / 40mm unions
Aquastream Solar 125	1.25	0.88	3.9	465	63	40mm ports x / 40mm unions
Aquastream Solar 150	1.50	1.15	5.0	465	72	40mm ports x / 40mm unions

Phase	Volts	Cycle	RPM
1	220-240	50	2860

Dimensions



Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

* Please refer to Waterco's warranty terms and conditions

TurboFlo Pumps

Multipurpose high performance pumps



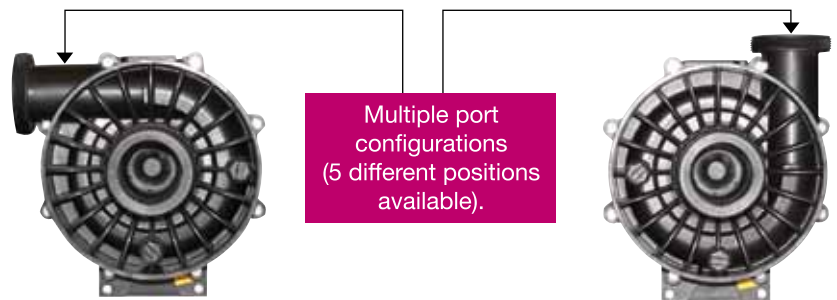
TurboFlo is a hydraulically efficient, high performance pump designed for pools and spas with high power requirements. It has an adjustable wet end which can be configured to suit up to 5 different plumbing conditions.

TURBOFLO PUMPS

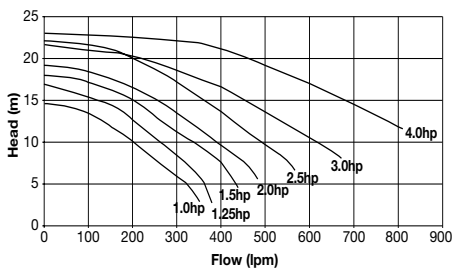
Part Number	Product Description	Nominal Size
2462100	TurboFlo 100	1.00hp
2462125	TurboFlo 125	1.25hp
2462150	TurboFlo 150	1.50hp
2462200	TurboFlo 200	2.00hp
2462250	TurboFlo 250	2.50hp
2462300	TurboFlo 300	3.00hp

Adjustable wet end

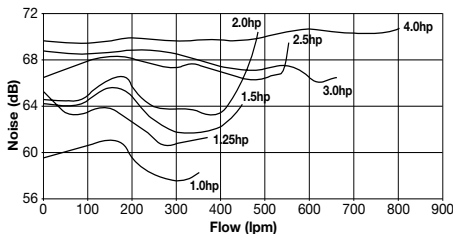
The outlet port of the TurboFlo can be configured to suit different plumbing conditions.



Flow Curves



Sound Levels

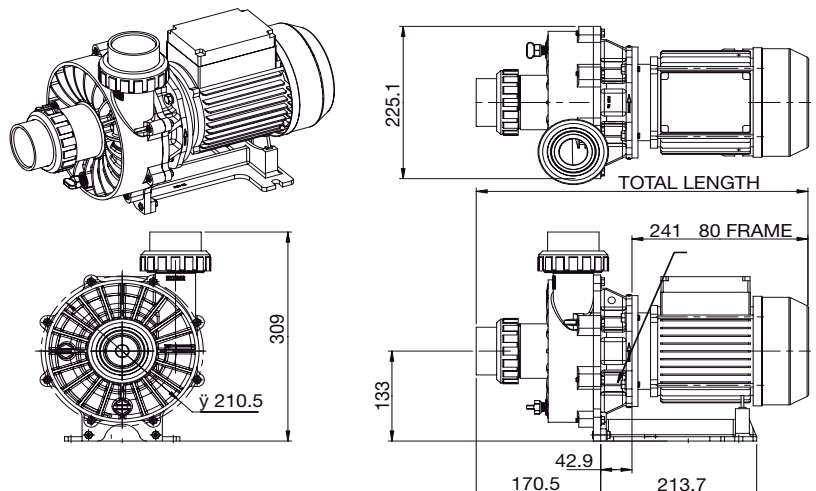


Specifications

Model	Nominal Power (hp)	Motor Input (kW)	Amps	Total Length (mm)	Motor Frame (mm)	Inlet/Outlet
TurboFlo 125	1.25	1.05	4.5	445	71	50mm ports x / 50mm unions
TurboFlo 150	1.50	1.40	5.9	445	80	50mm ports x / 50mm unions
TurboFlo 200	2.00	1.50	6.4	445	80	50mm ports x / 50mm unions
TurboFlo 250	2.50	1.70	7.2	445	80	50mm ports x / 50mm unions
TurboFlo 300	3.00	2.10	9.1	483	90	50mm ports x / 50mm unions

Phase	Volts	Cycle	RPM
1	220- 240	50	2860

Dimensions



Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

* Please refer to Waterco's warranty terms and conditions

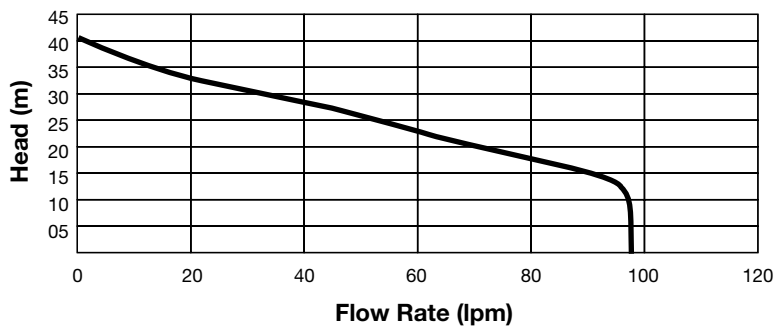
Sweepmaster Pumps

High performance pressure pool cleaner pumps

SWEEPMASTER PUMPS

Part Number	Product Description	Nominal Size
246803	Sweepmaster 150	1.50hp
2468030	Sweepmaster 150 w/Flexible Plumbing Hose Kit	1.50hp

Pool Sweep pump performance chart



Specifications

Model	Nominal HP	kW	Amps	Phase	Volts	Cycle	RPM
Sweepmaster 150	1.5	1.2	5	1	240	50	2860

Length	Height	Width	Delivery Height	Suction Height	Weight
500 mm	250 mm	200 mm	230 mm	180 mm	14 kg



Waterco's Sweepmaster pump is ideal for operating most pressure type swimming pool cleaners.

Using state of the art engineering plastics in its construction, Waterco's Sweepmaster pump is designed for durability and long life operation ensuring peace of mind.

An optional plumbing hose kit enables a flexible connection from both inlet & outlet ports of the Sweepmaster Pump.

Warranty

Pumps	3 years (conditional) *
Wet End	3 years
Motor, mechanical seal, O' ring, basket & impeller	2 years
Commercial applications	1 year
Labour	1 year

* Please refer to Waterco's warranty terms and conditions

FLEXIBLE PLUMBING HOSE KIT

Part Number	Product Description	Nominal Size
132306	Flexible Plumbing Hose Kit	1.5m

Specially developed for the Sweepmaster pump a flexible plumbing hose kit containing all the necessary components to enable an easy flexible hose connection from either inlet or outlet ports of the pump. The kit can be purchased separately or with the Sweepmaster pump.



Hydrostar MKIII Pumps

Commercial high performance pumps



Built with an innovative quarter lid & lock ring and extra large strainer basket, the Hydrostar is ideal for large domestic and commercial sized swimming pools.

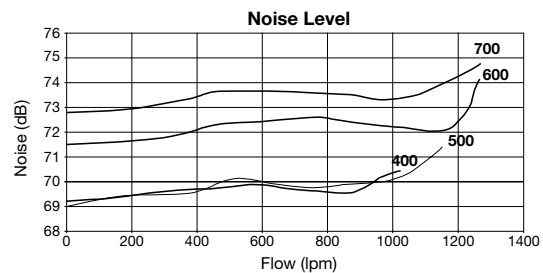
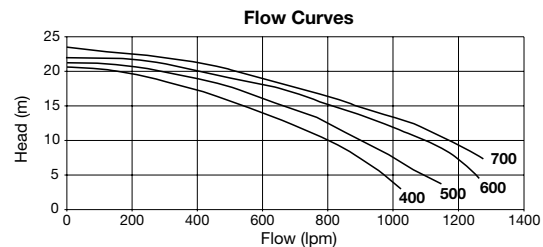
- 6 litre strainer basket.

HYDROSTAR MKIII PUMPS

Part Number	Product Description	Nominal Size
240440033	Hydrostar 400 MKIII	4.0hp
240450033	Hydrostar 500 MKIII	5.0hp
240460033	Hydrostar 600 MKIII	6.0hp
240470033	Hydrostar 700 MKIII	7.0hp

Sea water mechanical seal

63401625 Sea water mechanical seal

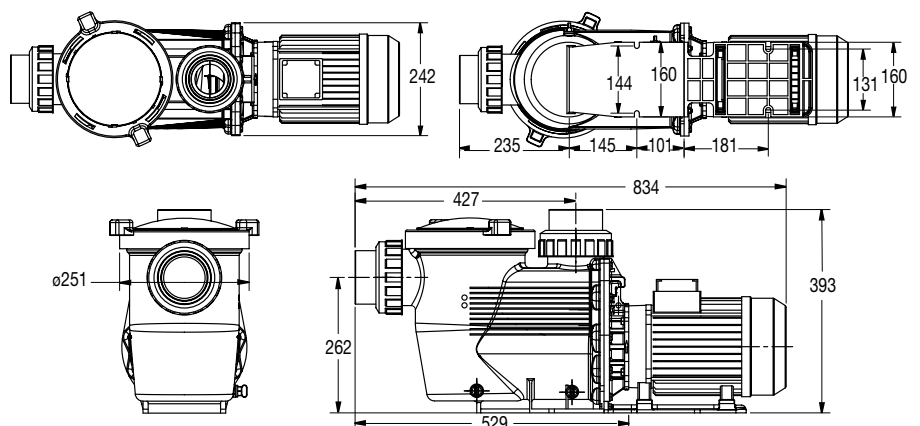


Specifications

Model	Nominal Power (hp)	Input Power (kW)	Amps/Phase	Weight (kg)	Total Length (mm)	Motor Frame	Inlet/Outlet
Hydrostar 400MKIII	4.0	2.92	5.2	44.0	939	100	80mm ports x / 80mm unions
Hydrostar 500MKIII	5.0	3.16	5.8	44.0	939	100	80mm ports x / 80mm unions
Hydrostar 600MKIII	6.0	4.36	7.0	48.5	939	100	80mm ports x / 80mm unions
Hydrostar 700MKIII	7.0	5.18	8.2	48.5	939	112	80mm ports x / 80mm unions

Phase	Volts	Cycle	RPM	Pump Rating
3	380 - 420	50	2900	IP55

Dimension



Warranty

Waterco commercial pumps are covered by a comprehensive 1 year warranty for commercial installations.

HydroSteel Pumps

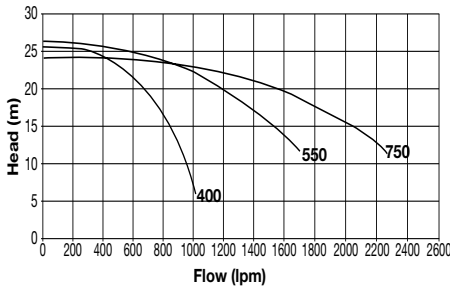
Commercial hybrid stainless steel pumps

HYDROSTEEL PUMPS

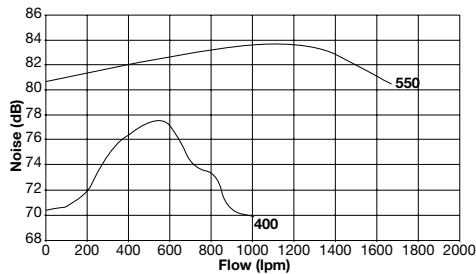
Part Number	Product Description	Nominal Size
2408400	4kW S/S Pump 400F (flange type) 3"	5.5hp / 4kW
2408401	4kW S/S Pump 400S (screw type) 3"	5.5hp / 4kW
2408550	5.5kW S/S Pump 550F (flange type) 3"	7.5hp / 5.5kW
2408551	5.5kW S/S Pump 550S (screw type) 3"	7.5hp / 5.5kW
2408750	7.5kW S/S Pump 750F (flange type) 4"	10.0hp / 7.5kW
2408751	7.5kW S/S Pump 750S (screw type) 4"	10.0hp / 7.5kW



Flow Curves



Noise Level



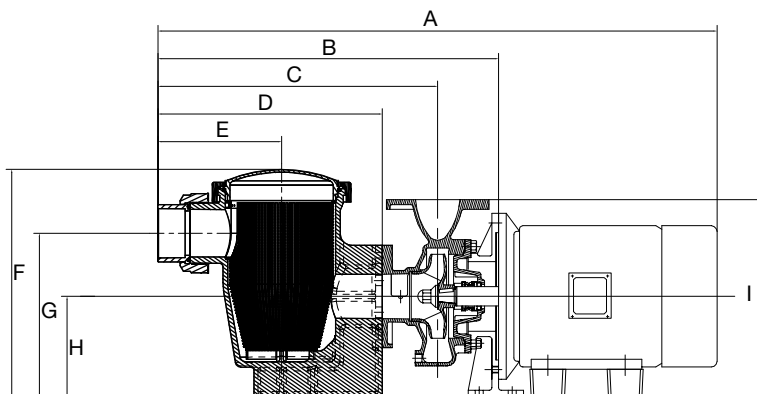
Specifications

Model	Nominal Power (hp)	Motor Input (kW)	Amps/Phase	Weight (kg)	Total Length (mm)	Motor Frame	Inlet/Outlet
400F	4.9	3.65	5.5	75	946	112	80mm ports
400S	4.9	3.65	5.5	75	946	112	80mm ports x / 80mm unions
550F	9.1	6.81	10.3	101	1011	132	80mm ports
550S	9.1	6.81	10.3	101	1011	132	80mm ports x / 80mm unions
750F	10.0	8.52	12.9	110	650	132	100mm ports
750S	10.0	8.52	12.9	110	650	132	100mm ports x / 100mm unions

Phase	Volts	Cycle	RPM	Pump Rating
3	380 - 420	50	2900	IP55

Dimension (mm)

Model	A	B	C	D	E	F	G	H	I
400	946	606	496	406	224	389	274	160	350
550	1011	616	506	406	224	414	299	185	360
750	1240	815	710	595	338	550	315	185	380



Hydrosteel pumps are the first hybrid of its kind; the pre-strainer is constructed from glass filled thermoplastic, while its impeller and volute are constructed from 316 grade stainless steel, ensuring a high level of durability in corrosive environments.

The pump's volute is hydraulically designed to allow for a natural balanced flow of water and minimise hydraulic turbulence. The result is a highly efficient pump with a low operating noise.

- 8.8 litre strainer basket.

Warranty

Waterco commercial pumps are covered by a comprehensive 1 year warranty for commercial installations.

Hydro 5000 Pumps

Commercial cast iron pumps

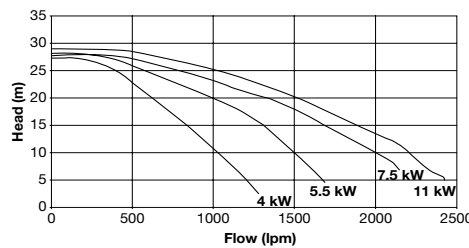


The Hydro 5000 pump features a hydraulically efficient bronze impeller which allows for quiet operation and excellent flow plus an 18 litre capacity strainer.

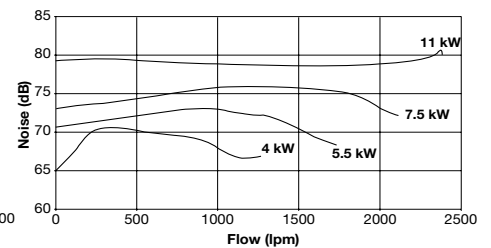
HYDRO 5000 PUMPS

Part Number	Product Description	Nominal Size
	Composite Lid & Lock Ring	
24095500	5.5kW C.I. Pump	7.5hp / 5.5kW
24097500	7.5kW C.I. Pump	10.0hp / 7.5kW
240911000	11.0kW C.I. Pump	15hp / 11.0kW

Flow Curves



Noise Level



Specifications

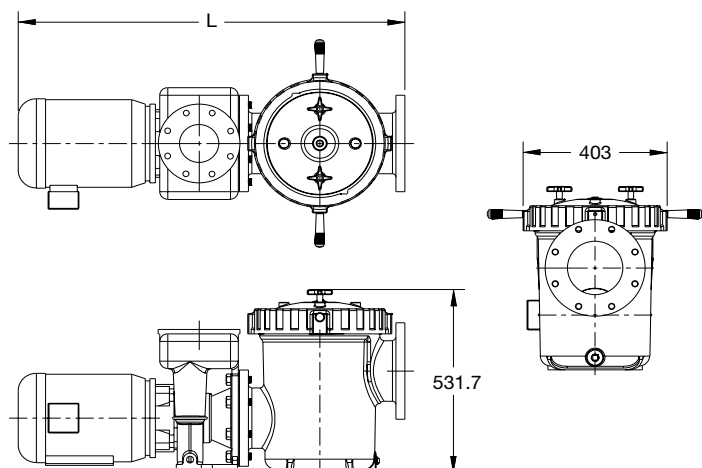
Model	Nominal Power (hp)	Input Power (kW)	Amps/Phase	Weight (kg)	Total Length (mm)	Motor Frame	Inlet/Outlet
4.0 kW	5.4	4.0	6.8	208	1060	112	150mm suction / 100mm discharge
5.5 kW	7.4	5.5	9.2	221	1124	132	150mm suction / 100mm discharge
7.5 kW	10.0	7.5	13.2	221	1162	132	150mm suction / 100mm discharge
11.0kW	14.7	11.0	21.5	279	1236	160	150mm suction / 100mm discharge

Phase	Volts	RPM	Pump Rating
3	380 - 420	2950	IPX5

Part	Materials
Pump Bracket	Cast Iron
Pump Body Gasket	Neoprene
Seal Assembly	Alumina Ceramic/ SS316/ Carbon (Silicon Carbide optional)
Impeller	Bronze
Impeller Washer	Stainless Steel Grade 316
Wear Ring	Bronze
Plug (for wet end)	Mild Steel
Pump Housing	Cast Iron
Strainer Basket	Stainless Steel Grade 316

Dimension (mm)

Model	A	B	D	E	F	L
4 kW	260	180	112	95	140	1017
5.5 kW and 7.5 kW	298	200	132	108	140	1070
11 kW	325	220	160	127	210	1198



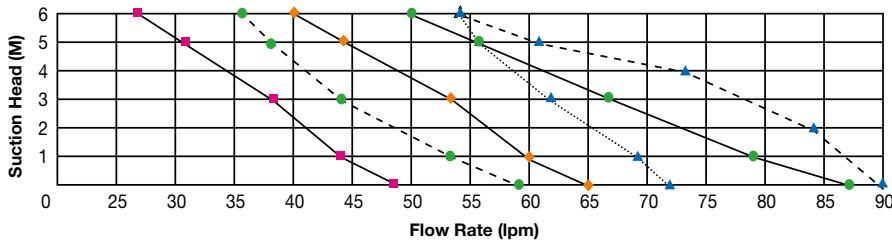
Warranty

Waterco commercial pumps are covered by a comprehensive 1 year warranty for commercial installations.

FINSBURY WATER PRESSURE SYSTEMS

Part Number	Product Description	Impellor	Input HP	Max. Flow
242100	Finsbury Mainsflo 48 with auto control	Closed	0.5	48 lpm
242110	Finsbury Mainsflo 65 with auto control	Closed	0.75	65 lpm
242120	Finsbury Mainsflo 87 with auto control	Closed	1.25	87 lpm
242130	Finsbury Mainsflo 90 with auto control	Closed	1.5	90 lpm

Mainsflo Flow Chart



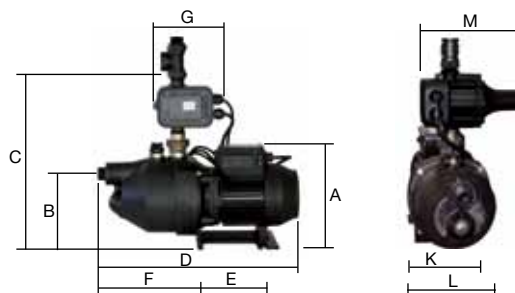
- **Mainsflo 48** - Up to 5 outlets: 2 adults, 2 children, 1 washing machine.
- ◆ **Mainsflo 65** - Up to 7 outlets: 2 adults, 2 children, 1 sprinkler, 1 washing machine, 1 dishwasher.
- **Mainsflo 87** - Up to 9 outlets: 2 adults, 3 children, 2 sprinklers, 1 washing machine, 1 dishwasher. Suitable for 2 storey houses.
- ▲ **Mainsflo 90** - Up to 10 outlets: 2 adults, 4 children, 2 sprinklers, 1 washing machine, 1 dishwasher. Suitable for 2 storey houses.

Specifications

Model	Max. Output (lpm)	Max. Total Head (m)	Output (kW)	Amp.	Volts	Cycle	Max. Pump Body Pressure (kPa)
Mainsflo 48	48	40	0.300	2.6	240	50	1340
Mainsflo 65	65	42	0.370	2.8	240	50	1340
Mainsflo 87	87	40	0.550	4	240	50	1340
Mainsflo 90	97	44	0.750	5	240	50	1340

Dimension (mm)

A	B	C	D	E
245	220	415	420	155
F	G	K	L	M
270	160	150	190	225



Finsbury Mainsflo Pumps provide convenient and reliable automatically-controlled water pressure throughout your entire home.

- Maintain constant water pressure from every tap
- Eliminate temperature fluctuations
- Energy efficient design
- Simple to operate and maintain
- Compact and easy to install

Warranty

Finsbury Mainsflo Pumps are covered by a 12 month warranty against faulty materials and workmanship.

SEPARATE PRESSURE PACKS

Part Number	Product Description	Nominal Size
249501	Finsbury Pressure Pack with Tee	1 litre
2495051	Finsbury Pressure Pack with Tee	2.75 litre
2495062	Finsbury Pressure Pack with Tee	4 litre

Specifications

Pressure Pack (litres)	Height of Pressure Pack (mm)	Diameter of Pressure Pack (mm)	Height to centre of T (mm)
1	320	215	40
2.75	340	275	30
4	470	275	25



Finsbury Pressure Pack