# CATA GROUP PTY LTD



MARINE GRADE

KOVA Pumps are manufactured for the marine industry and made to last. Leak free quality magnetic pumps can be used in all industries. In the marine industry they are mainly used for pumping seawater for marine air conditioning, refrigeration condensors, chilled water circulation lines, deck wash and boost pumps for water makers.

In fact anywhere you need to move large volumes of water with reliability and confidence with a pump you can trust.

**Anti-leak** 

Magnetic drive sealless pumps are free from leakage problems inherent with shaft pumps. No shaft connecting the impeller to the motor.

Wide range

The KOVA pump range comprises of several models starting from 16LPM / 251GPH up to 220LPM / 4022GPH.



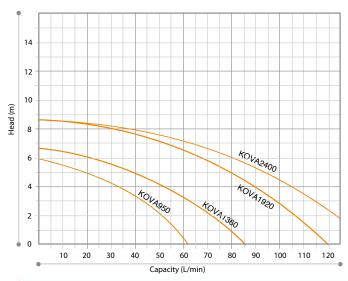
GFRPP (Glass filled reinforced polypropylene) pump heads are made for tough conditions and will not wear or be affected by electrolysis.

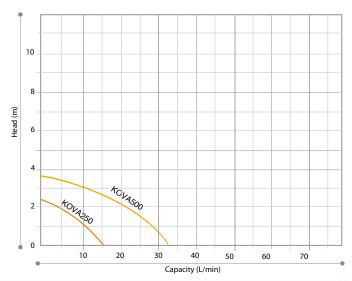
The KOVA Pump range is made for the tough marine environments. Stainless steel head bolts and screws.



Performance pump curve is at 240V/50Hz. All KOVA Pumps can be supplied as a designated voltage 240VAC/50Hz, 220V/240VAC-50/60Hz and 110VAC/60Hz

If using a 220/240V-50Hz/60Hz pump on a 240V-50Hz Cycle this will reduce the performance and flow rate by approximately 17%. Do not use a 50Hz pump on a 60Hz cycle. This will shorten the life of the pump. Using a 60Hz pump on a 50Hz is acceptable but with a reduced performance.

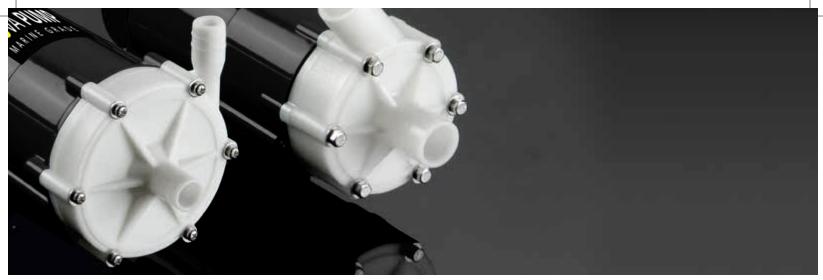


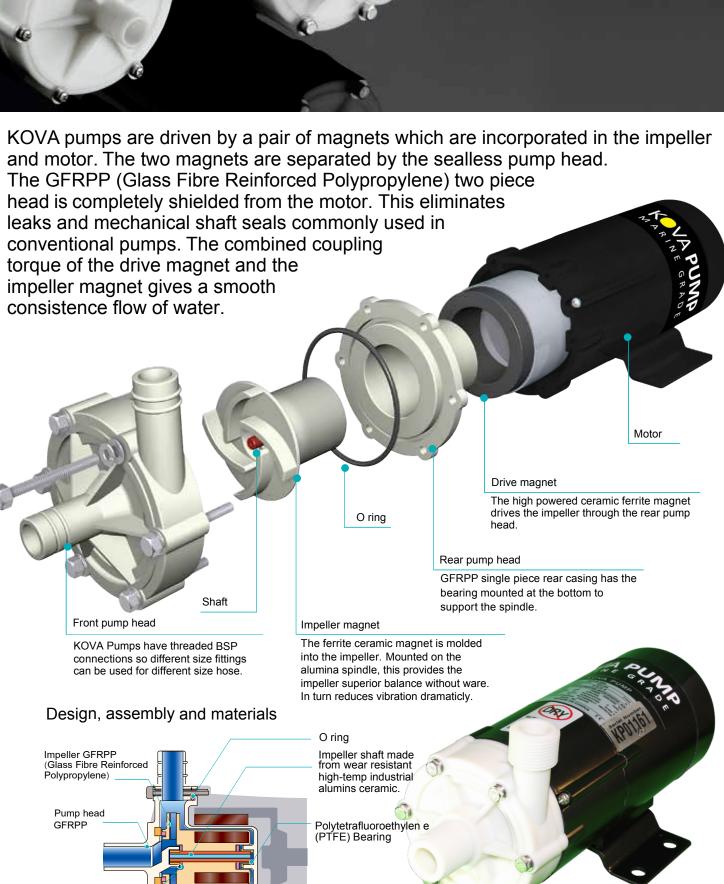


Model	AMP Draw			Thread Fitting		Max Head (Lift)		Max Flow		TAME	Weight
Model	240Vlt	110Vlt	380VIt	Metric	Imperial	Metric	Imperial	Metric	Imperial	Temp	vveigni
KOVA250	0.3	0.6	N/A	13mm	1/2"	2.4m	8ft	16Lpm	253Gph	0-80c	1.6kg
KOVA500	0.4	0.8	N/A	19mm	3/4"	3.8m	12ft	32Lpm	507Gph	0-80c	3.2kg
KOVA950	0.8	1.6	N/A	25mm	1"	5.6m	18ft	60Lpm	951Gph	0-80c	4.8kg
KOVA1360	1.2	2.4	N/A	25mm	1"	6.7m	22ft	86Lpm	1363Gph	0-80c	5.8kg
KOVA1920	1.9	3.6	N/A	25mm	1"	8.6m	29ft	120Lpm	1902Gph	0-80c	8.0kg
KOVA2400	2.1	4.2	1.9	38mm	1-1/2"	8.7m	30ft	152Lpm	2377Gph	0-80c	10.2kg

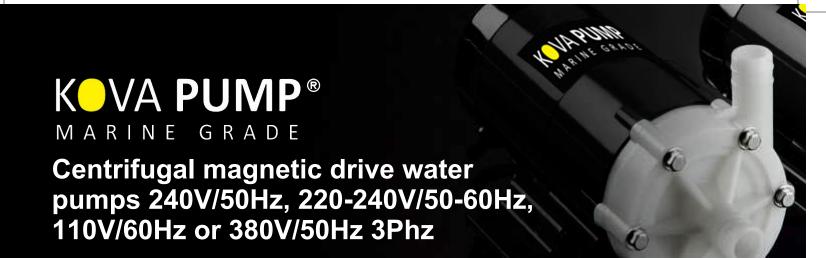
Water/liquid temperature range: 0-50°C Limit of viscosity: 30mPas (at 1 S.G.) Pump running temperature: 0-80°C. Motor type: Capacitor-run induction motor. Rated: Continuous running. Ingress protection IP54. The KOVA250 Pump has 1/2" hose tails. All other KOVA pump models have BSP threaded male inlets and outlets. All KOVA Pumps are specific voltage. Be sure to use the right pump for the right purpose. Centrifugal Magnetic drive pumps need to have a flooded head, installed under a water line for a gravity feed.







Impeller seat
Alumina ceramic



KOVA250



KOVA250 flow rate 251GPH or 16LPM 1/2" - 13mm Hose tail inlet and outlet. 1.6Kgs 220-240V or 110V

KOVA500



KOVA500 flow rate 497GPH or 32LPM 3/4" - 19mm Threaded inlet and outlet. 3.2Kgs 220-240V or 110V

KOVA950



KOVA950 flow rate 951GPH or 61LPM 1" - 25mm Threaded inlet and outlet. 4.8Kgs 220-240V or 110V

**KOVA1360** 



KOVA1360 flow rate 1363GPH or 86LPM 1" - 25mm Threaded inlet and outlet. 5.8Kgs 220-240V or 110V



**KOVA1920** 



KOVA1920 flow rate 1922GPH or 120LPM 1" or 25mm Threaded inlet and outlet. 8.0Kgs 220-240V or 110V

**KOVA2400** 



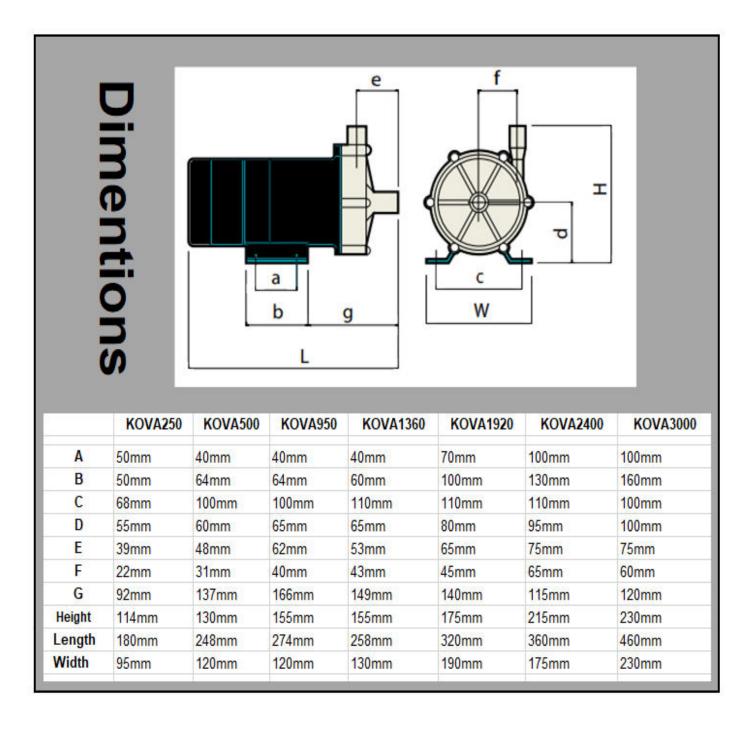
KOVA2400 flow rate 2402GPH or 151LPM 1-1/2" or 38mm Threaded inlet and outlet.10.2Kgs 220-240V - 110V also 380V 50Hz (3Phz)

**KOVA3000** 



KOVA3000 flow rate 3012GPH or 202LPM 1-1/2"or 38mm Threaded inlet and outlet. 13.1Kgs 220-240V-110V also 380V50Hz (3Phz)





**Note:** Some measurements are rounded up to the closest millimeters. Remember when sizing a KOVA Pump to fit consider your hose tail fittings.



MOUNT MODEL	RECOMMENDED WORKING LOAD PER MOUNT kg	BASE FOOTPRINT L X W mm	BASE BOLT CENTERS C mm	BASE BOLT DIAMETER d mm	NUMBER OF BOLTS	BASE THICKNESS t mm	BOLT DIAMETER mm	MIN FREE HEIGHT J mm	WEIGHT kg
M5-6	1.0-15	70 x 40	50	6	2	6	6	18	0.05
M6-6	1.0-30	91 x 52	65	6	2	8	6	20	0.1
M6-8	1.0-30	91 x 52	65	6	2	8	8	20	0.1
M6-10	1.0-30	91 x 52	65	6	2	8	10	20	0.1

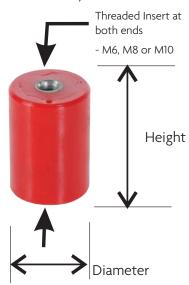
Heavy duty mounts for vertical installations also available.

#### Models: M5-6B & M6-6B



MOUNT MODEL	RECOMMENDED WORKING LOAD PER MOUNT	DIAMETER	BOLT DIAMETER	MIN FREE HEIGHT J	WEIGHT
	kg	mm	mm	mm	kg
CM6 (60) RED	1.0-40	22	6	32	0.02
CM6 (70) BLACK	20-50	22	6	32	0.02
CM8 (60) RED	15-50	27.5	8	34.5	0.04
CM8 (70) BLACK	40-80	27.5	8	34.5	0.04
CM10 (60) RED	15-50	30	10	40	0.07
CM10 (70) BLACK	40-100	30	10	40	0.07

Metric Coarse bolt thread, unless stated.





MARINE GRADE

Large volume Heavy Duty 380V/50Hz 3Phz
Magnetic drive pumps.
KOVA3K380 and KOVA4K380



Hi-Volume 380V/50Hz-3Phz KOVA Pumps are made for the heaviest of conditions. Unlike other big volume pumps with bronze heads and inpellers, the KOVA Pumps polypropylene head and impeller are super robust.

The KOVA3000 and KOVA4000 pumps have no shaft connecting the motor to the impeller. The combination of two magnets connecting the impeller to the motor delivers a smooth constant





"Bronze V Polypropylene"

flow of water. The TEFC motor (totally enclosed fan cooled) allows for maximum heat removal making the KOVA Pump able to operate in tight harsh environments. A quality heavy duty purpose built pump made for reliability, longevity and rated for continuous duty. Suited for chilled water circulation lines, air conditioning and refrigeration condensing or wherever you need to move big volumes of water.

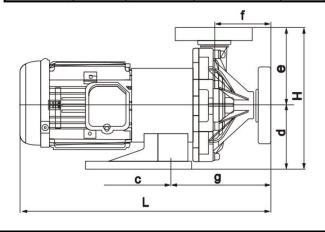


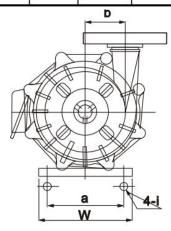




KOVA4K380 380VAC/50Hz-3Phz

Model	Voltage	Thread	ed Fittings	Watts	Amp	Max He	ead (Lift)	Max	Flow	Weight	Tomp
Would	380VIt	In (BSP)	Out (BSP)	vvalls	Draw	Metric	Imperial	Metric	Imperial	vveignt	remp
KOVA3000	3Phz	50mm / 2"	38mm / 1-1/2"	1500	3.9	8.6Mtrs	29Ft	195.2Lpm	3082Gph	32.0Kg	0.80C
KOVA4000	3Phz	50mm / 2"	38mm / 1-1/2"	2000	5.2	8.7Mtrs	30Ft	253.1Lpm	4009Gph	33.5Kg	0.80C





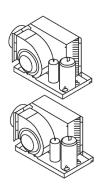
	Mesuments								
Code	3000	4000							
Α	208mm	208mm							
В	80mm	80mm							
С	200mm	200mm							
D	120mm	120mm							
E	160mm	160mm							
F	89mm	89mm							
G	157mm	157mm							
Height	280mm	280mm							
Width	260mm	260mm							
Length	516mm	516mm							



The KOVA KPR (KOVA Pump Relay) is used when you have two or more water cooled refrigeration or air conditioning units and you only want to use one pump. The KPR Pump relay is the answer. When you turn on any of the units connected to the KPR it will automatically turn a single pump on or off. Either of the 2 stage relay (KPR-2) or the 6 stage relay (KPR-6) will switch 110VAC, 220VAC or 240VAC. One solid state pump relay unit for all.



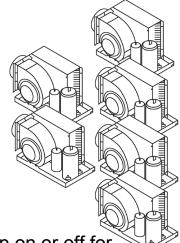




The **KPR-2** two stage relay will switch a single pump on or off for two seawater cooled air conditioning units or refrigeration units, or one of each. Also used for staged chilled water marine air conditioning systems.





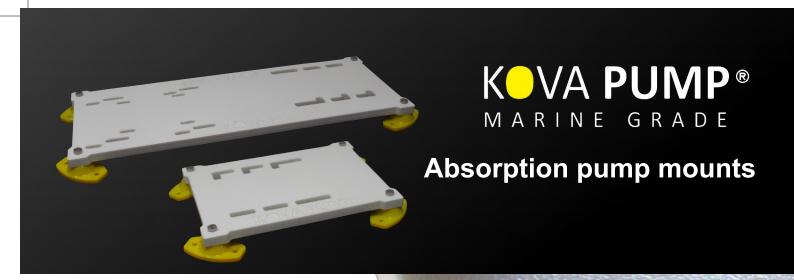


The **KPR-6** six stage relay will switch a single pump on or off for up to six air conditioning or refrigeration units. Also used for staged chilled water marine air conditioning systems.



KOVA Absorption mounts **KPM-1** (small) and **KPM-2** (large) are made to suit all the KOVA Pump range. The mount will not only remove any vibration or harmonic reverberation when a pump is fixed directly to a stringer or bolted down on a hull, but It will make for an easy installation.





KOVA Absorption mounts are supplied with all that you need. Stainless steel screws, washers and bolts along with 4 x Isoflex silicon isolation feet.

CNC machined from quality starboard, pre-drilled and cut for easy pump and strainer mounting.

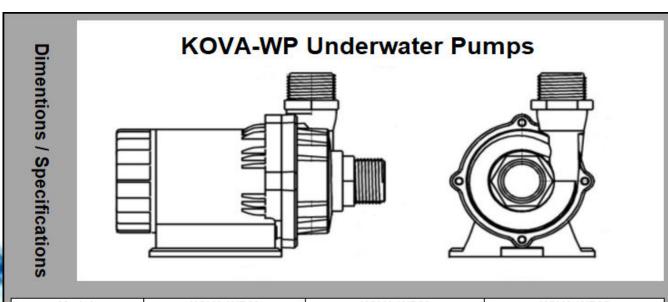






Fully Submersible Heavy Duty Magnetic Drive Pumps 12V, 24V, 110VAC, 240VAC

KOVA-WP Pumps (Waterproof) fully submersible pumps are made with pure sine wave technology. That makes them not only super reliable, but also completely silent. KOVA-WP Pumps have built in protection, when there is no water entering the pump they will shut off. The KOVA-WP is rated for continuous use and with an IP68 rating (ingerss protection) 100% waterproof, it's made to work underwater. Safety-nospark, Explosion-proof with zero corrosion casing. KOVA-WP Pumps are chemical pumps, so it can be used for descalers acid and alkali solution etc.. The KOVA-WP Pump range are super robust marine pumps that have been made for the harsh marine environment.



Model	KOVA-WP60	KOVA-WP80	KOVA-WP85
Flow Rate	55LPM - 3200LPH - 800GPH	110LPM - 6500LPH - 1600GPH	200LPM - 12000LPH - 3000GPH
Head	10 Meter	6.1 Meter	8.1 Meter
Voltage	12VDC - 24VDC	12V - 24V - 110V - 240V	12V - 24V - 110V - 240V
Amp Draw 12VDC	5.0 - 6.0Amp	6.0 - 7.0Amp	7.5 - 8.5Amp
Amp Draw 24VDC	2.0 - 3.0Amp	3.0 - 4.0Amp	4.0 - 5.0Amp
Amp Draw 110VAC	N/A	1.2Amp	1.3Amp
Amp Draw 240VAC	N/A	0.5Amp	0.6Amp
Watts@DC	80VV	90VV	150VV
Inlet Size	19mm - 3/4"	25mm - 1.0"	32mm - 1-1/4"
<b>Outlet Size</b>	19mm - 3/4"	25mm - 1.0"	32mm - 1-1/4"
Height	110mm	140mm	165mm
Length	160mm	190mm	220mm
Width	90mm	100mm	130mm

# **Underwater AC/DC Pumps**



Fully Submersible Heavy Duty Magnetic Drive Pumps 12V, 24V, 110VAC, 240VAC

- . KOVA-WP60 Can be supplied in 12VDC or 24 VDC
- . KOVA-WP80 / WP-85 can be supplied in 12V, 24V, 110AC, 220/240AC
- . KOVA-WP Pumps are completely water proof
- . Water protection with auto shut off
- . Made from fully corrosion resistance material
- . 3 Sizes 53Lpm, 110Lpm, 200Lpm
- . Perfect for bait tanks, DC Marine aircon or refrigeration units
- . Rated for continues use



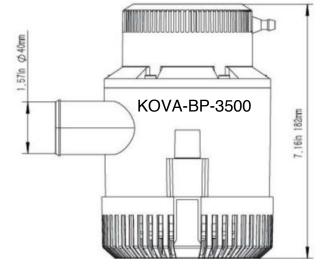


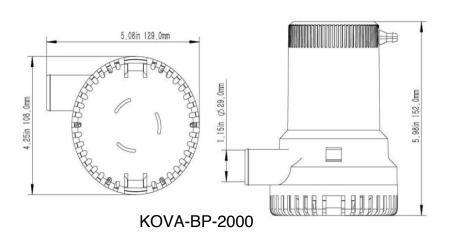
Heavy Duty Bilge Pumps 12VDC and 24VDC

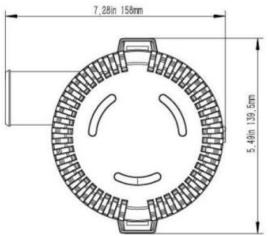
KOVA-BP (Bilge Pump) 12VDC & 24VDC The KOVA-BP is a heavy duty bilge pump

designed to de-water quick and super quiet.

- . 12VDC and 24VDC Compact design CE
- . Efficient long life motor with run dry
- . Standard industry mount
- . Stainless Steel shaft
- . Anti-Airlock protection
- . Fully sealed casing IP68
- . KOVA-BP-2000 (2000GPH)
- . KOVA-BP-3500 (3500GPH)
- . Quick disconnect base, easy cleaning







Model	Flow Rate	Voltage	Amp Draw	Head	Wire Lead	Outlet	Weight
KOVA-BP-2000-12	2000GPH	12VDC	8.5 Amps	5.0Mtrs	1.0Mtr	1-1/8"	1.22Kgs
KOVA-BP-2000-24	2000GPH	24VDC	5.0 Amps	5.0Mtrs	1.0Mtr	1-1/8"	1.22Kgs
KOVA-BP-3500-12	3500GPH	12VDC	16 Amps	8.0Mtrs	1.0Mtr	1-1/2"	2.4Kgs
KOVA-BP-3500-24	3500GPH	24VDC	8.0 Amps	8.0Mtrs	1.0Mtr	1-1/2"	2.4Kgs

### KOVA PUMP MARINE GRADE

Bilge Float Switch 12VDC 24VDC and 32VDC

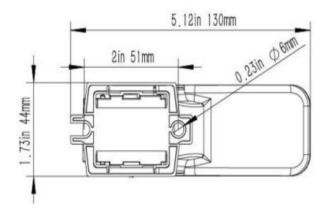


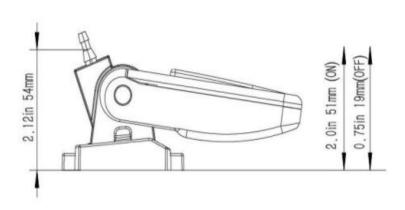
KOVA-FS (Float Switch)
Our KOVA heavy duty
float switch will turn on a
bilge pump when water

enters the hull then turn off after dewatering.

. CE, ROHS, ISO9001:2008 approved

- . Quality ABS, reliable ultrasonic welding
- . Switch on at 51mm and off at 19mm
- . Ignition protection with proven design
- . Removable snap on base for easy cleaning
- . Heavy duty construction for marine environments
- . Supplied in 12VDC, 24VDC and 32VDC Max 20Amps





Model	Voltage	Max AMP 12VDC	Max AMP 24VDC	Max AMP 32VDC	Cable	Gauge	Weight
KOVA Float Switch	12/24/32	20AMP	10AMP	7AMP	1Mtr	18AWG	0.2Kgs

## KOVA PUMP

MARINE GRADE

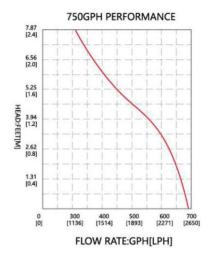
Shower Sump 750Gph with auto switching pump 12VDC 24VDC

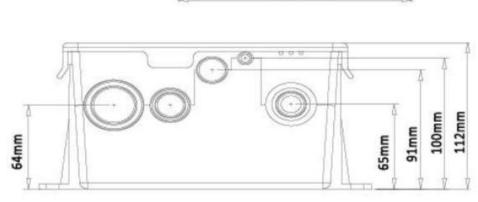


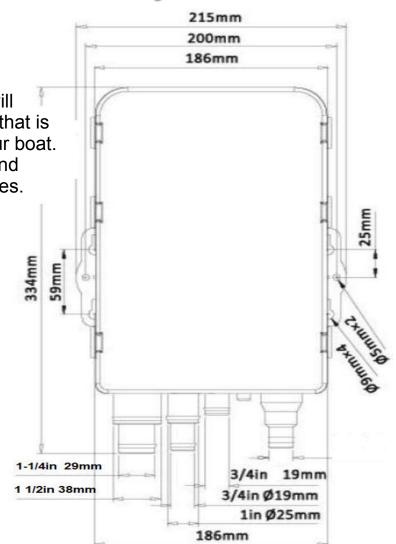
#### **KOVA-SS750 (Shower Sump)**

The KOVA SS750 shower sump will automatically pump out any water that is drained below the water line in your boat. Sealed for odour with a breather and multiple inlets for multiple hose sizes.

- . 12VDC 24VDC
- . Fully automatic
- . Ignition protected
- . Breather and 3 inlets
- . 750Gph, 2838Lph, 47Lpm
- . All in one pump and switch
- . Corrosion free
- . Removable pump for easy servicing and cleaning
- . Seawater and grey water
- . Pump turns on at 50mm and off at 20mm
- . CE Approved
- . low Power Consumption



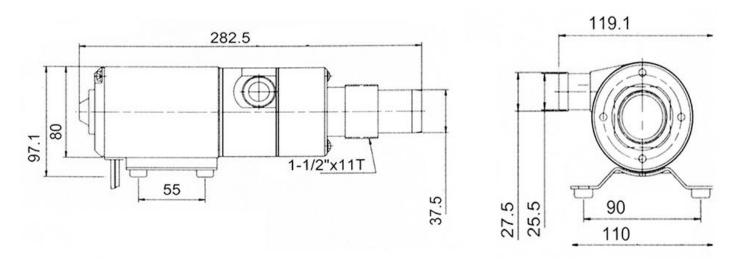






KOVA-MP (Macerator Pump) 12VDC, 24VDC, 220/240VAC & 110VAC Heavy duty Macerator pump that is self priming with a thermal overload cut off The KOVA-MP pumps are also able to be run dry for short periods of time. Stainless Steel dual cutting blades and a large 45Lpm.

- . 12/24VDC 220/240VAC 50/60Hz 110VAC 60Hz
- . Dual Stainless Steel Cutting Blades
- . Ignition Protected CE
- . 3.1" Self Priming Impeller
- . Industry Standard Mount Pattern
- . Low Power Consumption
- . Compact High-output Design
- . Run dry capability (no more than 20 seconds)
- . Inlet 1-1/2" Hose Tail or 1-1/2" NPT Male Thread
- . Outlet 1" Hose Tail
- . Fully Sealed Corrosion Proof Housing S/S Bolts



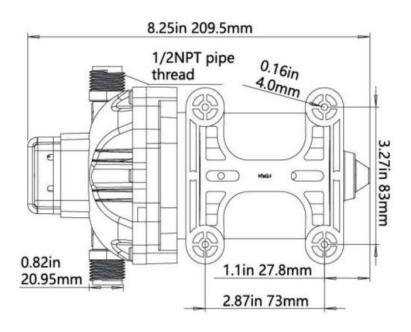
**Note:** AC version of the KOVA-MP Pumps 220/240 and 110V models are longer than the DC models 305mm Long (all other measurements are the same)



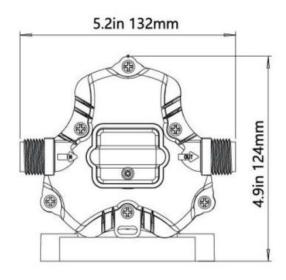
#### KOVA-PP-33 (Pressure Pump) 12VDC, 24VDC and 220/240VAC

This self priming pressure pump will lift up to 1.8 Metres and have a flow rate of **11.6** Litres every minute. The KOVA-PP-3 has a constant smooth flow of water at **45PSI**. Designed for Seawater or Freshwater.

- . Built-In bypass and on-demand pressure switch
- . Diaphragm design allows for short run dry capability
- . Self-priming up to 1.8mtr 6ft
- . Built-in thermal overload protection
- . Quiet operation with smooth flow
- . Santoprene diaphragm and EPDM valve
- . Ignition protected CE
- . Open flow up to 3.0GPM 11.6LPM
- . 1/2" 14mm NPT Threaded tails
- . Low power consumption
- . Fittings included





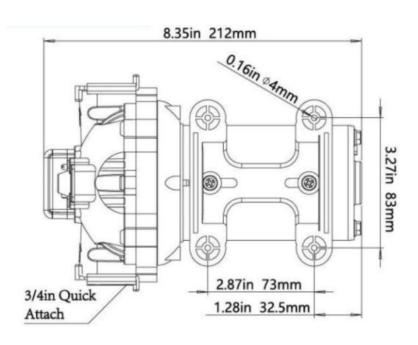


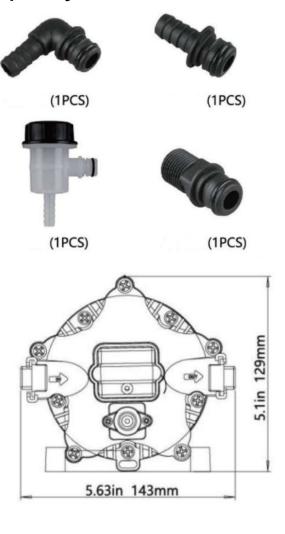


#### KOVA-PP-51 (Pressure Pump) 12VDC and 24VDC

This self priming pressure pump will lift up to 1.8 Metres and have a flow rate of **18.9** Litres every minute. The KOVA-PP has a 5 piston diaphragm, making for a constant smooth flow of water at **70PSI**. Designed for Seawater or Freshwater.

- . Built-In bypass and on-demand pressure switch
- . Diaphragm design allows for short run dry capability
- . Self-priming up to 1.8mtr 6ft
- . Built-in thermal overload protection
- . Five chamber diaphragm
- . Quiet operation with smooth flow
- . Santoprene diaphragm and EPDM valve
- . Ignition protected CE
- . Open flow up to 5.0GPM 18.9LPM
- . Quick disconnect fittings
- . Low power consumption















#### BISO STRAINER - bottom inlet / side outlet



#### Application:

Suitable for applications where a superior corrosion resistant stainless steel is required to filter liquids. Commonly used to strain seawater for engines, generators and HVAC systems in vessels.

#### Material

 Electro-polished AISI 2205 cast stainless steel

#### Features:

- Offset outlet for improved performance
- Quick and easy access for cleaning, no tools required
- BSP thread inlet and outlet, flanged strainers available on request

 Cast anode connection point to combat galvanic corrosion

#### **Options:**

- 316 Stainless steel basket
- Clear polycarbonate or solid lid

#### Sizes:

• 1" to 6" inlet / outlet

#### SISO STRAINER - side inlet / side outlet



#### Application:

Suitable for applications where a superior corrosion resistant stainless steel is required to filter liquids. Commonly used to strain seawater for engines, generators and HVAC systems in vessels.

#### Material:

 Electro-polished AISI 2205 cast stainless steel

#### **Features**

- Offset inlet and outlet for improved performance
- Quick and easy access for cleaning, no tools required
- BSP thread inlet and outlet, flanged strainers available on request

 Cast anode connection point to combat galvanic corrosion

#### **Options:**

- 316 Stainless steel basket
- Clear polycarbonate or solid lid

#### Sizes:

• 1" to 4" inlet / outlet

#### **BASKETS**



#### Application:

Baskets are designed for use in seawater cooling applications and comply with engine manufacturer specifications for screen size and flow rates.

#### Material:

 Baskets are available in ABS plastic or 316 stainless steel

#### Features:

 Baskets occupy the full height of the strainer body, maximising filtration surface area

#### Options:

- Available in ABS plastic, which is durable and impact resistant, or 316 Stainless Steel with a 2mm perforated hole
- ABS baskets are available for every size strainer
- 316 Baskets available for all sizes except 1" SISO

#### LIDS



#### Application:

Strainer Lids provide an air and watertight seal and have been tested for pressures well beyond typical marine use.

#### Material:

 Solid lids and retaining ring on clear lids are cast AISA cast stainless steel

#### Features:

 All Lids have a raised sealing ridge designed to fit directly onto the silicone gasket, eliminating the use of O-rings. Lids are quick and easy to remove, requiring no tools

#### Options:

- Solid lids available to meet survey requirements
- Also available as clear two piece lid with cast retaining ring and polycarbonate disc

#### **INLET STRAINERS**



#### Application:

Designed to scoop water into thru hull fittings when the boat is in motion, at the same time preventing large particles and debris from entering the marine systems aboard.

#### Material:

· Solid cast 2205 stainless steel

#### Features:

• Sand blasted surface finish for paint adhesion

#### Options:

- Scoop strainers available in sizes to suit 1/2" to 6" Thru Hull fittings
- Rose strainers available in two sizes: 90mm, 150mm

#### THRU HULL SKIN FITTINGS



#### Application:

Uniquely cast in 2205 stainless, specifically for underwater application.

#### Material:

· Solid cast 2205 stainless steel

#### Features:

· Mirror polished outside flange

#### **Options**

- Long reach fittings available in 3/4", 1", 1 1/2"
- Standard sizes from 1/2" to 4"

#### **BRACKET AND MOUNTING ARMS**



#### Application:

Brackets are designed to allow BISO strainers to be mounted on a vertical wall or bulkhead and in combination with the adjustable arm the bracket can be used to brace a BISO strainer that is mounted directly to Ball Valve.

#### Material:

• 316 Stainless Steel

#### Features:

- Single bracket required for model sizes 1" & 1.5"
- Two brackets required for models 2" to 4"

#### **Options:**

- Available for BISO models up to 4"
- Adjustable Arm sizes available in the following lengths – 100mm, 150mm, 200mm

#### **BALL VALVES**



#### Application:

For use with air, water, oil, gas and most chemicals. Locking device standard.

#### Material:

• Body - 316 SS, Seat - PTFE

#### Features:

· Full Bore, Female Female BSP thread

#### Options:

• 1/4" to 4"



#### Gobius<sup>®</sup> Level indicator

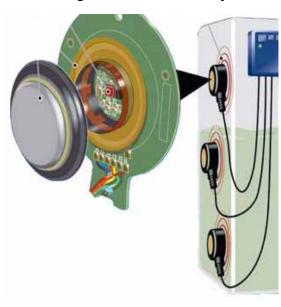
### MEASURES FROM THE OUTSIDE, NOTHING ON THE INSIDE!

# Welcome to Gobius Technology

Gobius level indicator kits are different. Never will you need to clean your black water tank level kit again. Gobius is an internationally patented, innovative product with technology that is best described as "knock and listen".

The Gobius sensor consists of a shaker that creates a vibration on the inside of the tank wall, that sends the signal to an accelerometer which measures the vibration. The data is then sent to the control unit that calculates the level that shows a reading from empty to 1/4, 1/2, 3/4 to full on the splash proof digital display.

This makes it possible to measure the level of any tank, size and shape no matter the condition inside the tank. Making Gobius perfect for sewage tanks or a great solution for any tank.





Fuel or Water Display



#### Gobius® Level indicator

### NEVER CLEAN YOUR FUEL, FRESH OR WASTE TANK LEVEL KIT AGAIN!

## Gobius can also connect to your old analogue gauge and is NMEA2000 compatible.

Gobius fuel, water and waste level kits have an analogue output so they can connect to your old gauges like VDO, Wema, Faria etc. In fact any gauge with a range of 0-180ohm 4-20ohm and 240-33ohm. Gobius is also NMEA2000 compatible so it can connect to products like Garmin, Raymarine etc, via a third party module (not supplied in Gobius kit)



### Gobius is very easy to install in minutes. DIY



No need for removing the tank.

No drilling holes in the tank.

No cleaning inside the tank.

No maintenance.

Coloured LED lamps shows the level.

Extremely low electricity consumption < 40 mA.

Support 12-24 Volts also AC 110v 240v on request.

Supports 0-5 Volt output for other industries.

Supports NMEA2000 Via adapter (not supplied).

Easy to integrate with EmpirBus NXT.

Can also be integrated with Ontech GSM module to

get an alarm on your mobile phone.

Will work through Stainless Steel, Mild Steel,1-3mm. Aluminium 2-5mm. Polyethylene, Polypropylene, in fact all plastics 2-12mm and Fibreglass 4-8mm.



Standard Gobius and Gobius Pro has the added feature of being able to turn a pump on when full and then turn off when empty or the other way around. Your choice (relay required). Audible buzzers and lights can be added for an extra feature.

Also be fitted to all versions of Gobius and Gobius Pro tank level kits.



### Gobius<sup>®</sup> Pro

## NEW

# A new revolution in tank monitoring with Bluetooth

#### "Tank Sensor Technology with Bluetooth"

Gobius could be explained by a "knock and listen" technology but it's much more sophisticated than that. A Gobius sensor projects a force on to the tank wall and causes a vibration.

An accelerometer is part of the sensor and it measures the vibrations. The processors algorithm calculates the vibration value each time the sensor performs a measurement.

The intelligent Gobius Pro sensor is mounted on the outside of a metal, plastic or fibreglass tank and measures from the outside, nothing inside. Easy install.

The Gobius Pro sensor can work alone on a tank indicating when a tank is full or empty, depending where the sensor is, top or bottom.

Or Gobius can be grouped together, up to nine sensors together on one tank giving a more accurate reading for more critical tanks like fuel or your fresh water supply.

Gobius Pro has built-in Bluetooth technology that works with a smart phone app (Android or iOS). Do all your settings on the phone. Monitor several tanks at one time, Fuel, Fresh, Hydraulic Oil or Waste.

Gobius Pro also has a flexible use voltage output for integrating audible alarms or flashing lights notifying you when a tank is full or empty. It can also switch relays to turn AC/DC pumps on or off.

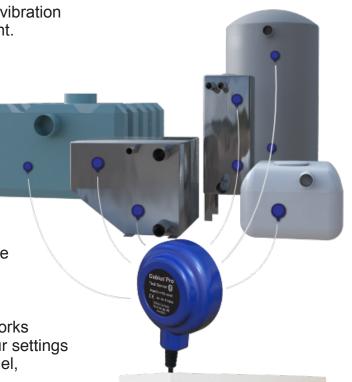
Gobius is also compatible with modern technology like NMEA2000 and CAM-Bus-Systems via the appropriate third party module. (not supplied with Gobius Level kits)

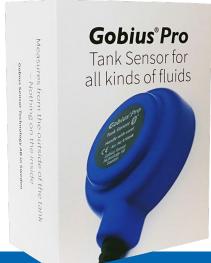






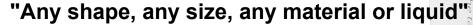






### Gobius<sup>®</sup> Pro

# Measures from the outside, nothing inside



The unique genius of Gobius Pro sensors is that they will automatically adapt to different tank materials and liquids. This makes for a quick, easy and uncomplicated install.

All customised setting are done on a smart phone or tablet. The Gobius Pro can work as a single stand alone unit to tell you when a tank is full or empty depending where it's mounted (top or bottom). Or multiple Gobius Pro sensors can be attached to the side of any tank and they will all communicate together, to give a more accurate measurement for critical liquids like fuel or freshwater. You can have up to nine Gobius Pro sensors grouped together to give up to ten levels of measurements. 5 Sensors will give you 6 levels of measurement and so on.

Gobius Pro has an additional direct current (DC 12V or 24V) output so you can add an AC or DC switching relays to turn pumps on or off. You could even turn a desalination system off when your freshwater tank is full etc. You can add audible alarms or flashing lights to warn when a freshwater tank is getting low or a sewage tank when it's getting close to full.

Gobius Pro is a very flexible product and will work with you. The choice is yours with flexible programming and easy installation. Programming and operation is very much a part of the development of the Gobius Pro technology.

A clever built in calibration function so you don't need to program the tanks material. Std steel, stainless steel, plastic, fiberglass or aluminum tank. Gobius Pro will work it out for you. You can even program Gobius Pro from it's start up installation with a full tank or an empty tank, no mater the liquid.













"Download the Gobius Pro App"

## Gobius® Pro Wireless Tank Monitoring

# A revolution in Tank Monitoring

The new Gobius Pro measures tanks of all kinds of materials and fluids from the outside. Now with Bluetooth communication built into every sensor. And a clever built in calibration functionality saves time and minimizes cost.











Sensor Technology with Bluetooth.

You could say "knock and listen" technology but it's more sophisticated than that. A Gobius sensor exerts force onto a tank wall and causes it to vibrate. An accelerometer is part of the sensor and it measures the vibrations. The processors algorithm calculates a vibration value each time the sensor performs a measurement

The Gobius Pro sensor is mounted on the outside of metal or plastic fluid tanks. No more mounting on the inside of the tank, no more drilling of holes. The sensor can work alone on a tank but also together with several Gobius Pro sensors.

The sensor has built-in Bluetooth communication for Android and iOS phones. In addition, the sensor has two outputs for integration, for example, in Bus-systems, control relays, lights or buzzers. Useful for all kinds of fluids, like freshwater, fuel, oil, grey/black water and waste water.



- Quick and easy installation
- Bluetooth communication
- 2 digital outputs, on/off signals
- Mounted on the outside
- No drilling of holes
- Easy to retrofit on an already installed tank
- Never in contact with the contents of the tank
- No risk for leakage
- Do all settings with your phone. Use 1 or up to 9 sensors on one tank for a more detailed measurements.

### Gobius<sup>®</sup> Pro

# A revolution in tank monitoring

Now you can now have a new simple easy to see display for your Gobius Pro, without using the smart phone Application. This will tell you at a glance when your tank is full.

The Gobius Pro can also turn a toilet system off or pump out systems on when the tank is full and off when the tank is empty. (via a relays)



With the Gobius HUB you can now connect up to 5 Gobius Pro sensors to any tank and display an accurate 6 level tank read on an analog gauge such as Faria, KUS, VDO, Wema or any other gauge that can read 10-180 Ohm or 240-33 Ohm. Or the HUB can be integrated to any NMEA2000 system Via the Gobius NMEA Adaptor. Now it can be connected to Raymarin, Simrad, Garmin etc.. It is also compatible to CAN BUS systems.

The new Gobius NMEA2000 adaptor will make your Gobius Pro or Gobius 4 compatible to your onboard computer system, like Raymarine, Simrad, Garmin etc...

Most modern Marine computer systems are compatible with NMEA2000 making for a fully integrated tank monitoring solution.





"Download the Gobius Pro App"



## **Marine Air conditioning**

#### Self contained air conditioning:

SAC Marine air conditioning units have a compact neat design making them great for tight spaces and a lightweight construction for easy handling.

A rotatable blower makes changing the fan direction simple. The fan can also be removed and re-attached for easy installation via small access hatches. Reverse cycle for customised climate control from heating to cooling. Planet friendly 410 gas and equipped with sensors for safety. Efficient power consumption with vibration mounts and anti corrosion copper nickel condensing coil. Rust free components for harsh marine environments.



Elegant digital display with simple adjustments.





Technical Parameters	S									
Model Number		SAC6/220	SAC8/220	SAC10/220	SAC12/220	SAC16/220	SAC18/220	SAC24/220	SAC36/220	SAC48/22
Cooling Capacity	BTU	6000	8000	10000	12000	16000	18000	24000	36000	48000
Heating Capacity	BTU	6300	8500	10800	13500	17600		27500	42500	51500
Power Source	220/240	220/240	220/240	220/240	220/240	220/240	220/240	220/240	220/240	220/240
Hz Cycle	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz	50Hz
Cooling Power (KW)	Kw	0.51	0.78	0.83	0.98	1.17		1.75	2.8	3.4
Heating Power (KW)	Kw	0.66	0.81	0.96	1.15	1.36		2.22	3.2	4.1
AMP Draw (Cool)	amp	2.2	3.2	3.5	4.2	5.1		8.5	12.5	15.5
AMP Draw (Heat)	amp	2.8	3.8	4	5.2	6.5		10.6	15.6	18.6
Airflow	(m3/h)	380	500	580	600	730				
Refrigerant	(Gas)	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a	R410a
Dimensions (High)	Metric	280mm	280mm	300mm	300mm	340mm		460mm	460mm	460mm
Dimensions (Wide)	Metric	240mm	240mm	285mm	285mm	315mm		400mm	440mm	480mm
Dimensions (Long)	Metric	400mm	400mm	480mm	480mm	520mm		605mm	645mm	750mm
Duct Outlet	Imperial	4"	4"	5"	5"	6"		8"	8"	10"
Duct Outlet	Metric	100mm	100mm	125mm	125mm	150mm		200mm	200mm	250mm
Seawater line	Imperial	5/8"	5/8"	5/8"	5/8"	5/8"		3/4"	3/4"	3/4"
Seawater line	Metric	16mm	16mm	16mm	16mm	16mm		19mm	19mm	19mm
Weight	Kilos	17.5Kgs	25.5Kgs	28Kgs	30Kgs	33Kgs		58Kgs	66Kgs	78Kgs

## Marine Air conditioning

We can provide every thing you need for a full installation, discharge grills, return air grills, duct, pumps. We can even supply skin fittings, strainers, water hose and clamps.



#### **Split System:**

A tough and reliable marine split air conditioning system, built to last in the harsh marine environment. Corrosion resistant, light weight and quiet. The most ideal systems to have on vessels with big areas to cool, or 3 or 4 areas to be cooled, like cabins all at the same temp with one compressor and multiple blowers. Split System air conditioners are made with copper nickel condenser tubing and stainless steel trays, both with two drain ports. The condenser must be installed in the bilge, engine room or utility room where the units are sea water cooled. The condenser is purely pumping R410a refrigerant around the boat to the fan coils. The fan coils can be installed in the cabin or under the berth where they are able to supply cooling or heating.



Compressor/Condensor

Evaporator/Blower

# MASTER VENT Holding Tank Odour Filter

Sewage holding tanks need to be vented. The best way for your waste tank to breathe and remove the bad smell known as Hydrogen Sulfide (H2S) is to have a quality impregnated Activated Carbon filter in the vent line. Master Vent is purpose made for maximum removal of H2S odours.

Master Vent is an industrial grade OxPure Activated Carbon filter that is impregnated with Potassium Hydroxide (KOH). This is the same impregnated Activated Carbon used in commercial municipal sewage treatment plants in Australia, USA & Europe.

Australian made and designed for easy installation by having a multiple staged tail for different size hoses 16mm-5/8" 19mm-3/4" 25mm-1" 38mm-1 1/2".

Master Vent comes with a mount kit, but for easy change over it will also fit into other brand brackets like Sealand, Dometic, Airforce etc.

Filled with 350 grams of OxPure industrial grade impregnated Activated KOH Carbon makes Master Vent one of heaviest and longer lasting odour filters on the market.



# MASTER VENT Holding Tank Odour Filter

# Don't be fooled, there is a difference..



Master Vent uses a quality industrial grade OxPure 4B-KOH Activated Carbon that is impregnated with Potassium Hydroxide. Made specifically for removing the maximum amount of H2S odours.



Most other brands use a standard Non impregnated carbon. The same commonly used in fish tank filters.



Master Vent has a 25PPIQDF moisture resistant foam filter in each end for a smooth clear air flow. The outer housing and tails made from a tough PN9PVC for harsh environments. Master Vent 440mm Long x 65mm Wide.



CATA Group unit 5/13 Expansion Street Molendinar, Queensland, Australia 4214 Office 07 5539 6439 Mobile 0424 623 743 info@catagroup.com.au catagroup.com.au

"Advertising sells the first product, service sells the rest"