

Regent pumps

A U S T R A L I A

founded 1948

RPAP Series

Submersible Aerator for Waste Treatment



Waste

Water

Treatment

Fish Farm

..... all about moving fluids

RPAP Series Self-aspirating submersible aerators for wastewater and water treatment in municipal and industrial plants. Main areas of application are mixing and equalisation tanks, activated sludge tanks, SBR-reactors and sludge storage tanks at a water depth between 2 to 8.5M

The aerator is free standing on the bottom of the basin and hence can be installed without emptying the basin. The aerator is characterised by a very low noise level and no aerosol formation. The aeration produces fine bubbles and the oxygen transfer factor is high.

APPLICATIONS



❖ **Waste Water Treatment**



❖ **Fish Farm**

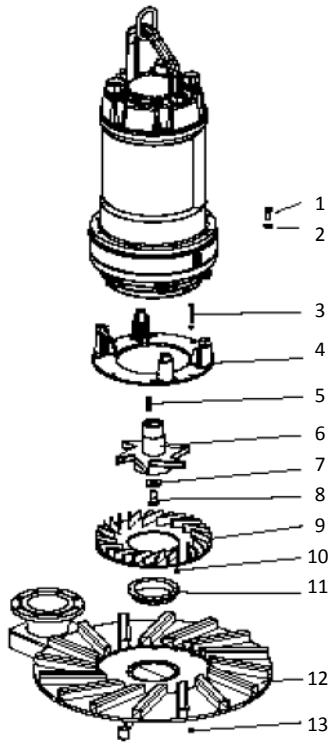


KEY FEATURES

Quick installation on existing tank without emptying

- ✦ Good SOTR (oxygen transfer)
 - ✦ Good SAE (Aeration efficiency Values)
 - ✦ Self cleaning system
 - ✦ Replaceable wear parts
 - ✦ No sedimentation and no aerosol effect on the bottom of the basin
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- ❖ Biological oxidation – suitable for all gas-liquid reactions at temperatures below 70 °C and pressure below 2 bar absolute
 - ❖ Sludge stabilization and digestion – avoidance of odour problems as well as further oxidation of organic substances
 - ❖ Mixing and equalization – equalizing of wastewater pollution load and wastewater quantities as well as avoidance of odour problems.
 - ❖ Oils and grease flotation
 - ❖ Neutralisation of alkaline wastewater with CO₂ or flue gas

RPAP Series Submersible Aerator

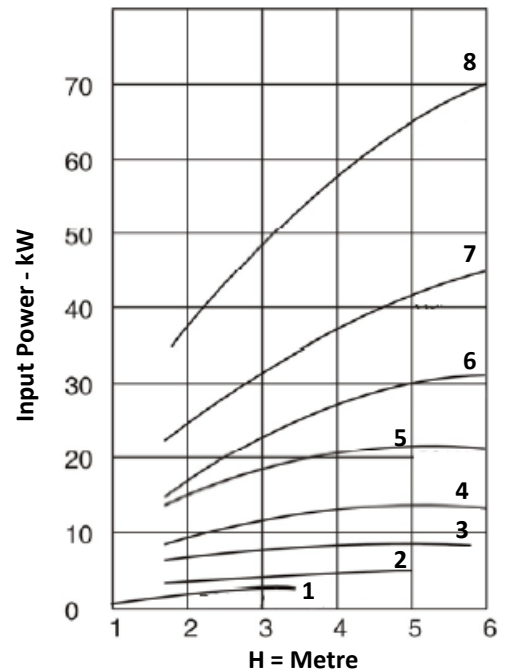
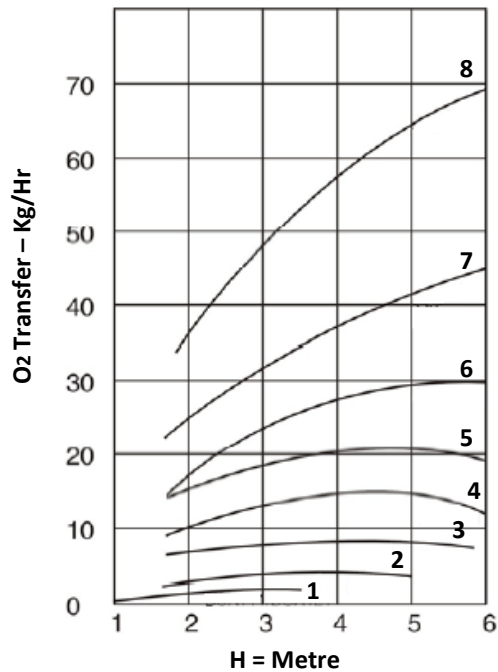


Part List

Item	Part Descriptions
1	Screw with Hex nuts
2	Washer
3	Screw
4	Motor support Frame
5	Key
6	Impeller
7	Impeller washer
8	Impeller screw
9	Channel Ring
10	Washer
11	Bush
12	Hydraulic stator
13	Support foot

Part Description	Material	DIN Standard
Motor casing	Cast Iron	GG20
Shaft	Stainless Steel SS420 Stainless Steel SS316	1.4021 1.4401
Mechanical Seal	Upper - SiC/SiC Lower - WuC/WuC	
Impeller	Stainless Steel SS304 Stainless Steel SS316	1.4301 1.4401
Hydraulic Stator	Black Steel Stainless Steel SS304 Stainless Steel SS316	1.4301 1.4401
Channel Ring	Cast Iron	GG 20

Performance Curve



Curve	Model	Aerator Area - Diameter in Metre
1	RPAP-101 RPAP-121	3 4
2	RPAP-151	6
3	RPAP-301	8
4	RPAP-601	10
5	RPAP-901	11
6	RPAP-1200	12
7	RPAP-1800	14
8	RPAP-2400	16



RPAP Series

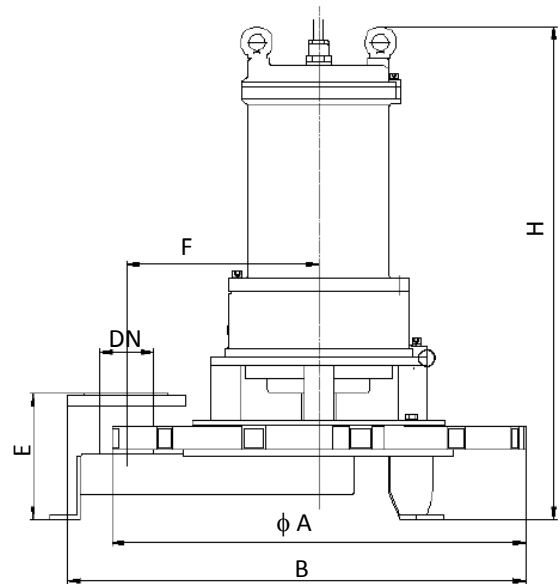
Submersible Aerator

Technical Data – 50Hz Supply

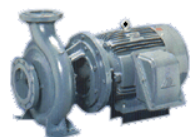
Model	RPAP101		RPAP121		RPAP151		RPAP301		RPAP601		RPAP901		RPAP1200		RPAP1800			RPAP2400	
Motor – kW	0.75	1.0	1.5	2.2	3.0	4.0	6.0	9.0	11	15	18.5	22	22	30	37	45	55	55	75
Speed -rpm	2850	1470																	
Voltage - V	220/380		380																
Current - A	5.6/2.2	7.5/3.2	4.0	6.0	7.8	8.8	13	20	24	32	40	45	45	62	73	86	99	99	137
No of Phase	Single/Three		Three																
Ins Class	F																		
Max submerged Depth – m	2	2.5	3	3.5	3	5	4	6	4	7	4.5	8	3	6.5	4	6	8.5	4.5	7.5
Max air Input m3/Hr	10	15	22	40	50	70	120	170	260	330	400	450	480	500	600	650	700	850	950
Approx Wt- kgs	30	30	55	75	80	95	180	180	280	280	400	400	420	450	470	490	550	570	590

Dimensions Data

Model	ϕ A	DN	B	E	F	H	
RPAP101-075-2	390	DN40	405	65	165	485	
RPAP101-10-2							
RPAP121-15-4	420	DN50	535	200	240	550	
RPAP121-22-4						615	
RPAP151-30-4	550		635	205	300	740	
RPAP151-40-4							
RPAP301-60-4	690	DN80	765	210	320	815	
RPAP301-90-4							
RPAP601-110-4	720	DN100	870	240	400	1045	
RPAP601-150-4							
RPAP901-185-4	840	DN125	1050		500	1100	
RPAP901-220-4							
RPAP1200-220-4	950	DN150	1180	260	560	1250	
RPAP1200-300-4						1300	
RPAP1800-370-4						1550	
RPAP1800-450-4							
RPAP1800-550-4							
RPAP2400-550-4	1050	DN200	1345	285	650	1600	
RPAP2400-750-4						1700	



Other Regent Pumps Range



Dinbloc /ISObloc
Direct Coupled



Dinflow/ISOflow – Bare Shaft



Linebloc- DIN/ISO



RPTS-Single or Multiple outlets –
Horizontal Multistage Pump



Vertical Turbine Pump
Submersible Pump



RPZ – API610



RPAH– Slurry Pump



Megaflo
Horizontal Split case



Self-Priming



RPSP Submersible
Sewage Pump



VSD's Booster Pump
System



Engine Drive Fire Pumps



Trailer Pump Engine Driven

Regent Pumps – Wide Ranging Applications



- ☐ Agricultural Irrigation
- ☐ Water treatment / RO System
- ☐ Mining
- ☐ Oil & Gas
- ☐ Power Station
- ☐ Marine Fire Fighting to FiFi I, II & III
- ☐ Palm Oil
- ☐ Chemical Plants
- ☐ Commercial / Industrial Buildings / Factory
- ☐ Leisure Park / Fountains
- ☐ Site Drainage
- ☐ Public Utilities Pumping Stations
- ☐ Sewage Plants
- ☐ Food Industries
- ☐ Marine – sea water pumps

✓ Quality

✓ Quick Delivery

✓ Reliability

✓ Customer Specific Need

Available From

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