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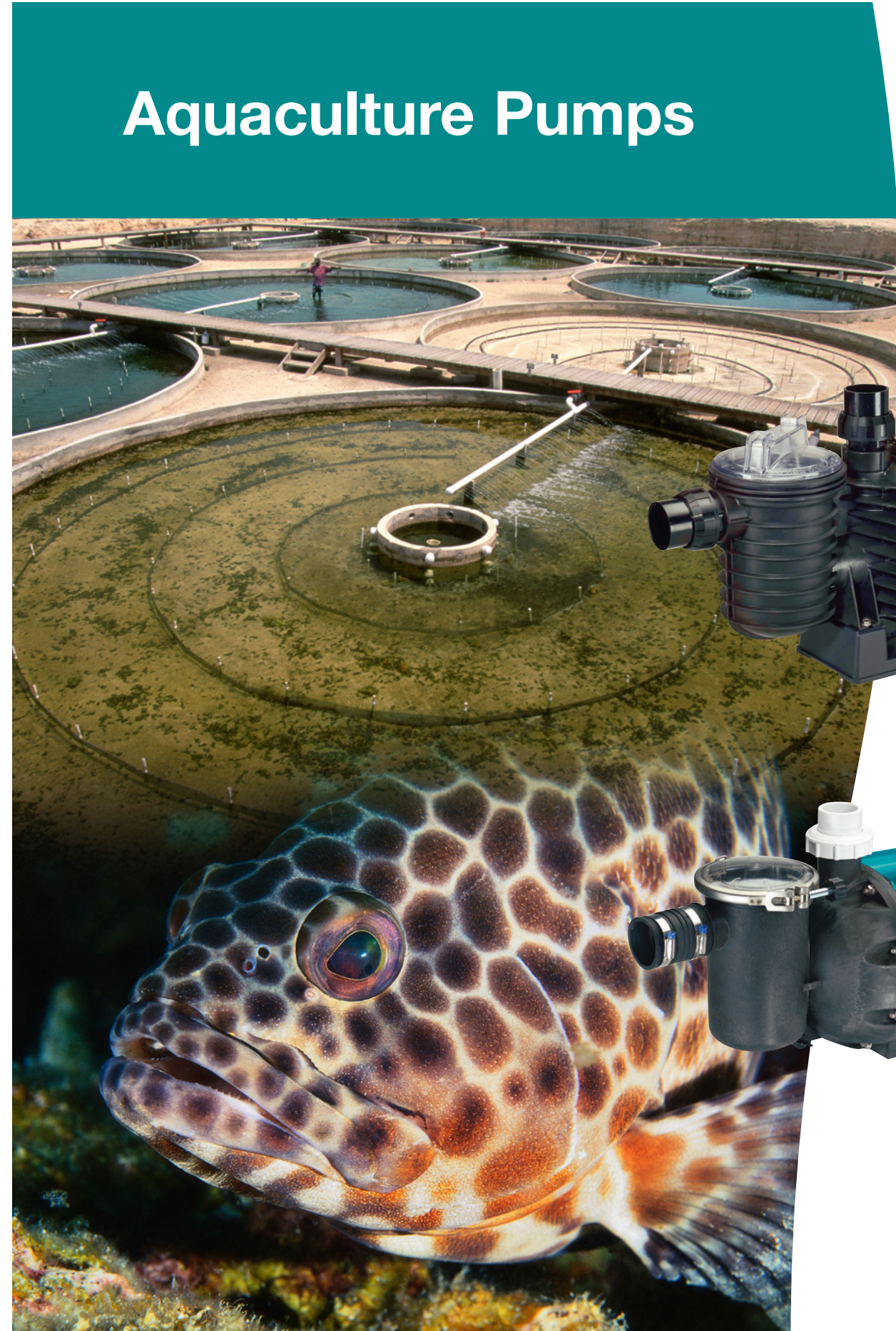
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AND PROUD OF IT

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Onga Pty Ltd ABN 27 004 856 204

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Aquaculture Pumps



L300063 A 1204

**Innovative Products.
Inspired People.**

**Distributor
Catalogue**

Pump failure is not an option when your business relies on water quality 24 hours a day, seven days a week.

That's why Onga has designed and engineered the new SeaBass Aquaculture range of pumps from the ground up, specifically to meet the unique demands of the Aquaculture industry.



Designed primarily for use in the Aquaculture industry for transfer and circulation of water in;

- Earthen Ponds
- Sea Water Tanks
- Holding Tanks
- Breeding Tanks
- Commercial Swimming Pools
- Commercial Applications covered by 6 month warranty.

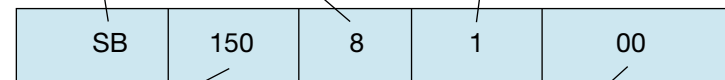


Model	Description	Seawater	Freshwater
SB730100	SeaBass 7 (730W-1hp single phase)	•	•
SB930100	SeaBass 9 (930W-1 1/4hp single phase)	•	•
SB1100100	SeaBass 11 (1100W-1 1/2hp single phase)	•	•
SB1500100	SeaBass 15 (1500W-2hp single phase)	•	•
SB1508100	SeaBass 15 (1500W-2hp three phase)	•	•
SB2201100	SeaBass 22 (2200W-3hp single phase)	•	•
SB2208100	SeaBass 22 (2200W-3hp three phase)	•	•
316650	166 Aquaculture pump (2400W-3hp single phase)		•
316660	166 Aquaculture pump (2400W-3hp three phase)		•

Part number nomenclature

SeaBass series part numbering system

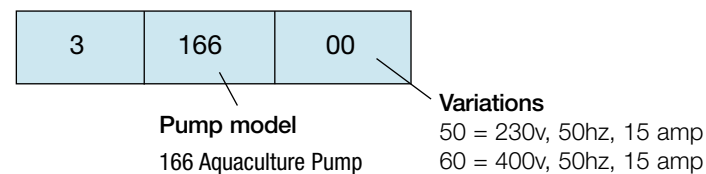
Pump model	Power supply	Approval
SB = SeaBass	0 = 230v, 50Hz, 10 amp	0 None
	1 = 230v, 50Hz, 15 amp	1 Australian
	2 = 220v, 60Hz, 10 amp	2 GS
	3 = 220v, 60Hz, 15 amp	4 Korean
	4 = 110v, 60Hz, 10 amp	
	5 = 110v, 60Hz, 15 amp	
	6 = 110v, 50Hz, 10 amp	
	7 = 110v, 50Hz, 15 amp	
	8 = 400v, 50Hz	
	9 = 380v, 60Hz	



Output
 X x 10 = Output watts
 73 = 730
 93 = 930
 110 = 1100
 150 = 1500
 220 = 2200

Variations
 As standard products covered by the first six digits require new variations the last two digits will be incremented and recorded.
 e.g. A special lead or packaging requirement.

166 Aquaculture series part numbering system

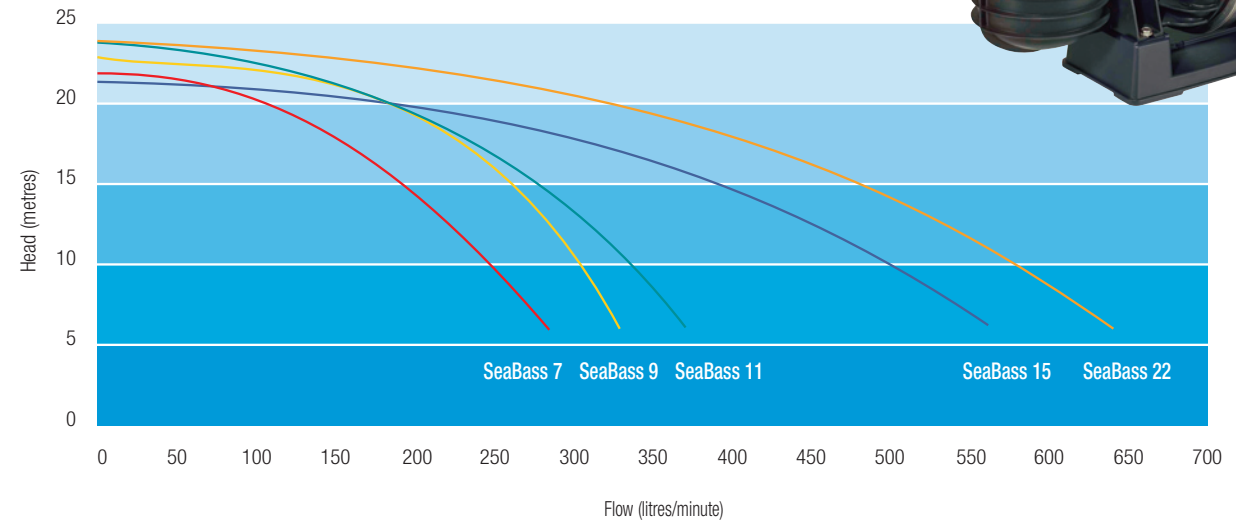


Date and serial number nomenclature

02	-	07	-	04261
YEAR	-	MONTH	-	UNIQUE SERIAL NUMBER

02 = 2002	01 = Jan	Numerical sequence, unique to each product
03 = 2003	02 = Feb	
04 = 2004	etc,	

Pump Performance Table



Features

Benefits

Running costs	Individual pump model running costs differ due to different motor power ratings. Based on efficiency, the running expense is a low 0.35¢ per cubic metre of water pumped (Calculated at 0.08¢ per kWh). Higher circulation rates at low energy input mean greater profits benefiting you and your business.
Corrosion resistance	Construction of the Wet-end is from precision moulded, industrial grade materials for corrosion resistance. The mechanical seal is specially selected for its ability to handle seawater. The motor is triple epoxy coated for increased protection and being a smooth shell, water will run off not accumulate anywhere, preventing possible weaknesses. The Pump base raises the motor and keeps it away from any ground moisture, creating a totally corrosion resistant pump designed for harsh environments.
Solids capability	The strainer basket captures foreign particles larger than 4mm in diameter and the internals of the pump will pass particles smaller than this, maintaining clear flow through the pump. The oversize basket means cleaning is less frequent and the clear lid allows you to check with a glance when cleaning is required. This means less downtime and greater earnings.
Reliable	Built for reliable operation 24 hours per day, seven days per week. Each individual component has been specified for rugged dependability to create a pump perfect for marine or freshwater Aquaculture.
High capacity	The highly efficient pump design delivers water up to 600 litres per minute for greater circulation. With 5 models in the range there is a model perfect for your application.
Service	Our Nationwide dealer network ensures spare parts are readily available. Accessibility for maintenance when required is quick and simple and requires few tools.

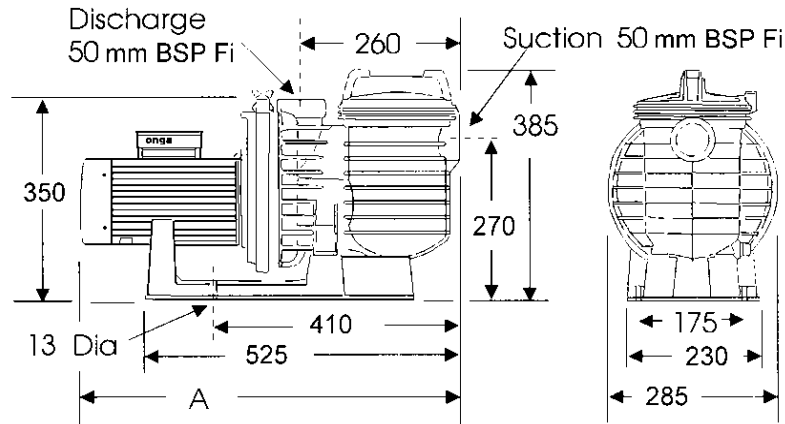
This pump is designed specifically for use in the Aquaculture Industry and is highly suitable for use in commercial swimming pool applications

Construction

Component	Material
Pump Casing:	30% GF Polypropylene
Seal Plate:	30% GF Polypropylene
Casing O-ring:	Nitrile
Impeller:	20% GF Polypropylene
Diffuser:	40% TF Polypropylene
Diffuser Screws:	316 S/Steel
Strainer Basket:	Nylon (5511)
Strainer Basket Lid:	Polycarbonate
Strainer Basket O-ring:	Nitrile
Drain Plug:	Polypropylene
Drain Plug O-ring:	Nitrile
Barrel Unions:	ABS
Barrel Union O-rings:	Nitrile
Motor Shaft:	316 S/Steel
End Shield:	Epoxy coated cast aluminium
Mechanical Seal (T21 3/4")	
Bellows:	Viton
Spring:	Stainless Steel
Rotating Face:	Silicone Carbine
Stationary Face:	Ceramic

Operating Conditions

Fluid:	
Maximum Working Pressure:	360kPa
Maximum Water Temperature:	35°C
Maximum Ambient Temperature:	55°C



Dimension Table

Pump Model	Dimension A (mm)				
	SeaBass 7	SeaBass 9	SeaBass 11	SeaBass 15	SeaBass 22
Single Phase	650	650	650	650	695
Three Phase	650	650	650	650	670

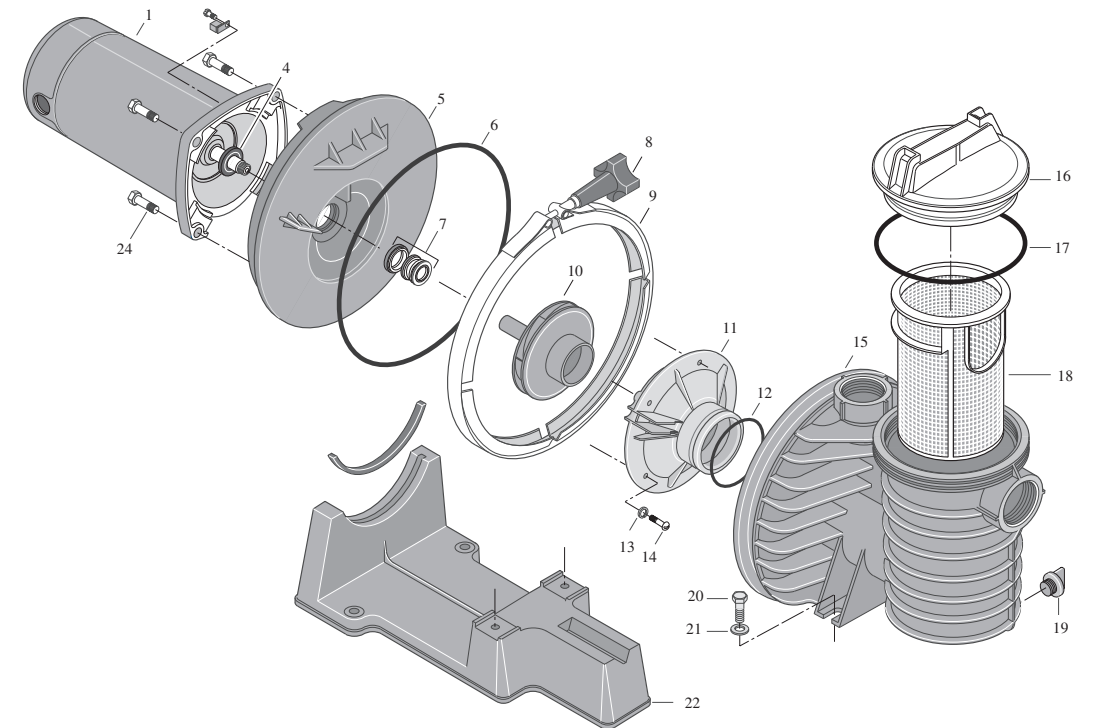
Note: Allow 160mm clearance height above the Strainer basket for cleaning and maintenance purposes. Unless otherwise specified all dimensions in mm, fixing slots accept 10mm fasteners.

Technical Data

Pump model	Sea Bass 7	Sea Bass 9	Sea Bass 11	Sea Bass 11	Sea Bass 15	Sea Bass 15	Sea Bass 22	Sea Bass 22
Type	TEFC 2 Pole							
Nominal Speed	2900							
IP rating	IP55							
Insulation Class	F							
Thermal Overload*	Inbuilt up to 1500W, Manual reset on 2200W*							
Temperature Rise	F							
Frequency (Hertz)	50							
Voltage	230-240 & 415							
Bearing Type	Deep groove ball bearing with double contact lip seal							
Bearing Temperature Rating	150°C							
Motor kW (hp)	.55 (3/4)	.75 (1)	1.1 (1.5)	1.1 (1.5)	1.5 (2)	1.5 (2)	2.2 (3)	2.2 (3)
Supply Voltage	240	240	240	415	240	415	240	415
Phase	1	1	1	3	1	3	1	3
Full Load Current (Amps)	4.1	4.4	6.5	2.7	9.0	3.5	11.6	4.3
Locked Rotor (Amps)	40	40	40	23	40	23	65	38
Capacitor mfd	20	20	30	-	30	-	40	-
Supply Cord Length (m)	3	3	3	-	3	-	3	-
Pump weight (kg)	22	22	24	26	24	26	28	28
Packed weight (kg)	24	24	26	28	26	28	30	30
Carton Dimension (L x W x H)	725 x 325 x 420	725 x 325 x 260	725 x 325 x 260	725 x 325 x 260	725 x 325 x 260	725 x 325 x 260	725 x 325 x 260	725 x 325 x 260

*415v 3 Phase requires fitting a suitable contactor and quick trip overload, fitted by a qualified person to local authority regulations.

SeaBass Aquaculture Pump



Model	SeaBass 7	SeaBass 9	SeaBass 11	SeaBass 15	SeaBass 22
Part number	SB710100	SB930100	SB110100	SB150100	SB220100
Description	1 hp(730W)	1 1/4 hp(930W)	1 1/2hp(1100W)	2 hp(1500W)	3 hp(2200W)

Items with suffix K are packaged for display

Item	Description	Qty	Part number				
1	Motor - 1PH	1	801370	801370	801370	801370	801371
	Motor 3Ph	1	-	-	-	801368	801369
4	Water Slinger	1	17351-0009	17351-0009	17351-0009	17351-0009	17351-0009
5	Seal Plate	1	C203-194PSS	C203-194PSS	C203-194PSS	C203-194PSS	C203-194PSS
6	O'ring - Body	1	U9-228A	U9-228A	U9-228A	U9-228A	U9-228A
7	Shaft Seal	1	702716	702716	702716	702716	702716
8	Clamp Knob	1	WC36-22	WC36-22	WC36-22	WC36-22	WC36-22
9	Clamp	1	C19-37A	C19-37A	C19-37A	C19-37A	C19-37A
10	Impeller	1	C105-238PPB	C105-238PRB	C105-238PSB	C105-238PLBAB	C105-238PHAB
10A	Impeller Screw Assembly 3Ph Only	1	37337-6080	37337-6080	37337-6080	37337-6080	37337-6080
11	Diffuser	1	411280K	411280K	411280K	411290K	411290K
12	O'ring - Diffuser	1	U9-374	U9-374	U9-374	U9-374	U9-374
13	Lockwasher	5	U43-21SS	U43-21SS	U43-21SS	U43-21SS	U43-21SS
14	Screw - Diffuser	5	U30-542SS	U30-542SS	U30-542SS	U30-542SS	U30-542SS
15	Tank Body Assembly	1	C176-59PW	C176-59PW	C176-59PW	C176-59PW	C176-59PW
16	Trap Cover	1	C3-185P	C3-185P	C3-185P	C3-185P	C3-185P
17	O'ring - Trap Cover	1	U9-375	U9-375	U9-375	U9-375	U9-375
18	Basket	1	C8-58P	C8-58P	C8-58P	C8-58P	C8-58P
19	Drain Plug & O'ring	2	800405	800405	800405	800405	800405
20	Screw - Base	2	SRU30-918SS	SRU30-918SS	SRU30-918SS	SRU30-918SS	SRU30-918SS
21	Washer - Base (Set of 20)	2	800151	800151	800151	800151	800151
22	Base with Motor Pad	1	C104-79P	C104-79P	C104-79P	C104-79P	C104-79P
24	Capscrew - Motor	4	702636	702636	702636	702637	702638
	O'ring for 10A (3Ph only)	1	35505-1426	35505-1426	35505-1426	35505-1426	35505-1426

Quantity column indicates maximum number of individual items per service repair. The part number given is for singular units unless otherwise stated in the item description. Drawings are indicative only, product appearance may change slightly.

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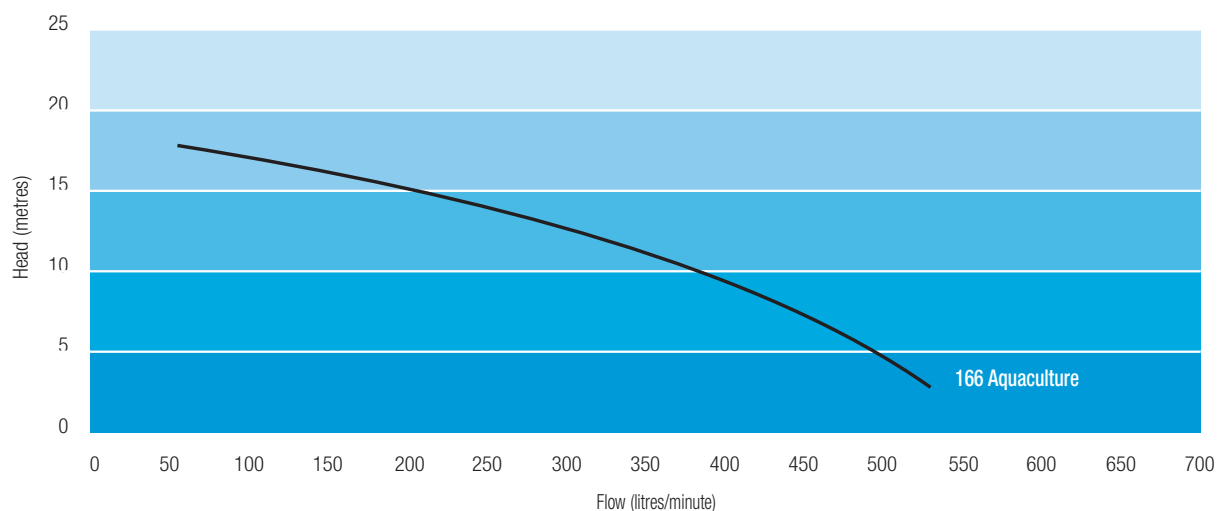
The Onga model 166, ideally suited to freshwater, self-priming pump features a built in suction strainer for ease of maintenance. The corrosion resistant internal wetted parts ensure a long life and reliable performance.

Typical Applications:

- Aquaculture
- Commercial Pool
- General water transfer
- Vegetable Washers



Pump Performance Table



Features	Benefits
Over size Motor	Ensures lower operating temperatures and longer life
Suction Strainer	Minimises maintenance with easy to remove see through lid
Moulded Construction	Ensures the pump is resistant to the elements and to corrosion
Manual Thermal Overload	Greater motor protection allowing you to rectify problems and lengthen service life.
High Flow	Allows higher turnover and lowers water transfer times.

Suitable for pumping clean non - aggressive liquids without solids or fibres in suspension.

Construction

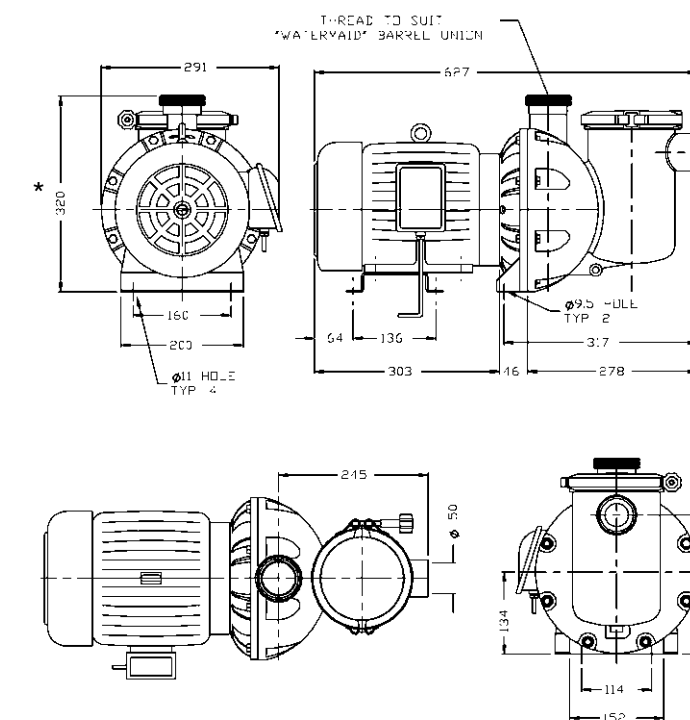
Component	Material
Pump Casing:	Polypropylene
Basket:	High Density PE
Lid:	Polycarbonate Natural
Clamp:	Stainless steel
Clamp Knob:	Acetyl
Casing Spigot:	Glass Filled Noryl
Baffle:	Glass Filled Noryl
Diffuser:	Glass Filled Noryl
Impeller:	Glass Filled Polycarbonate
Shaft Sleeve:	Nylon
Motor Shaft:	Steel
End Shield:	Cast Iron
Yoke:	Glass Filled Noryl
O-rings:	Nitrile
Priming/Drain Plug:	Polypropylene
Barrel Unions:	UPVC
Mechanical Seal, 3/4" Type 6	
Flexible Bellows:	Nitrile
Spring:	304 Stainless Steel
Rotating Face:	Carbon
Stationary Face:	Ceramic

Motor

Type:	TEFC
Nominal Speed:	2900 RPM
IP Rating:	IP 44
Insulation Class:	Class B
Temperature Rise:	Class B
Frequency:	50Hz
Voltage:	230-240
Bearing Type:	Deep Groove Ball Bearing with double contact Lip Seal
Bearing Temp. Rating:	150°C

Operating Conditions

Fluid:	
Maximum Working Pressure:	400kPa
Water Temperature:	70°C
Ambient Temperature:	50°C



*Additional 180mm required for strainer basket removal

Dimension Table

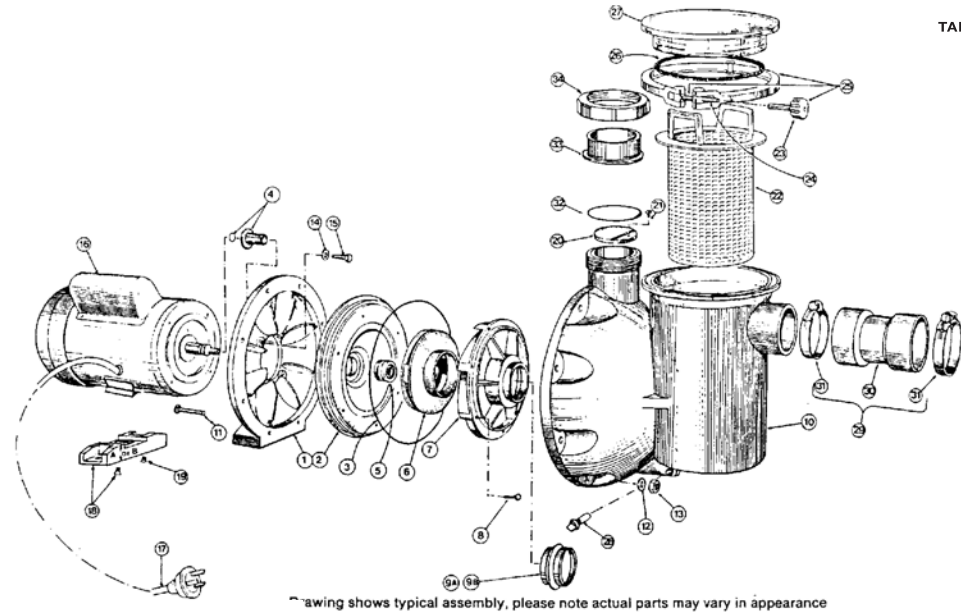
Pump Model	Suction Port (UPVC)	Discharge Port (UPVC)	Drain Plug (ESP Male)	Pump Weight (kgC)	Packed Weight (kg)	Carton Dimensions (LxWxH)
166 - 1 Phase	50mm	40mm	1/4"	38	44	710 x 355 x 385
166 - 3 Phase	50mm	40mm	1/4"	33	39	710 x 355 x 385

Note: unless otherwise specified, all dimensions in mm. Fixing Holes accept 10mm fasteners.

Model Data

Pump	Motor kW (hp)	Supply Voltage	Phase	Starting	Full Current (A)	Locked Rotor Current (A)	Output Power P ₂ (W)	Capacitor mfd	Supply Cord Length (m)
166	2.4 (3)	240	1	PSC	14	60	2800	30 (x2)	4
166	2.4 (3)	415	3	-	4.6	26.5	2800	-	-

*415v 3 Phase requires fitting a suitable contactor and quick trip overload, fitted by a qualified person to local authority regulations.



Drawing shows typical assembly, please note actual parts may vary in appearance

Items with suffix K are packaged for display

Model	166 1Ph	166 3Ph
Part number	316650	316660
Description	2.4kW	2.4kW

Item	Description	Qty	Part number	
1	Yoke	1	402061	402061
2	Baffle	1	403491	403491
3	O'ring - Casing	1	702180K	702180K
4	Shaft Sleeve Kit	1	800895K	800895K
5	Seal Kit (Incl. Seal + Item 4)	1	800583K	800583K
	Seal (Pack of 25)	1	800900	800900
6	Impeller	1	506383	506383
7	Diffuser	1	302461	302461
8	Screw (Set of 10)	6	-	-
9a	Seal - Diffuser/Casing	1	504000K	504000K
9b	Adaptor	1	503991	503991
10	Casing	1	301812	301812
11	Coach Bolt (Set of 10)	8	800254	800254
12	Washer (Set of 20)	8	800151	800151
13	Nut (Set of 12)	8	800163K	800163K
14	Washer (Set of 20)	4	800151	800151
15	Screw (Set of 10)	4	800097	800097
16	Motor	1	800446	800449
17	Lead - Motor 1PH	1	603350	
18	Base - Large Frame Motors	1	503340	503340
19	Screw (Set of 10)	2	800256	800256
20	Clacker	1	602950	602950
21	Screw (Set of 10)	1	800201	800201
22	Basket	1	301330	301330
23	Knob	1	601550	601550
24	Stud	1	601610	601610
25	Clamp Assembled	1	300631	300631
26	O'ring - Lid	1	702163	702163
27	Lid	1	502140	502140
28	Plug & O'ring	1	800222	800222
29	Coupling & Clips	1	800202	800202
30	Coupling	1	9114100	9114100
31	Hose Clip	2	700084	700084
32	O'ring (Pack of 4)	1	702193K	702193K
33	Union Tail	1	700676	700676
34	Union Nut	1	700675	700675

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Refer to owners manual for complete installation instruction.

Onga recommend the pump be mounted on a solid level, vibration free surface.

To maintain optimum performance from your pump, the suction pipe should be:

- Kept to the shortest length possible – place the pump as close to the water source as possible
- PVC or similar non-collapsible hose or pipe
- All fittings must be airtight
- Pipe should be equal to or larger than the diameter of the suction port
- Where possible install the pump below water level

To maintain optimum performance from your pump, the discharge pipe should be:

- Kept to the shortest possible length
- Of adequate diameter to reduce friction losses – avoid small pipes to maximise flow and pressure performance

Onga recommend the use of shut off valves in suction & discharge pipe to assist when maintenance is required. Closed loop systems (fig.1) or applications where the pump is installed vertically higher than the water source (fig.2) will require an additional check valve or footvalve.

Electrical

230 volt single phase motors are supplied as standard with built-in thermal overload protection and are designed to plug directly into a 10 amp domestic power supply to local electrical authority specifications (2.2kW,2.4kW - 15Amp Plug).

Caution: Pumps fitted with 415 volt three phase electric motors must be wired through a contactor incorporating quick trip type thermal overloads. Direction of rotation must be checked by switching power on momentarily and observing motor rotation. If the direction is not correct as per motor label have a qualified electrician make the change.

Recommended routine maintenance

- Check seal, if leaking replace with genuine Onga service parts.
- Regularly check o-rings and replace if worn or leaking
- Keep strainer basket free of debris by checking it regularly.



Ensure that your self-priming pump is filled with water before operating. NEVER run dry! Running pump dry may damage seals, causing leakage and flooding not covered by Onga warranty.

Figure 1

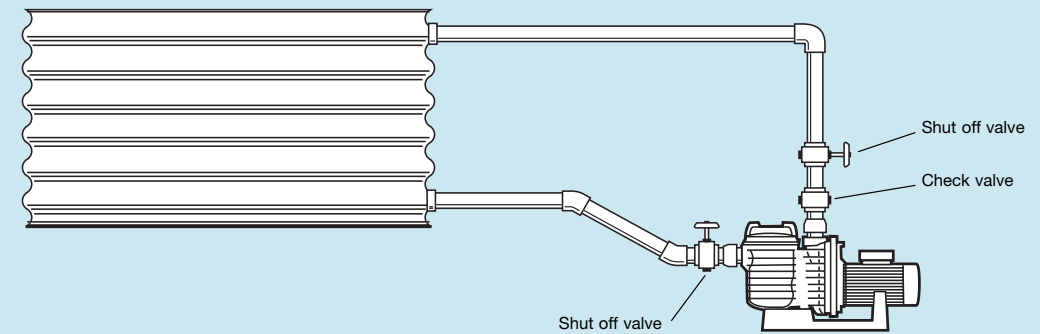
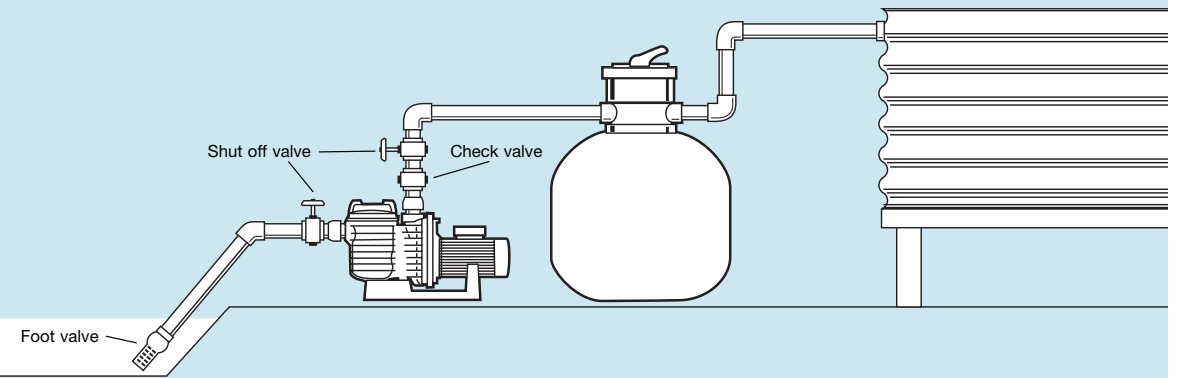


Figure 2



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Symptom	Cause	Remedy
Pump failure or reduced capacity or reduced discharge pressure.	Suction leaks / lost prime	Pump must be primed; make sure that the pump casing and strainer are full of water. Refer priming instructions.
		Make sure there are no leaks in suction piping.
		Make sure suction pipe inlet is well below the water level to prevent pump from sucking air.
		Suction lift of 3 to 6 metres will reduce performance. Suction lift of more than 6 metres will prevent pumping and cause pump to lose prime. In either instance, move the pump closer (vertically) to water source. Ensure that the suction pipe diameter is large enough.
	Clogged pipe / strainer / impeller, worn impeller.	Ensure basket is not clogged with debris; if it is, clean strainer & basket.
		Make sure that the impeller is not clogged. This should be checked by qualified personnel only.
		Impeller and diffuser may be worn. If so, check with your local Onga dealer or suitably qualified personnel.
		Pump operating against too high a head. Ensure pump is correctly sized for application.
	No power at outlet.	Use another electrical appliance that is known to work to check the power outlet.
	Blown fuse.	Check fuse and replace if necessary.
	Motor burnt out due to voltage spike or flooded by water.	The motor may need replacing.
Valves turned to the closed position.	Check the plumbing to ensure the valves are in the correct position for pumping on the suction and discharge.	
Air ingress to system.	Prime the pump. Check that there are no air leaks in the suction piping or fittings. Ensure the strainer lid is airtight and fitted securely. Check that there are no leaks evident from beneath the pump.	
Pump leaking from between the casing and motor.	Casing bolts are not tightened sufficiently; Casing O’ring is worn; Mechanical seal requires replacing; Casing clamp is loose.	Switch off the power to the pump. Loosen the casing bolts. Check the alignment and condition of the casing o’ring before retightening the bolts. Replace the o’ring if leaking persists.
		Replace the mechanical seal.

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Should problems persist, contact your nearest Onga service agent.