



2024

Pool technologies and solutions



swimming pool  
**private** > premium



Your own pool

For the simple  
joys of life.



# Key

## Circulation pumps



### Performance

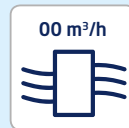
The maximum amount of water that can be transported by a pump. Specification in cubic metres per hour (m<sup>3</sup>/h). 1 cubic metre = 1,000 litres.



### Motor control

Type of external motor control:  
D - Digital potential-free  
A - Analogue 0-10 V and 4-20 mA  
R - RS485

## Counter swim units



### Performance

The maximum amount of water that can be transported by a pump. Specification in cubic metres per hour (m<sup>3</sup>/h). 1 cubic metre = 1,000 litres.



### Pool type - above ground

The pool type for which a counter swim unit is suitable. Above ground pools are free standing pools on a level surface.



### Pool type - partially-submerged

The pool type for which a counter swim unit is suitable. Partially-submerged pools are partly built-in to the ground.



### Pool type - built-in

The pool type for which a counter swim unit is suitable. Built-in pools are completely submerged in the ground.



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Current BADU news

Sophistication

Five star pool  
technology:  
in performance,  
quality and design.





Since the early 1960s the BADU brand has been linked with everything that brings a pool to life: pumps, counter swim units and massage nozzles. Filter units, swimming pool solar panels, regulators, control units, backwash units etc. The well-known BADU quality is what brings them all together. If you're looking for the best, then BADU is absolutely right for you.



**BADUJET Primavera Deluxe >**  
Submerged counter swim  
unit made completely from  
stainless steel.  
Page 96



### **BADU Green**

Enjoy your pool with a clear conscience whilst saving energy and protecting the environment. The efficient and intelligent BADU Green products use innovative technology for maximum sustainability in production and operation. The aim is always to run your swimming pool as environmentally and economically friendly as possible.

### **Product warranty**

Every BADU product comes with a 2 year warranty. If something does not function as intended, please contact your specialist dealer or the BADU customer service. More information under [badu.de](http://badu.de)

Get started

4

It's so simple  
with BADU.

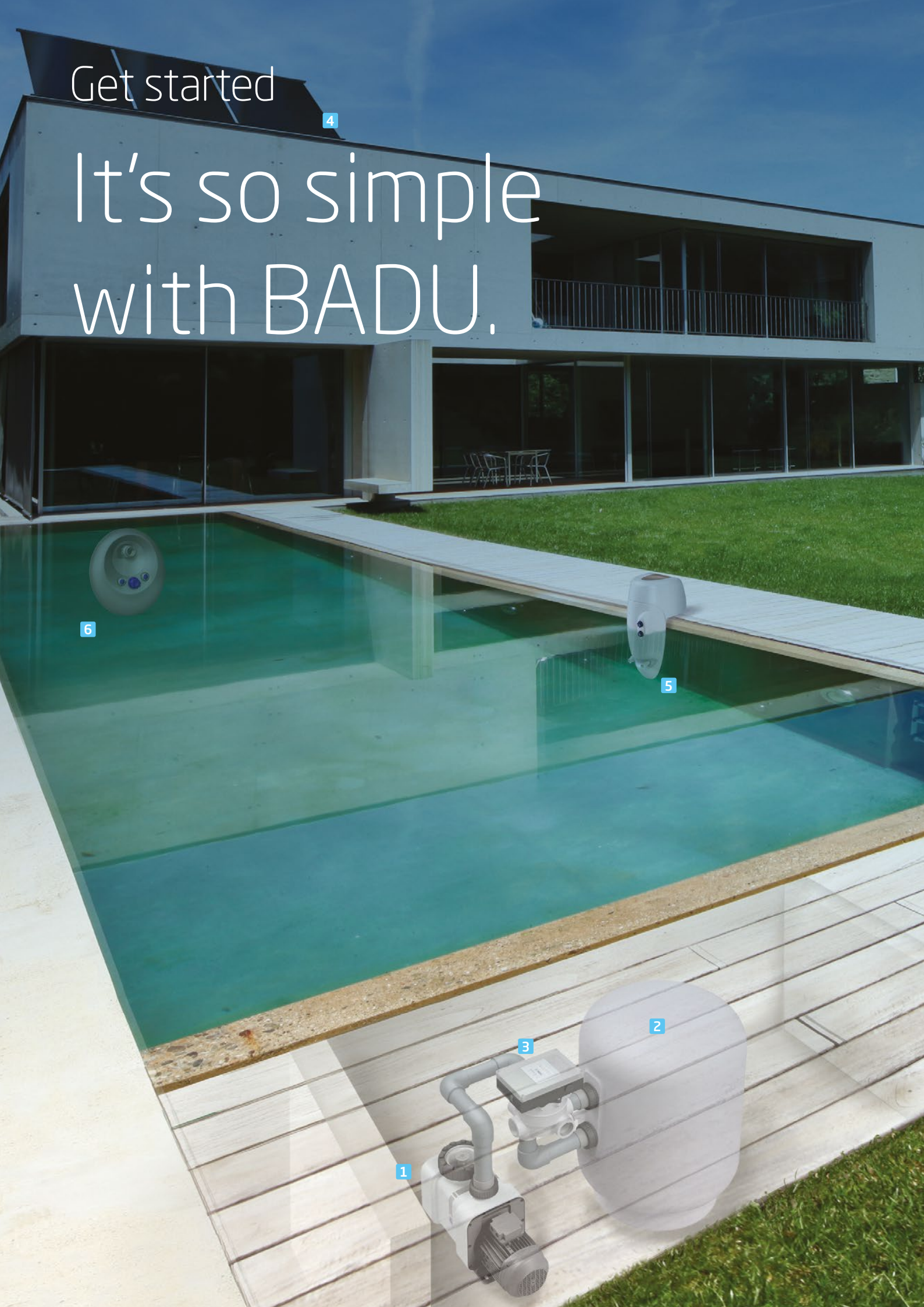
6

5

1

3

2







How long have you been dreaming of your own pool?  
Make your dreams come true – it's much easier than you think.  
The modern BADU technology takes away all of the risks  
and problems that are often associated with a private pool.  
Enjoy your pool - the place where you can relax and workout  
that you never want to give up.

### How a pool works

The heart of your pool is the circulation pump (1).  
It generates a water cycle for fresh and hygienic water.  
Pool water is pumped into the filter (2) via a skimmer or  
floor drainage and is cleaned mechanically. The clean  
water flows back into the pool. An automatic backwash  
valve (3) is integrated in order to control the intake of pool  
water and clean water and to clean the filter.

On its way back into the pool, the clean, filtered water  
can also be bypassed through the solar panel (4).  
It is warmed by the sun and then led back into the pool.  
If the water temperature is sufficient the bypass can even  
be separated from the water cycle fully automatically.

Counter swim units provide flowing water.  
There are systems which hang over (5) the pool wall  
or ones which are built-in (6) to the pool wall.  
A power supply is all you need for both installation types.  
The pump installed draws water from the pool and returns  
it directly to the pool via jet nozzles.

### BADU pool technology

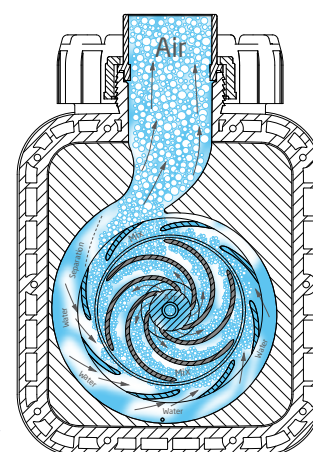
- 1 Circulation pump
- 2 Filter (all manufacturers and brands)
- 3 Automatic backwash valve
- 4 Solar panel
- 5 Overhang counter swim unit
- 6 Submerged counter swim unit

### How a pump works

Today centrifugal pumps are normally used in private  
and public pools and swimming baths. There are two  
different models:

Self-priming pumps can be placed above or below  
the water level. Following initial filling, they can draw in  
water independently and are able to pump the air found  
in the pipe out of the water cycle.

Non-self-priming pumps can only be placed below  
the water level. The air drawn in, for example if the pump  
is used to operate a pool cleaner, leads to a breakdown in  
the pump's performance and the pump has to be refilled.



Functional diagram  
Cross section of the  
BADU Delta, self-priming,  
centrifugal pump.

# BADU® pool products



**BADU Bronze**

Performance: 7-30 m<sup>3</sup>/h



**BADU Bronze Eco VS**

Performance: 28 m<sup>3</sup>/h



**BADU Prime Eco VS**

Performance: 28 m<sup>3</sup>/h



**BADU 93**

Performance: 30-110 m<sup>3</sup>/h



**BADU FA**

Performance: 35-45 m<sup>3</sup>/h



**BADU 42**

Performance: 2-12 m<sup>3</sup>/h



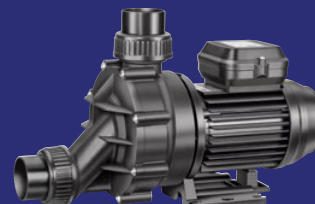
**BADU 43**

Performance: 15-32 m<sup>3</sup>/h



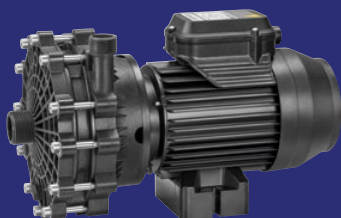
**BADU 44**

Performance: 1-12 m<sup>3</sup>/h



**BADU 45**

Performance: 7-13 m<sup>3</sup>/h



**BADU 73**

Performance: 2-5 m<sup>3</sup>/h



Further information regarding these pool products can be found on [badu.de](http://badu.de). Scan the QR code and you will be taken directly to the product information page.



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## POOL TECHNOLOGY

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# Circulation pumps, self-priming

Self-priming circulation pumps are suitable for all applications. These pumps can also be placed above the water level and are therefore suitable for all above ground and built-in pools. Available in 60 performance varieties, these BADU Premium pumps are suitable for pool sizes of up to 500 m<sup>3</sup>.

# Product overview



## **BADU Alpha**

Performance: 4-11 m<sup>3</sup>/h

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## **BADU Magna**

Performance: 8-14 m<sup>3</sup>/h

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## **BADU Gamma**

Performance: 7-32 m<sup>3</sup>/h

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## **BADU Delta**

Performance: 8-28 m<sup>3</sup>/h

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## **BADU Delta-MK**

Performance: 8-27 m<sup>3</sup>/h

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## **BADU Prime**

Performance: 7-20 m<sup>3</sup>/h

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## **BADU Prime**

Performance: 25-48 m<sup>3</sup>/h

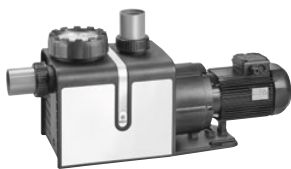
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## **BADU Profi**

Performance: 22-48 m<sup>3</sup>/h

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## **BADU Profi-MK**

Performance: 18-44 m<sup>3</sup>/h

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## **BADU EasyFit/ connection sets**

Performance: 9-45 m<sup>3</sup>/h

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## **BADU Resort**

Performance: 30-110 m<sup>3</sup>/h

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The pumps pictured above can be used for pool water with a salt concentration of up to 0.5 %, i.e. 5 g/l. For higher salt concentrations please contact us.

# BADU® Fact checker

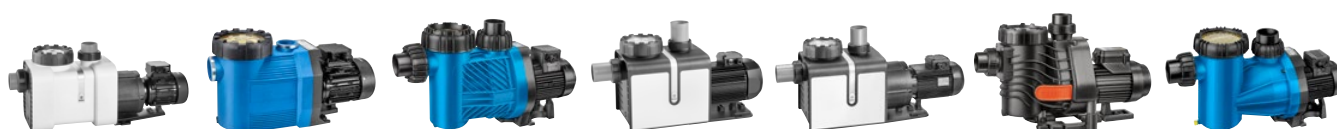
Well informed for the right decision: The BADU fact checker.  
Relevant pump features at a glance and in direct comparison.



Comparison parameters	BADU	Alpha	Magna	Gamma	Delta
Flow rate Q max. (m³/h)		15	17	37	36
Power input P <sub>1</sub> (kW)		0.35-0.69	0.58-0.97	0.46-1.76	0.46-1.20
Power output P <sub>2</sub> (kW)		0.18-0.45	0.30-0.65	0.30-1.50	0.30-1.00
Single phase 1~ 230 V*)		●	●	●	●
Three-phase 3~ 400/230 V*)		○	○	●	●
LED transparent lid		○	○	○	●
Lid opening device		●	●	●	●
Separable strainer basket		○	○	○	●
Glue socket d (mm)		50	-	75/63/50	63/50
Glue socket materials		ABS	-	PVC-U	PVC-U
Connection options		V	2/1.5" IG	1/2" IG	V
Replacement alternative (speed control not possible)		BADU Delta	BADU Prime, Gamma	BADU Prime	BADU Prime, Gamma
Replacement alternative (speed control possible)		BADU Alpha Eco Soft	BADU Top Eco VS	BADU Gamma Eco VS	BADU Delta Eco VS
GS symbol		●	●	●	●
Catalogue page		14	16	18	20

\*) Special voltages on request.

V - Union  
IG - Inner thread  
F - Flange  
● - Yes  
○ - No



Delta-MK	Prime	Prime	Profi	Profi-MK	EasyFit	Resort
35	25	50	52	50	50	115
0.50-1.40	0.46-1.29	1.85-3.45	1.03-2.92	1.03-2.92	0.58-2.54	1.78-6.17
0.30-1.00	0.30-1.00	1.30-2.60	0.75-2.20	0.75-2.20	0.30-2.20	1.50-5.50
●	●	●	●	●	●	○
●	●	●	●	●	●	●
●	○	○	●	●	○	○
●	●	●	●	●	●	●
●	○	○	●	●	●	○
63/50	-	90/75	75/63	75/63	75/63/50	110/90/75
PVC-U	-	ABS	PVC-U	PVC-U	ABS	ABS
V	2/1.5" IG	V	V	V	V/IG	V
BADU Profi-MK	BADU Gamma	-	BADU Delta	BADU Delta-MK	-	-
BADU Delta-MK Eco VS	BADU Prime Eco VS	BADU Eco Flex	BADU Profi Eco VS	BADU Profi-MK Eco VS	BADU EasyFit Eco VS	-
●	●	●	●	●	●	●
22	24	26	28	30	32	36

# BADU® Alpha

New standard for small pools -  
optimised like never before.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 2 m above or 3 m below  
water level.

## Design

Monoblock-type pump with integrated strainer tank. The  
bellow-type mechanical seal is mounted on a plastic shaft  
protector sleeve.

Motor/pump shaft has no contact with the pool water  
providing complete electrical separation.

Strainer tank capacity ..... approx. 1.0 l

Strainer basket mesh size ..... approx. 2.8 x 2.8 mm

## Materials used

Pump casing .....	PP
Housing cover .....	PP GF 30
Impeller .....	PPE GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/ABS
Glue sockets .....	ABS
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR

Technical data at 50 Hz	BADU Alpha	6	8	10	12
Inlet Sa/outlet connection Da		Special union with glue socket d = 50 included in delivery.			
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		50/50	50/50	50/50	50/50
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.35/0.18	0.45/0.25	0.60/0.40	0.69/0.45
Rated current (A)	1~ 230 V	1.95	2.30	2.70	3.20
Efficiency class		D	D	D	D

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

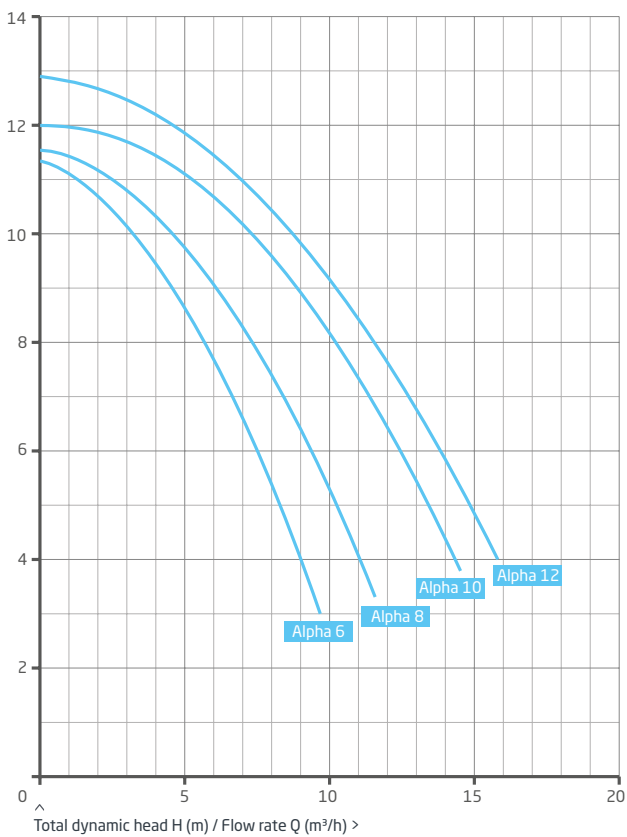
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.4060.038	BADU Alpha 6	1~ 230 V	0.18 kW	415.88 €	494.90 €
210.4080.038	BADU Alpha 8	1~ 230 V	0.25 kW	431.88 €	513.94 €
210.4100.038	BADU Alpha 10	1~ 230 V	0.40 kW	447.86 €	532.95 €
210.4120.038	BADU Alpha 12	1~ 230 V	0.45 kW	462.87 €	550.82 €

Universal opening device included in delivery. See page 150.

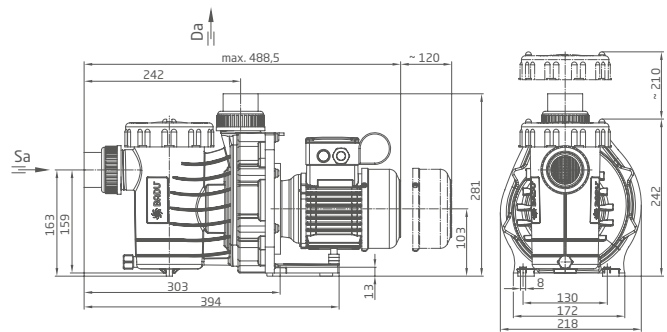




### Characteristics



### Dimensions



Detailed dimensions available on request or at [badu.de](http://badu.de)

# BADU<sup>®</sup> Magna

Tried and tested for constant operation with high performance and flexibility.  
For medium-size and above ground pools or smaller swimming ponds.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank.  
The bellow-type mechanical seal is mounted on a plastic shaftprotector sleeve.  
Motor/pump shaft has no contact with the poolwater providing complete electrical separation.  
Strainer tank capacity ..... approx. 3 l  
Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

## Materials used

Pump casing ..... PP TV 20  
Intermediate housing ..... PP TV 40  
Gland housing ..... PP TV 40  
Diffuser ..... PP TV 40  
Impeller ..... PPE GF 30  
Strainer basket ..... PP  
Lid ..... PC, transparent/PA 66 GF 30  
Mechanical seal ..... carbon/ceramic/NBR  
Screws ..... galvanised steel  
Elastomers ..... NBR

Technical data at 50 Hz	BADU Magna	8	12	14
Inlet Sa/outlet connection Da Rp <sup>2)</sup>		2/1½	2/1½	2/1½
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		50/50	50/50	63/50
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.58/0.30	0.69/0.45	0.97/0.65
Rated current (A)	1~ 230 V	2.60	3.20	4.70
Efficiency class		D	D	D

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
219.0088.038	BADU Magna 8	1~ 230 V	0.30 kW	451.88 €	537.74 €
219.0128.038	BADU Magna 12	1~ 230 V	0.45 kW	484.85 €	576.97 €
219.0148.038	BADU Magna 14	1~ 230 V	0.65 kW	515.85 €	613.86 €

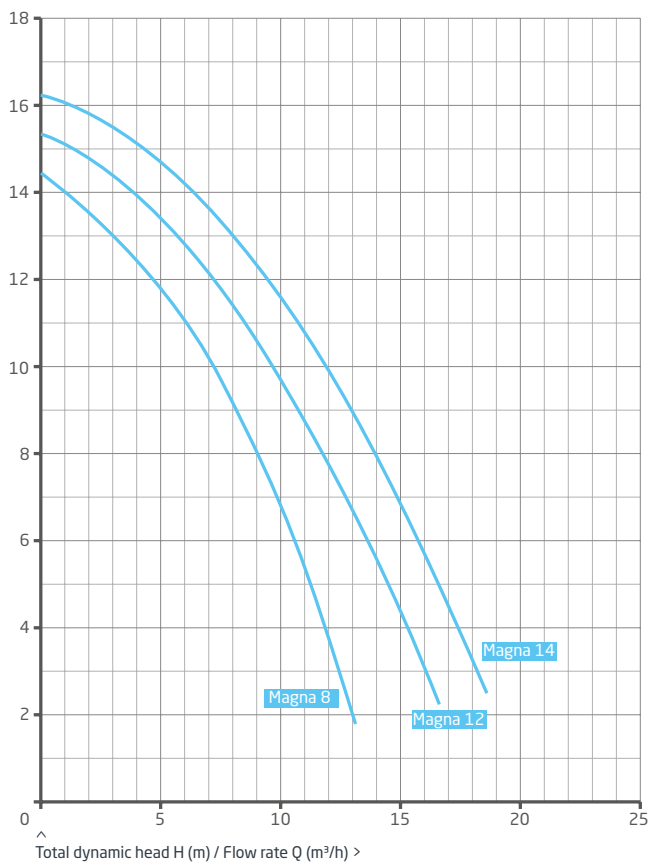
Sickel opening device included in delivery. See page 150.



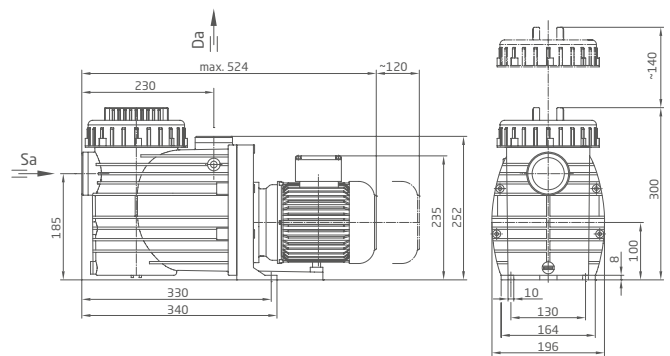
www.tuv.com  
ID 0000021507



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU<sup>®</sup> Gamma

The new bestseller based on our BADU Prime. Equipped with inner and outer threads. Efficient, modern, thought out.

## Field of application

Swimming pool water circulation through a filter system. The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 3 l

Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP TV 40
Gland housing .....	PP TV 40
Diffuser .....	PA 66 GF 30/PP GF 30
Impeller .....	PP GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Unions/glue sockets .....	ABS/PVC-U
Elastomers .....	NBR/Viton

Technical data at 50 Hz	BADU Gamma	7	11	15	20	23	29	32
Inlet Sa/ outlet connection Da d <sup>4</sup> )	Rp 2	50/50	63/63	63/63	63/63	63/63	75/75	75/75
Rec. inlet/outlet pipe, PVC pipe, d <sup>4</sup> )		50/50	63/63	63/63	63/63	63/63	75/75	75/75
Power input P <sub>1</sub> / output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.46/0.30	0.61/0.45	0.72/0.55	1.03/0.75	1.29/1.00	1.68/1.30	2.84/1.50
Rated current (A)	1~ 230 V	2.00	2.60	3.50	4.95	6.20	8.00	8.80
Power input P <sub>1</sub> / output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	0.41/0.30	0.59/0.45	0.69/0.55	0.90/0.75	1.20/1.00	1.54/1.30	1.76/1.50
Rated current (A)	3~ Y/Δ 400/230 V	0.90/1.50	1.10/2.00	1.40/2.50	1.80/3.10	2.55/4.40	3.00/5.20	3.30/5.60
Efficiency class	1~/3~	D/D	D/D	D/D	D/D	D/D	D/D	D/D

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.5070.038	BADU Gamma 7	1~ 230 V	0.30 kW	726.78 €	864.87 €
210.5110.038	BADU Gamma 11	1~ 230 V	0.45 kW	779.78 €	927.94 €
210.5150.038	BADU Gamma 15	1~ 230 V	0.55 kW	810.76 €	964.80 €
210.5200.038	BADU Gamma 20	1~ 230 V	0.75 kW	862.74 €	1,026.66 €
210.5230.038	BADU Gamma 23	1~ 230 V	1.00 kW	933.73 €	1,111.14 €
210.5290.038	BADU Gamma 29	1~ 230 V	1.30 kW	1,158.66 €	1,378.81 €
210.5320.038	BADU Gamma 32	1~ 230 V	1.50 kW	1,170.65 €	1,393.07 €
210.5070.037	BADU Gamma 7	3~ Y/Δ 400/230 V	0.30 kW	694.78 €	826.79 €
210.5110.037	BADU Gamma 11	3~ Y/Δ 400/230 V	0.45 kW	736.79 €	876.78 €
210.5150.037	BADU Gamma 15	3~ Y/Δ 400/230 V	0.55 kW	799.77 €	951.73 €
210.5200.037	BADU Gamma 20	3~ Y/Δ 400/230 V	0.75 kW	821.76 €	977.89 €
210.5230.037	BADU Gamma 23	3~ Y/Δ 400/230 V	1.00 kW	838.75 €	998.11 €
210.5290.037	BADU Gamma 29	3~ Y/Δ 400/230 V	1.30 kW	1,106.67 €	1,316.94 €
210.5320.037	BADU Gamma 32	3~ Y/Δ 400/230 V	1.50 kW	1,200.65 €	1,428.77 €

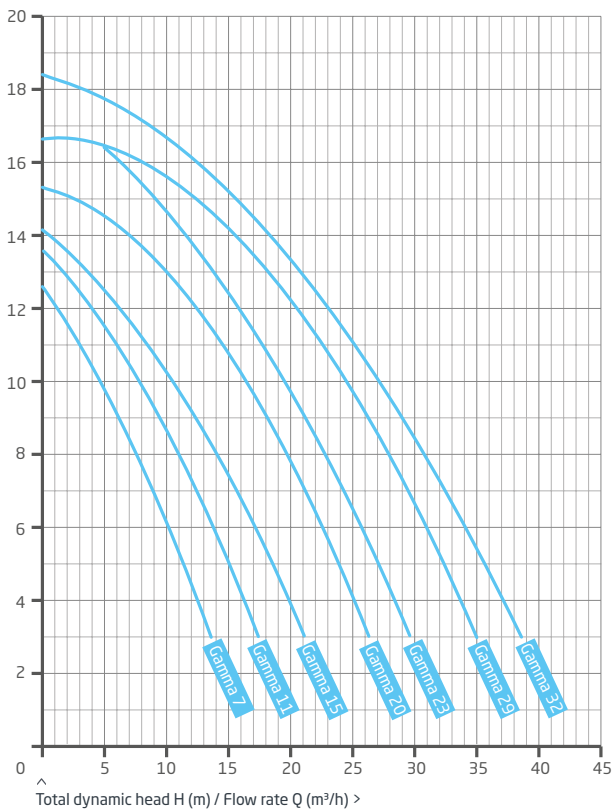
Universal opening device included in delivery. See page 150.



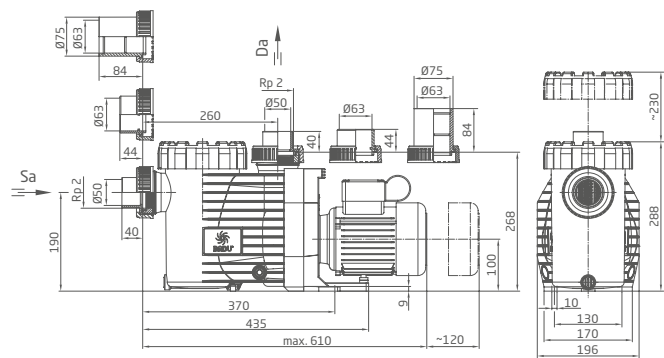
With inner and outer threads



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Delta

New high-class standard for ambitious projects.  
High-quality filter circulation pumps for professionals.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 4 l

Strainer basket mesh size ..... approx 2.2 x 2.2 mm

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP GF 30
Gland housing .....	PP TV 40
Unions/glue sockets .....	ABS/PVC-U
Diffuser .....	PP GF 30
Impeller .....	PPE GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR/Viton

Technical data at 50 Hz	BADU Delta	9	13	17	22	28
Inlet Sa/outlet connection Da d <sup>4)</sup>		50/50	63/63	63/63	63/63	63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		50/50	63/63	63/63	63/63	75/75
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.46/0.30	0.61/0.45	0.72/0.55	1.03/0.75	1.29/1.00
Rated current (A)	1~ 230 V	2.00	3.60	3.50	4.95	6.20
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	0.41/0.30	0.63/0.45	0.69/0.55	0.90/0.75	1.20/1.00
Rated current (A)	3~ Y/Δ 400/230 V	0.90/1.50	1.10/2.00	1.40/2.50	1.80/3.10	2.55/4.40
Efficiency class	1~/3~	D/D	D/D	C/C	C/C	C/C

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.3070.038	BADU Delta 9	1~ 230 V	0.30 kW	736.79 €	876.78 €
210.3120.038	BADU Delta 13	1~ 230 V	0.45 kW	764.78 €	910.09 €
210.3170.038	BADU Delta 17	1~ 230 V	0.55 kW	789.77 €	939.83 €
210.3220.038	BADU Delta 22	1~ 230 V	0.75 kW	926.72 €	1,102.80 €
210.3280.038	BADU Delta 28	1~ 230 V	1.00 kW	1,147.68 €	1,365.74 €
210.3070.037	BADU Delta 9	3~ Y/Δ 400/230 V	0.30 kW	736.79 €	876.78 €
210.3120.037	BADU Delta 13	3~ Y/Δ 400/230 V	0.45 kW	764.78 €	910.09 €
210.3170.037	BADU Delta 17	3~ Y/Δ 400/230 V	0.55 kW	789.77 €	939.83 €
210.3220.037	BADU Delta 22	3~ Y/Δ 400/230 V	0.75 kW	926.72 €	1,102.80 €
210.3280.037	BADU Delta 28	3~ Y/Δ 400/230 V	1.00 kW	1,147.68 €	1,365.74 €

Universal opening device included in delivery. See page 150.



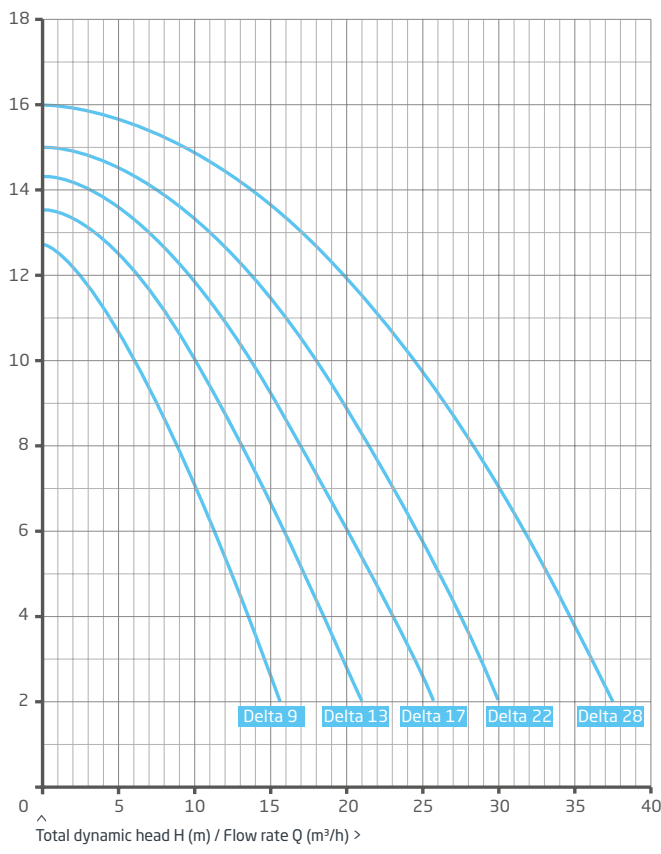
Transparent lid with integrated LED lighting



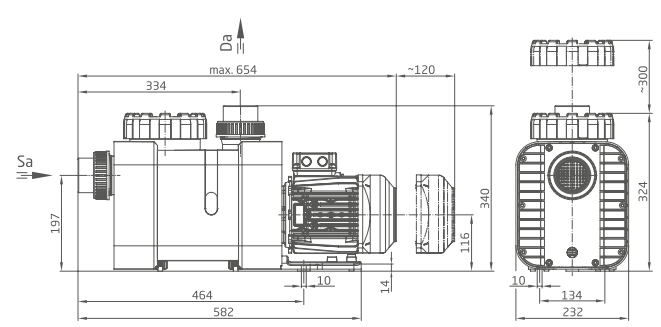
Circulation pumps, self-priming



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Delta-MK

Sealless pump for salt water pools.  
Extension of the quiet BADU Delta range.

## Fields of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 1.5 m above or 3 m below water level.

## Design

Monoblock-type pump with integrated strainer tank.  
Motor/pump shaft has no contact with the pool water providing complete electrical separation.  
Strainer tank capacity ..... approx. 4 l  
Strainer basket mesh size ..... approx. 2.2 x 2.2 mm

Also available with alternative material combinations for chemical applications.

## Materials used

Pump casing .....	PP GF 30
Intermediate housing/gland housing .....	PP GF 30
Lid for gland housing .....	PP GF 10
Can .....	PP GF 30
Intermediate flange .....	PP GF 30
Pump feet .....	ABS GF 20
Unions/glue sockets .....	ABS/PVC-U
Diffuser .....	PP GF 30
Impeller .....	PPE GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Slide bearing .....	SiC/SiC
Elastomers .....	NBR
Screws .....	stainless steel

Technical data at 50 Hz	BADU Delta-MK	8	12	16	20	27
Inlet Sa/outlet connection Da d <sup>4)</sup>		50/50	63/63	63/63	63/63	63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		50/50	63/63	63/63	63/63	75/75
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.50/0.30	0.65/0.45	0.97/0.65	1.10/0.75	1.40/1.00
Rated current (A)	1~ 230 V	2.60	3.20	4.70	5.20	6.70
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	0.50/0.30	0.63/0.45	0.97/0.65	0.93/0.75	1.26/1.00
Rated current (A)	3~ Y/Δ 400/230 V	1.00/1.75	1.25/2.15	1.75/3.00	1.95/3.40	2.25/3.90

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.3080.338	BADU Delta-MK 8	1~ 230 V	0.30 kW	1,106.67 €	1,316.94 €
210.3120.338	BADU Delta-MK 12	1~ 230 V	0.45 kW	1,114.67 €	1,326.46 €
210.3160.338	BADU Delta-MK 16	1~ 230 V	0.65 kW	1,128.67 €	1,343.12 €
210.3200.338	BADU Delta-MK 20	1~ 230 V	0.75 kW	1,189.66 €	1,415.70 €
210.3270.338	BADU Delta-MK 27	1~ 230 V	1.00 kW	1,260.61 €	1,500.13 €
210.3080.337	BADU Delta-MK 8	3~ Y/Δ 400/230 V	0.30 kW	1,093.68 €	1,301.48 €
210.3120.337	BADU Delta-MK 12	3~ Y/Δ 400/230 V	0.45 kW	1,097.68 €	1,306.24 €
210.3160.337	BADU Delta-MK 16	3~ Y/Δ 400/230 V	0.65 kW	1,118.69 €	1,331.24 €
210.3200.337	BADU Delta-MK 20	3~ Y/Δ 400/230 V	0.75 kW	1,185.65 €	1,410.92 €
210.3270.337	BADU Delta-MK 27	3~ Y/Δ 400/230 V	1.00 kW	1,266.65 €	1,507.31 €

Universal opening device included in delivery. See page 150.





Transparent lid with integrated LED lighting



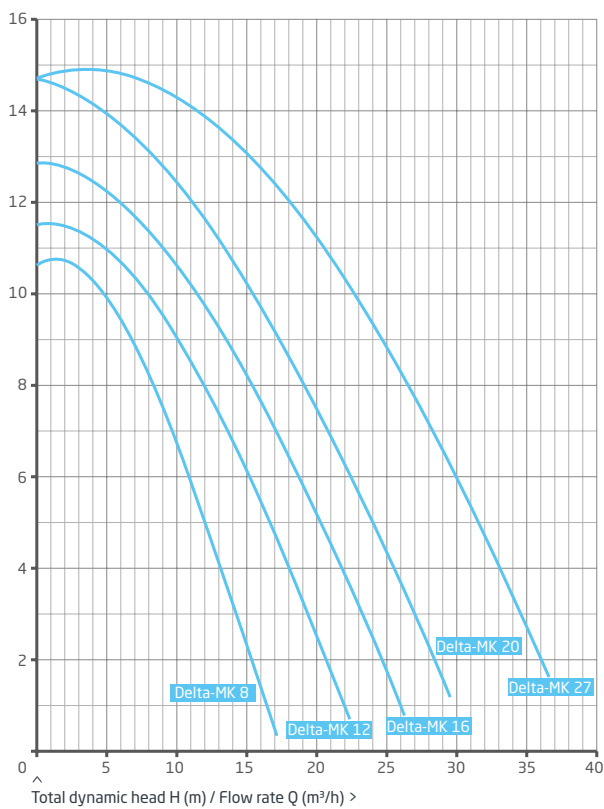
www.tuv.com  
ID 0000021507



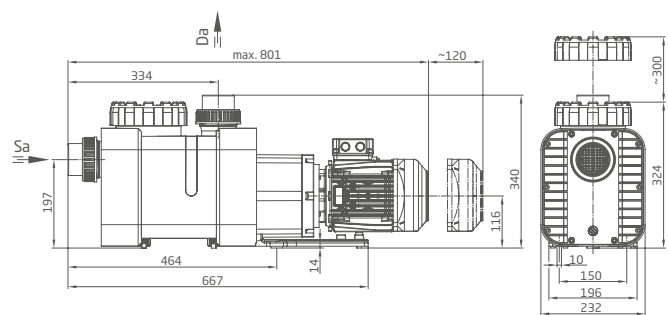
requested



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU<sup>®</sup> Prime

Established and reliable.  
Premium circulation pump.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 3 l

Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP TV 40
Gland housing .....	PP TV 40
Diffuser .....	PA 66 GF 30/PP GF 30
Impeller .....	PP GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR/Viton

Technical data at 50 Hz	BADU Prime	7	11	13	15	20
Inlet Sa/outlet connection Da Rp <sup>2)</sup>		1½/1½	1½/1½	2/1½	2/1½	2/1½
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		50/50	50/50	63/50	63/50	63/63
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.46/0.30	0.61/0.45	0.72/0.55	1.03/0.75	1.29/1.00
Rated current (A)	1~ 230 V	2.00	2.60	3.50	4.95	6.20
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	0.41/0.30	0.95/0.45	0.69/0.55	0.90/0.75	1.20/1.00
Rated current (A)	3~ Y/Δ 400/230 V	0.90/1.50	1.10/2.00	1.40/2.50	1.80/3.10	2.55/4.40
Efficiency class	1~/3~	D/D	D/D	D/D	D/D	D/D

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
219.0078.038	BADU Prime 7	1~ 230 V	0.30 kW	707.79 €	842.27 €
219.0118.038	BADU Prime 11	1~ 230 V	0.45 kW	757.78 €	901.76 €
219.0138.038	BADU Prime 13	1~ 230 V	0.55 kW	781.76 €	930.29 €
219.0158.038	BADU Prime 15	1~ 230 V	0.75 kW	845.74 €	1,006.43 €
219.0208.038	BADU Prime 20	1~ 230 V	1.00 kW	904.74 €	1,076.64 €
219.0078.037	BADU Prime 7	3~ Y/Δ 400/230 V	0.30 kW	677.81 €	806.59 €
219.0118.037	BADU Prime 11	3~ Y/Δ 400/230 V	0.45 kW	715.79 €	851.79 €
219.0138.037	BADU Prime 13	3~ Y/Δ 400/230 V	0.55 kW	766.77 €	912.46 €
219.0158.037	BADU Prime 15	3~ Y/Δ 400/230 V	0.75 kW	795.76 €	946.95 €
219.0208.037	BADU Prime 20	3~ Y/Δ 400/230 V	1.00 kW	809.76 €	963.61 €

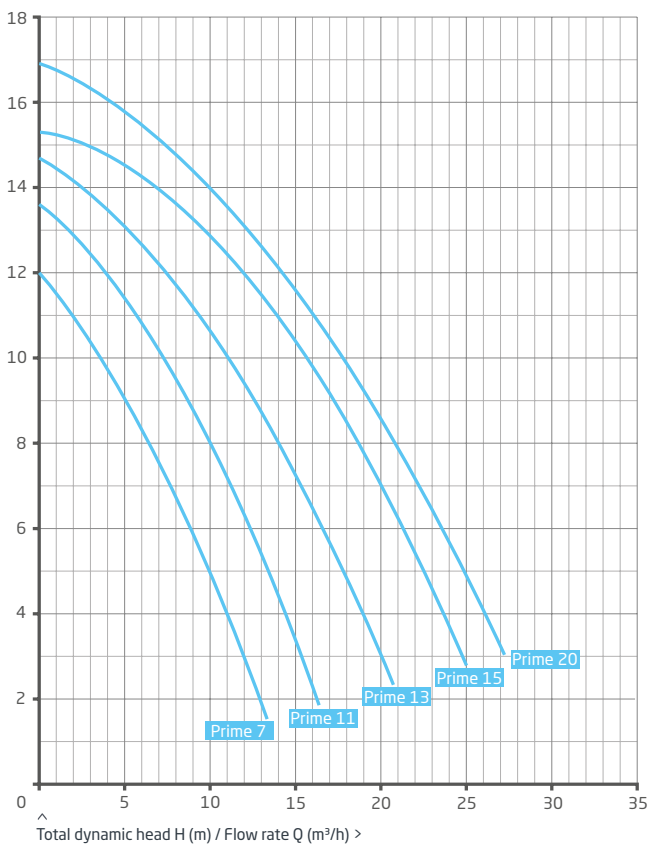
Universal opening device included in delivery. See page 150.



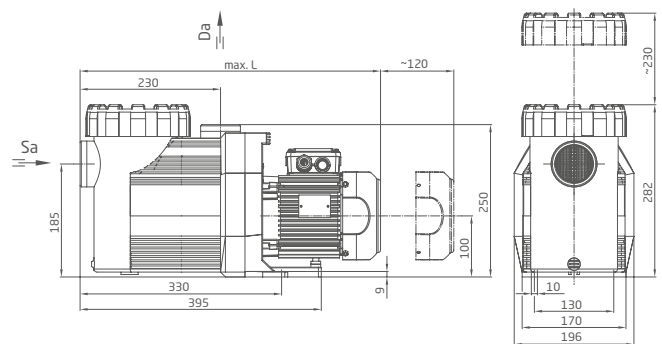
www.tuv.com  
ID 0000021507



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Prime

Highly efficient. With a motor suitable for use with a frequency converter.  
For large pools, swimming baths and solar panel units.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 6 l

Strainer basket mesh size ..... approx. 3.0 x 2.8 mm

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP GF 30
Gland housing .....	PP TV 40
Diffuser .....	PP GF 30
Impeller .....	PPE GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Glue sockets .....	ABS
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR/Viton

Technical data at 50 Hz	BADU Prime	25	30	40	48
Inlet Sa/outlet connection Da d <sup>4)</sup>		75/75	75/75	90/90	90/90
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		75/75	75/75	90/90	110/110
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	1.85/1.30	2.00/1.50	2.90/2.20	3.45/2.60
Rated current (A)	1~ 230 V	7.70	8.80	13.00	15.00
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	1.55/1.30	1.77/1.50	2.55/2.20	3.00/2.60
Rated current (A)	3~ Y/Δ 400/230 V	2.95/5.10	3.30/5.72	4.60/8.00	5.50/9.50

For more detailed information regarding the motor protection please see page 167.

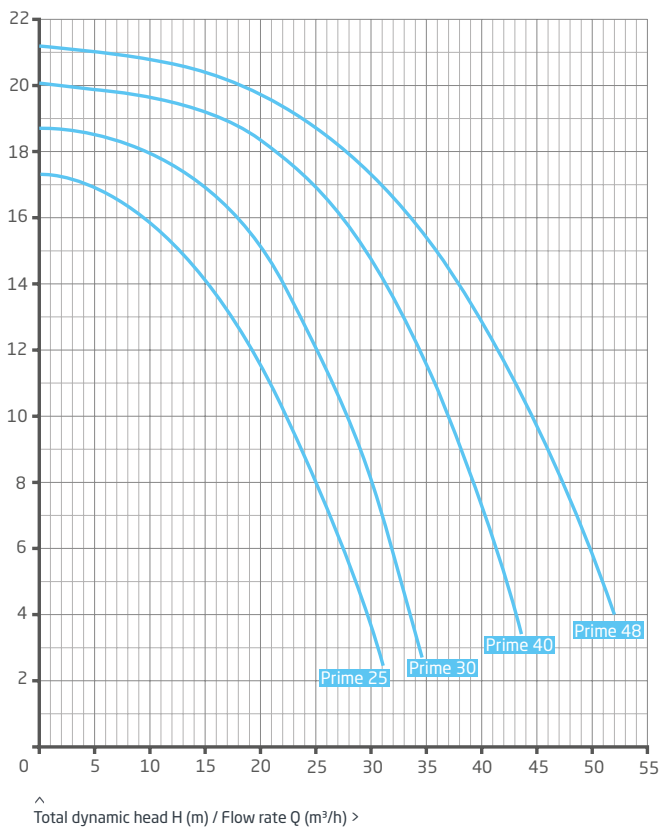
Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
219.0258.038	BADU Prime 25	1~ 230 V	1.30 kW	1,262.62 €	1,502.52 €
219.0308.038	BADU Prime 30	1~ 230 V	1.50 kW	1,375.60 €	1,636.96 €
219.0408.038	BADU Prime 40	1~ 230 V	2.20 kW	1,610.53 €	1,916.53 €
219.0488.038	BADU Prime 48	1~ 230 V	2.60 kW	2,097.40 €	2,495.91 €
219.0258.037	BADU Prime 25	3~ Y/Δ 400/230 V	1.30 kW	1,165.66 €	1,387.14 €
219.0308.037	BADU Prime 30	3~ Y/Δ 400/230 V	1.50 kW	1,281.63 €	1,525.14 €
219.0408.037	BADU Prime 40	3~ Y/Δ 400/230 V	2.20 kW	1,486.56 €	1,769.01 €
219.0488.037	BADU Prime 48	3~ Y/Δ 400/230 V	2.60 kW	1,645.51 €	1,958.16 €

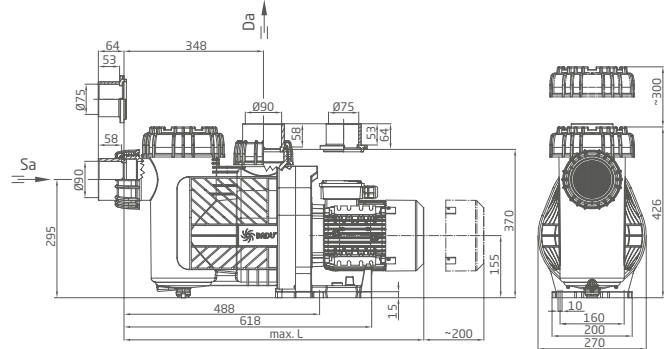
Three-way opening device included in delivery. See page 150.



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Profi

Exclusive premium pump. Maximum efficiency and quiet.  
For large pools and swimming baths. For the highest demands.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 4 l

Strainer basket mesh size ..... approx. 2.2 x 2.2 mm

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP GF 30
Gland housing .....	PP GF 30
Volute casing .....	PP
Diffuser .....	PA 66 GF 30/PP GF 30
Impeller .....	PP GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Glue sockets .....	PVC-U
Elastomers .....	NBR/Viton

Technical data at 50 Hz	BADU Profi	22	26	32	38	48
Inlet Sa/outlet connection Da d <sub>outer</sub> . DN <sub>inner</sub> <sup>4)</sup>		75/75 . 63/63	75/75 . 63/63	75/75 . 63/63	75/75 . 63/63	75/75 . 63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63	75/75	75/75	90/90	110/110
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	1.03/0.75	1.29/1.00	1.68/1.30	-/-	-/-
Rated current (A)	1~ 230 V	4.95	6.20	8.00	-/-	-/-
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	0.90/0.75	1.20/1.00	1.54/1.30	2.10/1.80	2.54/2.20
Rated current (A)	3~ Y/Δ 400/230 V	1.80/3.10	2.55/4.40	3.00/5.20	3.85/6.70	4.95/8.60
Efficiency class	1~/3~	D/C	D/C	D/C	-/C	-/C

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.2220.038	BADU Profi 22	1~ 230 V	0.75 kW	909.74 €	1,082.59 €
210.2260.038	BADU Profi 26	1~ 230 V	1.00 kW	1,125.67 €	1,339.55 €
210.2320.038	BADU Profi 32	1~ 230 V	1.30 kW	1,269.64 €	1,510.87 €
210.2220.037	BADU Profi 22	3~ Y/Δ 400/230 V	0.75 kW	909.74 €	1,082.59 €
210.2260.037	BADU Profi 26	3~ Y/Δ 400/230 V	1.00 kW	1,125.67 €	1,339.55 €
210.2320.037	BADU Profi 32	3~ Y/Δ 400/230 V	1.30 kW	1,269.64 €	1,510.87 €
210.2380.037	BADU Profi 38	3~ Y/Δ 400/230 V	1.80 kW	1,393.59 €	1,658.37 €
210.2480.037	BADU Profi 48	3~ Y/Δ 400/230 V	2.20 kW	1,606.54 €	1,911.78 €

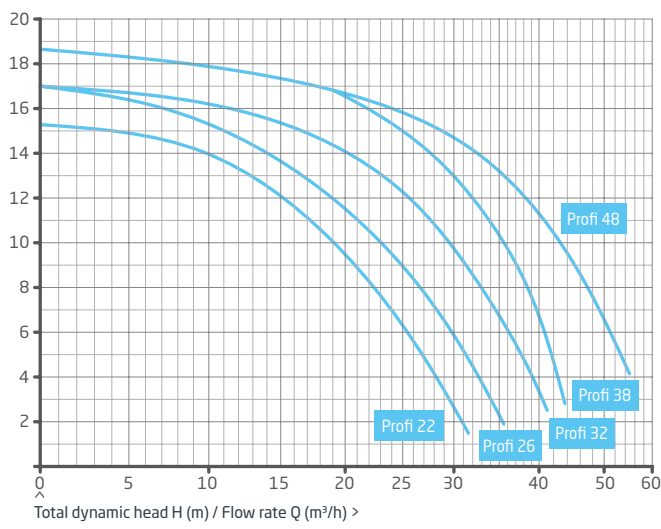
Universal opening device included in delivery. See page 150.



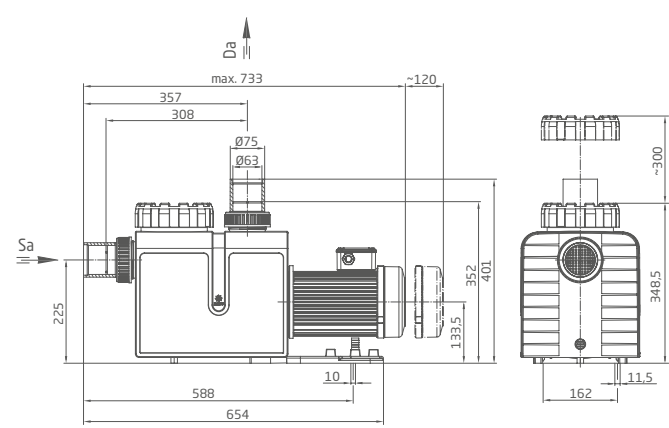
Transparent lid with integrated LED lighting



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Profi-MK

Sealless pump for the pool.  
Unique, reliable and uncompromising.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 1.5 m above or 3 m below water level.

## Design

Monoblock-type pump with integrated strainer tank.  
Motor/pump shaft has no contact with the pool water providing complete electrical separation.  
Strainer tank capacity ..... approx. 4 l  
Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

Also available with alternative material combinations for chemical applications.

## Materials used

Pump housing .....	PP GF 30
Intermediate housing/gland housing .....	PP GF 30
Lid for gland housing .....	PP
Can .....	PP GF 30
Intermediate flange .....	PP GF 30
Volute casing .....	PP
Diffuser .....	PA 66 GF 30/PP GF 30
Impeller .....	PP GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Slide bearing .....	SiC/SiC
Screws .....	stainless steel
Elastomers .....	NBR
Glue sockets .....	PVC-U

Technical data at 50 Hz	BADU Profi-MK	18	22	28	34	44
Inlet Sa/outlet connection Da, d <sub>outer</sub> · DN <sub>inner</sub> <sup>4)</sup>		75/75 · 63/63	75/75 · 63/63	75/75 · 63/63	75/75 · 63/63	75/75 · 63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63	63/63	75/75	90/90	110/110
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	1.03/0.75	1.29/1.00	1.68/1.30	2.31/1.80	2.92/2.20
Rated current (A)	1~ 230 V	4.95	6.20	8.00	11.88	14.40
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	0.90/0.75	1.20/1.00	1.54/1.30	2.10/1.80	2.54/2.20
Rated current (A)	3~ Y/Δ 400/230 V	1.80/3.10	2.55/4.40	3.00/5.20	3.85/6.70	4.95/8.60

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

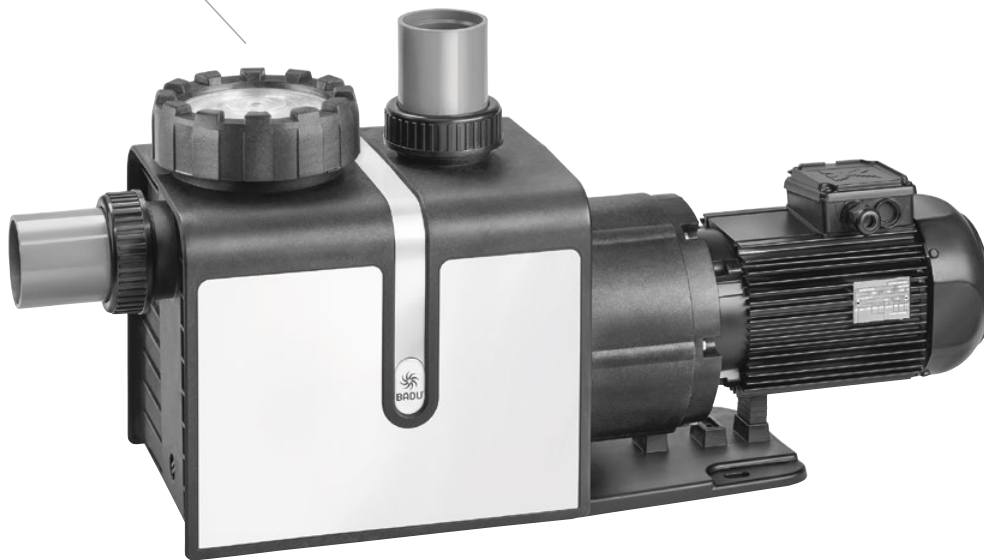
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.2220.238	BADU Profi-MK 18	1~ 230 V	0.75 kW	1,281.63 €	1,525.14 €
210.2260.238	BADU Profi-MK 22	1~ 230 V	1.00 kW	1,330.62 €	1,583.44 €
210.2320.238	BADU Profi-MK 28	1~ 230 V	1.30 kW	1,413.59 €	1,682.17 €
210.2380.238	BADU Profi-MK 34	1~ 230 V	1.80 kW	1,445.57 €	1,720.23 €
210.2480.238	BADU Profi-MK 44	1~ 230 V	2.20 kW	1,760.49 €	2,094.98 €
210.2220.237	BADU Profi-MK 18	3~ Y/Δ 400/230 V	0.75 kW	1,281.63 €	1,525.14 €
210.2260.237	BADU Profi-MK 22	3~ Y/Δ 400/230 V	1.00 kW	1,330.62 €	1,583.44 €
210.2320.237	BADU Profi-MK 28	3~ Y/Δ 400/230 V	1.30 kW	1,413.59 €	1,682.17 €
210.2380.237	BADU Profi-MK 34	3~ Y/Δ 400/230 V	1.80 kW	1,445.57 €	1,720.23 €
210.2480.237	BADU Profi-MK 44	3~ Y/Δ 400/230 V	2.20 kW	1,760.49 €	2,094.98 €

Universal opening device included in delivery. See page 150.





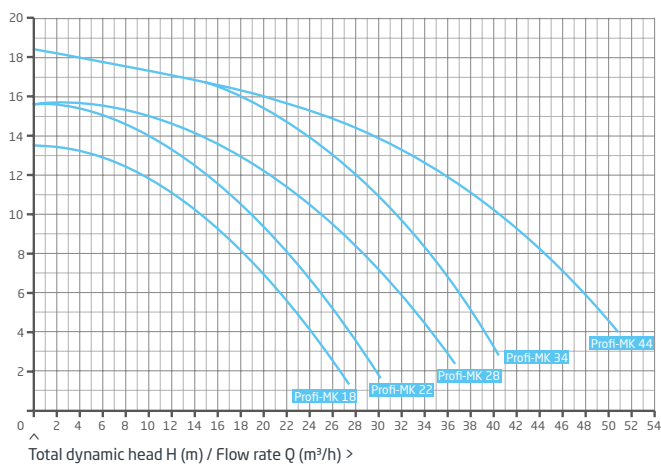
Transparent lid with integrated LED lighting



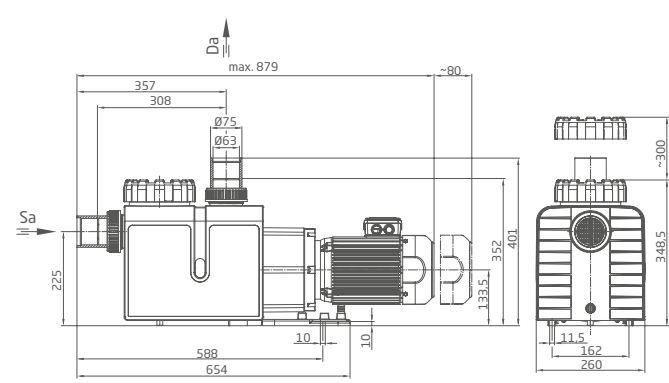
Circulation pumps, self-priming



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® EasyFit

The champion of flexibility with 6 various connection sets.  
For use in practically every filter unit, regardless of the manufacturer.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank.  
The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.  
Motor/pump shaft has no contact with the pool water providing complete electrical separation.  
Strainer tank capacity ..... approx. 3 l  
Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

## Materials used

Pump casing ..... PP GF 30  
Intermediate housing ..... PP GF 30  
Gland housing ..... PP TV 40  
Diffuser ..... PA 66 GF 30/PP TV 40/PP GF 30  
Impeller ..... PPE GF 30/PP GF 30  
Strainer basket ..... PP  
Lid ..... PC, transparent/PP GF 30  
Glue sockets ..... ABS  
Mechanical seal ..... carbon/ceramic/NBR  
Screws ..... stainless steel  
Elastomers ..... NBR/Viton

Technical data at 50 Hz	BADU EasyFit	9	12	15	18	24	29	36	45
Inlet Sa/outlet connection Da d <sup>4)</sup>		50/50	63/63	63/63	63/63	63/63	63/63	75/75	75/75
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/50	63/50	63/63	63/63	63/63	63/63	75/75	75/75
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0,58/0,30	0,69/0,45	0,97/0,65	1,20/0,80	1,45/1,00	1,70/1,30	-/-	-/-
Rated current (A)	1~ 230 V	2,60	3,20	4,70	5,30	6,40	7,40	-/-	-/-
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	0,55/0,30	0,68/0,45	0,95/0,65	1,10/0,80	1,32/1,00	1,65/1,30	2,10/1,80	2,54/2,20
Rated current (A)	3~ Y/Δ 400/230 V	1,00/1,75	1,25/2,15	1,75/3,00	2,10/3,60	2,90/5,02	3,20/5,54	3,85/6,70	4,95/8,60
Efficiency class	1~/3~	D/D	D/D	D/D	D/D	D/D	D/C	-/C	-/C

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
207.6100.038	BADU EasyFit 9	1~ 230 V	0.30 kW	572.67 €	681.48 €
207.6140.038	BADU EasyFit 12	1~ 230 V	0.45 kW	637.27 €	758.35 €
207.6170.038	BADU EasyFit 15	1~ 230 V	0.65 kW	667.66 €	794.52 €
207.6200.038	BADU EasyFit 18	1~ 230 V	0.80 kW	740.79 €	881.54 €
207.6260.038	BADU EasyFit 24	1~ 230 V	1.00 kW	932.63 €	1,109.83 €
207.6320.038	BADU EasyFit 29	1~ 230 V	1.30 kW	1,027.59 €	1,222.83 €
207.6100.037	BADU EasyFit 9	3~ Y/Δ 400/230 V	0.30 kW	619.23 €	736.88 €
207.6140.037	BADU EasyFit 12	3~ Y/Δ 400/230 V	0.45 kW	707.55 €	841.98 €
207.6170.037	BADU EasyFit 15	3~ Y/Δ 400/230 V	0.65 kW	719.88 €	856.66 €
207.6200.037	BADU EasyFit 18	3~ Y/Δ 400/230 V	0.80 kW	789.21 €	939.16 €
207.6260.037	BADU EasyFit 24	3~ Y/Δ 400/230 V	1.00 kW	960.17 €	1,142.60 €
207.6320.037	BADU EasyFit 29	3~ Y/Δ 400/230 V	1.30 kW	1,055.13 €	1,255.60 €
207.6380.037	BADU EasyFit 36	3~ Y/Δ 400/230 V	1.80 kW	1,218.50 €	1,450.02 €
207.6400.037	BADU EasyFit 45	3~ Y/Δ 400/230 V	2.20 kW	1,638.27 €	1,949.54 €

Universal opening device included in delivery. See page 150.



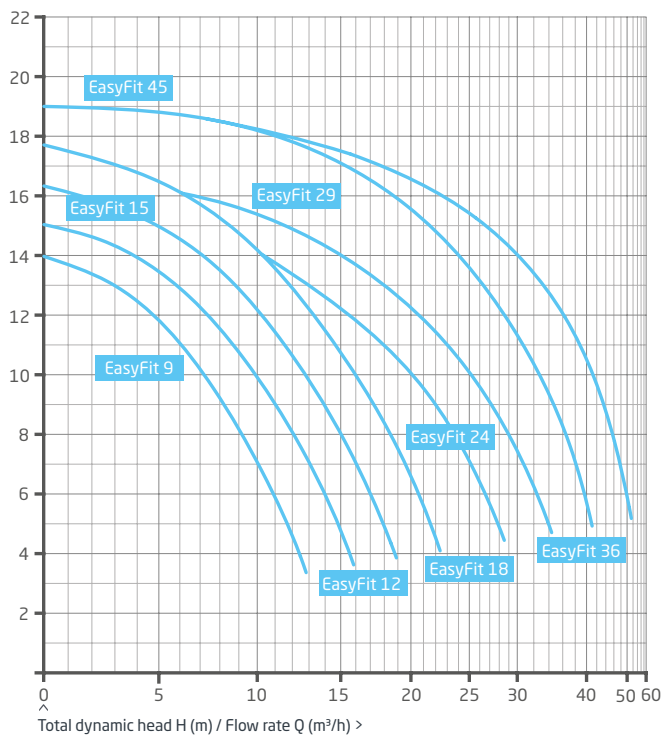
Standard connection included in delivery. For further connection variations please see the following page >



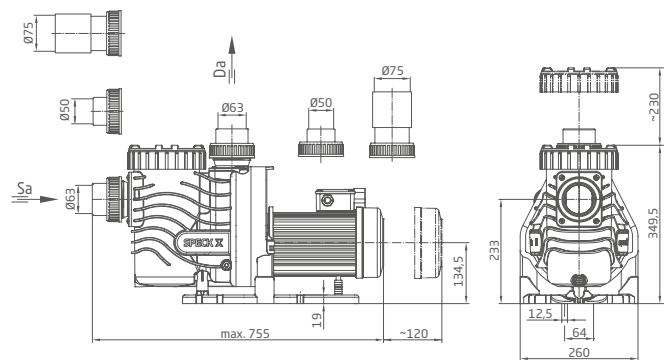
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### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® EasyFit connection sets

Even more flexibility for the BADU EasyFit.  
Connection sets now for 8 foreign ranges.

With the BADU EasyFit the often time-consuming task of installing a new circulation pump into an existing filter unit is a thing of the past.

The self-priming pump fits with six different connection sets and flexible pump feet in almost every unit, regardless of the manufacturer.

## Flexible connections regardless of the manufacturer

6 adaptable connection sets.

## Easy connection to existing pipes

Height adjustable pump feet reduce the assembly effort.

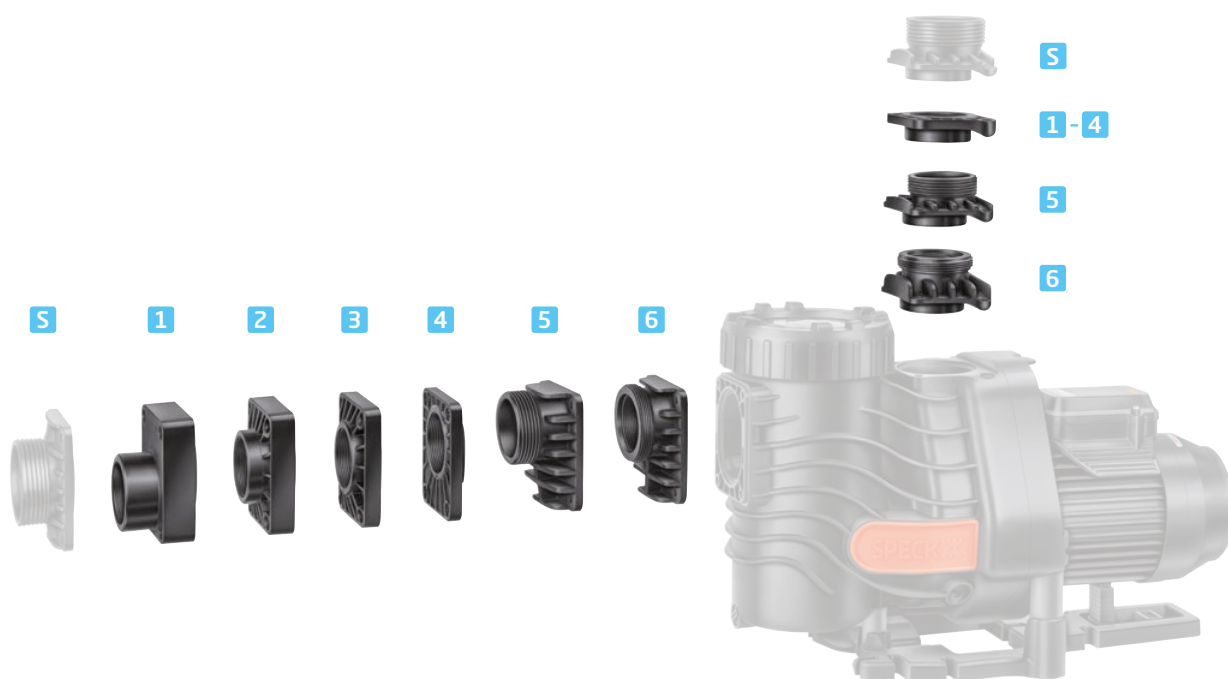
## The flexible and cost-effective solution

Saves time when converting an existing unit and saves on storage.

Article no	Description	Net RRP	Gross RRP <sup>7)</sup>
290.1472.105	Connection set 1 compatible with Pentair® "Ultra-Flow" pumps*)	41.11 €	48.92 €
290.1472.106	Connection set 2 compatible with Pentair® "WhisperFlo" pumps*)	41.11 €	48.92 €
290.1472.107	Connection set 3 compatible with Hayward® "Super Pump" pumps*)	41.11 €	48.92 €
290.1472.108	Connection set 4 compatible with Sta-Rite® "5P2R" pumps*)	41.11 €	48.92 €
290.1472.111	Connection set 5 compatible with Astral "Super Sprint", Astral "Victoria Plus" and Wilo "Filtec FBS" pumps*)	41.11 €	48.92 €
290.1472.112	Connection set 6 compatible with Sta-Rite® "5MPR (Dyna-Glas™)" pumps*)	41.11 €	48.92 €

\*) among other brands of pump.

Pentair®, Sta-Rite®, Dyna-Glas™, WhisperFlo® and Ultra-Flow® are trademarks and/or registered trademarks of Pentair Water Pool and Spa, Inc. and/or its affiliated companies. Hayward® and Super Pump® are trademarks of Hayward Industries, Inc.



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- S Standard connection
- 1 Connection set 1\*)
- 2 Connection set 2\*)
- 3 Connection set 3\*)
- 4 Connection set 4\*)

- 5 Connection set 5
- 6 Connection set 6

\*) Rp 1½ and Rp 2 included in each set.

# BADU<sup>®</sup> Resort

Cost saving pump for large units. Light and powerful.  
For wellness oases, hotel swimming pools or special pools.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 10 l

Strainer basket mesh size ..... approx. 3.4 x 3.2 mm

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP TV 40
Gland housing .....	PP TV 40
Diffuser .....	PP GF 30
Impeller .....	PPE GF 30/PP GF 30
Impeller nut .....	PP GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Glue sockets .....	ABS
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR/Viton

For glue sockets made from PVC suitable for BADU Resort 50 to BADU Resort 110 please see page 159.

Technical data at 50 Hz	BADU Resort	30	40	45	50	55	60	70	80	110
Inlet Sa/outlet connection Da d <sup>4)</sup>		75/75	90/90	90/90	110/110	110/110	110/110	110/110	110/110	110/110
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		75/75	90/90	90/90	110/110	110/110	110/110	110/110	140/140	160/140
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	1.78/1.50	2.54/2.20	3.01/2.60	3.44/3.00	-/-	3.01/2.60	3.44/3.00	-/-	-/-
Rated current (A)	3~ Y/Δ 400/230 V	3.60/6.10	4.60/8.00	5.20/9.00	6.30/10.90	-/-	5.20/9.00	6.30/10.90	-/-	-/-
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 690/400 V	-/-	-/-	-/-	-/-	4.54/4.00	-/-	-/-	4.54/4.00	6.17/5.50
Rated current (A)	3~ Y/Δ 690/400 V	-/-	-/-	-/-	-/-	4.60/8.00	-/-	-/-	4.60/8.00	5.90/10.20

For more detailed information regarding the motor protection please see page 167.

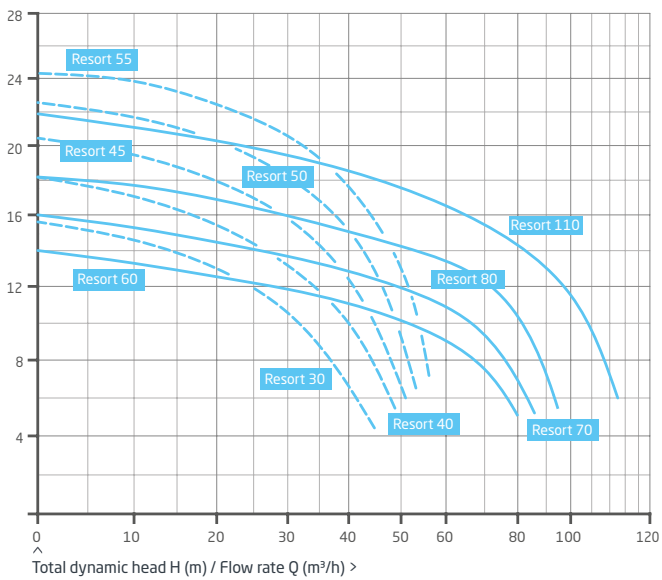
Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
219.5308.037	BADU Resort 30	3~ Y/Δ 400/230 V	1.50 kW	1,597.54 €	1,901.07 €
219.5408.037	BADU Resort 40	3~ Y/Δ 400/230 V	2.20 kW	1,778.49 €	2,116.40 €
219.5458.037	BADU Resort 45	3~ Y/Δ 400/230 V	2.60 kW	1,820.46 €	2,166.35 €
219.5508.037	BADU Resort 50	3~ Y/Δ 400/230 V	3.00 kW	2,012.42 €	2,394.78 €
219.5558.037	BADU Resort 55	3~ Y/Δ 690/400 V	4.00 kW	2,490.27 €	2,963.42 €
219.5608.037	BADU Resort 60	3~ Y/Δ 400/230 V	2.60 kW	1,915.43 €	2,279.36 €
219.5708.037	BADU Resort 70	3~ Y/Δ 400/230 V	3.00 kW	2,111.39 €	2,512.55 €
219.5808.037	BADU Resort 80	3~ Y/Δ 690/400 V	4.00 kW	2,530.26 €	3,011.01 €
219.5118.037	BADU Resort 110	3~ Y/Δ 690/400 V	5.50 kW	2,865.16 €	3,409.54 €

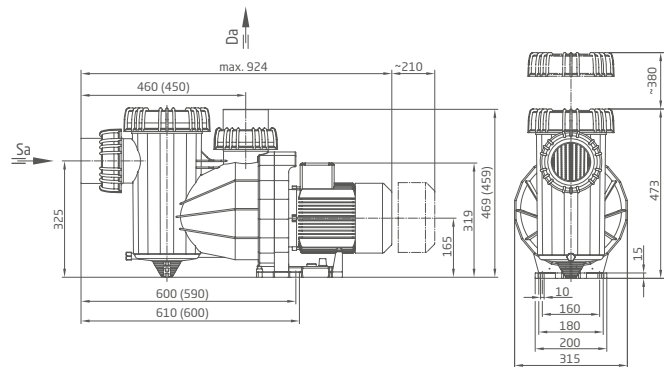
Three-way opening device included in delivery. See page 150.



### Characteristics



### Dimensions



Detailed dimensions available on request or at [badu.de](http://badu.de)



# Circulation pumps, energy-saving

Self-priming and non-self-priming circulation pumps are often the heart of a pool. Therefore the efficiency of your pump significantly determines the economic efficiency of your whole swimming pool unit and not least our environment and natural resources. That's what BADU Green products from our BADU Premium range stand for.



# Product overview



**BADU Alpha Eco Soft**  
Performance: 20 m<sup>3</sup>/h  
Page 42



**BADU Eco Soft**  
Performance: 25 m<sup>3</sup>/h  
Page 44



**BADU EasyFit Eco VS**  
Performance: 28 m<sup>3</sup>/h  
Page 46



**BADU Gamma Eco VS**  
Performance: 28 m<sup>3</sup>/h  
Page 48



**BADU Prime Neo VS**  
Performance: 28 m<sup>3</sup>/h  
Page 50



**BADU Eco Future**  
Performance: 30 m<sup>3</sup>/h  
Page 52



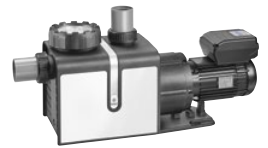
**BADU Delta Eco VS**  
Performance: 30 m<sup>3</sup>/h  
Page 54



**BADU Delta-MK Eco VS**  
Performance: 30 m<sup>3</sup>/h  
Page 56



**BADU Profi Eco VS**  
Performance: 37 m<sup>3</sup>/h  
Page 58



**BADU Profi-MK Eco VS**  
Performance: 33 m<sup>3</sup>/h  
Page 60



**BADU Eco Flex**  
Performance: 40 m<sup>3</sup>/h  
Page 62



**BADU Variostar**  
Performance: 65 m<sup>3</sup>/h  
Page 64

The pumps pictured above can be used for pool water with a salt concentration of up to 0.5 %, i.e. 5 g/l. For higher salt concentrations please contact us.

# BADU® Fact checker

Well informed for the right decision: The BADU fact checker.  
Relevant pump features at a glance and in direct comparison.



Comparison parameters	BADU	Alpha Eco Soft	Eco Soft	EasyFit Eco VS	Gamma Eco VS	Prime Neo VS
Flow rate Q max. (m³/h)		20	25	30	30	30
Power input P1 (kW)		0.04-0.75	0.06-1.10	0.03-1.40	0.03-1.40	0.03-1.40
Power output P2 (kW)		0.02-0.50	0.03-0.75	0.01-1.10	0.01-1.10	0.01-1.10
Single phase 1~ 230 V*)		●	●	●	●	●
Three-phase 3~ 400/230 V*)		○	○	○	○	○
LED transparent lid		○	○	○	○	●
Lid opening device		●	●	●	●	●
Separable strainer basket		○	○	●	○	○
Glue socket d (mm)		50	63/50	63	63	-
Glue socket materials		ABS	ABS	ABS	PVC-U	-
Connection options		V	V	V/IG	V/2" IG	2/1.5" IG
Motor control		D, A	D, A	D	D	D, A, R
Motor performance P (%)		5-100	5-100	5-100	5-100	5-100
Motor speed n (rpm)		800-2850	800-2850	600-3000	600-3000	600-3000
Sound pressure level L <sub>pa</sub> (1m) [dB(A)]		36.7-64.1	36.7-64.1	35.4-67.3	34.5-64.2	34.4-61.3
Replacement alternative (speed control possible)**)		BADU Eco Soft	BADU Gamma Eco VS	BADU Gamma Eco VS	BADU Delta Eco VS	BADU Gamma Eco VS
GS symbol		●	●	●	●	●
Catalogue page		42	44	46	48	50

\*) Special voltages on request.  
V - Union  
IG - Inner thread  
● - Yes  
○ - No

\*\*) Pipework adjustments may be necessary  
D - Digital potential-free  
A - Analogue 0-10 V and 4-20 mA  
R - RS485



## BADU® Green App

Calculate the energy efficiency and performance of your BADU Green circulation pump.

Right from the start BADU Green circulation pumps were designed for the best possible efficiency and therefore also with the environment in mind. However, whether or not a pump is the right choice for you, is a different question. You can find the answer easily by using the BADU Green App for iOS and Android operating systems.



Eco Future	Delta Eco VS	Delta-MK Eco VS	Profi Eco VS	Profi-MK Eco VS	Eco Flex	Variostar
37	37	37	38	37	40	65
0.03-1.40	0.03-1.40	0.48-1.80	0.09-1.80	0.56-1.80	0.08-2.60	0.07-1.15
0.01-1.10	0.01-1.10	0.37-1.40	0.05-1.40	0.48-1.40	0.05-2.20	0.03-0.85
●	●	●	●	●	●	●
○	○	○	○	○	○	○
●	●	●	●	●	○	○
●	●	●	●	●	●	○
●	●	●	●	●	○	○
63	63	63	75/63	75/63	90	90
PVC-U	PVC-U	PVC-U	PVC-U	PVC-U	ABS	ABS
V	V	V	V	V	V	V
D, A, R	D	D	D	D	D, A, R	D, A
5-100	5-100	-	-	-	5-100	-
600-3000	600-3000	2000-3000	1000-3000	2000-3000	600-3000	600-1800
35.9-65.3	35.7-66.5	50.3-66.5	40.0-69.7	55.7-69.7	39.2-72.8	40.2-57.6
BADU Profi Eco VS	BADU Profi Eco VS	BADU Profi-MK Eco VS	BADU Delta Eco VS	BADU Delta-MK Eco VS	-	-
●	●	●	●	●	○	○
52	54	56	58	60	62	64

# BADU® Alpha Eco Soft

New standard for small pools with variable speed motor.  
The most efficient pump ever.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 2 m above or 3 m below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 1.0 l

Strainer basket mesh size ..... approx. 2.8 x 2.8 mm

## Materials used

Pump casing .....	PP
Housing cover .....	PP GF 30
Impeller .....	PPE GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/ABS
Glue sockets .....	ABS
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR

Technical data at 50/60 Hz	BADU	Alpha Eco Soft
Inlet Sa/outlet connection Da d <sup>4)</sup>		50/50
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		50/50
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.04-0.75/0.02-0.50
Rated current (A)	1~ 230 V	0.30-3.20
Sound pressure level Lpa (1m) [dB(A)]		36.7-64.1

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.4000.038	BADU Alpha Eco Soft	1~ 230 V	0.50 kW	954.71 €	1,136.10 €

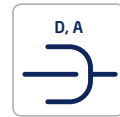
Universal opening device included in delivery. See page 156.



< With analogue input  
0-10 V and 4-20 mA

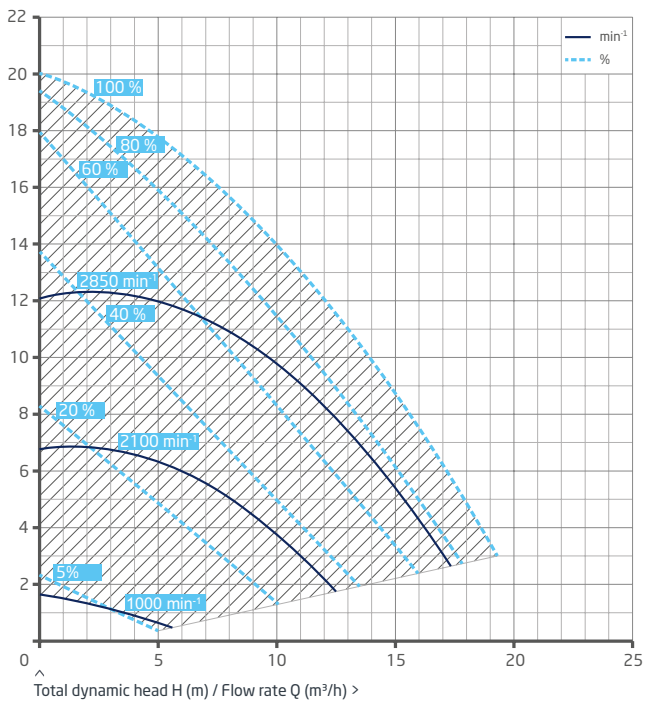
< Noise-optimised motor.  
Ideal use of the motor  
capacity

Circulation pumps, energy-saving

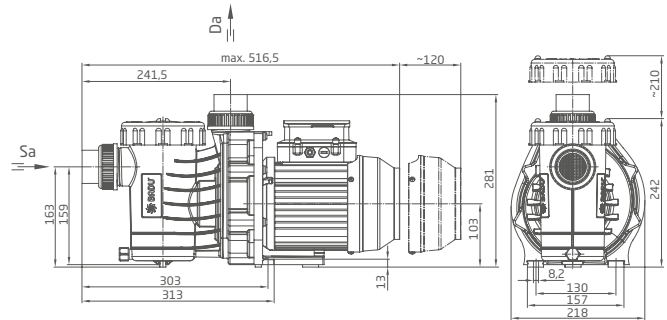


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### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Eco Soft

Intelligent, fast and quiet.

Highly efficient circulation pump that makes full use of its capacity.

## Field of application

Swimming pool water circulation through a filter system. The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 3 l

Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

Can be controlled using the BADU NetLink remote control. See page 136.

## Materials used

Pump casing .....	PP TV 20
Intermediate housing .....	PP TV 40
Gland housing .....	PP TV 40
Diffuser .....	PA 6 GF 15
Impeller .....	PA 66 GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Glue sockets .....	ABS
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	galvanised stainless steel
Elastomers .....	NBR

Technical data at 50/60 Hz	BADU	Eco Soft
Inlet Sa/outlet connection Da d <sup>4</sup> )		63/50
Rec. inlet/outlet pipe, PVC pipe, d <sup>4</sup> )		63/50
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.06-1.10/0.03-0.75
Rated current (A)	1~ 230 V	0.45-5.00
Sound pressure level Lpa (1m) [dB(A)]		36.7-64.1

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
219.0008.138	BADU Eco Soft	1~ 230 V	0.75 kW	1,222.64 €	1,454.94 €

Universal opening device included in delivery. See page 156.



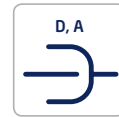
< With analogue input  
0-10 V and 4-20 mA

< Noise-optimised motor.  
Ideal use of the motor  
capacity

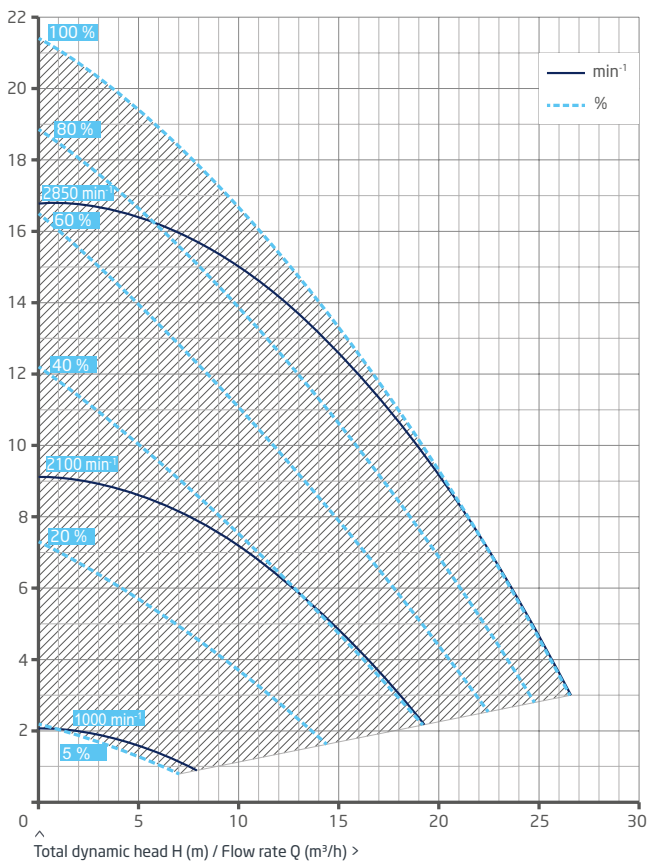
Circulation pumps, energy-saving



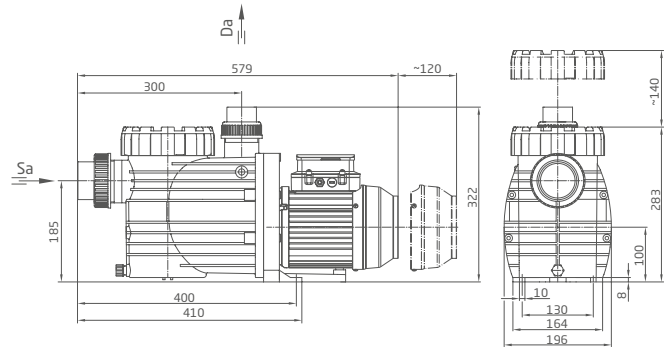
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### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® EasyFit Eco VS

Universal pump with great genes.  
Broad field of application with high flexibility.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 3 l

Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP GF 30
Gland housing .....	PP TV 40
Diffuser .....	PA 66 GF 30/PP GF 30
Impeller .....	PP GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PP GF 30
Glue sockets .....	ABS
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR/Viton

For connection variations please see page 34.

Can be controlled using the BADU NetLink remote control. See page 136.

Technical data at 50/60 Hz	BADU	EasyFit Eco VS
Inlet Sa/outlet connection Da d <sup>4)</sup>		63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.03-1.40/0.01-1.10
Rated current (A)	1~ 230 V	0.50-6.10
Sound pressure level L <sub>pa</sub> (1m) [dB(A)]		35.4-67.3

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
207.6261.138	BADU EasyFit Eco VS	1~ 230 V	1.10 kW	1,374.60 €	1,635.77 €

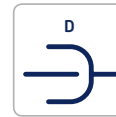
Universal opening device included in delivery. See page 156.





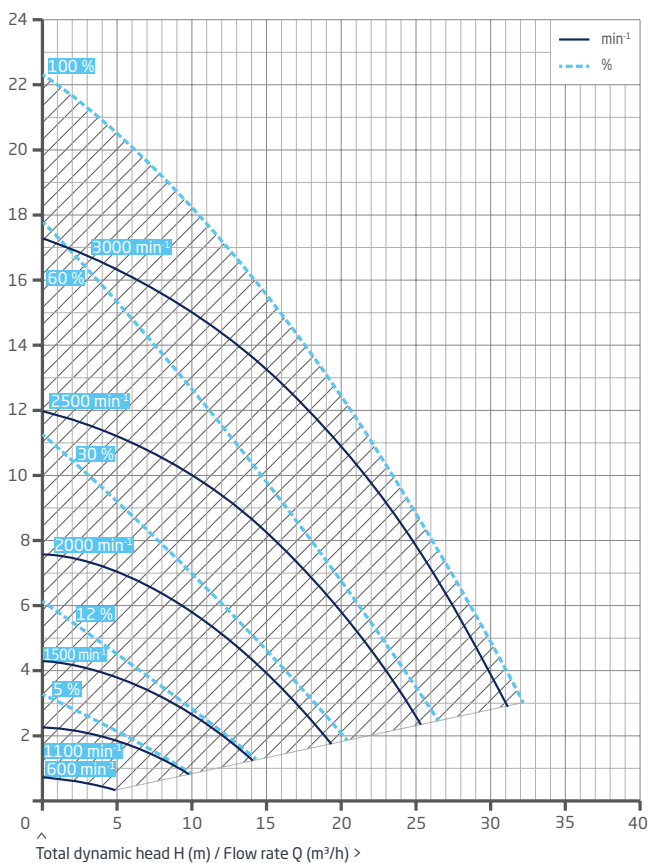
< Motor display with intuitive control

Circulation pumps, energy-saving

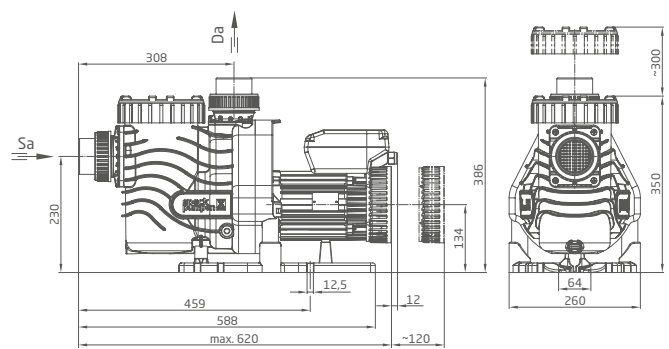


www.tuv.com  
ID 0000021507

### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Gamma Eco VS

The new bestseller with variable PM motor based on our BADU Prime. Efficient, modern, thought out.

## Field of application

Swimming pool water circulation through a filter system. The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 3 l

Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

Can be controlled using the BADU NetLink remote control. See page 136.

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP TV 40
Gland housing .....	PP TV 40
Diffuser .....	PA 66 GF 30/PP GF 30
Impeller .....	PP GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Unions/glue sockets .....	ABS/PVC-U
Elastomers .....	NBR/Viton

Technical data at 50/60 Hz	BADU	Gamma Eco VS
Inlet Sa/outlet connection Da d <sup>4)</sup>		63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.03-1.40/0.01-1.10
Rated current (A)	1~ 230 V	0.50-6.10
Sound pressure level L <sub>pa</sub> (1m) [dB(A)]		34.5-64.2

For more detailed information regarding the motor protection please see page 167.

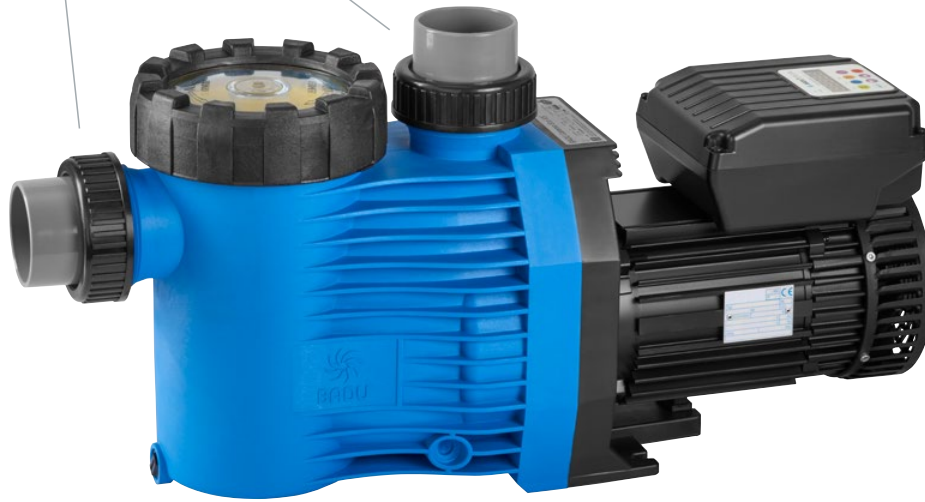
Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.5231.138	BADU Gamma Eco VS	1~ 230 V	1.10 kW	1,486.56 €	1,769.01 €

Universal opening device included in delivery. See page 156.



With inner and outer thread

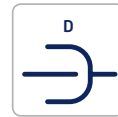


< Motor display with intuitive control

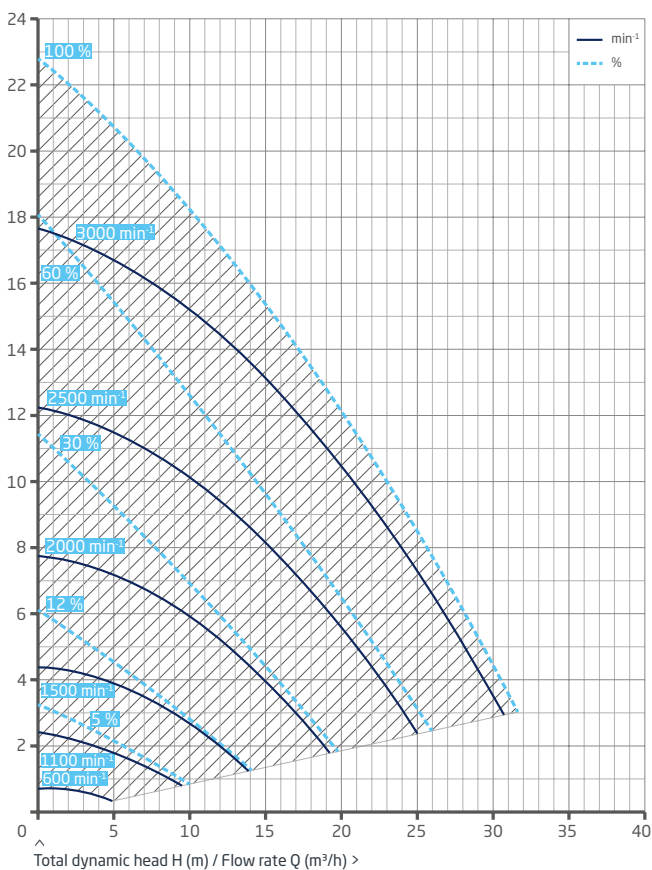
Circulation pumps, energy-saving



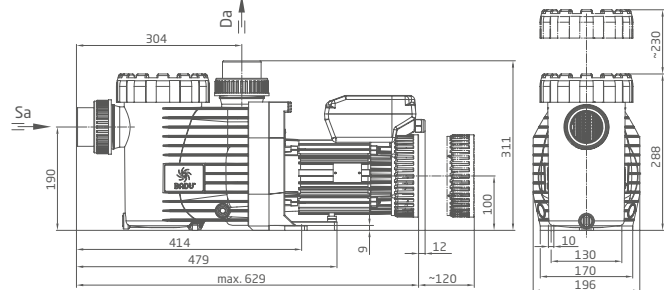
www.tuv.com  
ID 0000021507



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Prime Neo VS

Immerse yourself in a new era of water treatment and pump technology that combines efficiency and intelligence.

## Field of application

Swimming pool water circulation through a filter system. The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 3 l

Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

Can be controlled using the BADU NetLink remote control. See page 136.

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP TV 40
Gland housing .....	PP TV 40
Diffuser .....	PA 66 GF 30
Impeller .....	PP GF 30
Strainer basket.....	PP
Lid .....	PC, transparent/PA 66 GF 30
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR/Viton

Technical data at 50/60 Hz	BADU	Prime Neo VS
Inlet Sa/outlet connection Da Rp <sup>2)</sup>		2/1½
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.03-1.40/0.01-1.10
Rated current (A)	1~ 230 V	0.50-6.10
Sound pressure level Lpa (1m) [dB(A)]		34.4-61.3

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
219.7203.038	BADU Prime Neo VS	1~ 230 V	1.10 kW	1,367.60 €	1,627.44 €

Universal opening device included in delivery. See page 156.



< New generation of motors with extended control options

Circulation pumps, energy-saving



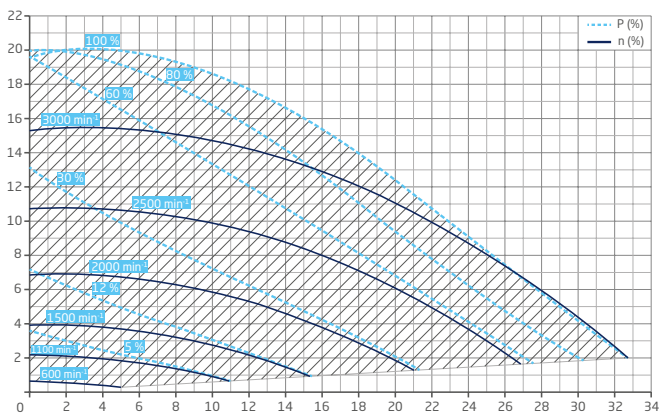
www.tuv.com  
ID 0000021507



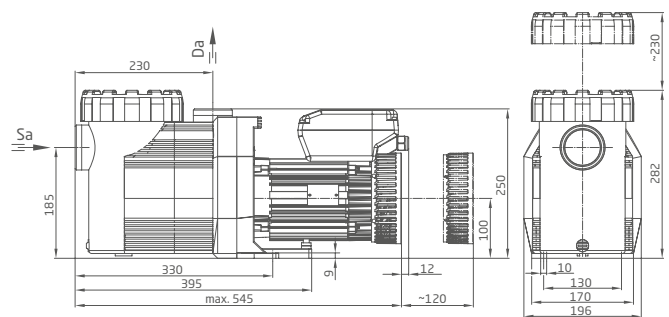
Pending approval.



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

^ Total dynamic head H (m) / Flow rate Q (m³/h) >

# BADU® Eco Future

The unprecedented novelty made of bio-based plastic.  
Combines innovation with design and maximum sustainability.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 3 l

Strainer basket mesh size ..... approx. 2.2 x 2.2 mm

Can be controlled with the BADU NetLink pump remote control. See page 136.

## Materials used

Pump casing .....	bio-based p.
Intermediate housing .....	bio-based p.
Gland housing .....	bio-based p.
Spiral insert .....	bio-based p.
Unions/glue sockets .....	ABS/PVC-U
Diffuser .....	bio-based p.
Impeller .....	PPE GF 30
Strainer basket .....	bio-based p.
Lid .....	PC, transparent/bio-based p.
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR/Viton

bio-based p. - bio-based plastic

Technical data at 50/60 Hz	BADU	Eco Future
Inlet Sa/outlet connection Da <sup>4)</sup>		63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.03-1.40/0.01-1.10
Rated current (A)	1~ 230 V	0.50-6.10
Sound pressure level Lpa (1m) [dB(A)]		35.9-65.3

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.6000.038	BADU Eco Future	1~ 230 V	1.10 kW	1,599.00 €	1,902.81 €

Universal opening device included in delivery. See page 156.

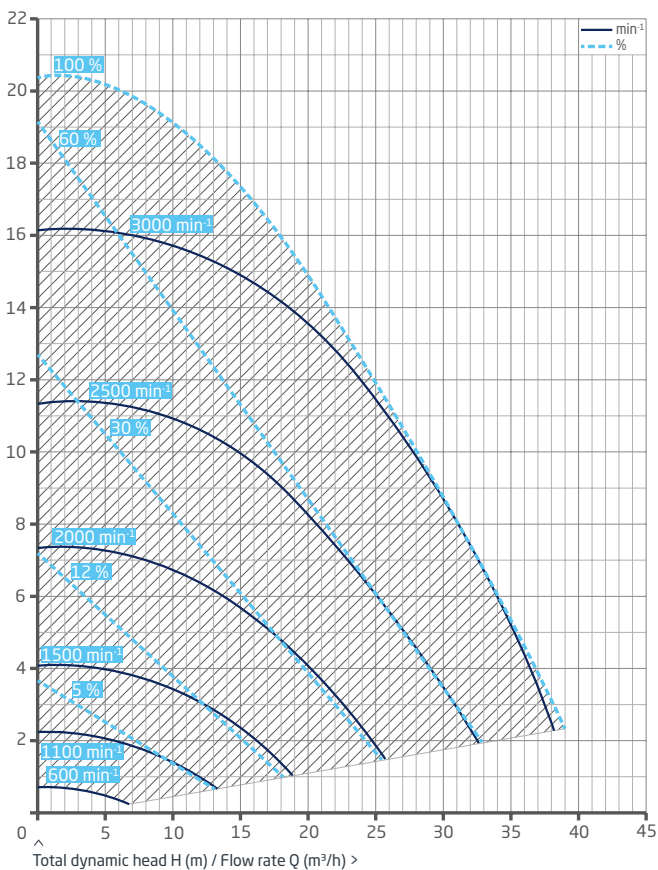


< New generation of motors with extended control options

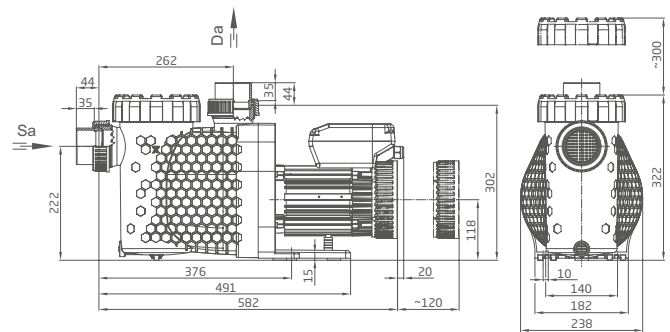


www.tuv.com  
ID 0000021507

### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Delta Eco VS

New high-class standard with speed control.  
High-quality filter circulation pumps for professionals.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 4 l

Strainer basket mesh size ..... approx. 2.2 x 2.2 mm

Can be controlled with the BADU NetLink pump remote control. See page 136.

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP GF 30
Gland housing .....	PP GF 30
Unions/glue sockets .....	ABS/PVC-U
Diffuser .....	PP GF 30
Impeller .....	PPE GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR/Viton

Technical data at 50/60 Hz	BADU	Delta Eco VS
Inlet Sa/outlet connection Da <sup>4)</sup>		63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.03-1.40/0.01-1.10
Rated current (A)	1~ 230 V	0.50-6.10
Sound pressure level L <sub>pa</sub> (1m) [dB(A)]		35.7-66.5

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.3281.138	BADU Delta Eco VS	1~ 230 V	1.10 kW	1,538.55 €	1,830.87 €

Universal opening device included in delivery. See page 156.





Transparent lid with integrated LED lighting

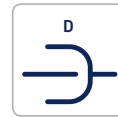


Impeller fan and guard for reduced operating noise

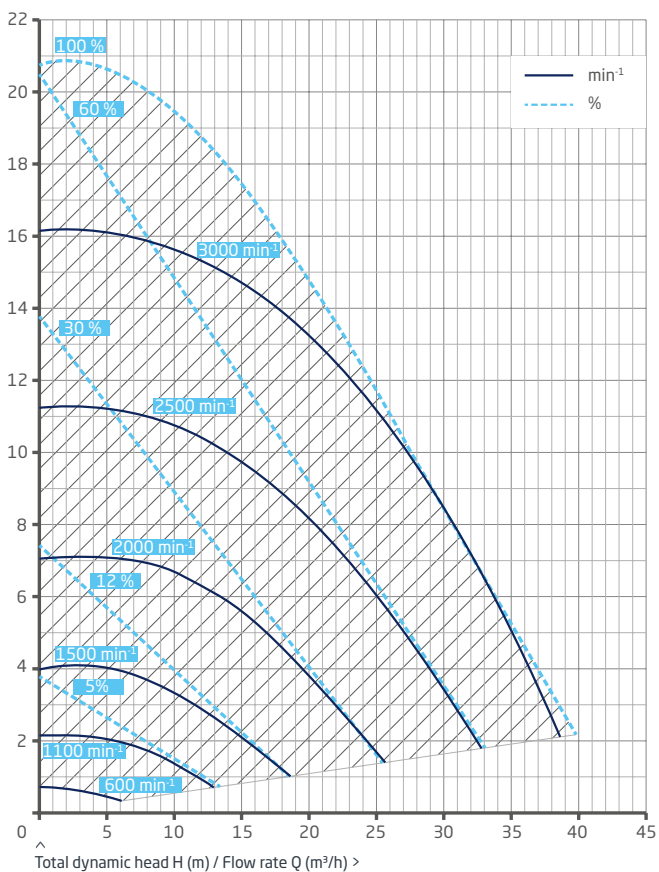
Circulation pumps, energy-saving



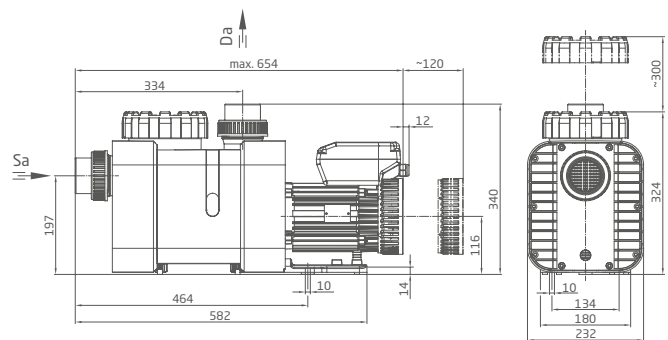
www.tuv.com  
ID 0000021507



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Delta-MK Eco VS

Sealless pump for the pool.  
Speed controlled and quiet.

## Fields of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 1.5 m above or 3 m below water level.

## Design

Monoblock-type pump with integrated strainer tank.  
Motor/pump shaft has no contact with the pool water providing complete electrical separation.  
Strainer tank capacity ..... approx. 4 l  
Strainer basket mesh size ..... approx. 2.2 x 2.2 mm

Can be controlled with the BADU NetLink pump remote control. See page 136.

## Materials used

Pump casing .....	PP GF 30
Intermediate housing/gland housing .....	PP GF 30
Lid for gland housing .....	PP GF 10
Can .....	PP GF 30
Intermediate flange .....	PP GF 30
Pump feet .....	ABS GF 20
Unions/glue sockets .....	ABS/PVC-U
Diffuser .....	PP GF 30
Impeller .....	PPE GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Slide bearing .....	SiC/SiC
Elastomers .....	NBR
Screws .....	stainless steel

Technical data at 50/60 Hz	BADU	Delta-MK Eco VS
Inlet Sa/outlet connection Da <sup>4)</sup>		63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.48-1.80/0.37-1.40
Rated current (A)	1~ 230 V	2.15-7.80
Sound pressure level Lpa (1m) [dB(A)]		50.3-66.5

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.3281.438	BADU Delta-MK Eco VS	1~ 230 V	1.40 kW	1,877.46 €	2,234.18 €

Universal opening device included in delivery. See page 156.



Transparent lid with integrated LED lighting



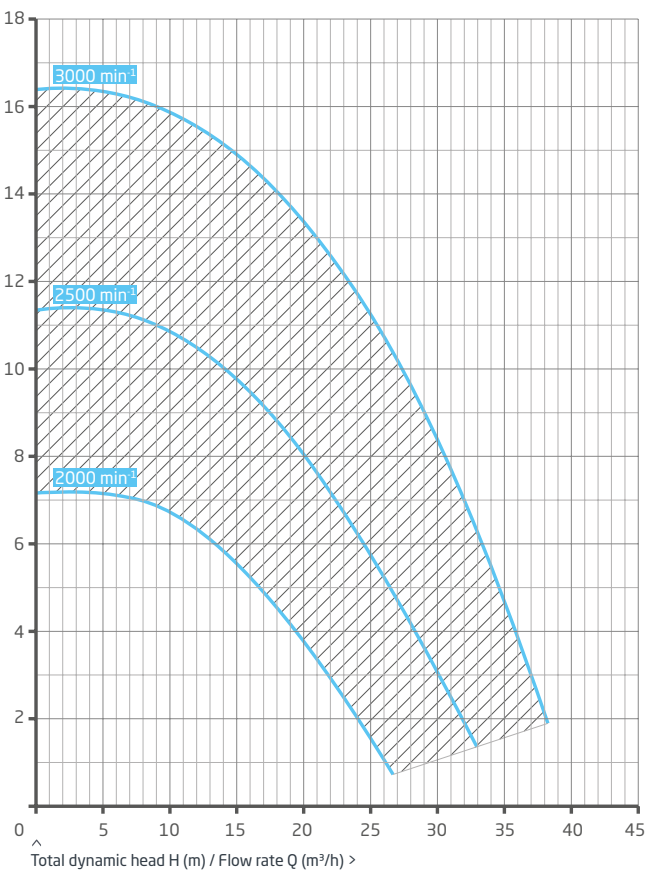
Circulation pumps, energy-saving



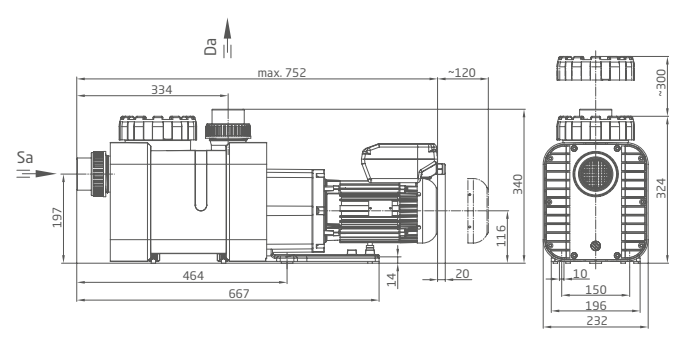
www.tuv.com  
ID 0000021507



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Profi Eco VS

Exclusive premium pump with maximum energy efficiency. Especially quiet. For larger pools and swimming baths. For the highest demands.

## Field of application

Swimming pool water circulation through a filter system. The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 4 l

Strainer basket mesh size ..... approx. 2.2 x 2.2 mm

## Materials used

Pump housing .....	PP GF 30
Intermediate housing .....	PP GF 30
Gland housing .....	PP GF 30
Spiral insert .....	PP
Diffuser .....	PA 66 GF 30
Impeller .....	PP GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Glue sockets .....	PVC-U
Elastomers .....	NBR/Viton

Can be controlled with the BADU NetLink pump remote control. See page 136.

Technical data at 50/60 Hz	BADU	Profi Eco VS
Inlet Sa/outlet connection Da d <sub>outer</sub> . DN <sub>inner</sub> <sup>4)</sup>		75/75 . 63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		75/75
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.09-1.80/0.05-1.40
Rated current (A)	1~ 230 V	0.65-7.80
Sound pressure level L <sub>pa</sub> (1m) [dB(A)]		40.0-69.7

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.2321.138	BADU Profi Eco VS	1~ 230 V	1.40 kW	1,474.57 €	1,754.74 €

Universal opening device included in delivery. See page 156.



Transparent lid with integrated LED lighting

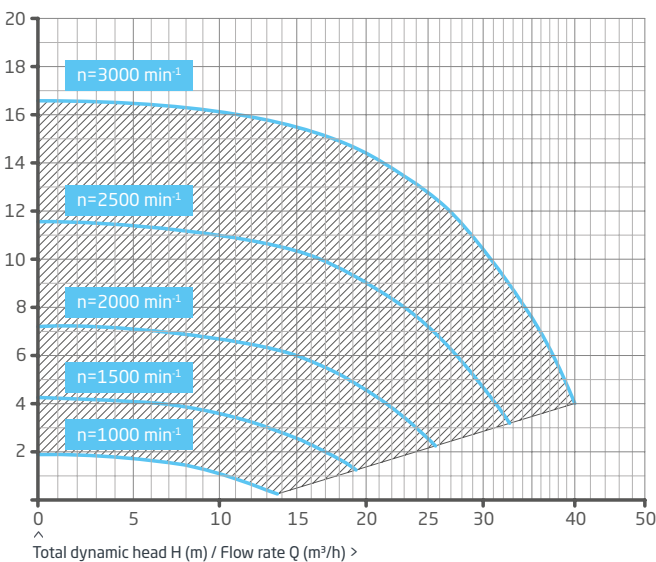


Circulation pumps, energy-saving

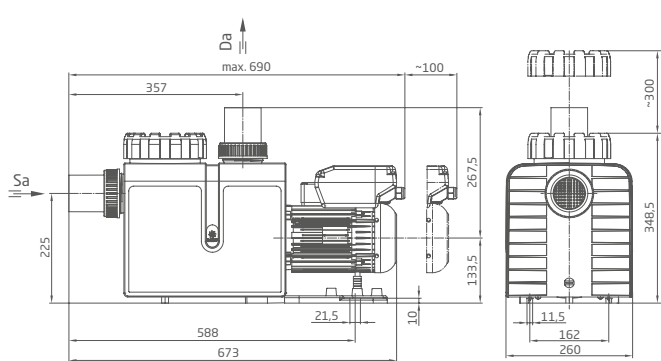


www.tuv.com  
ID 0000021507

### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Profi-MK Eco VS

Sealless pump for the pool.  
With variable speed control.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 1.5 m above or 3 m below water level.

## Design

Monoblock-type pump with integrated strainer tank.  
Motor/pump shaft has no contact with the pool water providing complete electrical separation.  
Strainer tank capacity ..... approx. 4 l  
Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

Can be controlled with the BADU NetLink pump remote control. See page 136.

## Materials used

Pump housing ..... PP GF 30  
Intermediate housing/gland housing ..... PP GF 30  
Lid for gland housing ..... PP  
Can ..... PP GF 30  
Intermediate flange ..... PP GF 30  
Spiral insert ..... PP  
Diffuser ..... PA 66 GF 30  
Impeller ..... PP GF 30  
Strainer basket ..... PP  
Lid ..... PC, transparent/PA 66 GF 30  
Slide bearing ..... SiC/SiC  
Screws ..... stainless steel  
Elastomers ..... NBR  
Glue sockets ..... PVC-U

Circulation pumps, energy-saving

Technical data at 50/60 Hz	BADU	Profi-MK Eco VS
Inlet Sa/outlet connection Da d <sub>outer</sub> . DN <sub>inner</sub> <sup>4)</sup>		75/75 . 63/63
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		75/75
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.56-1.80/0.48-1.40
Rated current (A)	1~ 230 V	2.49-7.80*)
Sound pressure level L <sub>pa</sub> (1m) [dB(A)]		55.7-69.7

For more detailed information regarding the motor protection please see page 167.

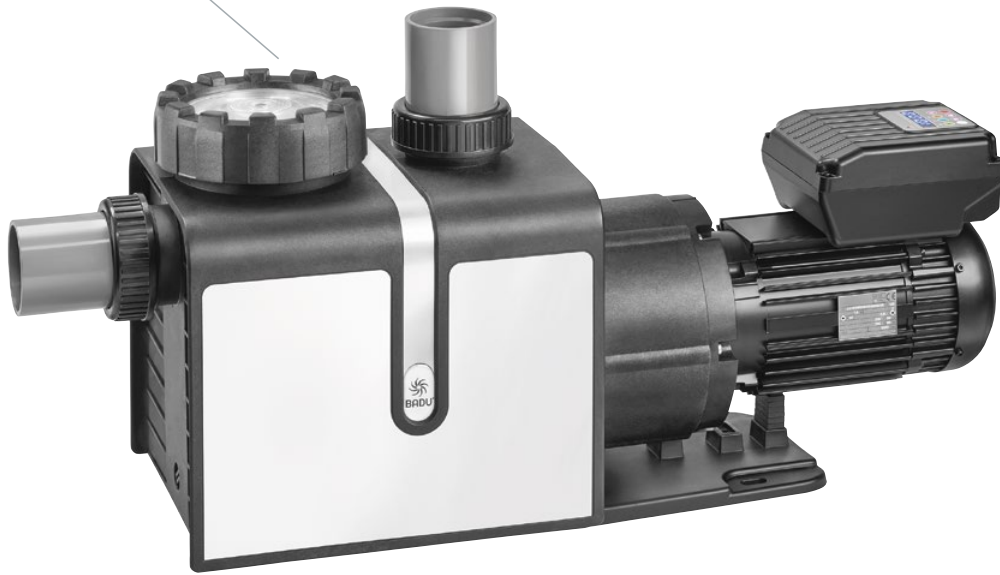
Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.2321.438	BADU Profi-MK Eco VS	1~ 230 V	1.40 kW	2,022.41 €	2,406.67 €

Universal opening device included in delivery. See page 156.



Transparent lid with integrated LED lighting



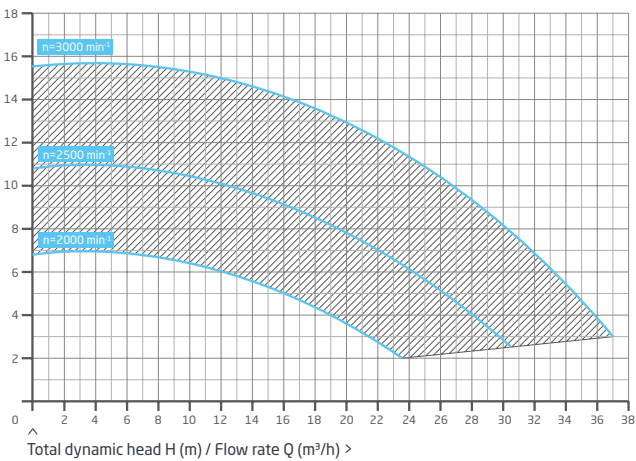
Circulation pumps, energy-saving



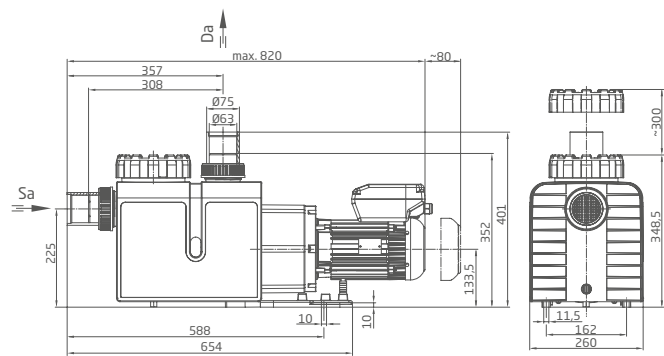
www.tuv.com  
ID 0000021507



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Eco Flex

Variable speed motor with the latest, highly efficient motor technology.  
Circulation pump with proven controls for large pools.

## Field of application

Swimming pool water circulation through a filter system.  
The pump can be installed max. 3 m above or below water level.

## Design

Monoblock-type pump with integrated strainer tank. The bellow-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Strainer tank capacity ..... approx. 6 l

Strainer basket mesh size ..... approx. 3.0 x 2.8 mm

## Materials used

Pump casing .....	PP GF 30
Intermediate housing .....	PP GF 30
Gland housing .....	PP TV 40
Diffuser .....	PP GF 30
Impeller .....	PPE GF 30
Strainer basket .....	PP
Lid .....	PC, transparent/PA 66 GF 30
Glue sockets .....	ABS
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR/Viton

Technical data at 50/60 Hz	BADU	Eco Flex
Inlet Sa/outlet connection Da d <sup>4)</sup>		90/90
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		90/90
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.08-2.60/0.05-2.20
Rated current (A)	1~ 230 V	0.45-12.00
Sound pressure level Lpa (1m) [dB(A)]		39.2-72.8

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
219.0408.338	BADU Eco FLex	1~ 230 V	2.20 kW	1,812.48 €	2,156.85 €

Three-way opening device included in delivery. See page 156.





Replacement for the BADU Eco Motion >



< Motor display with intuitive control

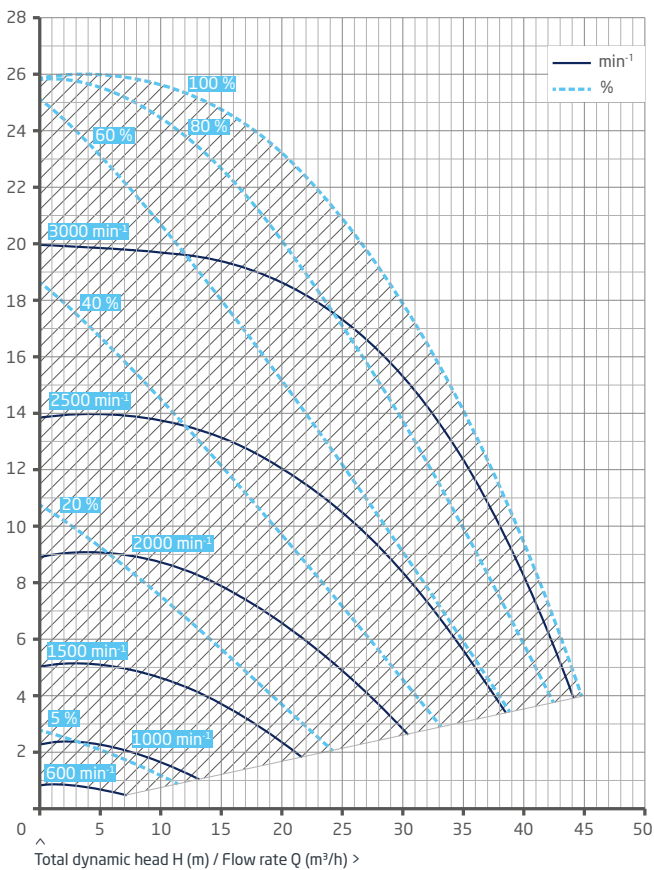
Circulation pumps, energy-saving



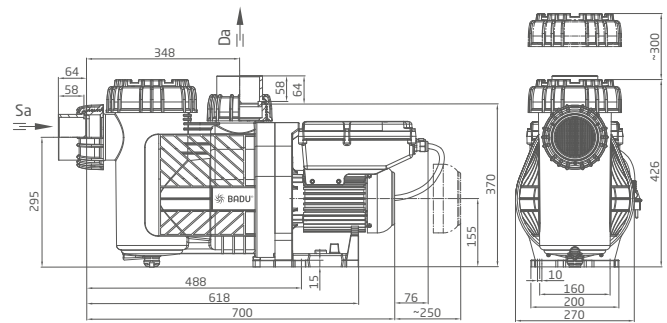
www.tuv.com  
ID 0000021507



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® Variostar

Salt water optimised, corrosion-resistant, robust.  
Variable centrifugal pump for streams and pond circulation.

## Field of application

Swimming pools and industrial filter units, counter swim units, air conditioning units, swimming pool attractions, cleaning devices and many more applications up to a flow rate of 65 m<sup>3</sup>/h.

## Design

The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.  
Motor/pump shaft has no contact with the pool water providing complete electrical separation.  
Discharge outlets swivel gradually by 90° each and by 29° clockwise when viewing the pump from the suction side.

## Materials used

Pump casing .....	PPE GF 30
Wear ring .....	stainless steel
Housing cover .....	PPE GF 30
Impeller .....	PP GF 30
Unions with glue socket .....	ABS
Impeller nut .....	PP GF 30
Mechanical seal .....	SiC/SiC/Viton
Motor shaft .....	stainless steel
Screws .....	stainless steel
Elastomers .....	Viton

Technical data at 50/60 Hz	BADU	Variostar
Inlet Sa/outlet connection Da Rp <sup>2)</sup>		90/90
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		110/110
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.07-1.15/0.03-0.85
Rated current (A)	1~ 230 V	0.60-4.95
Sound pressure level Lpa (1m) [dB(A)]		40.2-57.6

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
238.1342.448	BADU Variostar	1~ 230 V	0.85 kW	2,173.36 €	2,586.30 €



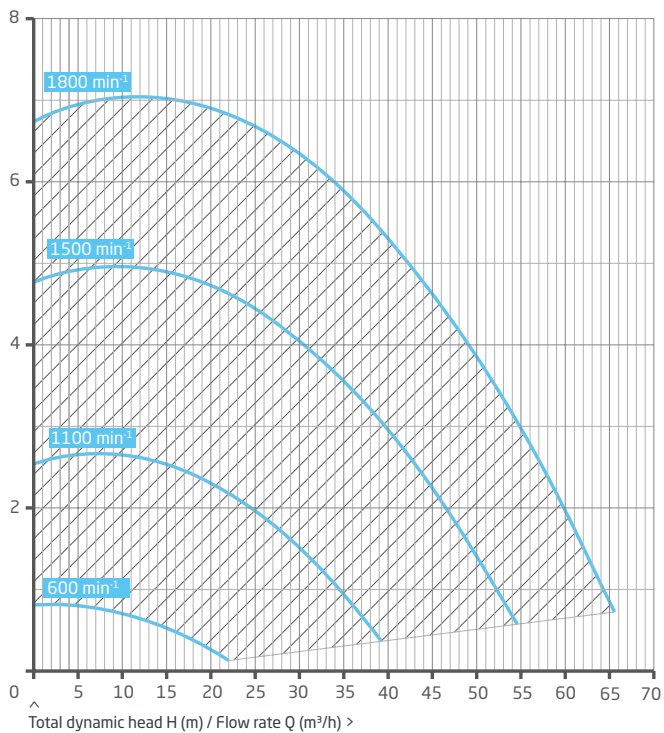
Circulation pumps, energy-saving



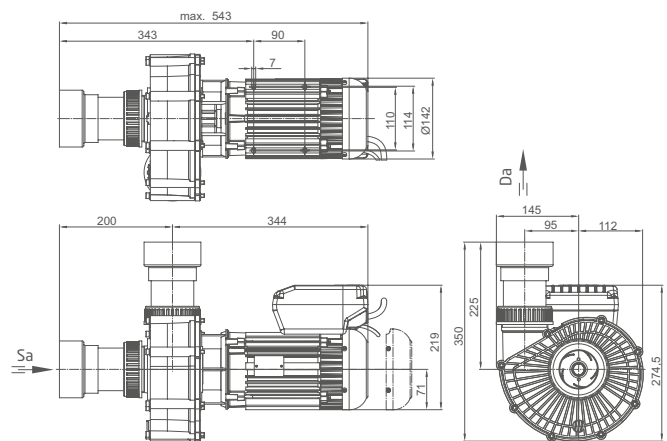
www.tuv.com  
ID 0000021507



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de



# Circulation pumps, non-self-priming

Non-self-priming circulation pumps are reliable and proven. These pumps are placed under the water level and are therefore often the perfect choice for pool attractions and whirlpools. Available in 34 performance varieties, these BADU pumps are suitable for pool volumes of up to 100 m<sup>3</sup>.

# Product overview



## **BADU 46**

Performance: 5-22 m<sup>3</sup>/h

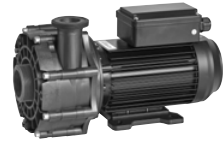
**Page 70**



## **BADU 47**

Performance: 5-22 m<sup>3</sup>/h

**Page 72**



## **BADU 21-40**

Performance: 12-30 m<sup>3</sup>/h

**Page 74**



## **BADU 21-41**

Performance: 12-30 m<sup>3</sup>/h

**Page 76**



## **BADU 21-50/21-60**

Performance: 20-50 m<sup>3</sup>/h

**Page 78**



## **BADU 21-80**

Performance: 40-80 m<sup>3</sup>/h

**Page 80**



## **BADU 21-81**

Performance: 40-80 m<sup>3</sup>/h

**Page 82**

The pumps pictured above can be used for pool water with a salt concentration of up to 0.5 %, i.e. 5 g/l. For higher salt concentrations please contact us.

# BADU<sup>®</sup> Fact checker

Well informed for the right decision: The BADU fact checker.  
Relevant pump features at a glance and in direct comparison.



Comparison parameters	BADU	46	47
Flow rate Q max. (m <sup>3</sup> /h)		25	25
Power input P <sub>1</sub> (kW)		0.58-1.20	0.58-1.20
Power output P <sub>2</sub> (kW)		0.30-0.80	0.30-0.80
Single phase 1~ 230 V*)		●	●
Three-phase 3~ 400/230 V*)		○	○
Glue socket d (mm)		63/50	63/50
Glue socket materials		ABS	ABS
Connection options		V	V
Replacement alternative. BADU		47	46
Catalogue page		70	72

\*) Special Voltages on request.

V - Union  
AG - Outer thread  
F - flange  
● - Yes  
○ - No

Circulation pumps, non-self-priming



21-40	21-41	21-50/21-60	21-80	21-81
30	30	52	90	90
0.85-2.00	0.85-2.00	1.31-3.76	1.85-4.54	1.85-4.54
0.55-1.50	0.55-1.50	1.10-3.00	1.60-4.00	1.60-4.00
●	●	●	●	●
●	●	●	●	●
-	63	-	-	90
-	ABS	-	-	ABS
2" AG	V/2" AG	2¾" AG	2¾" AG	V
21-41	21-40	-	21-81	21-80
74	76	78	80	82

# BADU® 46

Solid, medium-size jet pump with self-draining unit.  
For bath tubs, whirlpools and spa facilities.

## Field of application

With a flow rate from 5 to 20 m<sup>3</sup>/h at 8 m head, the BADU 46 series are the ideal pumps for jacuzzis, whirlpools and for use in spas.

## Design

The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

## Materials used

Pump casing .....	PP TV 40
Housing cover .....	PP GF 15
Impeller (BADU 46/5, 46/10, 46/15) .....	PPE GF 30
Impeller (BADU 46/22) .....	PA 66 GF 30
Unions with glue sockets .....	ABS
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	brass/stainless steel
Elastomers .....	NBR

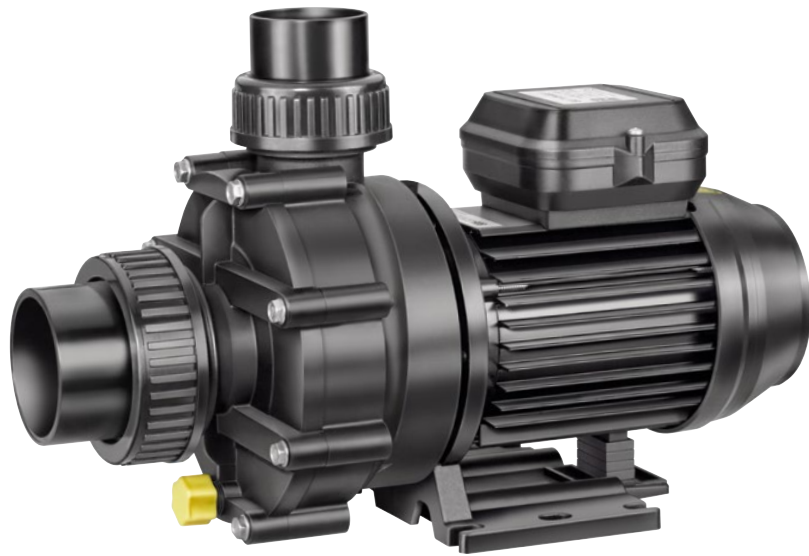
Technical data at 50 Hz	BADU 46/	5	10	15	22
Inlet Sa/outlet connection Da d <sup>4)</sup>		63/50	63/50	63/50	63/50
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		50/50	50/50	50/50	63/50
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.58/0.30	0.69/0.45	0.97/0.65	1.20/0.80
Rated current (A)	1~ 230 V	2.60	3.20	4.70	5.30

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

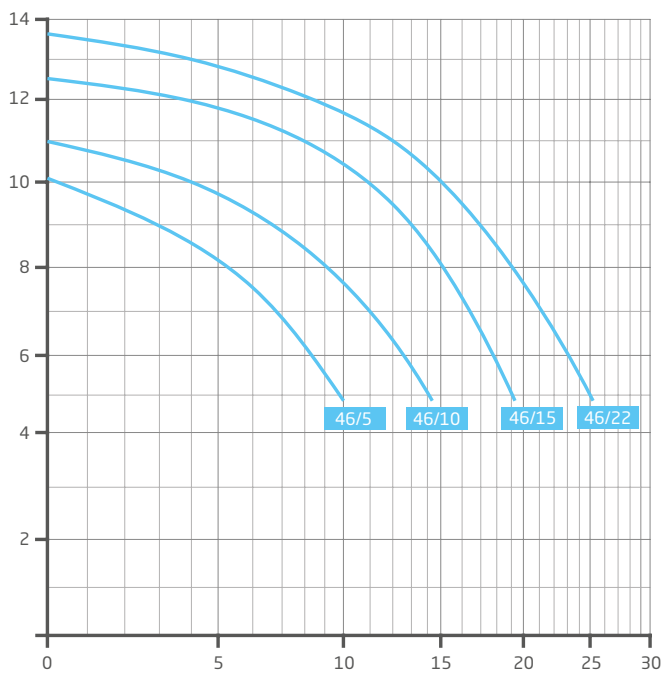
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
204.6050.038	BADU 46/5	1~ 230 V	0.30 kW	322.90 €	384.25 €
204.6100.038	BADU 46/10	1~ 230 V	0.45 kW	333.90 €	397.34 €
204.6150.038	BADU 46/15	1~ 230 V	0.65 kW	355.90 €	423.52 €
204.6220.038	BADU 46/22	1~ 230 V	0.80 kW	376.90 €	448.51 €





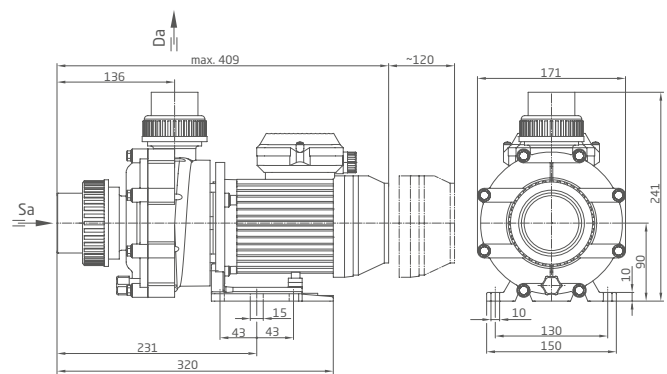
Circulation pumps, non-self-priming

### Characteristics



^ Total dynamic head H (m) / Flow rate Q (m³/h) >

### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® 47

Connection variant for BADU 46 medium-size jet pump.  
For bath tubs, whirlpools and spa facilities.

## Field of application

With a flow rate from 6 to 23 m<sup>3</sup>/h at 8 m head, the BADU 47 series are the ideal pumps for jacuzzis, whirlpools and for use in spas.

## Design

The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.  
Motor/pump shaft has no contact with the pool water providing complete electrical separation.

## Materials used

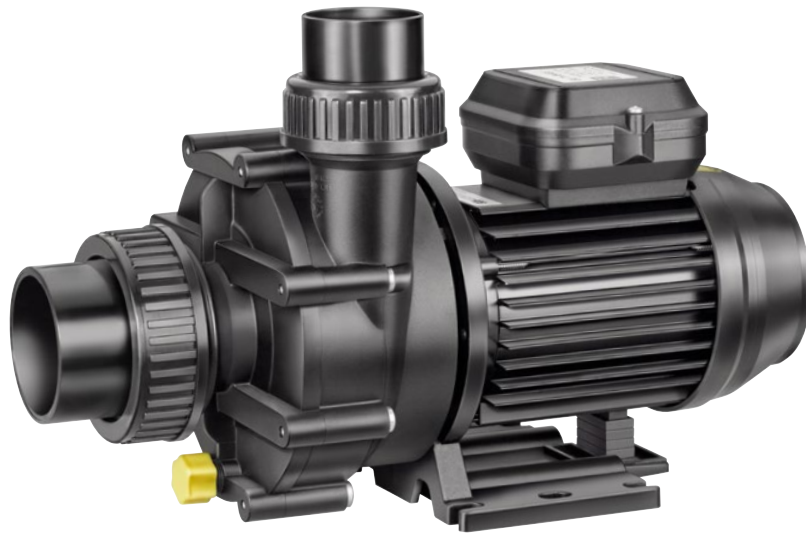
Pump casing ..... PP TV 40  
Housing cover ..... PP GF 15  
Impeller (BADU 47/5, 47/10, 47/16) ..... PPE GF 30  
Impeller (BADU 47/22) ..... PA 66 GF 30  
Unions with glue sockets ..... ABS  
Mechanical seal ..... carbon/ceramic/NBR  
Screws ..... brass/stainless steel  
Elastomers ..... NBR

Technical data at 50 Hz	BADU 47/	5	10	16	22
Inlet Sa/outlet connection Da d <sup>4)</sup>		63/50	63/50	63/50	63/50
Rec. inlet/outlet pipe. PVC pipe. d <sup>4)</sup>		50/50	50/50	50/50	63/50
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.58/0.30	0.69/0.45	0.97/0.65	1.20/0.80
Rated current (A)	1~ 230 V	2.60	3.20	4.70	5.30

For more detailed information regarding the motor protection please see page 167.

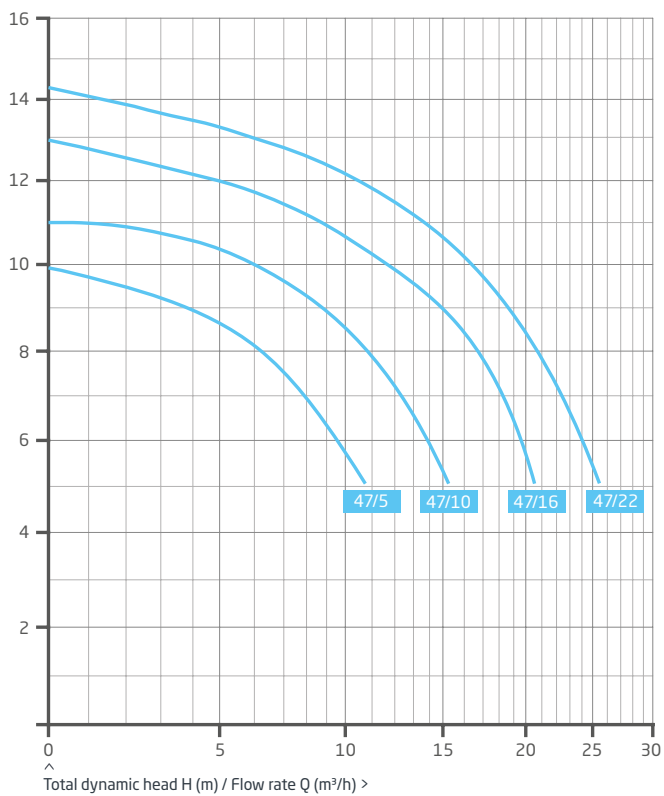
Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
204.7050.038	BADU 47/5	1~ 230 V	0.30 kW	323.92 €	385.46 €
204.7100.038	BADU 47/10	1~ 230 V	0.45 kW	333.90 €	397.34 €
204.7160.038	BADU 47/16	1~ 230 V	0.65 kW	355.90 €	423.52 €
204.7220.038	BADU 47/22	1~ 230 V	0.80 kW	376.90 €	448.51 €

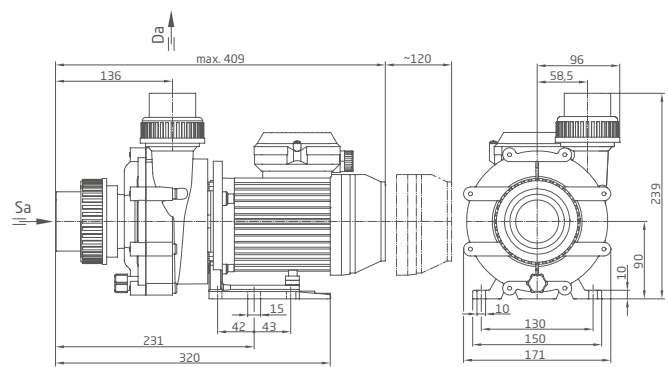


Circulation pumps, non-self-priming

### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

# BADU® 21-40

Universal. small circulation pump. Reliable and space-saving.  
For tubs and pools, counter swim units and pool cleaning devices.

## Field of application

Jet pump for bath tubs and whirlpools, massage units, air conditioning units and pool cleaning devices with a flow rate of up to 30 m<sup>3</sup>/h.

## Design

The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Discharge outlet swivels gradually by 90°. The unit may be installed vertically with the pump underneath.

The pump is self-draining when installed vertically.

For suitable connection unions please see page 158.

## Materials used

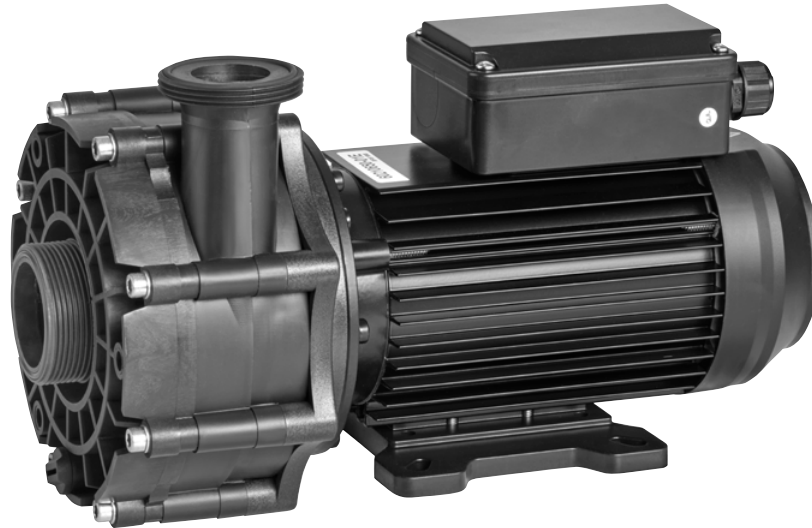
Pump casing .....	PP TV 40
Lid/stand .....	PP TV 40
Impeller (version H) .....	PPE GF 30 (PP GF 30)
Wear ring .....	stainless steel
Mechanical seal .....	carbon/ceramic/NBR
Screws .....	stainless steel
Elastomers .....	NBR

Technical data at 50 Hz	BADU 21-40/	63 G/H G	64 G/H G	65 G/H G	66 G/H G	68 G/H G
Inlet Sa/outlet connection Da d <sup>4)</sup>		2/2*)	2/2*)	2/2*)	2/2*)	2/2*)
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63	63/63	63/63	63/63	75/75
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.85/0.55	1.05/0.75	1.40/1.00	-/-	2.00/1.50
Rated current (A)	1~ 230 V	3.80	4.80	6.30	-/-	8.80
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	-/-	-/-	-/-	1.50/1.10	1.95/1.50
Rated current (A)	3~ Y/Δ 400/230 V	-/-	-/-	-/-	3.00/5.20	3.60/6.20

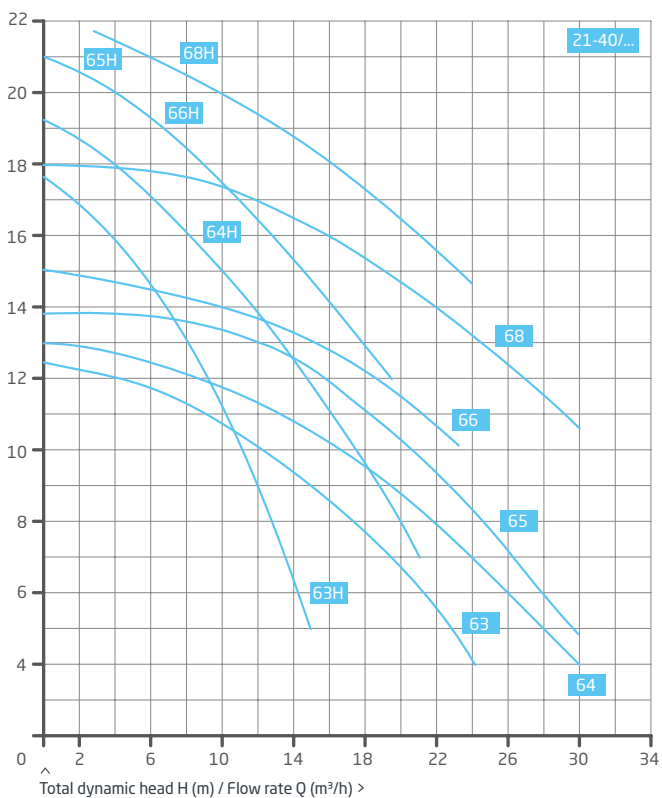
For more detailed information regarding the motor protection please see page 167.

\*) Also available with ø 50/ø 40 hose adapters. | Technical data may vary.

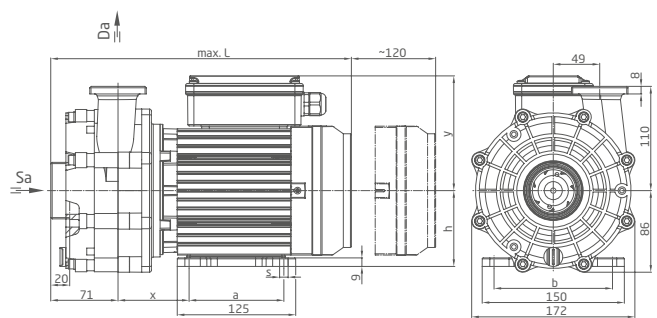
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
234.0630.138	BADU 21-40/63 G	1~ 230 V	0.55 kW	591.83 €	704.28 €
234.0630.338	BADU 21-40/63H G	1~ 230 V	0.55 kW	609.82 €	725.69 €
234.0640.138	BADU 21-40/64 G	1~ 230 V	0.75 kW	711.80 €	847.04 €
234.0640.338	BADU 21-40/64H G	1~ 230 V	0.75 kW	732.79 €	872.02 €
234.0650.138	BADU 21-40/65 G	1~ 230 V	1.00 kW	772.77 €	919.60 €
234.0650.338	BADU 21-40/65H G	1~ 230 V	1.00 kW	790.78 €	941.03 €
234.0680.138	BADU 21-40/68 G	1~ 230 V	1.50 kW	935.72 €	1,113.51 €
234.0680.338	BADU 21-40/68H G	1~ 230 V	1.50 kW	949.73 €	1,130.18 €
234.0660.137	BADU 21-40/66 G	3~ Y/Δ 400/230 V	1.10 kW	806.76 €	960.04 €
234.0660.337	BADU 21-40/66H G	3~ Y/Δ 400/230 V	1.10 kW	827.77 €	985.05 €
234.0680.137	BADU 21-40/68 G	3~ Y/Δ 400/230 V	1.50 kW	853.76 €	1,015.97 €
234.0680.337	BADU 21-40/68H G	3~ Y/Δ 400/230 V	1.50 kW	874.73 €	1,040.93 €



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

	a	b	h	s	x	x1	y	max. L
21-40/63 G/H G 1~	90	112	71	7	84	149	106	343
21-40/64 G/H G 1~	100	125	80	9	75	140	121	317
21-40/65 G/H G 1~	100	125	80	9	75	140	121	335
21-40/66 G/H G 3~	100	125	80	9	75	140	121	367
21-40/68 G/H G 1~	100	125	80	9	75	140	121	367
21-40/68 G/H G 3~	100	125	80	9	75	140	121	367

# BADU® 21-41

Connection variant for the BADU 21-40/6 universal circulation pump.  
For tubs and pools, counter swim units and pool cleaning devices.

## Field of application

Jet pump for bath tubs and counter swim units, whirlpools, massage units, air conditioning units and pool cleaning devices with a flow rate of up to 30 m<sup>3</sup>/h.

## Design

The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Discharge outlet swivels gradually by 90°. The unit may be installed vertically with the pump underneath.

The pump is self-draining when installed vertically.

For suitable connection unions please see page 158.

## Materials used

Pump casing ..... PP TV 40  
Lid/stand ..... PP GF 15  
Impeller (version H) ..... PPE GF 30 (PP GF 30)  
Mechanical seal ..... carbon/ceramic/NBR  
Screws ..... stainless steel  
Elastomers ..... NBR  
Union with glue socket ..... ABS

Technical data at 50 Hz	BADU 21-41/	63 G/H G	64 G/H G	65 G/H G	66 G/H G	68 G/H G
Inlet Sa glue socket d <sup>4)</sup> /outlet connection Da G <sup>3)</sup>		63/2	63/2	63/2	63/2	63/2
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>		63/63	63/63	63/63	63/63	75/75
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.85/0.55	1.05/0.75	1.40/1.00	-/-	2.00/1.50
Rated current (A)	1~ 230 V	3.80	4.80	6.30	-/-	8.80
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	-/-	-/-	-/-	1.50/1.10	1.95/1.50
Rated current (A)	3~ Y/Δ 400/230 V	-/-	-/-	-/-	3.00/5.20	3.60/6.20

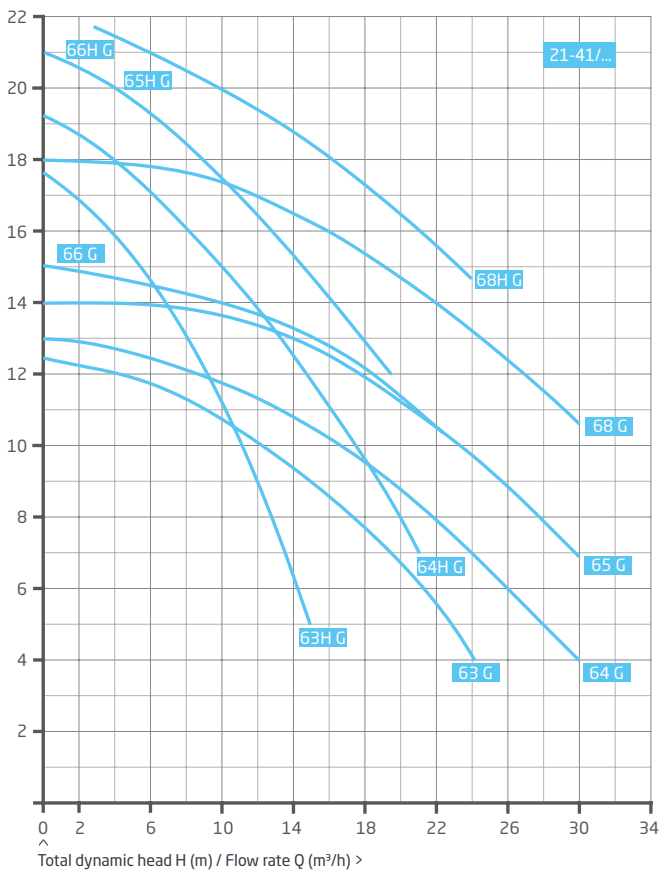
For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

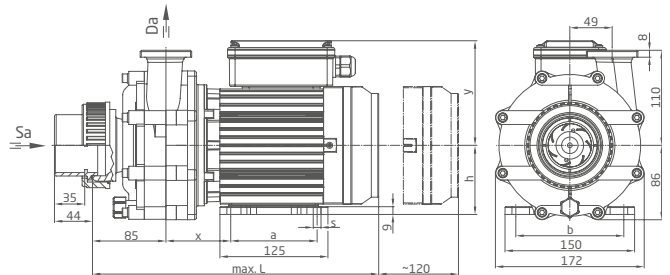
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
234.1630.138	BADU 21-41/63 G	1~ 230 V	0.55 kW	591.83 €	704.28 €
234.1630.338	BADU 21-41/63H G	1~ 230 V	0.55 kW	609.82 €	725.69 €
234.1640.138	BADU 21-41/64 G	1~ 230 V	0.75 kW	711.80 €	847.04 €
234.1640.338	BADU 21-41/64H G	1~ 230 V	0.75 kW	732.79 €	872.02 €
234.1650.138	BADU 21-41/65 G	1~ 230 V	1.00 kW	773.78 €	920.80 €
234.1650.338	BADU 21-41/65H G	1~ 230 V	1.00 kW	790.78 €	941.03 €
234.1680.138	BADU 21-41/68 G	1~ 230 V	1.50 kW	935.72 €	1,113.51 €
234.1680.338	BADU 21-41/68H G	1~ 230 V	1.50 kW	949.71 €	1,130.15 €
234.1660.137	BADU 21-41/66 G	3~ Y/Δ 400/230 V	1.10 kW	806.76 €	960.04 €
234.1660.337	BADU 21-41/66H G	3~ Y/Δ 400/230 V	1.10 kW	827.77 €	985.05 €
234.1680.137	BADU 21-41/68 G	3~ Y/Δ 400/230 V	1.50 kW	853.76 €	1,015.97 €
234.1680.337	BADU 21-41/68H G	3~ Y/Δ 400/230 V	1.50 kW	874.73 €	1,040.93 €



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

	a	b	h	s	x	x1	y	max. L
21-41/63 G/H G 1~	90	112	71	7	84	149	106	357
21-41/64 G/H G 1~	100	125	80	9	75	140	121	331
21-41/65 G/H G 1~	100	125	80	9	75	140	121	349
21-41/66 G/H G 3~	100	125	80	9	75	140	121	381
21-41/68 G/H G 1~	100	125	80	9	75	140	121	381
21-41/68 G/H G 3~	100	125	80	9	75	140	121	381

# BADU® 21-50/21-60

Universal, medium-size circulation pump. Reliable and flexible.  
For whirlpools, counter swim units, pool cleaning devices and massage units.

## Field of application

Large whirlpools, hotel pools, swimming pools and industrial filter units, counter swim units, massage units, air conditioning units, pool cleaning devices and many other applications with a flow rate of up to 54 m<sup>3</sup>/h.

## Design

The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.  
Motor/pump shaft has no contact with the pool water providing complete electrical separation.  
Discharge outlet swivels infinitely.

## Materials used

Pump casing ..... PP GF 30  
Housing cover ..... PPE GF 30  
Impeller BADU 21-50 ..... POM GF 30  
Impeller BADU 21-60 ..... PP GF 30  
Wear ring ..... stainless steel  
Mechanical seal ..... carbon/ceramic/NBR  
Impeller nut ..... PP GF 30  
Clamping ring ..... aluminium  
Screws ..... stainless steel  
Motor shaft ..... stainless steel  
Elastomers ..... NBR/Viton

For suitable connection unions please see page 158.

Technical data at 50 Hz	BADU 21-	50/42 G	50/43 G	50/44 G	60/43 G	60/44 G	60/46 G
Inlet Sa/ outlet connection Da G <sup>3)</sup>		2¾/2¾	2¾/2¾	2¾/2¾	2¾/2¾	2¾/2¾	2¾/2¾
Rec. inlet/outlet pipe. PVC pipe, d <sup>4)</sup>		90/75	90/75	90/75	90/75	90/75	90/75
Power input P <sub>1</sub> / output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	1.58/1.10	2.12/1.60	2.90/2.20	2.12/1.60	2.90/2.20	3.76/3.00
Rated current (A)	1~ 230 V	7.10	9.40	12.80	9.40	12.80	16.50
Power input P <sub>1</sub> / output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	1.31/1.10	1.85/1.60	2.56/2.20	1.85/1.60	2.56/2.20	3.44/3.00
Rated current (A)	3~ Y/Δ 400/230 V	2.80/4.80	3.50/6.10	4.90/8.50	3.50/6.10	4.90/8.50	6.10/10.60

For more detailed information regarding the motor protection please see page 167.

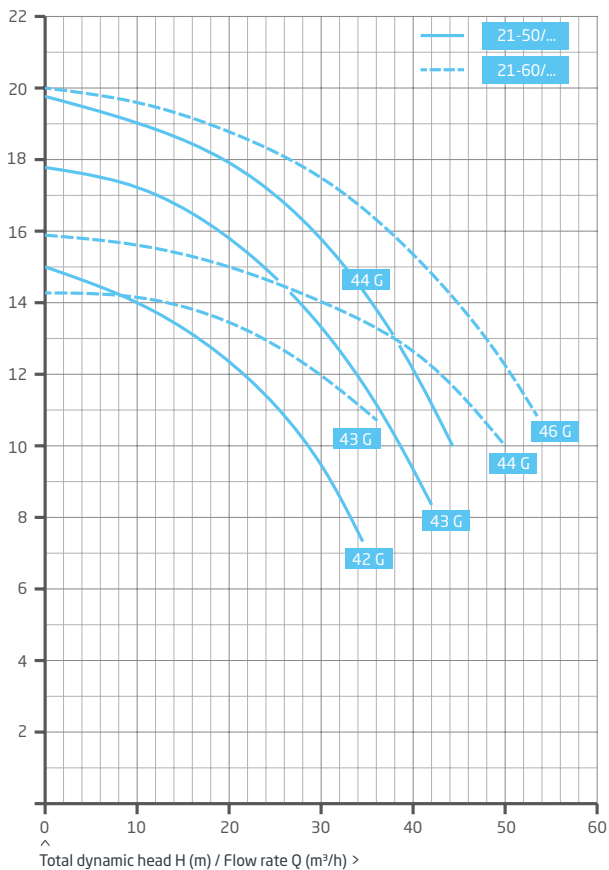
Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
235.0420.138	BADU 21-50/42 G	1~ 230 V	1.10 kW	1,028.71 €	1,224.16 €
235.0430.138	BADU 21-50/43 G	1~ 230 V	1.60 kW	1,126.67 €	1,340.74 €
235.0440.138	BADU 21-50/44 G	1~ 230 V	2.20 kW	1,349.60 €	1,606.02 €
236.0430.138	BADU 21-60/43 G	1~ 230 V	1.60 kW	1,176.67 €	1,400.24 €
236.0440.138	BADU 21-60/44 G	1~ 230 V	2.20 kW	1,364.60 €	1,623.87 €
236.0460.138	BADU 21-60/46 G	1~ 230 V	3.00 kW	1,634.53 €	1,945.09 €
235.0420.137	BADU 21-50/42 G	3~ Y/Δ 400/230 V	1.10 kW	929.72 €	1,106.37 €
235.0430.137	BADU 21-50/43 G	3~ Y/Δ 400/230 V	1.60 kW	984.71 €	1,171.80 €
235.0440.137	BADU 21-50/44 G	3~ Y/Δ 400/230 V	2.20 kW	1,078.69 €	1,283.64 €
236.0430.137	BADU 21-60/43 G	3~ Y/Δ 400/230 V	1.60 kW	1,043.69 €	1,241.99 €
236.0440.137	BADU 21-60/44 G	3~ Y/Δ 400/230 V	2.20 kW	1,120.67 €	1,333.60 €
236.0460.137	BADU 21-60/46 G	3~ Y/Δ 400/230 V	3.00 kW	1,315.61 €	1,565.58 €

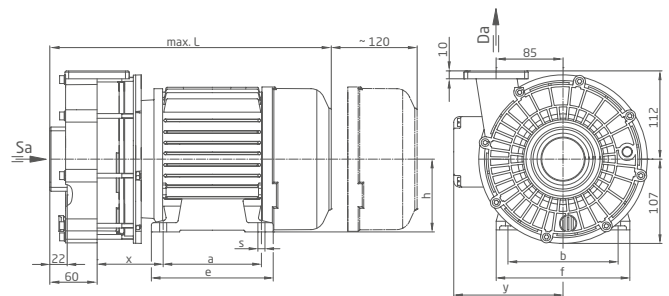




### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

	a	b	e	f	h	s	x	y	L
21-50/42 G 1~	125	140	155	166	90	10	100	153	381
21-50/42 G 3~	100	140	128	170	90	10	100	132	364
21-50/43 G 1~	125	140	155	166	90	10	100	153	381
21-50/43 G 3~	100	140	128	170	90	10	100	132	364
21-50/44 G 1~	125	140	155	166	90	10	100	153	381
21-50/44 G 3~	125	140	155	174	90	9	100	122.5	416
21-60/43 G 1~	125	140	155	166	90	10	100	132	381
21-60/43 G 3~	100	140	128	170	90	10	100	153	364
21-60/44 G 1~	125	140	155	166	90	10	100	153	381
21-60/44 G 3~	125	140	155	174	90	9	100	122.5	416
21-60/46 G 1~	140	160	170	192	100	12	107	176.5	423.5
21-60/46 G 3~	140	160	175	192	100	12	107	159.5	443

# BADU® 21-80

Universal, large circulation pump. Reliable and high-powered.  
For whirlpools, counter swim units and swimming pool attractions.

## Field of application

Swimming pools and industrial filter units, counter swim units, air conditioning units, pool cleaning devices and many more applications with a flow rate of up to 90 m<sup>3</sup>/h.

## Design

The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Discharge outlets swivel gradually by 90° each and by 29° clockwise when viewing the pump from the suction side.

BADU 21-80/... SG conditionally self-priming up to 0.5 m on request.

For suitable connection unions please see page 158.

## Materials used

Pump casing .....	PPE GF 30
Wear ring .....	stainless steel
Housing cover.....	PPE GF 30
Impeller .....	PP GF 30
Impeller nut .....	PP GF 30
Mechanical seal .....	carbon/ceramic/NBR
Motor shaft .....	stainless steel
Screws .....	stainless steel
Elastomers .....	NBR/Viton

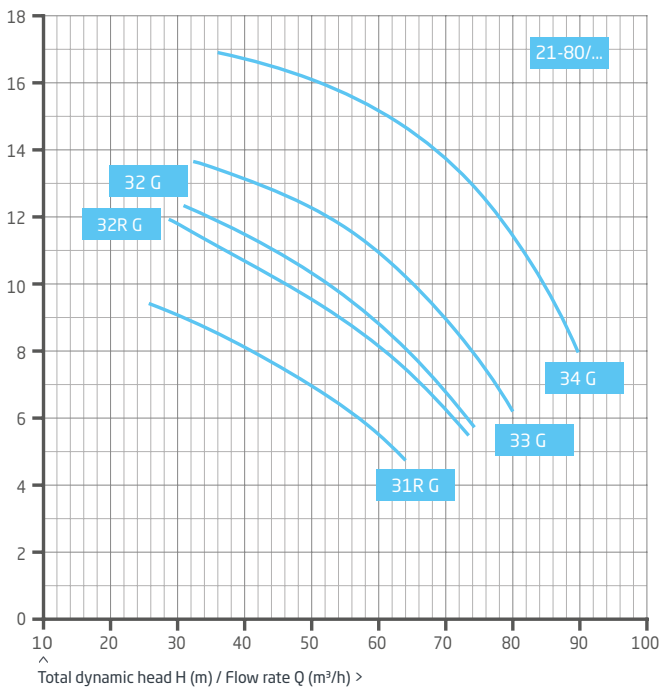
Technical data at 50 Hz	BADU 21-80	31R G	32R G	32 G	33 G	34 G
Inlet Sa/outlet connection Da R <sup>2)</sup>		2¾/2¾**)	2¾/2¾**)	2¾/2¾**)	2¾/2¾**)	2¾/2¾**)
Rec. inlet/outlet pipe. PVC pipe. d <sup>4)</sup>		110/110	110/110	110/110	140/110	140/110
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	2.12/1.60	2.90/2.20	-/-	3.76/3.00	-/-
Rated current (A)	1~ 230 V	9.40	12.80	-/-	16.50*)	-/-
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	1.85/1.60	2.56/2.20	3.00/2.60	3.44/3.00	-/-
Rated current (A)	3~ Y/Δ 400/230 V	3.50/6.10	4.90/8.50	5.60/9.70	6.10/10.60	-/-
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 690/400 V	-/-	-/-	-/-	-/-	4.54/4.00
Rated current (A)	3~ Y/Δ 690/400 V	-/-	-/-	-/-	-/-	4.80/8.30

For more detailed information regarding the motor protection please see page 167. | \*) Start-up current approx. 82 A. | \*\*) Pumps also available with ø 82 mm hose connections. | Technical data may vary.

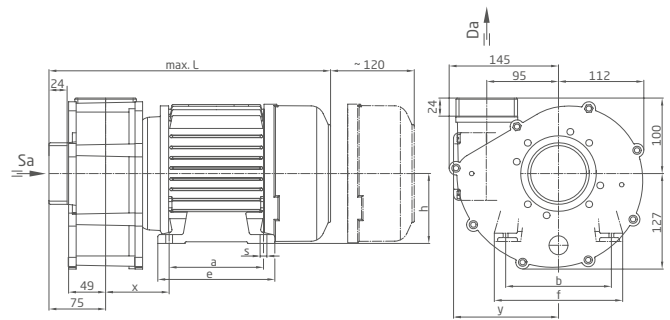
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
238.0310.138	BADU 21-80/31R G	1~ 230 V	1.60 kW	1,380.60 €	1,642.91 €
238.0320.138	BADU 21-80/32R G	1~ 230 V	2.20 kW	1,580.54 €	1,880.84 €
238.0330.138	BADU 21-80/33 G	1~ 230 V	3.00 kW	2,389.30 €	2,843.27 €
238.0310.137	BADU 21-80/31R G	3~ Y/Δ 400/230 V	1.60 kW	1,231.62 €	1,465.63 €
238.0320.537	BADU 21-80/32R G	3~ Y/Δ 400/230 V	2.20 kW	1,316.62 €	1,566.78 €
238.0320.137	BADU 21-80/32 G	3~ Y/Δ 400/230 V	2.60 kW	1,474.57 €	1,754.74 €
238.0330.137	BADU 21-80/33 G	3~ Y/Δ 400/230 V	3.00 kW	1,474.57 €	1,754.74 €
238.0340.137	BADU 21-80/34 G	3~ Y/Δ 690/400 V	4.00 kW	2,023.40 €	2,407.85 €



### Characteristics



### Dimensions



Detailed dimensions available on request or at badu.de

	a	b	e	f	h	s	x	y	L
21-80/31R G 1~	125	140	155	166	90	10	100	153	396
21-80/31R G 3~	100	140	128	170	90	10	100	132	379
21-80/32R G 1~	125	140	155	166	90	10	100	153	396
21-80/32R G 3~	125	140	155	174	90	9	100	122.5	431
21-80/32 G 3~	125	140	155	176	90	9	100	122.5	431
21-80/33 G 1~	140	160	170	192	100	12	107	176.5	438.5
21-80/33 G 3~	140	160	175	192	100	12	107	159.5	458
21-80/34 G 3~	140	160	175	192	100	12	107	159.5	466.5

# BADU® 21-81

Connection variant for BADU 21-80 universal circulation pump.  
For whirlpools, counter swim units and swimming pool attractions.

## Field of application

Swimming pools and industrial filter units, counter swim units, air conditioning units, swimming pool attractions, cleaning devices and many more applications up to a flow rate of 90 m<sup>3</sup>/h.

## Design

The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve.

Motor/pump shaft has no contact with the pool water providing complete electrical separation.

Discharge outlets swivel gradually by 90° each and by 29° clockwise when viewing the pump from the suction side.

For suitable connection unions please see page 158.

## Materials used

Pump casing .....	PPE GF 30
Wear ring .....	stainless steel
Housing cover .....	PPE GF 30
Impeller .....	PP GF 30
Impeller nut .....	PP GF 30
Glue sockets .....	ABS
Mechanical seal .....	carbon/ceramic/NBR
Motor shaft .....	stainless steel
Screws .....	stainless steel
Elastomers .....	NBR/Viton

Technical data at 50 Hz	BADU 21-81	31R	32R	32	33	34
Saug Sa/Druck Da d <sup>4)</sup>		90/90	90/90	90/90	90/90	90/90
Empf. Saug-/Druckleitung. PVC-Rohr. d <sup>4)</sup>		110/110	110/110	110/110	140/110	140/110
Leistungsaufnahme P <sub>1</sub> /-abgabe P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	2.12/1.60	2.90/2.20	-/-	3.90/3.00	-/-
Nennstrom (A)	1~ 230 V	9.40	12.80	-/-	17.00*)	-/-
Leistungsaufnahme P <sub>1</sub> /-abgabe P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	1.85/1.60	2.56/2.20	3.00/2.60	3.44/3.00	-/-
Nennstrom (A)	3~ Y/Δ 400/230 V	3.50/6.10	4.90/8.50	5.60/9.70	6.10/10.60	-/-
Leistungsaufnahme P <sub>1</sub> /-abgabe P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 690/400 V	-/-	-/-	-/-	-/-	4.54/4.00
Nennstrom (A)	3~ Y/Δ 690/400 V	-/-	-/-	-/-	-/-	4.80/8.30

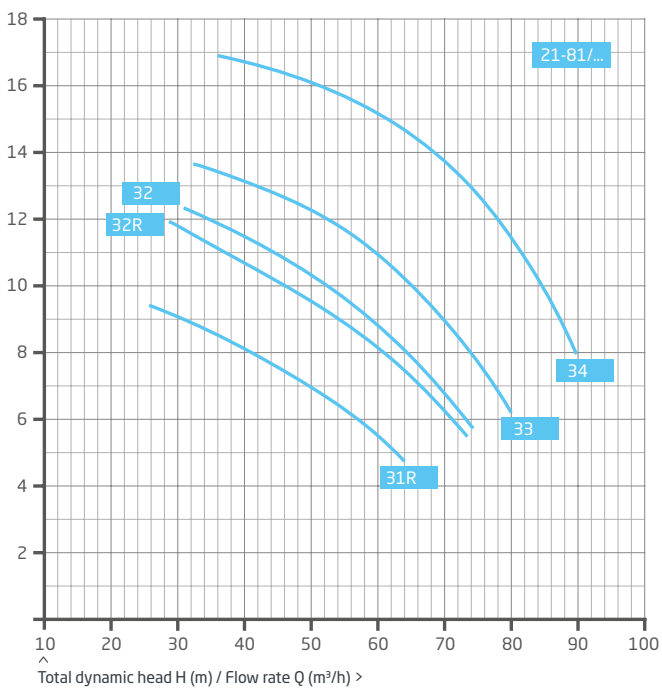
For more detailed information regarding the motor protection please see page 167.

\*) Start-up current approx. 82 A. | Technical data may vary.

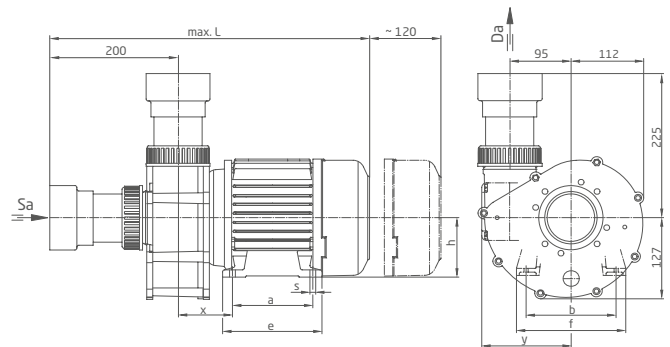
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
238.1310.238	BADU 21-81/31R	1~ 230 V	1.60 kW	1,380.60 €	1,642.91 €
238.1320.238	BADU 21-81/32R	1~ 230 V	2.20 kW	1,580.54 €	1,880.84 €
238.1330.338	BADU 21-81/33	1~ 230 V	3.00 kW	2,389.30 €	2,843.27 €
238.1310.237	BADU 21-81/31R	3~ Y/Δ 400/230 V	1.60 kW	1,231.62 €	1,465.63 €
238.1320.237	BADU 21-81/32R	3~ Y/Δ 400/230 V	2.20 kW	1,316.62 €	1,566.78 €
238.1320.337	BADU 21-81/32	3~ Y/Δ 400/230 V	2.60 kW	1,474.57 €	1,754.74 €
238.1330.337	BADU 21-81/33	3~ Y/Δ 400/230 V	3.00 kW	1,474.57 €	1,754.74 €
238.1340.337	BADU 21-81/34	3~ Y/Δ 690/400 V	4.00 kW	2,023.40 €	2,407.85 €



### Characteristics



### Dimensions

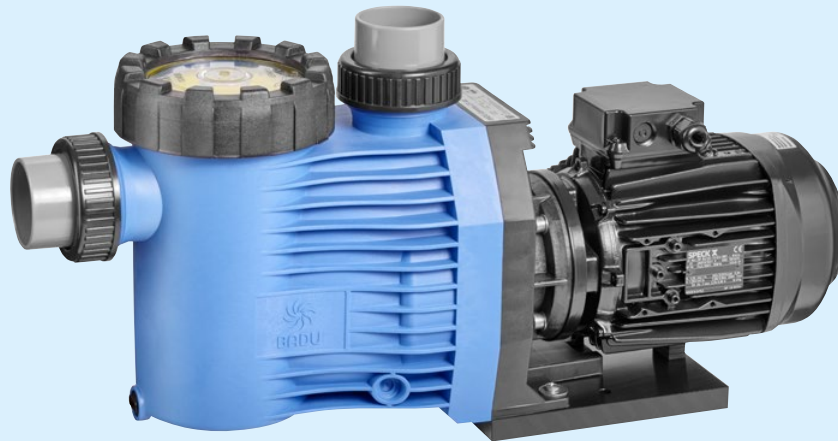


Detailed dimensions available on request or at badu.de

	a	b	e	f	h	s	x	y	L
21-81/31R 1~	125	140	155	166	90	10	100	153	521
21-81/31R 3~	100	140	128	170	90	10	100	132	504
21-81/32R 1~	125	140	155	166	90	10	100	153	521
21-81/32R 3~	125	140	155	174	90	9	100	122.5	556
21-81/32 3~	125	140	155	174	90	9	100	122.5	556
21-81/33 1~	140	160	170	192	100	12	107	176.5	563.5
21-81/33 3~	140	160	175	192	100	12	107	159.5	583
21-81/34 3~	140	160	175	192	100	12	107	159.5	591.5

# BADU® AK-Versionen

Circulation pump with motor/pump separation for optimised use in salt water applications. For a longer service life in corrosive environments.



^  
BADU Gamma-AK



www.tuv.com  
ID 0000021507

## Field of application

For thermal water, thermal brine, sea water aquariums with artificial salt water, brine units as well as various problematic media depending on the concentrations and components.

### Attention:

When ordering please always state the intended medium so that the resistance of the pump can be checked.

## Design

The pump corresponds to the respective standard version, except that the gland housing is not mounted directly to the A-side motor bearing, but is separated from the motor by an intermediate lantern and labyrinth disk. Thus, leaking medium and crystallizing minerals or salts cannot come into contact with the motor and its bearing. This guarantees a considerably longer life for this application compared to standard versions.

Special sealing materials available on request.

## Materials used

See standard version.

Lantern .....	PPE GF 30
Mechanical seal .....	SiC/SiC/Viton
Screws .....	stainless steel
Elastomers .....	Viton

## Motors

Special motors on request.<sup>1)</sup>

## Available types

BADU Magna, BADU Gamma, BADU Prime, BADU Resort, BADU Bronze, BADU 93, BADU FA, BADU 42, BADU 43, BADU 44, BADU 21-40, BADU 21-41, BADU 21-50/21-60, BADU 21-80, BADU 21-81.  
Further types on request.

## Technical data

See standard version.

## GS approval

Valid for all AK version pumps which also have GS approval in the standard version.



^  
BADU 21-50/...-AK

### Characteristics

See standard version.

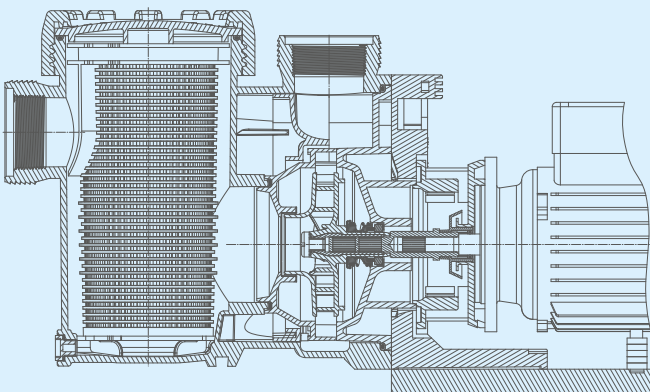
### Dimensions

See standard version.

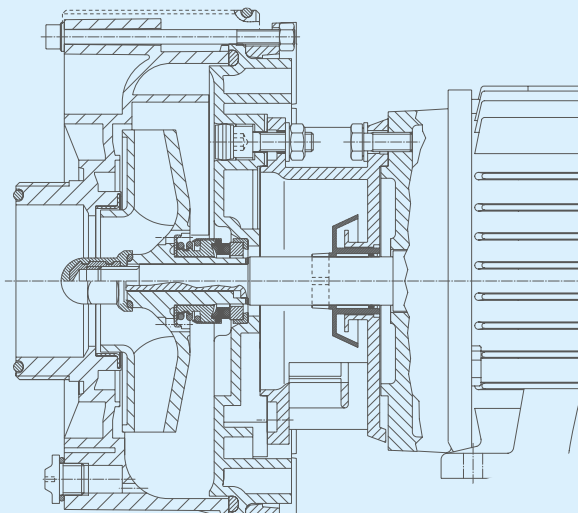
**Note:**

Length of the selected pump + approx. 65 mm  
= total length of AK version

### Sectional drawing BADU Gamma-AK



### Sectional drawing BADU 21-50/...-AK



Detailed dimensions available on request or at badu.de

A high-angle, close-up photograph of a person swimming in a pool. The water is a vibrant blue, and there is a significant amount of white splashing and bubbles around the swimmer's head and shoulders. The swimmer's dark hair is visible, and their skin is wet and glistening. The background is a deep, clear blue, suggesting a large pool or open water.

# Counter swim units

Add a bit of movement to your pool and your life.

There are powerful BADU JET counter swim units to meet everyone's taste - from dreamy, gentle waves to powerful currents for cardio and fitness training. Available in overhang and built-in models; from modest to luxurious.



# Product overview



**BADU JET Vogue**  
Performance: 58 m<sup>3</sup>/h  
Page 90



**BADU JET Vogue Deluxe**  
Performance: 58 m<sup>3</sup>/h  
Page 92



**BADU JET Primavera**  
Performance: 85 m<sup>3</sup>/h  
Page 94



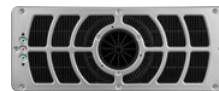
**BADU JET Primavera Deluxe**  
Performance: 85 m<sup>3</sup>/h  
Page 96



**BADU JET Turbo Light**  
Performance: 200 m<sup>3</sup>/h  
Page 98



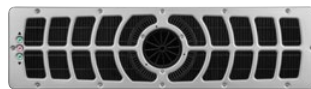
**BADU JET Turbo**  
Performance: 245 m<sup>3</sup>/h  
Page 100



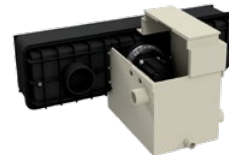
**BADU JET Turbo Salt**  
Performance: 350 m<sup>3</sup>/h  
Page 102



**BADU JET Turbo Pro**  
Performance 350 m<sup>3</sup>/h  
Page 104



**BADU JET Turbo Pro salt**  
Performance: 350 m<sup>3</sup>/h  
Page 106



**BADU Technology Shaft**  
Page 108



**BADU JET Perla**  
Performance: 40 m<sup>3</sup>/h  
Page 110



**BADU JET Riva**  
Performance: 58 m<sup>3</sup>/h  
Page 112



**BADU JET Stella**  
Performance: 75 m<sup>3</sup>/h  
Page 114

# BADUJET<sup>®</sup> Fact checker

Well informed for the right decision: The BADUJET fact checker.  
Relevant counter swim unit features at a glance and in direct comparison.



Comparison parameters BADUJET	Vogue	Vogue Deluxe	Primavera	Primavera Deluxe
Pump flow rate (m <sup>3</sup> /h)	54-58	54-58	75-85	75-85
Pump, BADU	21-60/45 GT 27°, 21-60/44 GT 27°	21-60/45 GT 27°, 21-60/44 GT 27°	21-81/33 G 29°, 21-81/34 G 29°	21-81/33 G 29°, 21-81/34 G 29°
Single phase 1~ 230 V*)	●	●	●	●
Three-phase 3~ 400/230 V*)	●	●	●	●
Number of nozzles	1	1	2	2
Accessories, see page	152	152	152	152
LED light	white/multicoloured	white/multicoloured	white/multicoloured	white/multicoloured
Pneumatic button	●	○	●	○
Piezo button	○	●	○	●
Wireless control	Optional	Optional	●	●
Air regulation	●	●	●	●
Adjustable flow rate	●	●	●	●
Winter panel kit	●	●	●	●
Type of installation	Fixed during initial build	Fixed during initial build	Fixed during initial build	Fixed during initial build
Catalogue page	90	92	94	96

\*) Special voltages on request.

● - Yes  
○ - No



Turbo Light	Turbo / Turbo salt	Turbo Pro / Turbo Pro salt	Perla	Riva	Stella
125-200	125-245	150-350	40	54-58	75
○	○	○	21-81/31 RG	21-81/32 G, 21-81/32 RG	21-81/33 G
●	●	○	●	●	○
○	○	●	●	●	●
1	1	1	1	1	2
152	152	152	152	152	152
○	○	○	white/multicoloured	white/multicoloured	white/multicoloured
○	○	○	●	●	●
●	●	●	○	○	○
○	●	●	Optional	Optional	Optional
○	○	○	●	●	●
●	●	●	●	●	●
○	○	○	○	○	○
Fixed during initial build	Fixed during initial build	Fixed during initial build	Expansion	Expansion	Expansion
98	100/102	104/106	110	112	114

Counter swim units

# BADUJET Vogue

Attractive design unit for discerning customers.  
Red Dot award winning aesthetics with stainless steel cover.

## Field of application

For mounting into walls of all pool models as a conversation piece, for fitness training, as a wave or bubble bath, for underwater massages (consult physician), for endless, no-turn swimming even in the smallest pool.

## Design

A powerful jet pump is connected via suction and pressure lines with the plastic jet housing which is flush-mounted into the pool wall. The BADU pump draws the water in and returns it to the swimming pool with a powerful stream via an adjustable nozzle which swivels 60° in each direction. The large number of openings around the nozzle housing guarantees an extremely low priming flow.

The sinuous and homogeneous design of its cover, which is made of high quality stainless steel, is a real eye-catcher. A built-in LED lamp, which can be operated from the

pool, as well as the pneumatic switch and the regulation of the air bubble bath, add to a relaxed atmosphere. The pump and the LED light can be switched off automatically via the integrated timer. On delivery, this is always set to 15 minutes operating time.

## Materials used

Cover .....	stainless steel
Main housing .....	ABS
Nozzle housing .....	ABS
Interior parts .....	ABS/stainless steel
Suction/pressure line .....	PVC
Ball valves and fittings .....	PVC

For recommended accessories as well as the winter kit, please see page 150.

Technical data at 50 Hz	BADU JET Vogue	21-60/45 GT 27°	21-60/44 GT 27°
Pump flow rate (m <sup>3</sup> /h)	3~ /1~	58	54
Voltage	3~ /1~	3 N~ 400/230 V	1~ 230 V
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ /1~	3.18/2.60	2.89/2.20
Number of nozzles (Ø 40 mm)		1	1
Flow pressure at nozzle (bar)	3~ /1~	1.10	1.00
Flow velocity in centre 2 m from the nozzle (m/s)	3~ /1~	1.20	1.10
Massage pressure (bar) max.	3~ /1~	1.60	1.40
Multi-directional swivel nozzle (degrees)		60	60

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Variation	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>2)</sup>
232.1100.000	BADU JET Vogue <sup>6)</sup>	Pre-assembly kit			376.90 €	448.51 €
232.2400.000	BADU JET Vogue <sup>1)</sup> - white LED	Final assembly kit	1~ 230 V	2.20 kW	3,605.95 €	4,291.08 €
232.2420.000	BADU JET Vogue <sup>6)</sup> - multicoloured LED	Final assembly kit	1~ 230 V	2.20 kW	3,789.89 €	4,509.97 €
232.2200.000	BADU JET Vogue <sup>6)</sup> - white LED	Final assembly kit	3 N~ 400/230 V	2.60 kW	3,478.99 €	4,140.00 €
232.2220.000	BADU JET Vogue <sup>6)</sup> - multicoloured LED	Final assembly kit	3 N~ 400/230 V	2.60 kW	3,660.93 €	4,356.51 €
232.1300.001	Ball valve kit				141.96 €	168.93 €
232.2000.402	Stainless steel hand rail for BADU JET Vogue, complete <sup>6)</sup>				1,016.79 €	1,209.98 €

When ordering a complete unit please indicate the article number of the pre-assembly kit and the final assembly kit.

Counter swim units, submerged



With stainless steel cover >

Optional stainless steel hand rail >



### Scope of delivery

#### Pre-assembly kit

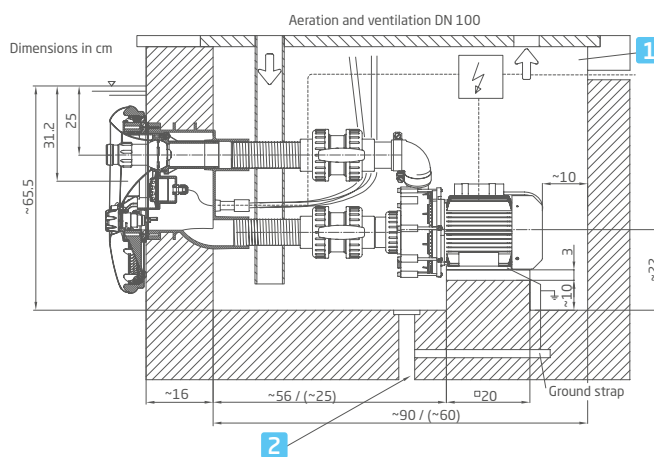
- > Plastic housing
- > Clamping ring, screws and seals
- Final assembly kit
- > Complete nozzle housing with a swivelling nozzle and screws
- > Stainless steel cover
- > 63 mm suction/pressure line
- > Switching device
- > BADU 21-60/45 GT 27° or BADU 21-60/44 GT 27°

#### Note

If you use longer suction and pressure lines, please make sure they are wide enough in order to avoid power loss > see page 154.

### Dimensions

#### Recommended installation example



Sufficiently dimensioned drain required.

Dimensions in brackets [ ] version without ball valves

Detailed dimensions available on request or at badu.de

- 1 Shaft width min. 70 cm
- 2 Floor drainage

Counter swim units, submerged

# BADUJET Vogue Deluxe

A material variation on the BADUJET Vogue with a hint of luxury. Made completely from stainless steel and simply impeccable.

## Field of application

For mounting into walls of all pool models as a conversation piece, for fitness training, as a wave or bubble bath, for underwater massages (consult physician), for endless, no-turn swimming even in the smallest pool.

## Design

As with the BADU JET Vogue, however with nozzle and control elements made from stainless steel and with piezo buttons.

For recommended accessories as well as the winter kit, please see page 150.

## Materials used

Cover .....	stainless steel
Main housing .....	ABS
Nozzle housing .....	ABS
Interior parts .....	ABS/stainless steel
Suction/pressure line .....	PVC
Ball valves and fittings .....	PVC
Control elements .....	stainless steel
Nozzle .....	ABS/stainless steel

Technical data at 50 Hz	BADU JET Vogue Deluxe	21-60/45 GT 27°	21-60/44 GT 27°
Pump flow rate (m <sup>3</sup> /h)	3~/1~	58	54
Voltage	3~/1~	3 N~ 400/230 V	1~ 230 V
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~/1~	3.18/2.60	2.89/2.20
Number of nozzles (Ø 40 mm)		1	1
Flow pressure at nozzle (bar)	3~/1~	1.10	1.00
Flow velocity in centre 2 m from the nozzle (m/s)	3~/1~	1.20	1.10
Massage pressure (bar) max.	3~/1~	1.60	1.40
Multi-directional swivel nozzle (degrees)		60	60

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Variation	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>2)</sup>
232.1100.000	BADU JET Vogue Deluxe <sup>5)</sup>	Pre-assembly kit			376.90 €	448.51 €
232.4400.000	BADU JET Vogue Deluxe <sup>5)</sup> - white LED	Final assembly kit	1~ 230 V	2.20 kW	4,207.77 €	5,007.25 €
232.4420.000	BADU JET Vogue Deluxe <sup>5)</sup> - multicoloured LED	Final assembly kit	1~ 230 V	2.20 kW	4,392.73 €	5,227.35 €
232.4200.000	BADU JET Vogue Deluxe <sup>5)</sup> - white LED	Final assembly kit	3 N~ 400/230 V	2.60 kW	4,078.82 €	4,853.80 €
232.4220.000	BADU JET Vogue Deluxe <sup>5)</sup> - multicoloured LED	Final assembly kit	3 N~ 400/230 V	2.60 kW	4,264.76 €	5,075.06 €
232.1300.001	Ball valve kit				141.96 €	168.93 €
232.2000.402	Stainless steel hand rail for BADU JET Vogue Deluxe, complete <sup>6)</sup>				1,016.79 €	1,209.98 €

When ordering a complete unit please indicate the article number of the pre-assembly kit and the final assembly kit.



Cover, nozzles and control elements made from stainless steel >

Nozzle housing with piezo button >

Optional stainless steel hand rail >



### Scope of delivery

#### Pre-assembly kit

- > Plastic housing
- > Clamping ring, screws and seals

#### Final assembly kit

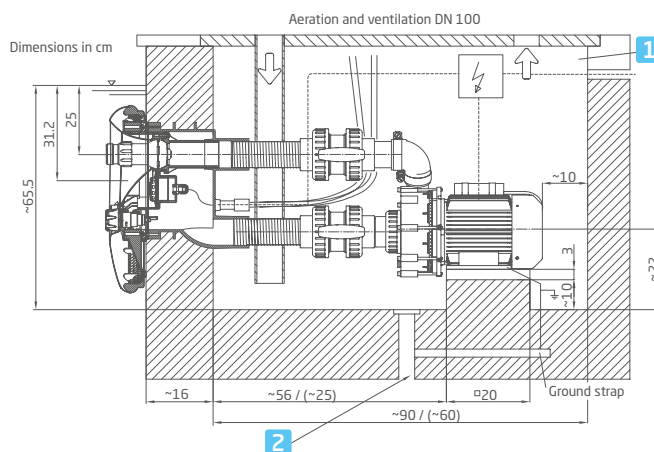
- > Complete nozzle housing with a swivelling nozzle and screws
- > Stainless steel cover
- > 63 mm suction/pressure line
- > Switching device
- > BADU 21-60/45 GT 27° or BADU 21-60/44 GT 27°

#### Note

If you use longer suction and pressure lines, please make sure they are wide enough in order to avoid power loss > see page 154.

### Dimensions

#### Recommended installation example



Sufficiently dimensioned drain required.

Dimensions in brackets [ ] version without ball valves

Detailed dimensions available on request or at badu.de

- 1 Shaft width min. 70 cm
- 2 Floor drainage

# BADUJET Primavera

Innovative technology for ambitious swimmers.  
With optimum performance.

## Field of application

For mounting into walls of all pool models as a conversation piece, for fitness training, as a wave or bubble bath, for underwater massages (consult physician), for endless, no-turn swimming even in the smallest pool.

## Design

A powerful jet pump is connected via suction and pressure lines with the plastic jet housing which is flush-mounted into the pool wall.

The BADU pump draws the water in and returns it to the swimming pool with a powerful stream via two adjustable nozzles which swivel 60° in each direction. The large number of openings around the nozzle housing guarantees an extremely low priming flow. The sinuous and homogeneous design of its cover, which is made of high quality stainless steel, is a real eye-catcher. The pneumatic on/off switch and the regulation for the air-intake, which gives

the sparkling bubble bath effect, are both integrated in the nozzle housing. The pump and the LED light can be switched off automatically via the integrated timer. On delivery, this is always set to 15 minutes operating time.

## Materials used

Main housing .....	ABS
Nozzle housing .....	ABS
Interior parts .....	PP/PC/ASA
Suction/pressure line .....	PVC
Shut-off valve and fittings .....	PVC
Cover/hand rail .....	stainless steel

For recommended accessories as well as the winter kit, please see page 150.

Technical data at 50 Hz	BADU JET Primavera	21-81/33 G 29°	21-81/34 G 29°
Pump flow rate (m³/h)	3~/1~	75	85
Voltage	3~/1~	3 N~ 400/230 V/1~ 230 V	3 N~ Δ 400 V
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~/1~	3.74/3.00 / 3.90/3.00	4.55/4.00
Number of nozzles (Ø 40 mm)		2	2
Flow pressure at nozzles (bar)	3~/1~	1.00	1.00
Flow velocity in centre 2 m from the nozzles (m/s)	3~/1~	1.10	1.20
Massage pressure (bar) max.	3~/1~	1.60	1.80
Multi-directional swivel nozzles (degrees)		60	60

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Variation	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
232.6100.000	BADU JET Primavera <sup>6)</sup>	Pre-assembly kit			646.82 €	769.72 €
232.7401.000	BADU JET Primavera <sup>6)</sup> - white LED	Final assembly kit	1~ 230 V	3.00 kW	3,884.87 €	4,623.00 €
232.7421.000	BADU JET Primavera <sup>6)</sup> - multicoloured LED	Final assembly kit	1~ 230 V	3.00 kW	3,884.87 €	4,623.00 €
232.7201.000	BADU JET Primavera <sup>6)</sup> - white LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	3,752.89 €	4,465.94 €
232.7221.000	BADU JET Primavera <sup>6)</sup> - multicoloured LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	3,752.89 €	4,465.94 €
232.7801.000	BADU JET Primavera <sup>6)</sup> - white LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	4,014.83 €	4,777.65 €
232.7821.000	BADU JET Primavera <sup>6)</sup> - multicoloured LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	4,014.83 €	4,777.65 €
232.6100.010	BADU JET Primavera salt	Pre-assembly kit			662.46 €	788.33 €
232.7402.000	BADU JET Primavera salt - white LED	Final assembly kit	1~ 230 V	3.00 kW	4,234.75 €	5,039.35 €
232.7422.000	BADU JET Primavera salt multicoloured LED	Final assembly kit	1~ 230 V	3.00 kW	4,234.75 €	5,039.35 €
232.7202.000	BADU JET Primavera salt - white LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	4,103.80 €	4,883.52 €
232.7222.000	BADU JET Primavera salt multicoloured LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	4,103.80 €	4,883.52 €
232.7802.000	BADU JET Primavera salt - white LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	4,228.76 €	5,032.22 €
232.7822.000	BADU JET Primavera salt multicoloured LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	4,228.76 €	5,032.22 €
232.6100.100	BADU JET Primavera additional kit for tiled pools				51.70 €	61.52 €

When ordering a complete unit please indicate the article number of the pre-assembly kit and the final assembly kit.





With stainless steel cover >

Delivery with stainless steel hand rail and wireless control >



### Scope of delivery

#### Pre-assembly kit

- > Plastic housing
- > Shut-off valve
- > Clamping ring, screws and seals

#### Final assembly kit

- > Complete nozzle housing with two swivelling nozzles and screws
- > Stainless steel cover and suction cover
- > 75 mm suction/pressure line
- > Switching device
- > BADU 21-81/33 G 29° or BADU 21-81/34 G 29°
- > Hand rail and waterproof BADU JET wireless control II

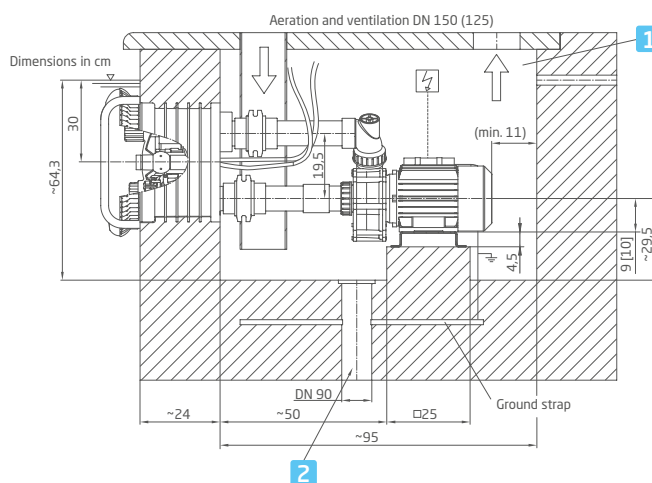
#### Note

If you use longer suction and pressure lines, please make sure they are wide enough in order to avoid power loss > see page 154.

The BADU JET Primavera counter swim unit it also available in the saltwater version BADU JET salt. (Possible saltwater concentration of up to 2 %).

### Dimensions

#### Recommended installation example



Sufficiently dimensioned drain required  
 Dimensions in brackets [ ] only for BADU 21-81/33 1° and BADU 21-81/34 3°  
 Detailed dimensions available on request or at badu.de

- 1 Shaft width min. 70 cm
- 2 Floor drainage

# BADUJET Primavera Deluxe

A material variation on the BADUJET Primavera, without any compromises.  
Made completely from stainless steel and therefore high quality and wear resistant.

## Field of application

For mounting into walls of all pool models as a conversation piece, for fitness training, as a wave or bubble bath, for underwater massages (consult physician), for endless, no-turn swimming even in the smallest pool.

## Design

As with the BADUJET Primavera, however with nozzles and control elements made from stainless steel and with piezo buttons.

For recommended accessories as well as the winter kit, please see page 150.

## Materials used

Main housing .....	ABS
Nozzle housing .....	ABS
Interior parts .....	PP/PC/ASA
Suction/pressure line .....	PVC
Shut-off valve and fittings .....	PVC
Cover/hand rail .....	stainless steel
Control elements .....	stainless steel
Nozzles .....	ABS/stainless steel

Technical data at 50 Hz	BADUJET Primavera Deluxe	21-81/33 G 29°	21-81/34 G 29°
Pump flow rate (m <sup>3</sup> /h)	3~ /1~	75	85
Voltage	3~ /1~	3 N~ 400/230 V/1~ 230 V	3 N~ Δ 400 V
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ /1~	3.74/3.00 / 3.90/3.00	4.55/4.00
Number of nozzles (Ø 40 mm)		2	2
Flow pressure at nozzles (bar)	3~ /1~	1.00	1.00
Flow velocity in centre 2 m from the nozzles (m/s)	3~ /1~	1.10	1.20
Massage pressure (bar) max.	3~ /1~	1.60	1.80
Multi-directional swivel nozzles (degrees)		60	60

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Variation	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
232.6100.000	BADUJET Primavera Deluxe <sup>6)</sup>	Pre-assembly kit			646.82 €	769.72 €
232.7401.000	BADUJET Primavera Deluxe <sup>6)</sup> - white LED	Final assembly kit	1~ 230 V	3.00 kW	4,142.79 €	4,929.92 €
232.7421.000	BADUJET Primavera Deluxe <sup>6)</sup> - multicoloured LED	Final assembly kit	1~ 230 V	3.00 kW	4,142.79 €	4,929.92 €
232.7201.000	BADUJET Primavera Deluxe <sup>6)</sup> - white LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	4,012.82 €	4,775.26 €
232.7221.000	BADUJET Primavera Deluxe <sup>6)</sup> - multicoloured LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	4,012.82 €	4,775.26 €
232.7801.000	BADUJET Primavera Deluxe <sup>6)</sup> - white LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	4,275.77 €	5,088.17 €
232.7821.000	BADUJET Primavera Deluxe <sup>6)</sup> - multicoloured LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	4,275.77 €	5,088.17 €
232.6100.010	BADUJET Primavera salt	Pre-assembly kit			662.46 €	788.33 €
232.7402.000	BADUJET Primavera salt - white LED	Final assembly kit	1~ 230 V	3.00 kW	4,234.75 €	5,039.35 €
232.7422.000	BADUJET Primavera salt multicoloured LED	Final assembly kit	1~ 230 V	3.00 kW	4,234.75 €	5,039.35 €
232.7202.000	BADUJET Primavera salt - white LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	4,103.80 €	4,883.52 €
232.7222.000	BADUJET Primavera salt multicoloured LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	4,103.80 €	4,883.52 €
232.7802.000	BADUJET Primavera salt - white LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	4,228.76 €	5,032.22 €
232.7822.000	BADUJET Primavera salt multicoloured LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	4,228.76 €	5,032.22 €
232.6100.100	BADUJET Primavera Deluxe additional kit for tiled pools				51.70 €	61.52 €

When ordering a complete unit please indicate the article number of the pre-assembly kit and the final assembly kit.



Cover, nozzles and control elements made from stainless steel >

Nozzle housing with piezo button >

Delivery with stainless steel hand rail and wireless control >



### Scope of delivery

#### Pre-assembly kit

- > Plastic housing
- > Shut-off valve
- > Clamping ring, screws and seals

#### Final assembly kit

- > Complete nozzle housing with two swivelling nozzles and screws
- > Stainless steel cover and suction cover
- > 75 mm suction/pressure line
- > Switching device
- > BADU 21-81/33 G 29° or BADU 21-81/34 G 29°
- > Hand rail and waterproof BADU JET wireless controll II

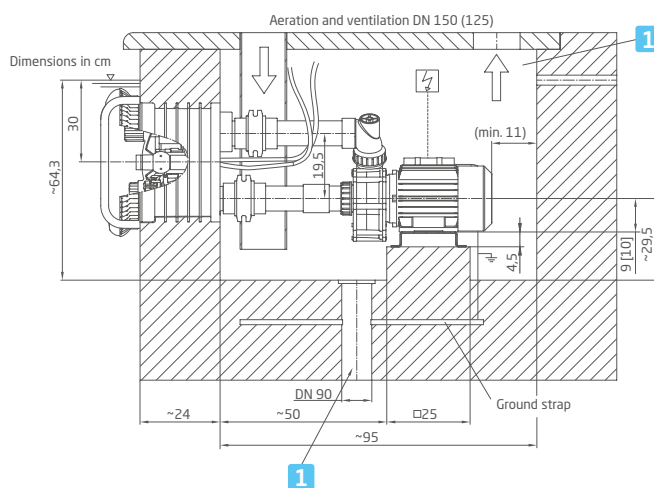
#### Note

If you use longer suction and pressure lines, please make sure they are wide enough in order to avoid power loss > see page 154.

The BADU JET Primavera Deluxe counter swim unit is also available in the saltwater version BADU JET Primavera salt. (Possible saltwater concentration of up to 2 %).

### Dimensions

#### Recommended installation example



Sufficiently dimensioned drain required  
Dimensions in brackets [ ] only for BADU 21-81/33 1° and BADU 21-81/34 3°

Detailed dimensions available on request or at badu.de

- 1 Shaft width min. 70 cm
- 2 Floor drainage

# BADUJET Turbo Light

Innovative technology combined with elegant design.  
Perfect for leisure and relaxation swimmers.

## Field of application

For mounting into walls of all pool models, up to a wall thickness of 7 mm, except for round pools.  
For performance-oriented workouts, relaxation, rehabilitation training, fitness or leisure fun with the whole family.  
For an endless swimming experience without any turning.

## Design

The built-in main housing uses innovative propeller technology to draw water in via the cover and return it to the swimming pool with a powerful stream. The system is driven by an efficient, fanless, fully encapsulated permanent magnet motor.  
Power control as well as switching the power on and off is carried out via the integrated piezo buttons or a remote control.

## Materials used

Main housing ..... ABS  
Nozzle housing ..... ABS  
Covers ..... ABS  
Intermediate flange ..... PP GF 30  
Drive unit ..... PP GF 30  
Mechanical Seal ..... carbon/ceramic/NBR  
Screws ..... stainless steel

## Scope of delivery

Plastic main housing, suction cover, ABS cover, propeller unit, nozzle unit, piezo buttons, seals, screws.

Technical data at 50 Hz/60 Hz	BADU JET Turbo Light
Flow rate (m <sup>3</sup> /h)	90-200
Voltage	1~ 230V
Power input P <sub>1</sub> <sup>1)</sup> (kW)	1.1
Number of nozzles (Ø 40 mm)	1
Flow velocity (m/s)	1.1-2.4
Multi-directional swivel nozzle (degrees)	±5

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

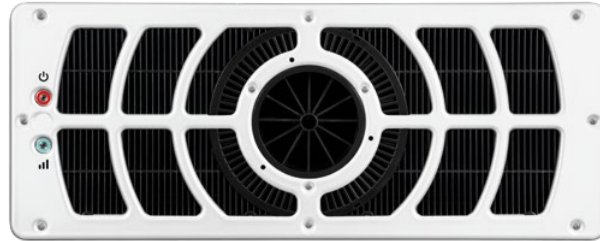
Article no	Description	Net RRP	Gross RRP <sup>2)</sup>
232.8300.000	BADU JET Turbo Light <sup>6)</sup>	4,500,00 €	5,355,00 €
232.8000.406	BADUJET Turbo Light additional kit for 8-17 mm wall strength	50.99 €	60.68 €
232.8000.407	BADUJET Turbo Light additional kit for 18-27 mm wall strength	50.99 €	60.68 €

For pools with a wall thickness from 8 mm on request.

Counter swim units, submerged



Design 1 >



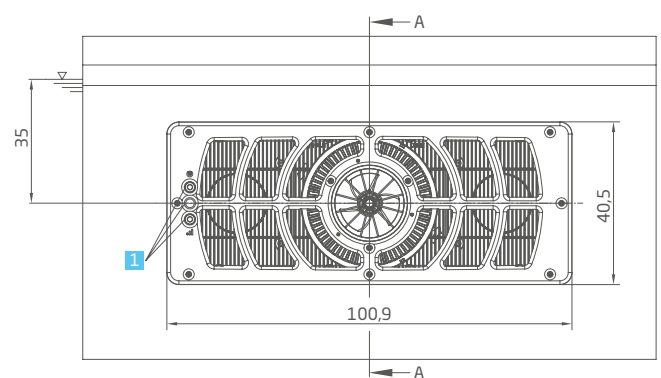
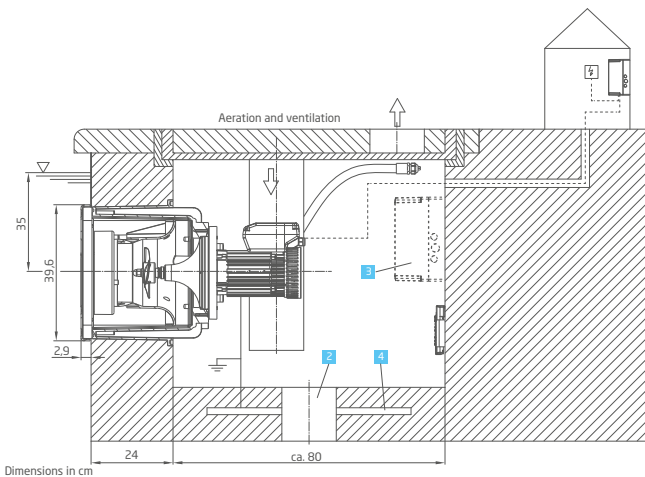
Pending approval.



### Dimensions

### Dimensions

Recommended installation example



Detailed dimensions available on request or at badu.de

- 1 Piezo buttons
- 2 Floor drainage
- 3 Control box
- 4 Earthing strap

Counter swim units, submerged

# BADUJET Turbo

Innovative technology combined with elegant design.  
Perfect for leisure and relaxation swimmers.

## Field of application

For mounting into walls of all pool models, up to a wall thickness of 7 mm, except for round pools.  
For performance-oriented workouts, relaxation, rehabilitation training, fitness or leisure fun with the whole family.  
For an endless swimming experience without any turning.

## Design

The built-in main housing uses innovative propeller technology to draw water in via the cover and return it to the swimming pool with a powerful stream. The system is driven by an efficient, fanless, fully encapsulated permanent magnet motor.  
Power control as well as switching the power on and off is carried out via the integrated piezo buttons or a remote control.

## Materials used

Main housing ..... ABS  
Nozzle housing ..... ABS  
Covers ..... ABS/stainless steel  
Intermediate flange ..... PPE  
Drive unit ..... PPE/PP/stainless steel  
Plain bearing ..... SiC/SiC  
Screws ..... stainless steel

Scope of delivery standard assembly kit for design 1 and 2  
Plastic main housing, clamping ring, suction grating, stainless steel cover design 1 or design 2, propeller unit, nozzle unit, piezo buttons, seals, screws.

## Scope of delivery drive set 1 N~

Motor unit, frequency converter, control box, remote control, screws, shielded motor cable, 10 m, 25 m, 45 m.

Technical data at 50 Hz/60 Hz	BADUJET Turbo
Flow rate (m <sup>3</sup> /h)	125-245
Voltage	1~ 200-240 V
Power input P <sub>1</sub> <sup>1)</sup> (kW)	1.20
Number of nozzles (Ø 40 mm)	1
Flow velocity (m/s)	1.50-3.00
Multi-directional swivel nozzle (degrees)	±5

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

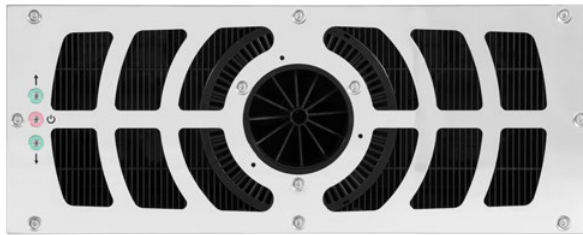
Article no	Description	Variation	Voltage	Power input P <sub>1</sub>	Net RRP	Gross RRP <sup>2)</sup>
232.8100.000	BADUJET Turbo Pro <sup>6)</sup> , Design 1	Standard assembly kit			4,600.00 €	5,474.00 €
232.8120.000	BADUJET Turbo Pro <sup>6)</sup> , Design 2	Standard assembly kit			4,600.00 €	5,474.00 €
232.8200.001	BADUJET Turbo Pro	Drive set, 10 m	1~ 230 V	1.90 kW	4,600.00 €	5,474.00 €
232.8200.002	BADUJET Turbo Pro	Drive set, 25 m	1~ 230 V	1.90 kW	4,895.00 €	5,825.05 €
232.8200.003	BADUJET Turbo Pro	Drive set, 45 m	1~ 230 V	1.90 kW	5,190.00 €	6,176.10 €
232.8000.406	BADUJET Turbo additional kit for 8-17 mm wall strength				50.99 €	60.68 €
232.8000.407	BADUJET Turbo additional kit for 18-27 mm wall strength				50.99 €	60.68 €

When ordering a complete unit please indicate the article number of the standard assembly kit and the drive set.

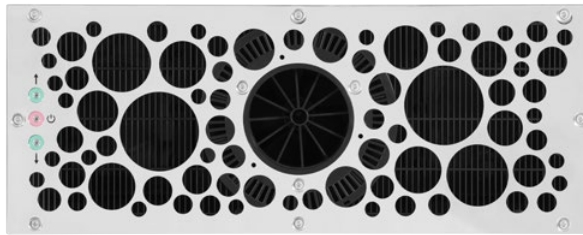
For pools with a wall thickness from 8 mm on request.



Design 1 >



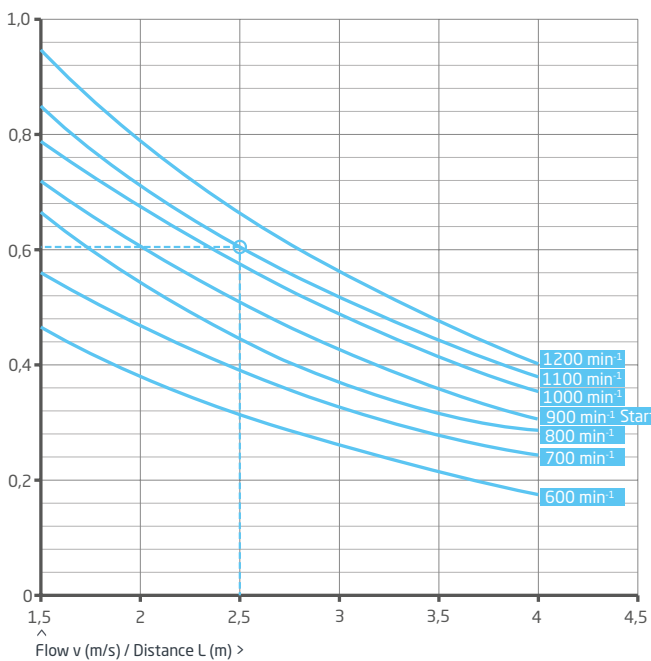
Design 2 >



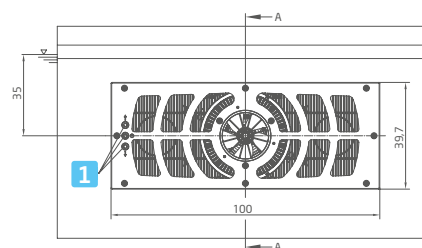
Pending approval.



### Flow speed characteristics

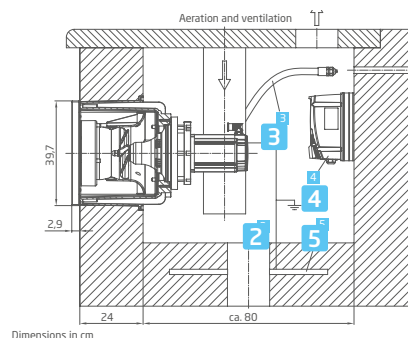


### Dimensions



Detailed dimensions available on request or at badu.de

### Recommended installation example



Dimensions in cm

### Example

Approx 0.60 m/s flow speed at the centre of the flow jet at 1,100 rpm and 2.50 m distance to the outlet nozzle.

- 1 Piezo buttons
- 2 Protective hose/piezo button wiring
- 3 Floor drainage
- 4 Frequency converter
- 5 Earthing strap

# BADUJET Turbo salt

Innovative technology combined with elegant design.  
Perfect for leisure and relaxation swimmers.

## Field of application

For thermal water, thermal brine, brine units as well as various problematic media depending on the concentrations and components.

For mounting into walls of all pool models, up to a wall thickness of 7 mm, except for round pools.

For performance-oriented workouts, relaxation, rehabilitation training, fitness or leisure fun with the whole family.

For an endless swimming experience without any turning.

## Design

The built-in main housing uses innovative propeller technology to draw water in via the cover and return it to the swimming pool with a powerful stream. The system is driven by an efficient, fanless, fully encapsulated permanent magnet motor.

Power control as well as switching the power on and off is carried out via the integrated piezo buttons or a remote control.

## Materials used

Main housing .....	ABS
Nozzle housing .....	ABS
Covers .....	ABS
Intermediate flange .....	PPE
Drive unit .....	PPE/PP/stainless steel
Plain bearing .....	SiC/SiC
Screws .....	stainless steel (V5A)
Piezo buttons .....	stainless steel (V5A)

Scope of delivery standard assembly kit for ABS main housing, clamping ring, suction grating, ABS cover, propeller unit, nozzle unit, piezo buttons, seals, screws.

## Scope of delivery drive set 1 N~

Motor unit, frequency converter, control box, remote control, screws, shielded motor cable, 10 m, 25 m, 45 m.

Technical data at 50 Hz/60 Hz	BADUJET Turbo salt
Flow rate (m <sup>3</sup> /h)	125-245
Voltage	1~ 200-240 V
Power input P <sub>1</sub> <sup>1)</sup> (kW)	1.90
Number of nozzles (Ø 40 mm)	1
Flow velocity (m/s)	1.50-3.00
Multi-directional swivel nozzle (degrees)	±5

For more detailed information regarding the motor protection please see page 167.

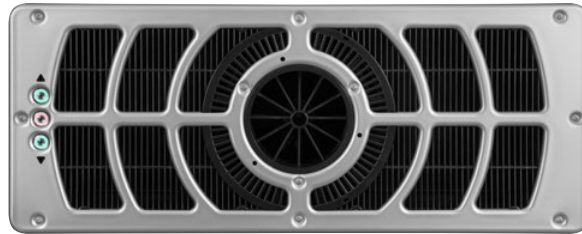
Technical data may vary.

Article no	Description	Variation	Voltage	Power input P <sub>1</sub>	Net RRP	Gross RRP <sup>2)</sup>
232.8170.000	BADUJET Turbo salt	Standard assembly kit			4,600.00 €	5,474.00 €
232.8200.001	BADUJET Turbo salt	Drive set, 10 m	1~ 230 V	1.90 kW	4,600.00 €	5,474.00 €
232.8200.002	BADUJET Turbo salt	Drive set, 25 m	1~ 230 V	1.90 kW	4,895.00 €	5,825.05 €
232.8200.003	BADUJET Turbo salt	Drive set, 45 m	1~ 230 V	1.90 kW	5,190.00 €	6,176.10 €
232.8000.408	BADUJET Turbo salt additional kit for 8-17 mm wall strength				50.99 €	60.68 €
232.8000.409	BADUJET Turbo salt additional kit for 18-27 mm wall strength				71.68 €	85.30 €
232.8000.500	BADUJET Turbo salt upgrade kit				695.00 €	827.05 €

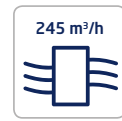
When ordering a complete unit please indicate the article number of the standard assembly kit and the drive set.

For pools with a wall thickness from 8 mm on request.





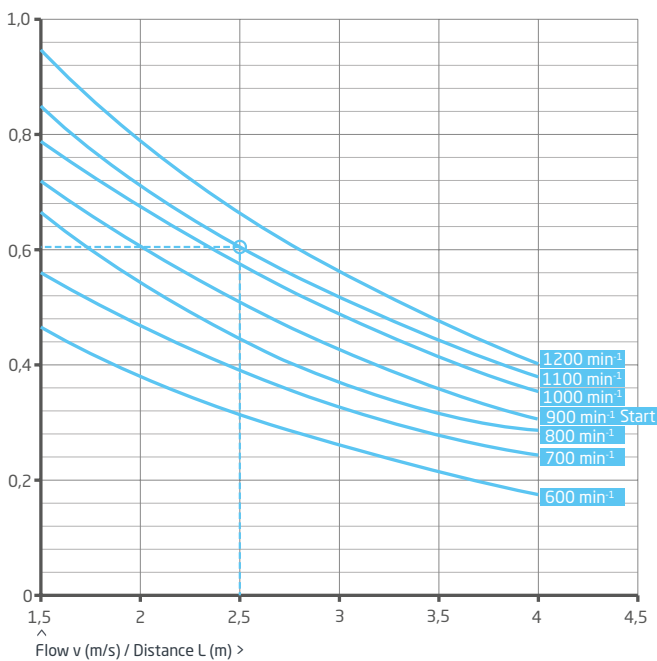
Pending approval.



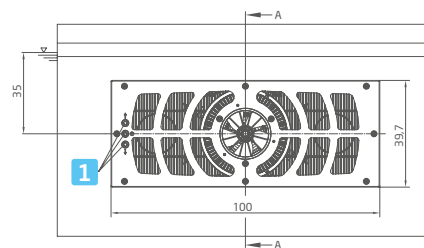
see key



### Flow speed characteristics

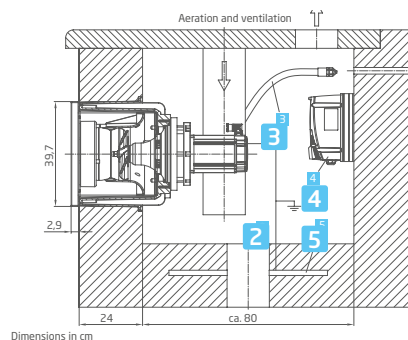


### Dimensions



Detailed dimensions available on request or at [badu.de](http://badu.de)

### Recommended installation example



- 1 Piezo buttons
- 2 Protective hose/  
piezo button wiring
- 3 Floor drainage
- 4 Frequency converter
- 5 Earthing strap

### Example

Approx 0.60 m/s flow speed at the centre of the flow jet at 1,100 rpm and 2.50 m distance to the outlet nozzle.

# BADUJET Turbo Pro

Innovation, performance and sophisticated design combined.  
Welcome to the limit.

## Field of application

For mounting into walls of all pool models, up to a wall thickness of 7 mm, except for round pools.  
For performance oriented professional workouts, relaxation, rehabilitation training, fitness or leisure.

## Design

The built-in main housing uses innovative propeller technology to draw water in via the cover and return it to the swimming pool with a powerful stream. The system is driven by an efficient, fanless, fully encapsulated permanent magnet motor.  
Power control as well as switching the power on and off is carried out via the integrated piezo buttons or a remote control.

## Materials used

Main housing ..... ABS  
Nozzle housing ..... ABS  
Covers ..... ABS/stainless steel  
Intermediate flange ..... PPE  
Drive unit ..... PPE/PP/stainless steel  
Plain bearing ..... SiC/SiC  
Screws ..... stainless steel

Scope of delivery standard assembly kit for design 1 and 2  
Plastic main housing, suction cover, stainless steel cover design 1 or design 2, propeller unit, nozzle unit, piezo buttons, seals, screws.

## Scope of delivery drive set 3 N~

Motor unit, frequency converter, control box, remote control, screws, shielded motor cable, 10 m, 25 m, 45 m.

Technical data at 50 Hz/60 Hz	BADUJET Turbo Pro
Flow rate (m <sup>3</sup> /h)	150-350
Voltage	3~ 380-480 V
Power input P <sub>1</sub> <sup>1)</sup> (kW)	2.75
Number of nozzles (Ø 40 mm)	1
Flow velocity (m/s)	1.80-4.10
Multi-directional swivel nozzle (degrees)	±5

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Variation	Voltage	Power input P <sub>1</sub>	Net RRP	Gross RRP <sup>2)</sup>
232.5100.000	BADUJET Turbo Pro <sup>6)</sup> , Design 1	Standard assembly kit			6,297.15 €	7,493.61 €
232.5120.000	BADUJET Turbo Pro <sup>6)</sup> , Design 2	Standard assembly kit			6,297.15 €	7,493.61 €
232.5200.000	BADUJET Turbo Pro	Drive set, 10 m	3 N~	3.60 kW	6,297.15 €	7,493.61 €
232.5200.001	BADUJET Turbo Pro	Drive set, 25 m	3 N~	3.60 kW	6,477.11 €	7,707.76 €
232.5200.002	BADUJET Turbo Pro	Drive set, 45 m	3 N~	3.60 kW	6,657.05 €	7,921.89 €
232.5000.418	BADUJET Turbo Pro supplementary kit for tiled pools				50.99 €	60.68 €
232.5000.402	BADUJET Turbo Pro additional kit for 8-17 mm wall strength				50.99 €	60.68 €
232.5000.403	BADUJET Turbo Pro additional kit for 18-27 mm wall strength				50.99 €	60.68 €

When ordering a complete unit please indicate the article number of the standard assembly kit and the drive set.

For pools with a wall thickness from 8 mm on request.



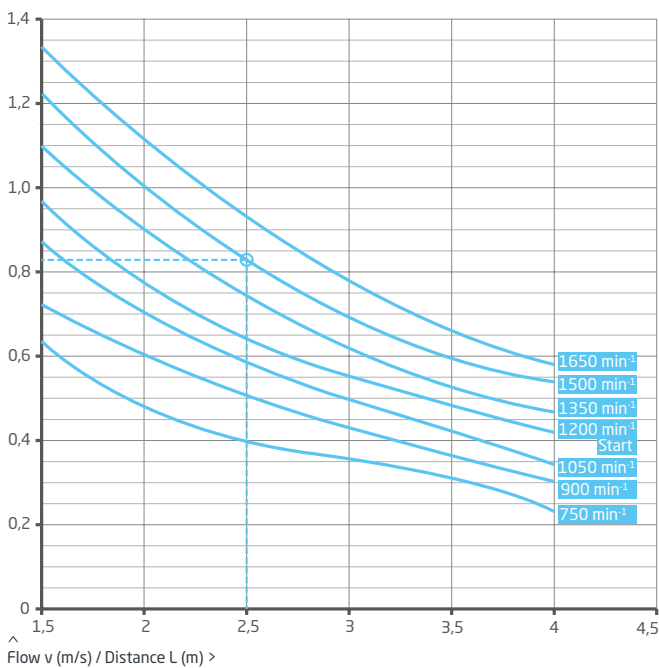
Design 1 >



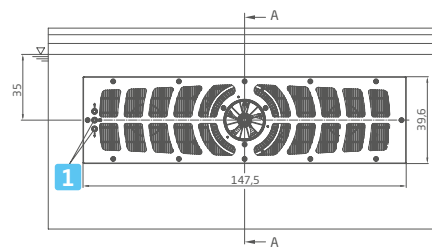
Design 2 >



### Flow speed characteristics

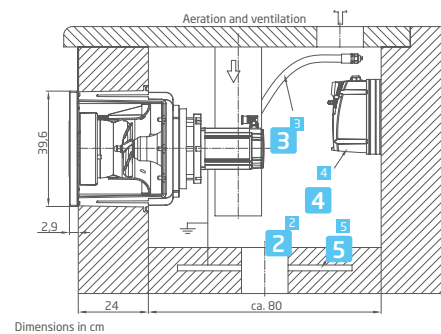


### Dimensions



Detailed dimensions available on request or at badu.de

### Recommended installation example



Dimensions in cm

### Example

Approx 0.82 m/s flow speed at the centre of the flow jet at 1,500 rpm and 2.50 m distance to the outlet nozzle.

- 1 Piezo buttons
- 2 Protective hose/ piezo button wiring
- 3 Floor drainage
- 4 Frequency converter
- 5 Earthing strap

# BADUJET Turbo Pro salt

Innovation, performance and sophisticated design combined.  
Welcome to the limit.

## Field of application

For thermal water, thermal brine, brine units as well as various problematic media depending on the concentrations and components.

For mounting into walls of all pool models, up to a wall thickness of 7 mm, except for round pools.

For performance oriented professional workouts, relaxation, rehabilitation training, fitness or leisure.

## Design

The built-in main housing uses innovative propeller technology to draw water in via the cover and return it to the swimming pool with a powerful stream. The system is driven by an efficient, fanless, fully encapsulated permanent magnet motor.

Power control as well as switching the power on and off is carried out via the integrated piezo buttons or a remote control.

## Materials used

Main housing .....	ABS
Nozzle housing .....	ABS
Covers .....	ABS
Intermediate flange .....	PPE
Drive unit .....	PPE/PP/stainless steel
Plain bearing .....	SiC/SiC
Screws .....	stainless steel (V5A)
Piezo buttons .....	stainless steel (V5A)

Scope of delivery standard assembly kit for Plastic main housing, suction cover, ABS cover, propeller unit, nozzle unit, piezo buttons, seals, screws.

## Scope of delivery drive set 3 N~

Motor unit, frequency converter, control box, remote control, screws, shielded motor cable, 10 m, 25 m, 45 m.

Technical data at 50 Hz/60 Hz	BADUJET Turbo Pro salt
Flow rate (m <sup>3</sup> /h)	150-350
Voltage	3~ 380-480 V
Power input P <sub>1</sub> <sup>1)</sup> (kW)	3.60
Number of nozzles (Ø 40 mm)	1
Flow velocity (m/s)	1.80-4.10
Multi-directional swivel nozzle (degrees)	±5

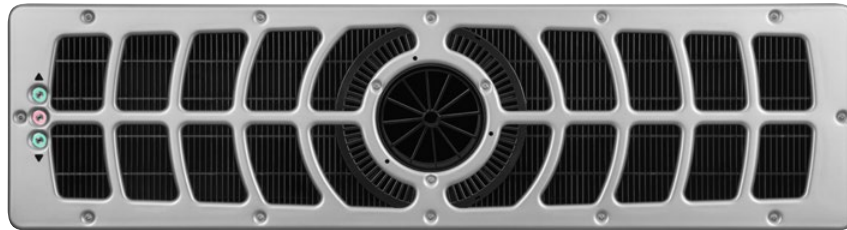
For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

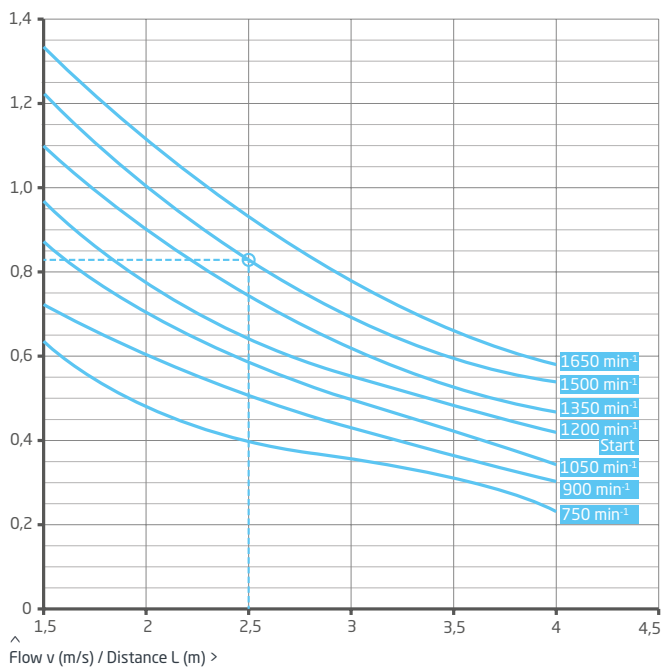
Article no	Description	Variation	Voltage	Power input P <sub>1</sub>	Net RRP	Gross RRP <sup>2)</sup>
232.5170.000	BADUJET Turbo Pro salt	Standard assembly kit			6,297.15 €	7,493.61 €
232.5200.000	BADUJET Turbo Pro salt	Drive set, 10 m	3 N~	3.60 kW	6,297.15 €	7,493.61 €
232.5200.001	BADUJET Turbo Pro salt	Drive set, 25 m	3 N~	3.60 kW	6,477.11 €	7,707.76 €
232.5200.002	BADUJET Turbo Pro salt	Drive set, 45 m	3 N~	3.60 kW	6,657.05 €	7,921.89 €
232.5000.416	BADUJET Turbo Pro salt additional kit for 8 - 17 mm wall strength				50.99 €	60.68 €
232.5000.417	BADUJET Turbo Pro salt additional kit for 18 - 27 mm wall strength				50.99 €	60.68 €
232.5000.500	Upgrade kit BADUJET Turbo Pro salt				769.00 €	915.11 €

When ordering a complete unit please indicate the article number of the standard assembly kit and the drive set.

For pools with a wall thickness from 8 mm on request.



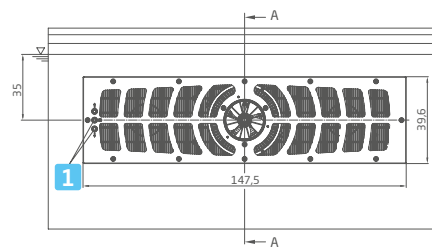
### Flow speed characteristics



### Example

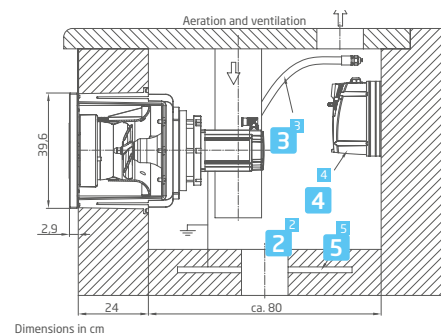
Approx 0.82 m/s flow speed at the centre of the flow jet at 1,500 rpm and 2.50 m distance to the outlet nozzle.

### Dimensions



Detailed dimensions available on request or at badu.de

### Recommended installation example



Dimensions in cm

- 1 Piezo buttons
- 2 Protective hose/piezo button wiring
- 3 Floor drainage
- 4 Frequency converter
- 5 Earthing strap

# BADU<sup>®</sup>JET Technology Shaft

More room for attractions.

## Field of application

Ready-made technology shaft solution for all BADU Jet Turbo / Turbo Pro models. Can be used in almost all pool installations. The technology shaft can be integrated discreetly into the overall concept of the pool system if an appropriate shaft cover is installed on-site.

## Design

The shaft is made of polypropylene and has connections for ventilation, cable ducts and a floor drain. It has an inspection cover and an adjustable frame for straight and sloping pool walls.

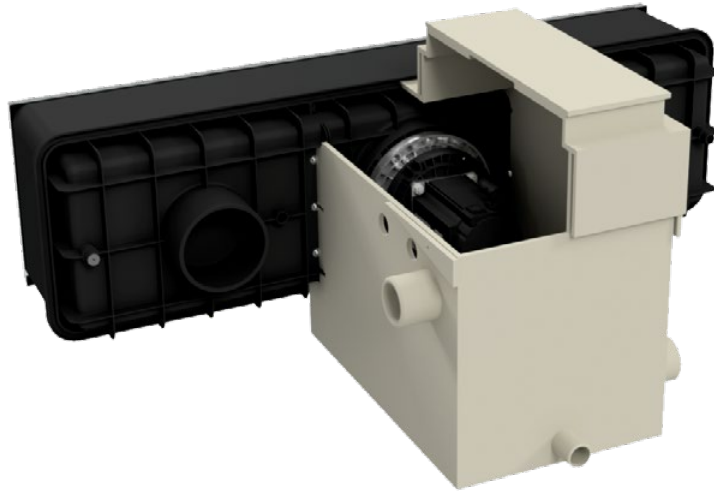
## Materials used

Lower part .....	PP
Upper part .....	PP
Lid .....	PP

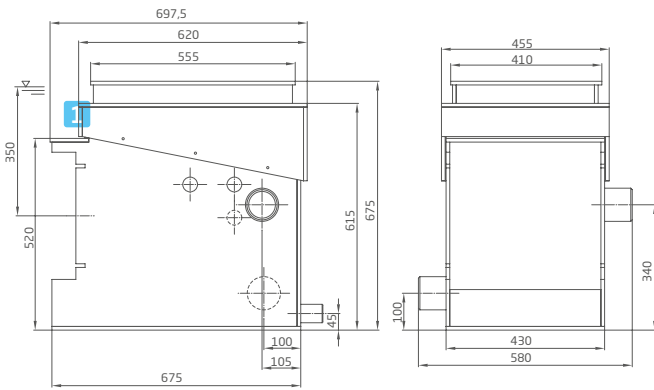
Technical data	Technology Shaft
External dimensions (width x height x depth in mm)	455 x 675 x 702
Internal dimensions (width x height x depth in mm)	410 x 655 x 655
Lid dimensions	410 x 555
Load class	A 15 - accessible
Aeration and ventilation	2x Ø 90mm socket for DN 90 HT fittings
Floor drainage	Ø 50mm socket
Cable entry grommet	3x Ø 40mm for DN 40 cable conduits

Article no	Description	Net RRP	Gross RRP <sup>7)</sup>
232.5000.000	BADU JET Technology Shaft	1,475.00 €	1,755.25 €

Counter swim units, submerged



## Dimensions



Detailed dimensions available on request or at [badu.de](http://badu.de)

# BADUJET Perla

Overhang unit with high gloss finish and LED lighting.  
For small-size pools. UV resistant, scratch and stain resistant.

## Field of application

For expanding all pool models as an attraction, for fitness training, as a wave or bubble bath, for underwater massages (consult physician), for endless, no-turn swimming even in the smallest pool.

## Materials used

Housing ..... ABS/PMMA  
Interior parts ..... PP/ABS/stainless steel  
Control elements ..... ABS  
Suction/pressure line ..... PVC/ABS

## Design

Water is drawn in through the suction inlet at the bottom of the unit using a powerful pump and led back into the pool through a strong jet via an adjustable nozzle. The BADU JET Perla is equipped with an easy-care, high quality, wood-look design inlay.

For recommended accessories see page 150.

Technical data at 50 Hz	BADU JET Perla	21-81/31 RG	21-81/31 RG
Pump flow rate (m <sup>3</sup> /h)	3~ /1~	40	40
Voltage	3~ /1~	3 N~ 400/230 V	1~ 230 V
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ /1~	2.07/1.60	2.12/1.60
Number of nozzles (Ø 40 mm)	3~ /1~	1	1
Flow pressure at nozzle (bar)	3~ /1~	0.90	0.90
Flow velocity in centre 2 m from the nozzle (m/s)	3~ /1~	1.10	1.10
Massage pressure (bar) max.	3~ /1~	1.20	1.20
Multi-directional swivel nozzle (degrees)	3~ /1~	60	60

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

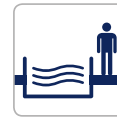
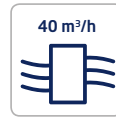
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>2)</sup>
231.7600.000	BADU JET Perla - white LED	1~ 230 V	1.60 kW	2,578.66 €	3,068.61 €
231.7620.000	BADU JET Perla - multicoloured LED	1~ 230 V	1.60 kW	2,754.60 €	3,277.97 €
231.7500.000	BADU JET Perla - white LED	3 N~ 400/230 V	1.60 kW	2,467.28 €	2,936.06 €
231.7520.000	BADU JET Perla - multicoloured LED	3 N~ 400/230 V	1.60 kW	2,643.24 €	3,145.46 €
231.9851.000	Telescopic foot for above ground pools			193.95 €	230.80 €



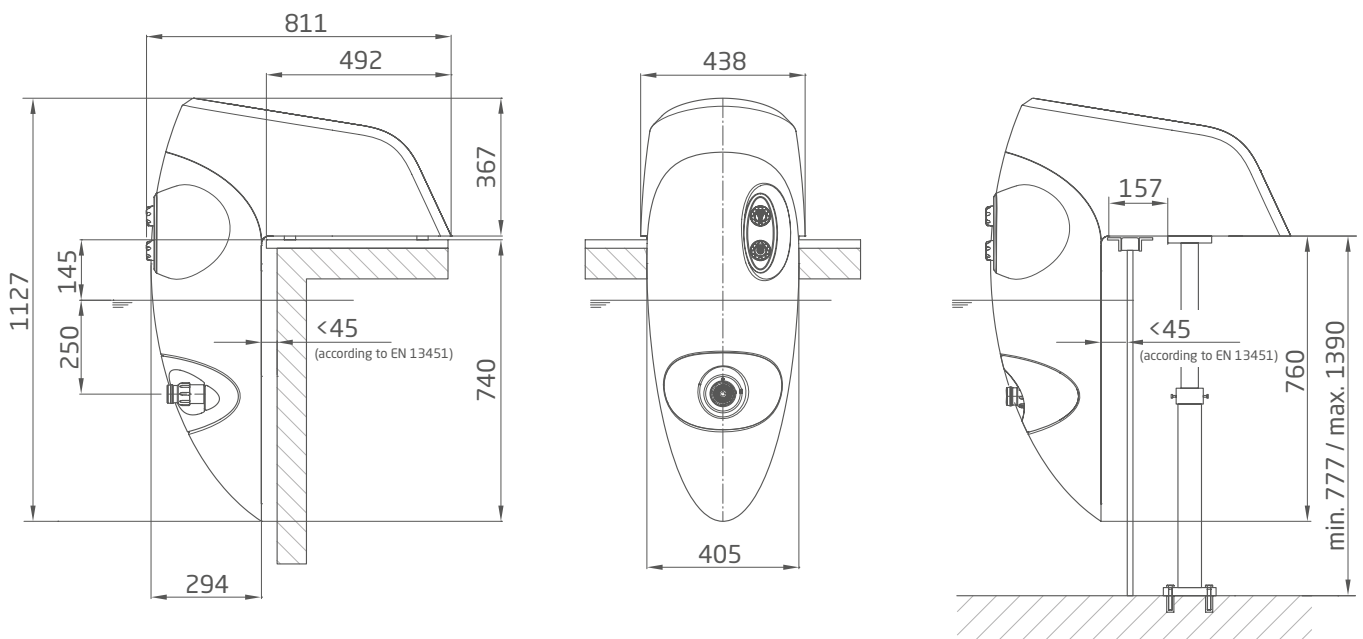


With white or multicoloured LED >

With design inlay as standard >



## Dimensions



Detailed dimensions available on request or at [badu.de](http://badu.de)

# BADUJET Riva

High performance overhang unit with high gloss finish and LED lighting.  
For medium-size pools. UV resistant, scratch and stain resistant.

## Field of application

For expanding all pool models as an attraction, for fitness training, as a wave or bubble bath, for underwater massages (consult physician), for endless, no-turn swimming even in the smallest pool.

## Materials used

Housing ..... ABS/PMMA  
Interior parts ..... PP/ABS/stainless steel  
Control elements ..... ABS  
Suction/pressure line ..... PVC/ABS

## Design

Water is drawn in through the suction inlet at the bottom of the unit using a powerful pump and led back into the pool through a strong jet via an adjustable nozzle. The BADUJET Riva is equipped with an easy-care, high quality, wood-look design inlay.

For recommended accessories see page 150.

Technical data at 50 Hz	BADUJET Riva	21-81/32 G	21-81/32 RG
Pump flow rate (m <sup>3</sup> /h)	3~/1~	58	54
Voltage	3~/1~	3 N~ 400/230 V	1~ 230 V
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~/1~	3.18/2.60	2.89/2.20
Number of nozzles (Ø 40 mm)	3~/1~	1	1
Flow pressure at nozzle (bar)	3~/1~	1.10	1.00
Flow velocity in centre 2 m from the nozzle (m/s)	3~/1~	1.20	1.15
Massage pressure (bar) max.	3~/1~	1.60	1.60
Multi-directional swivel nozzle (degrees)	3~/1~	60	60

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>2)</sup>
231.8600.000	BADUJET Riva - white LED	1~ 230 V	2.20 kW	3,183.07 €	3,787.85 €
231.8620.000	BADUJET Riva - multicoloured LED	1~ 230 V	2.20 kW	3,357.02 €	3,994.85 €
231.8500.000	BADUJET Riva - white LED	3 N~ 400/230 V	2.60 kW	3,117.09 €	3,709.34 €
231.8520.000	BADUJET Riva - multicoloured LED	3 N~ 400/230 V	2.60 kW	3,292.04 €	3,917.53 €
231.9851.000	Telescopic foot for above ground pools			193.95 €	230.80 €

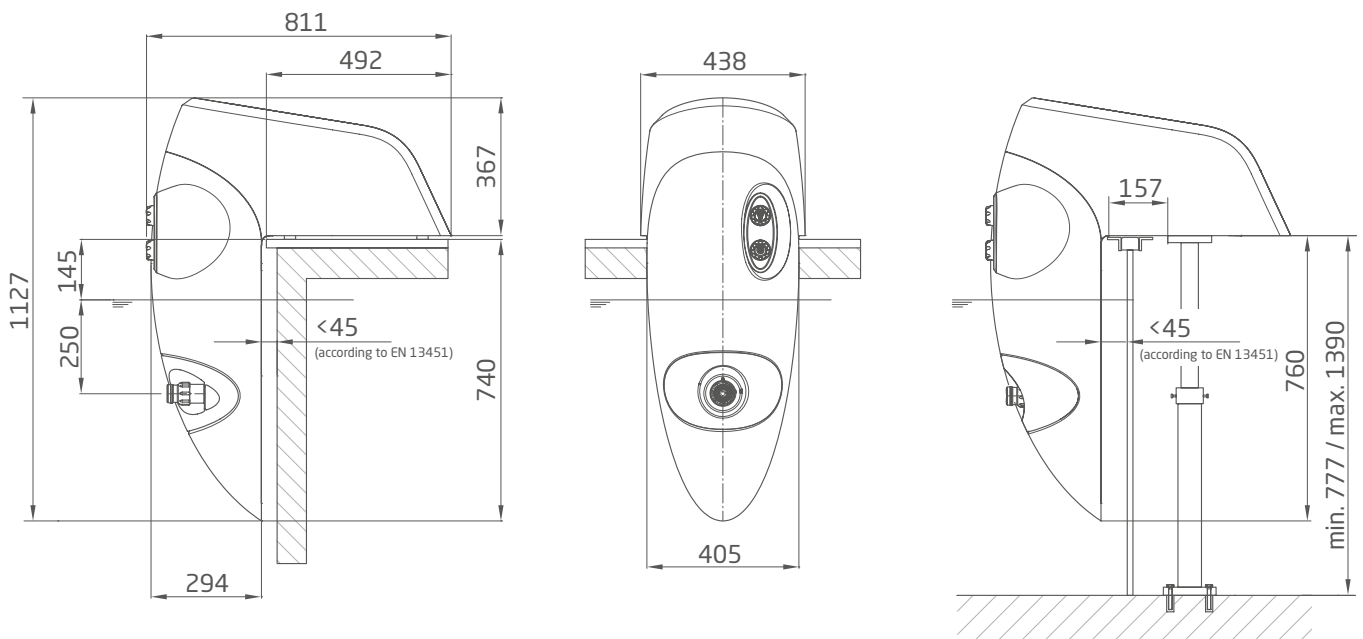


With white or multicoloured LED >

With design inlay as standard >



## Dimensions



Detailed dimensions available on request or at badu.de

# BADU<sup>®</sup>JET Stella

Powerful overhang unit with high gloss finish and LED lighting.  
For large pools. UV resistant, scratch and stain resistant.

## Field of application

For expanding all pool models as an attraction, for fitness training, as a wave or bubble bath, for underwater massages (consult physician), for endless, no-turn swimming even in the smallest pool.

## Materials used

Housing ..... ABS/PMMA  
Interior parts ..... PP/ABS/stainless steel  
Control elements ..... ABS  
Suction/pressure line ..... PVC/ABS

## Design

Water is drawn in through the suction inlet at the bottom of the unit using a powerful pump and led back into the pool through a strong jet via two adjustable nozzles. The BADU JET Stella is equipped with an easy-care, high quality, wood-look design inlay.

For recommended accessories see page 150.

Technical data at 50 Hz	BADU JET Stella	21-81/33 G
Pump flow rate (m <sup>3</sup> /h)	3~	75
Voltage	3~	3 N~ 400/230 V
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~	3.74/3.00
Number of nozzles (Ø 40 mm)	3~	2
Flow pressure at nozzles (bar)	3~	1.00
Flow velocity in centre 2 m from the nozzles (m/s)	3~	1.40
Massage pressure (bar) max.	3~	1.60
Multi-directional swivel nozzles (degrees)	3~	60

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>2)</sup>
231.9500.000	BADU JET Stella - white LED	3 N~ 400/230 V	3,00 kW	3,635.94 €	4,326.77 €
231.9520.000	BADU JET Stella - multicoloured LED	3 N~ 400/230 V	3,00 kW	3,811.89 €	4,536.15 €
231.9851.000	Telescopic foot for above ground pools			193.95 €	230.80 €

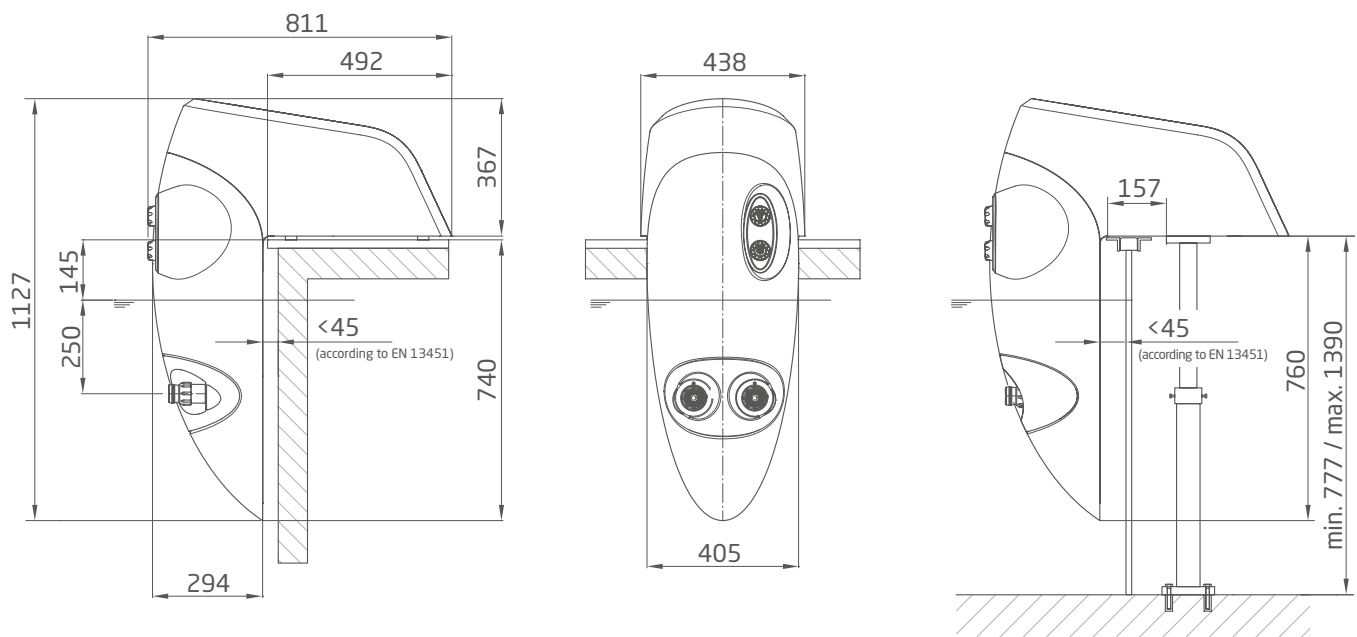


With white or multicoloured LED >

With design inlay as standard >



## Dimensions



Detailed dimensions available on request or at badu.de

Counter swim units, overhang

# Pool heating

Your pool is as beautiful as the water is warm.

The BADU BK heating system means you don't have to agonise over the environment or your purse strings to have warm water: warmth comes from the sun.





## Functionality

The warmth of the sun, absolutely free. The BADU BK solar panel series brings warm water to your pool simply with a few rays of sun and without any heating charges. Furthermore it is completely environmentally friendly as there is no CO<sub>2</sub> pollution. The solar panel unit pays for itself within the first few years - and you'll get more from your heated pool as you'll be able to use it more often.

The pool heating is a system of external swimming pool solar panels and a bypass pipe connection to your pool. The circulation pump, or an additional pump, leads the filtered water through the heating system when necessary and returns the heated water to your pool.

As soon as the surroundings are warmer than the pool water, the pool heating can be turned on by opening the shut-off valve. It can be turned off again by closing the shut-off valve so that the water is still refreshingly cool in high season. This can also be controlled automatically with the BADU Logic remote pool control, see pages 137. It's practically impossible to heat your pool in a simpler and more intelligent way.

The BADU BK swimming pool solar panels are made from high quality polypropylene. Therefore they are UV-resistant, weatherproof and resistant to swimming pool water as well as the chemicals in it. The d 50 mm welded headers with socket connections are also made from polypropylene and are therefore just as resistant and durable.

## Economic efficiency

### Calculation example for the BADU BK solar panels in an outdoor pool.

#### Pool situation

Pool surface ..... 32 m<sup>2</sup>  
Pool volume ..... 45 m<sup>3</sup>  
Desired water temperature ..... approx. 24 °C

- > Outdoor poolcover to avoid heat loss
- > Bathing season from May to September (150 days)

#### Calculation example for heat requirement

Operating time: 150 days  
x Heat loss per day: 2 °C  
x pool volume: 45m<sup>3</sup>  
x Required power to heat water: 1.16 kW\*  
= Heat energy per bathing season: 15.660 kWh

#### Calculation example for required panel surface

Pool surface x pool cover correction factor x  
positioning/inclination correction factor  
= required panel surface

#### Result in the case of your example:

32 m<sup>2</sup> x 0.7 x 1.2 = approx. 27 m<sup>2</sup>

**Cost of a BADU BK solar panel system incl. assembly and control technology** ..... approx. 4,500,- €

#### Required Absorber Area

The pool's water surface, the presence of a pool cover and the positioning and inclination of the panels are deciding factors when configuring the required panel surface.

\* Heating power to increase 1 m<sup>3</sup> of water by 1°C.

\*\* 1 L of oil is equivalent to about 10 kWh of primary energy and 8 kWh of heating energy.

### Calculation of energy cost savings compared to heat requirement with an oil heating system

Required energy to heat water: 15,660 kWh  
Heating energy: 8 kWh / L \*\*  
= required amount of heating oil: 1,958 L  
1,958 L x €0.95 net  
= €1,860 plus delivery

**Cost without a BADU BK solar panel unit using an oil heating system** ..... approx. 2,200.00 € per year

The amortisation period for a BADU BK swimming pool solar panel system is just over 2 years.

### Calculation of energy cost saving compared to heat requirement with a heat pump

Heat requirement with Heat Pump (WP) 16.5  
Required power to heat water 12.0 kW (based on 15 °C air and 26 °C water temperature)  
Nominal heating energy requirement: 2.7 kWh  
= Heating energy requirement per season: 3.524 kWh  
x price for 1 kWh: €0.37  
= Savings with solar panels: €1,304.00

The amortisation period for a BADU BK swimming pool solar panel system is just over 3 years.

*This example is based on basic oil heating charges of €0.95/l net, as well as panel positioning towards the south with a 60° horizontal inclination.*

*Assembly may only be carried out by a trained professional. Assembly materials must be provided on site.*

*The total cost is an estimate point of reference based on information from installation companies.*

# BADU® BK 250 / BK 370

Environmentally friendly solar heating for your pool.  
Extend your swimming season with the BADU BK solar panel.

## Panel surface calculation example

4 m x 8 m pool dimensions = 32 m<sup>2</sup> pool surface

$$\text{Number of panels} > \frac{\text{pool surface}}{\text{panel surface}} > \frac{32.0 \text{ m}^2}{3.70 \text{ m}^2} > 8.65 \times 0.7 (70\%) > 6.06 > 6 \text{ units}$$

With this example you are able to calculate the number of panels required. In this case we have calculated a requirement of 6 BADU BK 370 panels. This value can vary depending on the direction and inclination of the pool heating.

**Note:** In Central Europe the panel surface should correspond to the pool surface in size. If a cover is used to minimise heat loss, the panel surface is reduced to 70 % of the pool surface.

Technical data	BADU BK	370	370 R	250	250 R
Surface (m <sup>2</sup> )		3.70	3.70	2.50	2.50
Weight without water (kg)		9	17	7	12
Weight with water (kg)		19	27	13	18
Operating pressure (bar) max.		1.50	1.50	1.50	1.50
Flow rate (l/h)		1000	1000	750	750
Collector pipe with socket connection (mm)		50	50	50	50
Flow resistance (m)	with 4 panels	0.14	0.14	0.14	0.14
Flow resistance (m)	with 6 panels	0.40	0.40	0.40	0.40
Flow resistance (m)	with 8 panels	0.90	0.90	0.90	0.90
Flow resistance (m)	with 10 panels	1.70	1.70	1.70	1.70

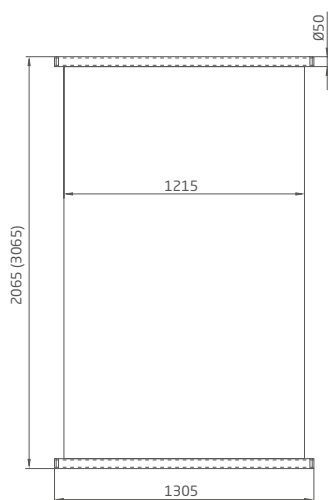
R = with frame. Max. 10 panels can be installed in one bank.

Article no	Description	Net RRP	Gross RRP <sup>7)</sup>
250.2000.000	BADU BK 250 solar panel	356.89 €	424.70 €
250.4000.000	Aluminium frame for BADU BK 250	222.93 €	265.29 €
250.1000.000	BADU BK 370 solar panel	411.89 €	490.15 €
250.3000.000	Aluminium frame for BADU BK 370	257.93 €	306.94 €

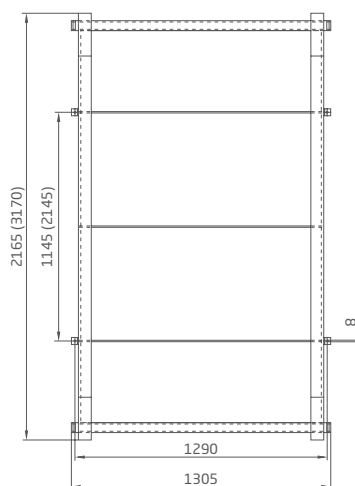




## Dimensions



Individual solar panel



Solar panel in aluminium frame

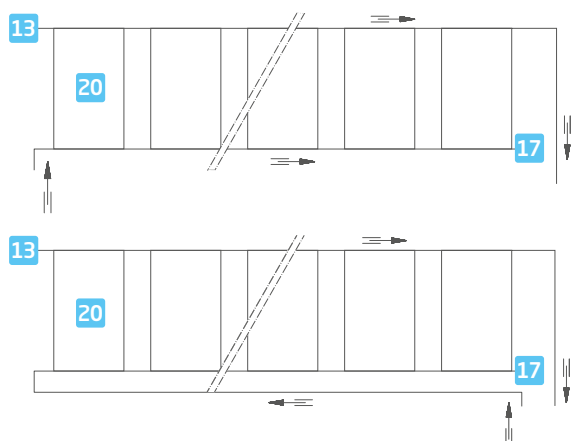


Side view

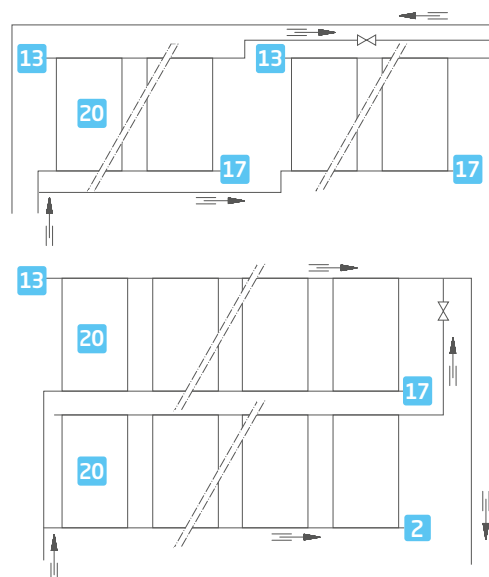
Dimensions in brackets for BADU BK 370. Possible dimensional tolerances  $\pm 1\%$ .  
Detailed dimensions on request or at badu.de



## Installation



Installation example for solar panels in one bank  
(max. 10 panels per bank)



Installation example for solar panels in two banks  
(max. 10 panels per bank)

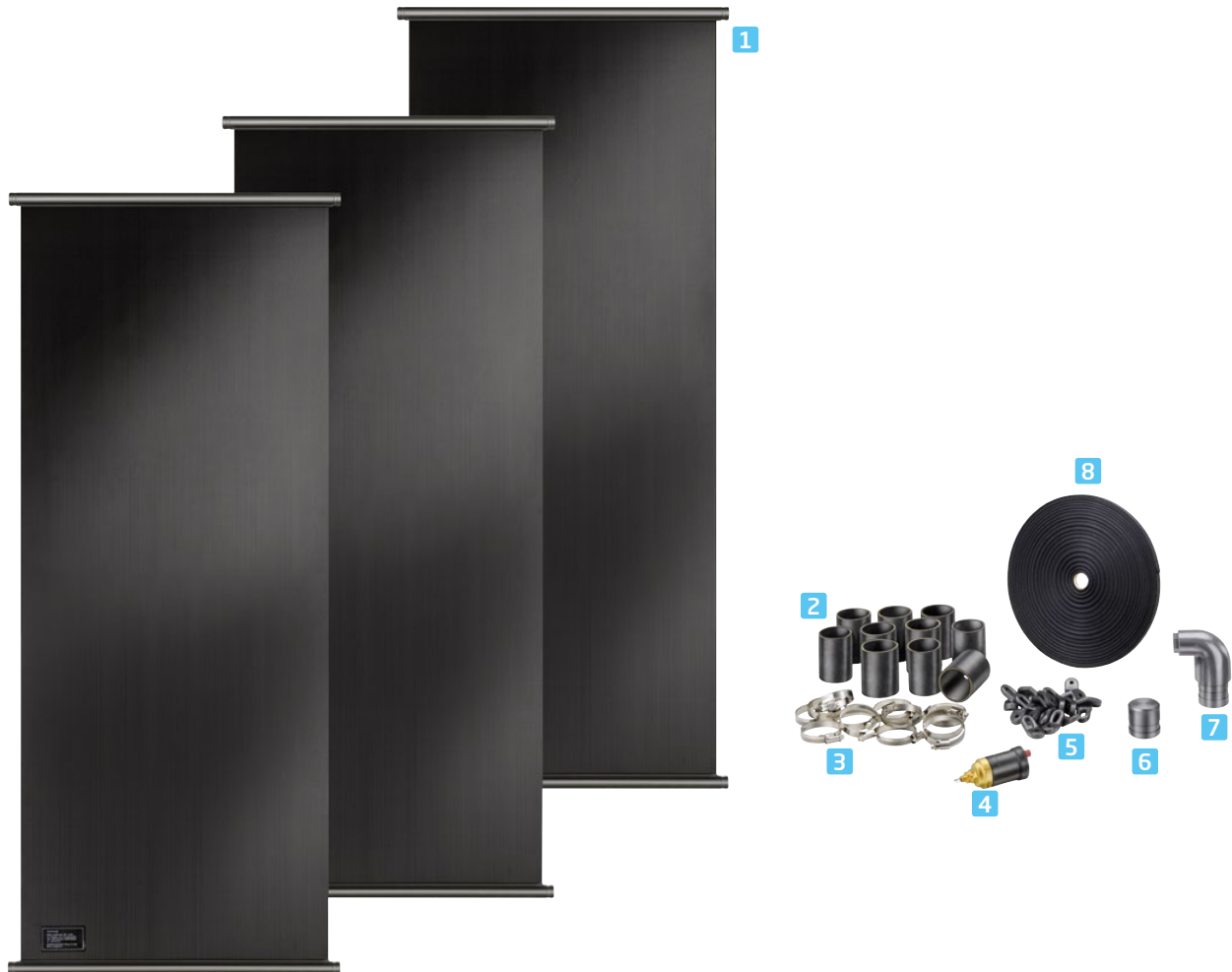
### Configuring the pump's delivery head ( $H_{total}$ )

$H_{total}$  = Difference in height between the water level and the highest point of the panels plus the resistance inside the panels, pipes, fittings and other individual resistances (filter, backwash valve, nozzles etc).

- 1 BADU BK solar panel
- 2 End plug
- 3 Aeration and ventilation valve

# BADU® BK 250 / BK 370 Sets

The BADU BK solar panel as a complete set.  
Use the sun simply, fast and cost-effectively for your pool.



## Design

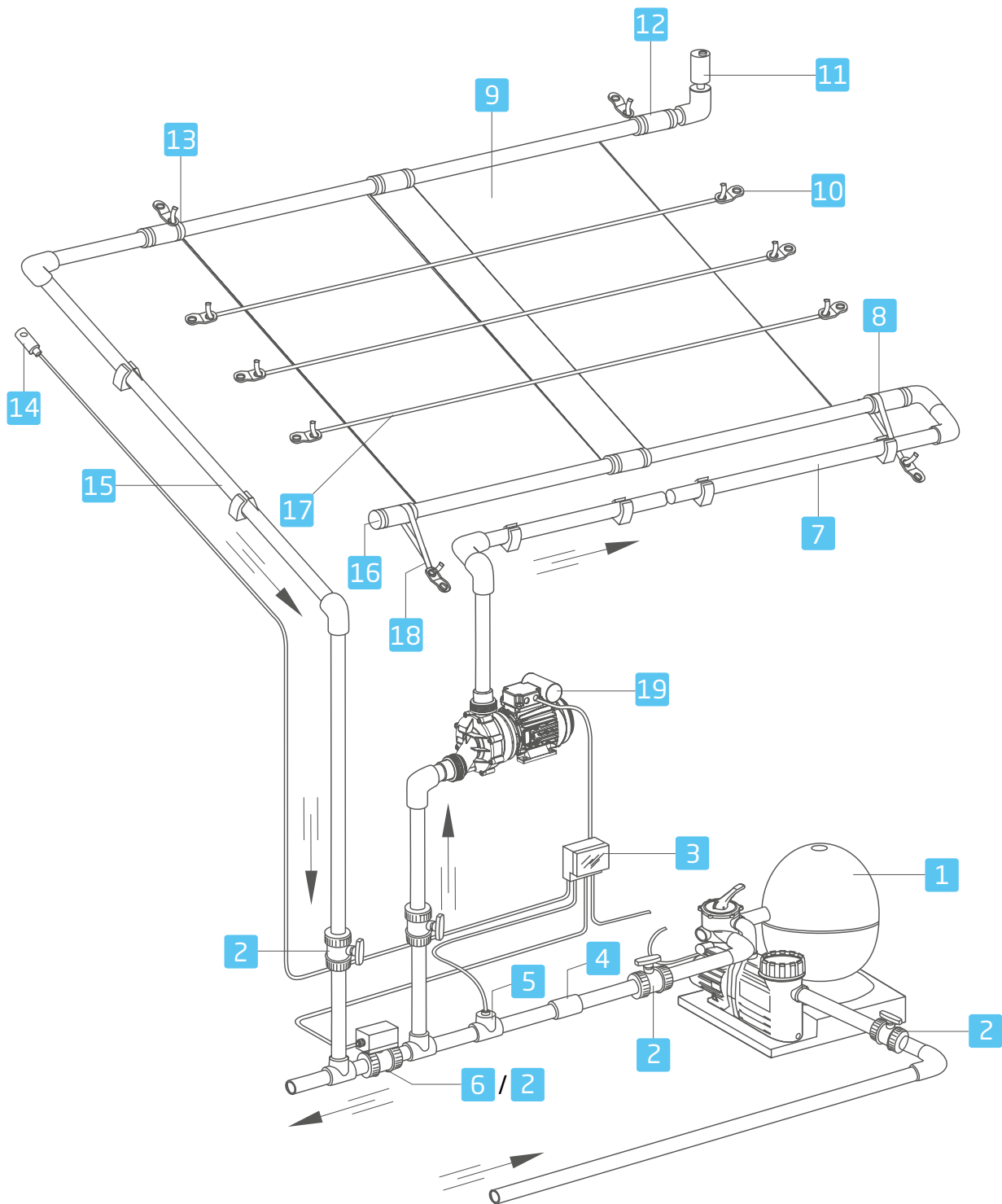
Our solar panels are available in sets. These include the required amount of solar panels as well as appropriate accessories. Therefore you save time configuring the solar panels and can bring the sun's warmth to your pool even quicker.

- 1 Solar panel BADU BK 250 or BADU BK 370
- 2 Panel connectors
- 3 Hose clamps
- 4 Vent unit R 3/8
- 5 Plastic double eyelet
- 6 End plugs
- 7 Elbow for vent unit
- 8 Polyester tape

Article no	Description	Net RRP	Gross RRP <sup>7)</sup>
250.2020.000	Solar panel set, 2 x BADU BK 250 with accessories	899.74 €	1.070.69 €
250.2030.000	Solar panel set, 3 x BADU BK 250 with accessories	1.278.63 €	1.521.57 €
250.2040.000	Solar panel set, 4 x BADU BK 250 with accessories	1.661.52 €	1.977.21 €
250.2050.000	Solar panel set, 5 x BADU BK 250 with accessories	1.993.43 €	2.372.18 €
250.2060.000	Solar panel set, 6 x BADU BK 250 with accessories	2.430.30 €	2.892.06 €
250.1020.000	Solar panel set, 2 x BADU BK 370 with accessories	1.009.70 €	1.201.54 €
250.1030.000	Solar panel set, 3 x BADU BK 370 with accessories	1.440.57 €	1.714.28 €
250.1040.000	Solar panel set, 4 x BADU BK 370 with accessories	1.876.46 €	2.232.99 €
250.1050.000	Solar panel set, 5 x BADU BK 370 with accessories	2.295.33 €	2.731.44 €
250.1060.000	Solar panel set, 6 x BADU BK 370 with accessories	2.755.20 €	3.278.69 €



## Installation



Detailed dimensions on request or at [badu.de](http://badu.de)

- |  |  |
|--|--|
| <ul style="list-style-type: none"><li>1 Filter unit with pump</li><li>2 Ball valve</li><li>3 BADU Logic pool control, optional</li><li>4 Non-return valve</li><li>5 Sensor for water temperature with T-fitting</li><li>6 Actuator or ball valve</li><li>7 Feed pipe</li><li>8 Inlet - BADU BK solar panel unit</li><li>9 BADU BK solar panel</li><li>10 Double eyelet</li></ul> | <ul style="list-style-type: none"><li>11 Vent unit</li><li>12 Panel connectors</li><li>13 Outlet - BADU BK solar panel unit</li><li>14 Air temperature sensor</li><li>15 Return pipe</li><li>16 End plug</li><li>17 Long polyester tape</li><li>18 Short polyester tape</li><li>19 Additional pump, optional</li></ul> |
|--|--|

# BADU® pool products



BADU Quick



BADU Suction  
safety system



BADU Mat T 1/T 1G  
Topmount design



BADU Mat T 1/T 1G  
Sidemount design



Further information regarding these pool products can be found on [badu.de](http://badu.de).  
Scan the QR code and you will be taken directly to the product information page.



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## OPERATION

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Flow meters	124
Filter units	126
Frequency converters	128
Controllers	130
Backwash units	140

# BADU® FlowSonic / FlowSonic+

Flow measurement

## Flow measurement via ultrasound

### Field of application

The ultrasonic flow meters are ideally suited for measuring the volume flow. Thanks to ultrasonic measurement, they offer a precise, loss-free and calibration-free possibility to measure the volume flow. With a measuring range of 0-54 m³/h they can be used for pool water with a salt concentration of up to 3 % and are therefore particularly suitable for monitoring and displaying the flow in pool systems. Variable speed pumps can be adjusted to the required flow rate.

The FlowSonic+ can be used as a stand-alone solution and enables manual evaluation and customised adjustment of the flow rate. Settings for the FlowSonic+ are also possible via the SmartCONNECT app. This makes it flexible to use and expands the areas of application.

The FlowSonic communicates directly with the BADU Blue and BADU Blue Pro and other pool control solutions that can process a digital signal (pulse signal) and an analogue signal 4 - 20 mA.

### Materials used

Housing .....	PA 66 GF 25
Measuring section .....	PP
Transducer .....	PEEK
Elastomers (process connection) .....	NBR
Elastomers (transducer) .....	EPDM

Technical data	BADU FlowSonic	BADU FlowSonic+
Power supply	DC 24V SELV	DC 24V SELV
Power Consumption	50mA, 300mA with digital output	50mA, 300mA with digital output
Power Input	Max. 10 W	Max. 10 W
Nominal pressure rating	PN 10	PN 10
Measuring range	54 m³/h	54 m³/h
Nominal diameter	DN 50	DN 50
Analogue output signal	4-20mA	4-20mA
Digital output signal	Pulse (667/l)	Pulse (667/l)
Medium temperature	0-45 °C	0-45 °C

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Net RRP	Gross RRP <sup>7)</sup>
271.6510.002	BADU FlowSonic	479.00 €	570.00 €
271.6520.002	BADU FlowSonic+	579.00 €	689.00 €



FlowSonic >



FlowSonic+ >



Self-priming, complete filter unit with no backwashing.  
For crystal clear fun in the pool.

## Field of application

Swimming pool water filtration in private pools, can be installed max. 3 m above or below water level. This filter unit doesn't require a waste water connection since backwashing is not necessary. It is therefore very environmentally friendly.

## Mode of operation

The BADU Star complete filter unit is self-priming. It pumps pool water from the pool, via the front-end strainer basket (for leaves etc.) and forces it through the fine mesh filter cartridges (approx. 50 µm) in order to return it to the pool crystal clear. The pressure gauge indicates the degree of contamination in the filter cartridges. They can be cleaned by hosing them down or simply by putting them into any household washing machine at 30 °C. Do not spin.

## Design

Cartridge filter with strainer tank, transparent lid and pressure gauge in one compact unit, ready for connection. Motor/pump shaft has no contact with the pool water providing complete electrical separation.

## Materials used

Parts in contact with water ..... PP GF 30  
Screws ..... stainless steel 1.4301  
Filter cartridge ..... synthetic fibre mesh, approx. 50 µm  
Cartridge pipe ..... PVC  
Transparent lid ..... SAN, transparent

Technical data at 50 Hz	BADU Star	69/12 <sup>*)</sup>	69/24 <sup>*)</sup>	69/36 <sup>*)</sup>	913/12 <sup>**)</sup>	913/24 <sup>**)</sup>	913/36 <sup>**)</sup>
Inlet Sa/outlet connection Da Rp <sup>2)</sup>		1½/ 1½	1½/ 1½	1½/ 1½	1½/ 1½	1½/ 1½	1½/ 1½
Rec. Inlet/output pipe, d <sup>4)</sup>		50/50	50/50	50/50	50/50	50/50	50/50
Flow rate (m <sup>3</sup> /h) <sup>***)</sup>		9	9	9	13	13	13
Number of filter cartridges		12	24	36	12	24	36
Filtration area (m <sup>2</sup> )		7	14	21	7	14	21
Filtration (m/h)		1,3	0,64	0,43	1,60	0,93	0,62
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~230 V	0.50/0.30	0.50/0.30	0.50/0.30	0.63/0.45	0.63/0.45	0.63/0.45
Rated Current (A)	1~230V	2.40	2.40	2.40	3.00	3.00	3.00
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	3~ Y/Δ 400/230 V	0.44/0.30	0.44/0.30	0.44/0.30	0.66/0.45	0.66/0.45	0.66/0.45
Rated current (A)	3~ Y/Δ 400/230 V	0.95/1.65	0.95/1.65	0.95/1.65	1.25/2.15	1.25/2.15	1.25/2.15

For more detailed information regarding the motor protection please see page 167. \*) Up to approx. 50 m<sup>3</sup> pool volume. \*\*) Up to approx. 80 m<sup>3</sup> pool volume. \*\*\*) With clean filter and no resistance on site.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
220.1100.000	BADU Star 69/12	1~230 V	0.30 kW	1,870.47	2,225.86 €
220.2100.000	BADU Star 69/24	1~230 V	0.30 kW	2,317.32	2,757.61 €
220.3100.000	BADU Star 69/36	1~230 V	0.30 kW	2,717.20	3,233.47 €
220.1300.000	BADU Star 913/12	1~230 V	0.45 kW	1,917.44	2,281.75 €
220.2300.000	BADU Star 913/24	1~230 V	0.45 kW	2,366.33	2,815.93 €
220.3300.000	BADU Star 913/36	1~230 V	0.45 kW	2,760.20	3,284.64 €
220.1000.000	BADU Star 69/12	3~ Y/Δ 400/230 V	0.30 kW	1,856.46	2,209.19 €
220.2000.000	BADU Star 69/24	3~ Y/Δ 400/230 V	0.30 kW	2,291.33	2,726.68 €
220.3000.000	BADU Star 69/36	3~ Y/Δ 400/230 V	0.30 kW	2,688.20	3,198.96 €
220.1200.000	BADU Star 913/12	3~ Y/Δ 400/230 V	0.45 kW	1,905.45	2,267.49 €
220.2200.000	BADU Star 913/24	3~ Y/Δ 400/230 V	0.45 kW	2,351.30	2,798.05 €
220.3200.000	BADU Star 913/36	3~ Y/Δ 400/230 V	0.45 kW	2,750.19	3,272.73 €





^ 12 filter cartridges

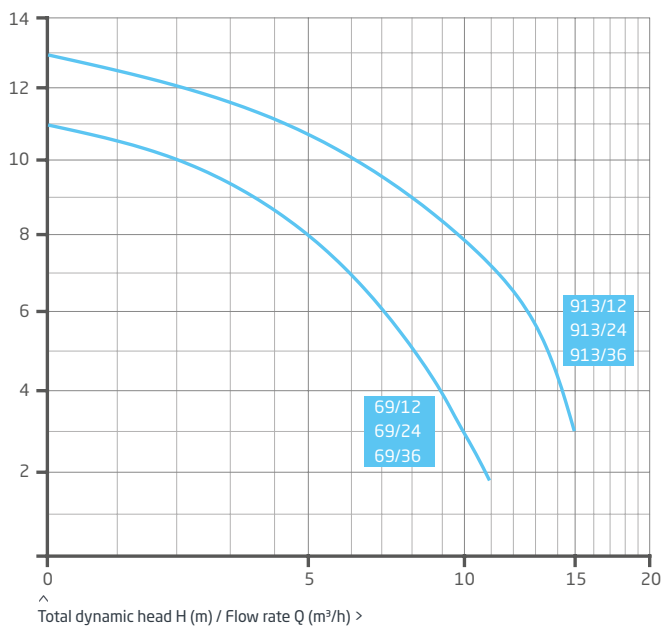


^ 24 filter cartridges

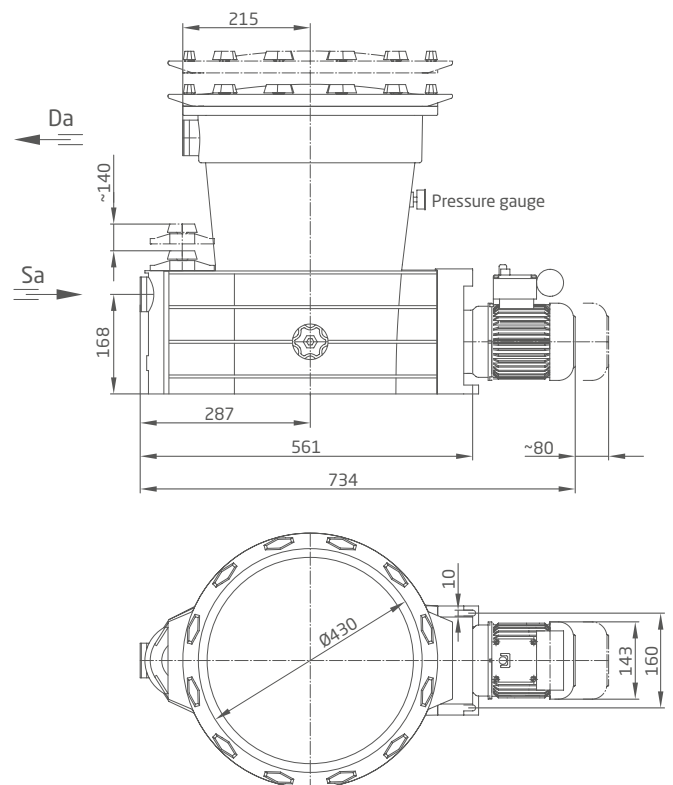


^ 36 filter cartridges

Performance



Dimensions



# BADU® Eco Drive II

It's all go. Compact frequency converter for optimal working conditions.

## Field of application

There are various operating conditions in pool water treatment, for example filtering - pool water circulation - backwashing and rinsing. Depending on pipe friction loss and filter speed, different operating points have to be set. This can be ensured conveniently by controlling the pump's operating points via a frequency converter. Therefore the pump's motor speed is electronically adjusted as necessary.

The BADU Eco Drive II frequency converters are ideally suited for use with the BADU Prime 25 - BADU Prime 48, BADU Resort and BADU 93.

## Performance characteristics

- > Wide range of control options: direct control, digital inputs to approach fixed speeds, 0-10V or 4-20mA
- > Various relay input functions and relay output functions.
- > Unnecessary energy loss is avoided
- > Pumps are always run at optimal and most economic operating point.
- > Maximum energy saving potential through adjustable flow rate

Technical data at 50 Hz	BADU Eco Drive II	0.75 kW	1.50 kW	2.20 kW	4.00 kW	5.50 kW
Frequency		50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz	50-60 Hz
Voltage		3~ 380-480 V	3~ 380-480 V	3~ 380-480 V	3~ 380-480 V	3~ 380-480 V
Analogue input		0-10 V/4-20 mA	0-10 V/4-20 mA	0-10 V/4-20 mA	0-10 V/4-20 mA	0-10 V/4-20 mA
Cooling		ventilation	ventilation	ventilation	ventilation	ventilation
Max. ambient temperature		50 °C	50 °C	50 °C	50 °C	50 °C

For more detailed information regarding device protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Net RRP	Gross RRP <sup>7)</sup>
297.0075.412	Frequency converter BADU Eco Drive II for 0.75 kW	3~ 380-480 V	<b>1,189.40</b>	1,415.39 €
297.0150.412	Frequency converter BADU Eco Drive II for 1.50 kW	3~ 380-480 V	<b>1,381.31</b>	1,643.76 €
297.0220.412	Frequency converter BADU Eco Drive II for 2.20 kW	3~ 380-480 V	<b>1,573.23</b>	1,872.14 €
297.0400.412	Frequency converter BADU Eco Drive II for 4.00 kW	3~ 380-480 V	<b>2,041.16</b>	2,428.98 €
297.0550.412	Frequency converter BADU Eco Drive II for 5.50 kW	3~ 380-480 V	<b>2,575.43</b>	3,064.76 €
297.0000.001	Programming flat rate BADU Eco Drive II		<b>on request</b>	

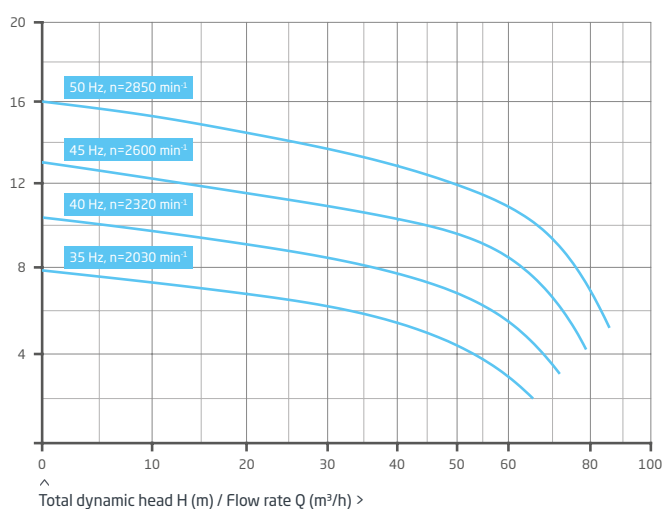
Further capacities on request.



Graphic display >



### Performance



Characteristics calculated for the BADU Resort 70 at different frequencies.

### Special on-site requirements

- > Protected cable between motor and frequency converter.
- > We recommend providing a PTC thermistor sensor for the motor winding.
- > We recommend not running the motor below 30 Hz.
- > Residual current circuit breaker (type B).

The smart complete pool control system for carefree swimming fun.  
With integrated measuring and control technology for private swimming pools.

## Field of application

BADU Blue is a pool control system which is integrated in the network. It has been developed as a system that can be adapted to many different pool installations and a variety of technical equipment.

It also offers functions that are not used in every pool.

The pool control with measuring and control technology is designed for private pools up to a maximum of 250 m<sup>3</sup>.

## Mode of operation

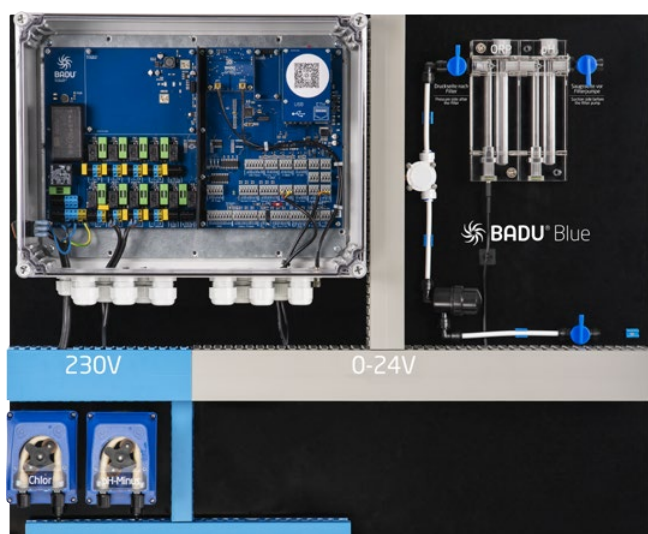
Parameters that are recorded, evaluated and appropriately regulated can all be displayed and modified using a web app on a smartphone, tablet or PC. This can be displayed on the home network or through remote accessing. There is also the option for the pool builder to administer the control system via a backend.

## Scope of delivery

- 1x BADU Blue terminal box, mounted on a mounting board, wired.
- 1x pH glass electrode
- 1x Redox glass electrode
- 1x Adhesive set for injection points and sample water
- 1x Buffer solution set
- 2x PE hose 3m, ø 6 mm, white
- 1x Teflon tape, 12 mm wide
- 1x Interference snubber, wired, 250V AC
- 2x Accessories / small parts for dosing groups
- 1x Installation instructions

## Features

- > Redox measurement.
- > Ph measurement.
- > Control of variable speed and unregulated filter pumps.
- > Optional filter pressure and/or circulation monitoring.
- > Control of heating/heat pump/heat exchanger.
- > Control of the suction via floor drain (ECO) and overflow gutter / skimmer.
- > Active winterizing / frost protection.
- > Solar panel forced flushing.
- > Solar panel priority circuit.
- > Backwash control via actuator or rod valve possible.
- > Water level control for skimmer and overflow tank possible.
- > Safety switch-off / monitoring of the water refilling.
- > Connection of additional analogue sensors with display on the dashboard.
- > PV surplus control.
- > Temperature control with up to 12 sensors.
- > Connection of 4 suction lances for water care products.
- > Integration of the weather interface.
- > Software updates through independent installation.
- > Support interface.
- > Optional, free remote access via cloud server.
- > Configuration wizard.
- > User notification by email, push notifications.
- > Simple integration of the measured values into home automation systems (JSON API).
- > Inline assistant for direct access to the operating instructions.
- > Customisable user interface.



## Features of the BADU Blue



Control of water disinfection (Redox)



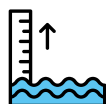
Control of pH value (pH plus or pH minus; optionally both)



Backwash control



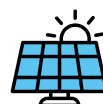
Alarm and notifications (by email or mobile push)



Control of water level via level control



Control of filter pump



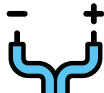
Control of solar panel system



Pool lighting control



Integration of weather interface



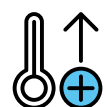
Additional connection options for analogue sensors



Additional connection options for up to 12 temperature sensors



Eco mode



Control of heating, heat pump or heat exchanger

Technical data	BADU Blue
Circuit board	microprocessor controlled
Operating voltage	1~ 230 V, 50/60 Hz
Connection value (motor capacity P <sub>1</sub> )	max. 0.90 kW
Fuse for circuit board/relay	1A delay/400mA relay/630 mA relay light
Max. permissible load current	250 V/4 A

For more detailed information regarding the device protection please see page 167.

Technical data may vary.

Article no	Description	Net RPR	Gross RPR <sup>7)</sup>
271.6500.500	BADU Blue	4,850.00 €	5,771.50 €

# BADU<sup>®</sup> Blue Pro

The smart complete pool control system for carefree swimming fun.  
With integrated measuring and control technology for private swimming pools.

## Field of application

BADU Blue Pro is a pool control system which is integrated in the network. It has been developed as a system that can be adapted to many different pool installations and a variety of technical equipment.

Designed for private pools up to a maximum of 250 m<sup>3</sup>, the pool control can also be used for further water care variants, and for hotel swimming pools.

## Mode of operation

Parameters that are recorded, evaluated and appropriately regulated can all be displayed and modified using a web app on a smartphone, tablet or PC. There is also the option for the pool builder to administer the control system via a backend.

## Scope of delivery

- 1x BADU Blue Pro terminal box, mounted on a mounting board, wired.
- 1x pH glass electrode
- 1x Redox glass electrode
- 1x Adhesive set for injection points and sample water
- 1x Buffer solution set
- 2x PE hose 3m, ø 6 mm, white
- 1x Teflon tape, 12 mm wide
- 1x Interference snubber, wired, 250V AC (Bitte Leerzeichen auch im Dt. Katalog, also nicht 250VAC !!!)
- 2x Accessories / small parts for dosing groups
- 1x Installation instructions

## Features

- > Redox measurement.
- > Ph measurement.
- > Control of variable speed and unregulated filter pumps.
- > Optional filter pressure and/or circulation monitoring.
- > Control of heating/heat pump/heat exchanger.
- > Control of the suction via floor drain (ECO) and overflow gutter / skimmer.
- > Active winterizing / frost protection.
- > Solar panel forced flushing.
- > Solar panel priority circuit.
- > Backwash control via actuator or rod valve possible.
- > Water level control for skimmer and overflow tank possible.
- > Safety switch-off / monitoring of the water refilling.
- > Connection of additional analogue sensors with display on the dashboard.
- > PV surplus control.
- > Temperature control with up to 12 sensors.
- > Connection of 4 suction lances for water care products.
- > Integration of the weather interface.
- > Software updates through independent installation.
- > Support interface.
- > Optional, free remote access via cloud server.
- > Configuration wizard.
- > User notification by email, push notifications.
- > Simple integration of the measured values into home automation systems (JSON API).
- > Inline assistant for direct access to the operating instructions.
- > Customisable user interface.
- > Free chlorine.
- > Salt electrolysis.
- > Flocculant dosing.
- > Control of attractions.
- > Control of the pool cover.



## Features of the BADU Blue Pro



Control of water disinfection  
(Redox, free chlorine,  
salt electrolysis)



Pool cover control



Control of pool attractions



Flocculant dosing



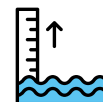
Control of pH value (pH plus or  
pH minus; optionally both)



Backwash control



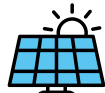
Alarm and notifications  
(by email or mobile push)



Control of water level  
via level control



Control of filter pump



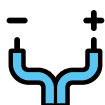
Control of solar panel system



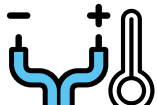
Pool lighting control



Integration of weather interface



Additional connection options for  
analogue sensors



Additional connection options for  
up to 12 temperature sensors



Eco mode



Control of heating, heat pump or  
heat exchanger

### Technical data

### BADU Blue Pro

Circuit board	microprocessor controlled
Operating voltage	1~ 230 V, 50/60 Hz
Connection value (motor capacity P <sub>1</sub> )	max. 0.90 kW
Fuse for circuit board/relay	1A delay/400mA relay/630 mA relay light
Max. permissible load current	250 V/4 A

For more detailed information regarding the device protection please see page 167.

Technical data may vary.

Article no	Description	Net RPR	Gross RPR <sup>7)</sup>
271.6500.501	BADU Blue Pro	6,480.00 €	7,711.20 €

# BADU® Blue / Blue Pro Accessories

The smart complete pool control system for carefree swimming fun.  
Designed for private pools and hotel swimming pools.

Article no	Description	Net RRP	Gross RRP <sup>7)</sup>
271.6500.513	1-Wire Sensor DS18B20, 6x50 mm, 3 m	9.20 €	10.95 €
271.6500.514	1-Wire Sensor DS18B20, 6x50 mm, 5 m	12.25 €	14.58 €
271.6500.515	1-Wire Sensor DS18B20, 6x50 mm, 10 m	18.02 €	21.44 €
271.6500.517	Pressure transmitter FST800-211	157.13 €	186.98 €
271.6500.518	Level sensor FST700-101	260.60 €	310.11 €
271.6500.571	Additional terminal box 3~ 1.1 - 1.6 A BADU Blue	314.30 €	374.02 €
271.6500.572	Additional terminal box 3~ 1.4 - 2.0 A BADU Blue	296.99 €	353.42 €
271.6500.573	Additional terminal box 3~ 1.8 - 2.5 A BADU Blue	322.65 €	383.95 €
271.6500.574	Additional terminal box 3~ 2.2 - 3.2 A BADU Blue	304.20 €	362.00 €
271.6500.575	Additional terminal box 3~ 2.8 - 4.0 A BADU Blue	294.65 €	350.63 €
271.6500.576	Additional terminal box 3~ 3.5 - 5.0 A BADU Blue	318.55 €	379.07 €
271.6500.583	Additional terminal box 1~ 1.8 - 2.5 A BADU Blue	315.12 €	374.99 €
271.6500.584	Additional terminal box 1~ 2.2 - 3.2 A BADU Blue	296.67 €	353.04 €
271.6500.585	Additional terminal box 1~ 2.8 - 4.0 A BADU Blue	287.12 €	341.67 €
271.6500.586	Additional terminal box 1~ 3.5 - 5.0 A BADU Blue	311.03 €	370.13 €
271.6500.525	BADU Blue potentiostat module	164.23 €	195.43 €
271.6500.552	BADU Blue relay expansion	280.06 €	333.27 €
271.6500.534	pH glass electrode, BNC connector with 1m cable	175.50 €	208.85 €
271.6500.535	Redox plastic electrode, gold, BNC connector with 1m cable	113.10 €	134.59 €
271.6500.536	Redox glass electrode, platinum, BNC connector with 1m cable	191.10 €	227.41 €
271.6500.537	Potentiostatic chlorine electrode, 1.5m cable	409.50 €	487.31 €
271.6500.512	Measuring cell expansion kit	274.01 €	326.07 €
271.6500.554	Buffer solution set, BADU Blue	56.00 €	66.64 €
271.6500.555	Dosing pump, BADU Blue	221.40 €	263.47 €
271.6500.556	Set for injection point and sample water, BADU Blue	111.07 €	132.17 €
260.6100.041	BADU Omni actuator with R 41/3 A	784.00 €	932.96 €
260.6100.051	BADU Omni actuator with R 51/3 A	795.00 €	946.05 €
260.6402.119	PVC holder temp.+adhesive drill flange,OmniTronic	21.72 €	25.85 €
271.6500.590	PE hose, ø 6 mm, white, 3 m	3.86 €	4.59 €
271.6500.591	PE hose, ø 6 mm, white, 5 m	4.91 €	5.84 €
271.6500.592	PE hose, ø 6 mm, white, 10 m	7.49 €	8.91 €
260.6402.161	Conductive sensor pins 7.5m OmniTronic	74.12 €	88.20 €
260.6402.171	Conductive sensor pins 25m OmniTronic	90.82 €	108.08 €
260.6402.185	Conductive sensor pins 40m OmniTronic	95.65 €	113.82 €
271.6500.539	Snubber, wired, 250V AC	3.74 €	4.45 €
260.6402.157	Option: Battery pack+converter,OmniTronic	283.92 €	337.86 €
271.6070.003	Magnetic valve, separate, 230 V, Rp ½, IP 65	118.96 €	141.56 €
271.6090.005	Level switch, BNR 300, with 10 m cable	87.98 €	104.70 €
250.0014.050	Ball valve LH II 50, solar actuator 1~ 230V	456.86 €	543.66 €
250.0014.063	Ball valve LH II 63, solar actuator 1~ 230V	725.03 €	862.79 €
271.6500.532	Filter with screen, 6mm tube	16.54 €	19.68 €
271.6500.545	Peristaltic hose for hose pump	25.78 €	30.68 €
271.6500.546	Injection valve for hose pump, BADU Blue	46.80 €	55.69 €
271.6500.547	Aspiration hose, 4x6, 2m, for dosing pump	3.51 €	4.18 €
271.6500.548	Pressure hose, 4x6, 2m, for dosing pump	3.39 €	4.03 €
271.6500.549	Foot valve with counterweight for dosage pump	57.92 €	68.92 €
271.6500.516	Water flow sensor YF-S402B	19.73 €	23.48 €
271.6500.527	Water flow sensor cable, 3m, black	7.02 €	8.35 €





## BADU Blue control system in RESPONSIVE Design. You can control your pool from anywhere at any time.



BADU Blue and BADU Blue Pro can be easily controlled via the web, mobile devices or the PC. This means you have access to your pool at all times and can manage it conveniently from anywhere, whether you're enjoying a relaxing evening in your garden or travelling on the other side of the world. The all-in-one pool controls are simple and easy to use, for maximum pool enjoyment with minimum effort. In addition to remote monitoring, you also have the option of remote maintenance support from your pool builder. For carefree pool enjoyment, also thanks to servers located in Germany.

### Upgrade kits:

BADU Blue can be upgraded to BADU Blue Pro at any time, to receive the following additional options:

- > Free chlorine measurement.
- > Flocculant dosing.
- > Pool cover control.
- > Additional 8 relay outputs.
- > Use of switching rules (time, temperature and analogue controlled).
- > Use of 7 digital inputs for controlling external relays.
- > Connection of 3 LED piezo buttons in conjunction with digital inputs.

Article no	Upgrading BADU Blue to BADU Blue Pro	Net RRP	Gross RRP <sup>7)</sup>
271.6500.552	Relay expansion, BADU Blue	280.06 €	333.27 €
271.6500.525	BADU Blue potentiostat module	164.23 €	195.43 €
271.6500.555	Dosing pump, BADU Blue	221.40 €	263.47 €
271.6500.512	Measuring cell expansion kit	274.01 €	326.07 €
271.6500.537	Potentiostatic chlorine electrode, 1.5m	409.50 €	487.31 €

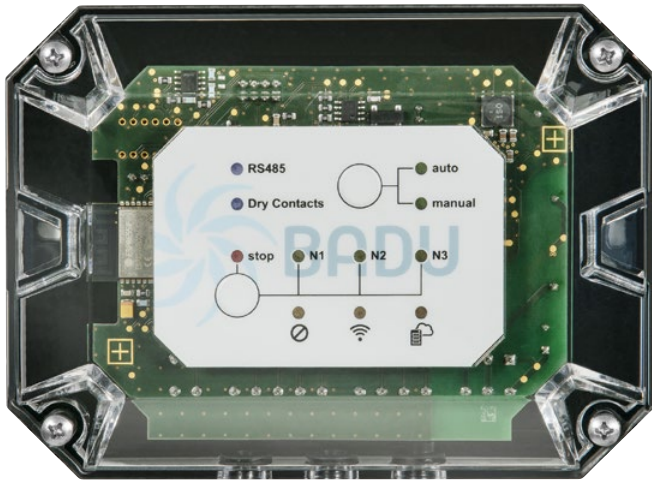
Article no	Chlorine retrofitting	Net RRP	Gross RRP <sup>7)</sup>
271.6500.525	BADU Blue potentiostat module	164.23 €	195.43 €
271.6500.512	Measuring cell expansion kit	274.01 €	326.07 €
271.6500.537	Potentiostatic chlorine electrode, 1.5m	409.50 €	487.31 €

Article no	Salt water electrolysis retrofitting	Net RRP	Gross RRP <sup>7)</sup>
271.6500.552	Relay expansion, BADU Blue	280.06 €	333.27 €
271.6500.512	Measuring cell expansion kit	274.01 €	326.07 €

Article no	Flocculation retrofitting	Net RRP	Gross RRP <sup>7)</sup>
271.6500.552	Relay expansion, BADU Blue	280.06 €	333.27 €
271.6500.555	Dosing pump, BADU Blue	221.40 €	263.47 €

# BADU® NetLink

Smart controller  
for variable speed pumps of the BADU Green range



^ Compatible with the BADU connect app: baduconnect.com



^ Installation example

## Field of application

Filter pump regulation for remote and hard to reach engineering rooms. It regulates the filter times fully automatically whilst you relax and enjoy ideal water quality.

## Performance characteristics

- > Selection of automatic or manual operating mode and the speed level by using the buttons of the device.
- > Display of actual motor speed.
- > Convenient regulation via WLAN when using the free „BADU connect“ app.
- > Multilingual menu.
- > Several switch times per day with different speed levels are possible.

- > Connection for BADU Green pumps with potential-free inputs or RS 485 interface.
- > Connection of water sensor for leakage detection via PUSH notification.

## Design

- > Electronic control unit with modern clamp connection technology.
- > Water sensor (optionally available).


## Wi-Fi connection


- > IEEE 802.11, 2.4 GHz, b/g/n
- > Indoor antenna, free range of 25 m
- > Data throughput 150 Mbps


Article no	Description	Voltage	Net RRP	Gross RRP <sup>7)</sup>
271.6700.000	BADU NetLink	1~ 230 V, 50/60 Hz	210.00 €	249.90 €
271.6605.018	Water level sensor		27.24 €	32.42 €


For more detailed information regarding device protection please see page 167.

LOAD THE APP HERE











Relax and enjoy with fully automatic controllers.  
For convenient regulation of temperature and filtration times.



## Field of application

The new pool controllers regulate the filter times as well as the heating and solar heating of swimming pool water fully automatically whilst you relax and enjoy an ideal water temperature. Depending on the type, the controller regulates further fundamental parameters of your unit.

## Performance characteristics

- > Simple installation and fast troubleshooting thanks to installation assistant and help menu.
- > Easily understandable full text display and multilingual menu.
- > Clear graphic display of the swimming pool system.
- > Usage display and efficiency testing with optional third temperature sensor.

## Designs

- > **BADU Logic 2**  
Filter pump control and regulation of temperature, including two temperature sensors.
- > **BADU Logic 3**  
Additional multistage filter pump control for BADU Green motors, e.g. BADU Eco Soft and BADU Delta Eco VS, including two temperature sensors.

Article no	Description	Voltage	Net RRP	Gross RRP <sup>7)</sup>
271.6602.000	BADU Logic 2		677.81 €	806.59 €
271.6603.000	BADU Logic 3		789.77 €	939.83 €
250.0014.050	Ball valve LH 50 II solar with actuator	1~ 230 V	456.86 €	543.66 €
250.0014.063	Ball valve LH 63 II solar with actuator	1~ 230 V	725.03 €	862.79 €
271.6600.403	Water sensor with 5m cable		53.69 €	63.89 €

For more detailed information regarding device protection please see page 167.

# BADU® BNR 300

Convenient flooding protection.  
Automatic water level control.

## Field of application

For observation of the environment surrounding the pool and technology equipment. Due to the multilingual menu this product can be used in almost every country worldwide.

## Design

BADU BNR 300 is built using the most modern integrated switching technology and consists of:

- > Level switch with 10 m cable.
- > Mounting rail for float switch.
- > Safety shutdown system with threefold protection.
- > Magnetic valve Rp ½ (at an additional cost).
- > Acoustic warning signal, available optionally.
- > Water meter.
- > Further accessories, e.g. water detector, available on request.



Float switch included in delivery >

Technical data at 50 Hz	BADU BNR 300
Temperature range	5 °C-50 °C
Rated voltage	1~ 230 V, 50/60 Hz
Relay switching capacity	4.0 A at 1~ 230 V
Switch on/off delay	approx. 1-4 min., individually programmable
Cable lengths	10 m standard length/max. cable length 25 m, required cable cross section 2 x 0.25 mm <sup>2</sup>
Float switch	waterproof

For more detailed information regarding device protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Net RPR	Gross RPR <sup>7)</sup>
271.6605.010	BADU BNR 300 with magnetic valve	1~ 230 V	502.85 €	598.39 €
271.6605.000	BADU BNR 300 without magnetic valve	1~ 230 V	385.88 €	459.20 €
271.6070.003	Magnetic valve Rp ½. separate		118.96 €	141.56 €



Water level, fountain and splash water control.  
With conductivity sensor.

## Field of application

For observation of the pool water level including the safety features, and also for water level regulation of various tanks. Splash water control is also possible.

## Design

- > Electronic control unit with modern clamp connection technology.
- > Adhesive holders.
- > Conductivity sensors, as water level detector.
- > Magnetic valve Rp ½ (at an additional cost).
- > Suspended electrodes and additional components for splash water control (at an additional cost).

## Function

The BADU BNR 402 is a fully automatic level control system and can be used for up to three pools/tanks. Under operating mode, the device can be used as a splash water control. If the splash water control is selected, four electrodes with the corresponding cable length as well as the additional components are required at an additional cost, in addition to the BADU BNR 402 with magnetic valve.



Convenient first filling mode eliminates the waiting time during fill-up at first-time installation. In addition, a BADU Eco VS pump can be connected with the control cable. The BADU Eco VS pump can also be set as an attraction pump for fountains, switching the motor speed of the pump at random.

Technical data at 50 Hz	BADU BNR 402
Rated voltage	1~ 230 V, 50/60 Hz
Relay switching capacity	2.0 or 4.0 A at 1~ 230 V
Cable cross section	2 x 0.5 mm <sup>2</sup>

For more detailed information regarding device protection please see page 167.

Technical data may vary.

Article no	Description	Voltage	Net RPR	Gross RPR <sup>7)</sup>
271.6607.205	BADU BNR 402 with sensor, cable length 7.5 m without magnetic valve	1~ 230 V	516.98 €	615.21 €
271.6607.225	BADU BNR 402 with sensor, cable length 25 m without magnetic valve	1~ 230 V	571.97 €	680.64 €
271.6607.200	BADU BNR 402 without sensor, without magnetic valve	1~ 230 V	452.00 €	537.88 €
271.6607.201	BADU BNR 402 without sensor, with magnetic valve	1~ 230 V	452.00 €	537.88 €
271.6607.206	BADU BNR 402 with sensor, cable length 7.5 m with magnetic valve	1~ 230 V	613.94 €	730.59 €
271.6607.226	BADU BNR 402 with sensor, cable length 25 m with magnetic valve	1~ 230 V	667.94 €	794.85 €
260.6402.161	Conductivity sensor, 7.5 m		74.12 €	88.20 €
260.6402.171	Conductivity sensor, 25 m		90.82 €	108.08 €
260.6402.185	Conductivity sensor, 40 m		95.65 €	113.82 €
271.6070.003	Magnetic valve Rp ½, separate		118.96 €	141.56 €
510.0060.005	Suspended electrode, 5m cable, 1 piece *)		64.68 €	76.97 €
510.0060.020	Suspended electrode, 20m cable, 1 piece *)		85.68 €	101.96 €
510.0060.045	Suspended electrode, 45m cable, 1 piece *)		120.82 €	143.78 €
271.6607.302	Additional components for operating mode splash water control		on request	

\*) Four pieces are required for the splash water control. Other lengths are available!

Universal automatic backwash unit for almost every application.  
Simple and flexible operation.

## Field of application

Depending on the size and load, filter units have to be backwashed on a regular basis in order to wash away debris that has been filtered in. The BADU OmniTronic electronic backwash device is a reliable and time-saving alternative to manual backwash valves.

## Mode of operation

A digital timer starts the backwash procedure automatically according to the settings of the interval or time controlled programme. Filter time settings can also be specified. An automatic level control is integrated and can be used with an optionally available level sensor and magnetic valve. A battery pack prevents the pool from emptying in the event of a power failure.

## Performance features

- > The new and larger control box of the BADU OmniTronic provides more space for additional sub-assemblies.
- > Mounting rail (15mm) for modules.
- > BADU GREEN pumps, such as the BADU Delta Eco VS can be connected directly to the backwash device with a potential free cable.
- > Level control with optional sensor
- > Various inputs and outputs with additional functions, e.g. pressure switch trigger and remote control.
- > Operation in combination with a dosage control system possible.

Technical data	BADU OmniTronic
Circuit board	microprocessor controlled
Operating voltage	1~ 230 V, 50 Hz
Connection value (motor capacity P <sub>1</sub> )	max. 1.00 kW
Fuse, for electronics/pump	315 mA delay/4 A delay
Max. permissible load current	250 V/4 A
Operating pressure	max. 2 bar

For more detailed information regarding the device protection please see page 167.

Technical data may vary.

Article no	Description	Connections	Voltage	Net RPR	Gross RPR <sup>7)</sup>
260.6000.041	BADU OmniTronic with BADU Mat R 41/3 A	Rp 1½	1~ 230 V	947.74 €	1.127.81 €
260.6000.051	BADU OmniTronic with BADU Mat R 51/3 A	Rp 2	1~ 230 V	978.70 €	1.164.65 €
260.6402.087	Pressure transducer +500..+1500 mbar, incl. assembly accessories			119.39 €	142.07 €
260.6402.088	Pressure transducer +0.25..+1.00 bar, incl. assembly accessories			119.39 €	142.07 €
260.6402.204	Accessory: Control of floor drain			66.15 €	78.72 €
260.6402.205	Accessory: Control of single phase pumps up to a maximum of 6.40 A.			175.59 €	208.95 €
260.6402.206	Accessory: Control of three-phase pumps with 1.00 A **)			220.33 €	262.19 €
240.9102.063	Special non-return valve*) d 63			169.97 €	202.26 €
260.6402.117	Temperature sensor with 5m cable and PVC mount			82.28 €	97.91 €
260.6402.118	Temperature sensor with 15m cable and PVC mount			106.98 €	127.31 €
260.6402.161	Conductivity sensor, 7.5m, as level detector			74.12 €	88.20 €
260.6402.171	Conductivity sensor, 25m, as level detector			90.82 €	108.08 €
260.6402.157	Battery pack with capacitor			283.92 €	337.86 €
260.6402.244	OmniTronic Power switch for photovoltaics			163.69 €	194.79 €

\*) For sewage pipes when the BADU OmniTronic is installed below the water level.

\*\*) Further accessories for three-phase pumps with other current consumptions available on request.



Level control



Filter control



Attraction connection



Solar



Pressure dependent backwash



Heating



Active frost protection system

Backwash units, automatic

### Product details

#### Switching functions

- > Automatic backwash and filtering.
- > Backwash and rinse cycles can be started automatically, manually or externally and set individually.
- > BADU Green pumps can be connected directly.
- > Magnetic valve can be controlled optionally (level control).
- > Can be used optionally as a temperature and level control.

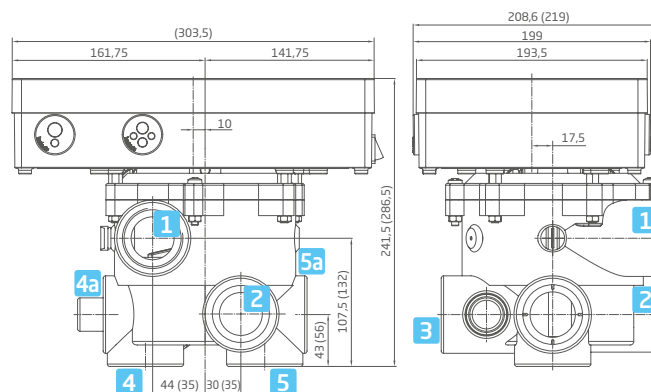
#### Optional additional modules

- > For direct connection of single-phase pumps via a contactor e.g. BADU Prime 7 to BADU Prime 20.
- > For direct connection of three phase pumps via three phase protection and a contactor e.g. BADU Prime 7 to BADU Prime 25.
- > Insert option for a circuit board that controls the floor drain.

#### Installation tip

Do not install lower than 3 m below water level.  
 Lead the sewage pipe above the water level in a loop.  
 In case this is not feasible, install a spring-loaded non-return valve in the sewage pipe.  
 Too large temperature differences (>20 K) between the environment and the pumped medium lead to condensation.

### Dimensions



The measurements in brackets are for BADU OmniTronic with BADU Mat R 51/3 A.  
 Detailed dimensions available on request or at badu.de

- |          |        |               |                 |
|----------|--------|---------------|-----------------|
| <b>1</b> | Pump   | <b>4 / 4a</b> | to the filter   |
| <b>2</b> | Pool   | <b>5 / 5a</b> | from the filter |
| <b>3</b> | Sewage |               |                 |

# BADU® Mat R 41 / Mat R 51

The robust allrounder keeps everything under control.  
Manual 6-way multiport valve as a sidemount valve.

## Field of application

Depending on the size and load, filter units have to be backwashed on a regular basis in order to wash away debris that has been filtered in.

## Mode of operation

The valve regulates the flow of water and reverses it according to the chosen settings. Therefore the water flows back through the filter container and starts the backwashing process. These and other functions can be set easily and clearly on the BADU Mat using the handle. After backwashing, fresh water must be fed into the system in order to re-establish the original water level. This is best done automatically with the BADU BNR 300 or BNR 400, see pages 132-134.

## Designs

- > **BADU Mat R 41/3 A / BADU Mat R 51/3 A**  
All connections open, with two sealing plugs.
- > **BADU Mat R 41/3 G / BADU Mat R 51/3 G**  
Threaded connections.

- > **BADU Mat R 41/3 K / BADU Mat R 51/3 K**  
Glue connections.
- > **BADU Mat R 41/3 GK / BADU Mat R 51/3 GK**  
Connections 2 + 3 = G.  
Connections 1 + 4a + 5 = K.

## Materials used

All parts which come into contact with water are made from corrosion resistant plastic, ABS or stainless steel.

## Operating data

Water temperature ..... max. 40 °C  
Interior housing pressure ..... max. 2.5 bar

Due to optimal water flow there is minimal flow noise and flow loss. See flow characteristics on page 143.

## Performance characteristic

The gasket is in the upper part of the valve. This makes it easier to replace if it becomes worn.

Article no	Description	Connections	Net RPR	Gross RPR <sup>2)</sup>
263.5000.000	BADU Mat R 41/3 GK	Rp 1½/d 50	135.96 €	161.79 €
263.3300.000	BADU Mat R 41/3 G	Rp 1½	135.96 €	161.79 €
263.3700.000	BADU Mat R 41/3 A	Rp 1½, with two R 1½ sealing plugs	149.96 €	178.45 €
263.3600.000	BADU Mat R 41/3 K	d 50	135.96 €	161.79 €
264.5000.000	BADU Mat R 51/3 GK	Rp 2/d 63	179.95 €	214.14 €
264.3300.000	BADU Mat R 51/3 G	Rp 2	179.95 €	214.14 €
264.3700.000	BADU Mat R 51/3 A	Rp 2, with two R 2 sealing plugs	191.94 €	228.41 €
264.3600.000	BADU Mat R 51/3 K	d 63	179.95 €	214.14 €



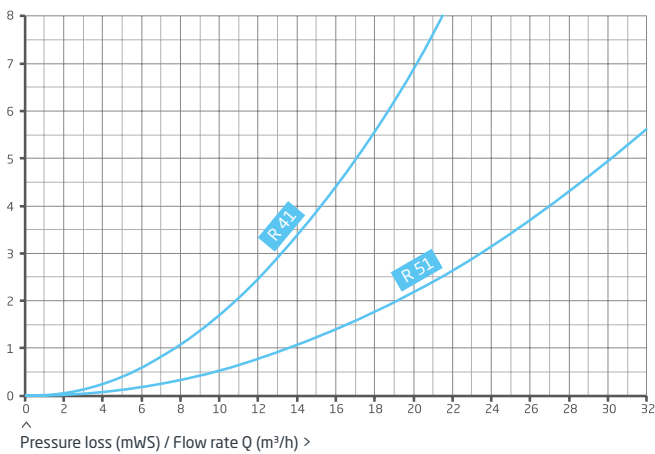


^ BADU Mat R 41

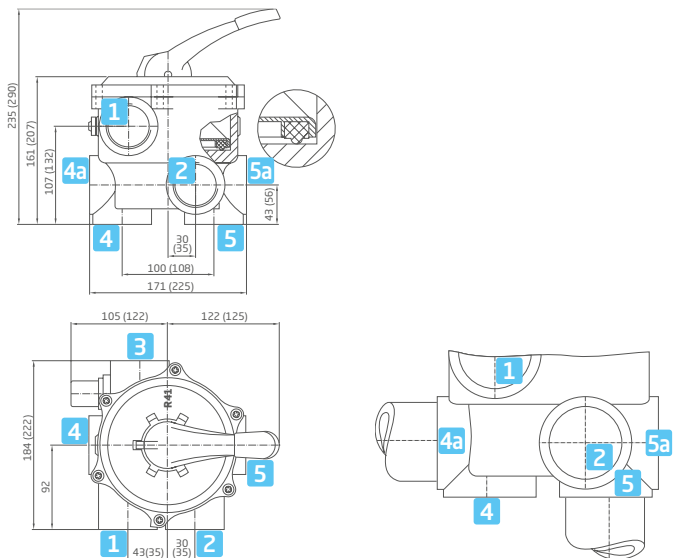


^ BADU Mat R 51

### Flow rate curve



### Measurements



^ BADU Mat R 41/BADU Mat R 51

^ Version 3

The measurements in brackets are for BADU Mat R 51.  
Detailed dimensions available on request or at badu.de

- 1 Pump
- 2 Pool
- 3 Sewage

- 4 / 4a to the filter
- 5 / 5a from the filter

**BADU**® Green Complete





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# BADU GREEN COMPLETE

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BADU Green Complete individual components	146
BADU Green Complete packages	148



# BADU® Counter swim units

Maximum pool enjoyment with minimum effort

SPECK Pumpen presents efficient, sustainable and smart new products and developments for maximum bathing fun with a clear conscience. In pool operation and water care, important individual components have been combined in various coordinated technology packages. They cater to the individual requirements and needs of users. Through the use of the efficient and intelligent BADU Green Complete products, energy is saved, the environment is protected and the pool's energy consumption is reduced.

## DIN EN 17645 CERTIFIED

ENVIRONMENTALLY FRIENDLY  
BATHING FUN WITH  
A CLEAR CONSCIENCE



### BADU Delta Eco VS - Old classic with proven motor technology

The BADU Delta Eco VS is an efficient, extremely quiet and durable pump that has proven itself in worldwide use for many years with its renowned motor technology.



You will find further information on page 54.

### BADU Green Complete - Maximum pool enjoyment with minimum effort

Available as individual components, options and variations.

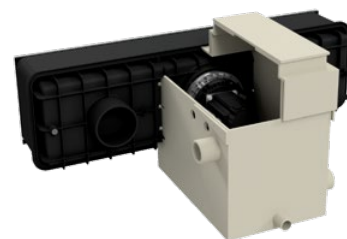
With BADU Green Complete, the effort and costs of pool maintenance are minimized. The complete system automates all control and monitoring tasks so that pool operation can be enjoyed carefree. With BADU Green Complete, the amount of work a pool requires is reduced and at the same time the carbon footprint is lowered and more time can be spent in the cool water.

By the way: BADU Green Complete is also interesting for those who already own a pool. Both individual components and the complete system can be installed in existing pool facilities (depending on the components already installed).

The advantage? Carefully coordinated pool technology with a price advantage.

### BADU Technology shaft - More room for attractions

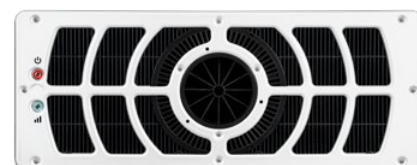
A polypropylene technology shaft has been developed for all BADU JET Turbo models, which offers numerous connections for aeration and ventilation, cable ducts and a floor drain.



You will find further information on page 108.

### BADU JET Turbo light - Entering the Turbo class

SPECK Pumpen has developed the BADU JET Turbo further with an entry-level class. The BADU JET Turbo light now complements the range of premium counter swim units.



You will find further information on page 98.



### BADU Eco Future – Visionary pump concept

The BADU Eco Future continues the introduction of energy-saving inverter motors from the innovative BADU Eco Vision motor series.



You will find further information on page 52.

### BADU Prime Neo VS – Old classic marks the start of a new generation of motors

Update of the BADU Prime Eco VS in efficiency and motor control. This development is the first indication of our new BADU Eco Vision motor technologies.

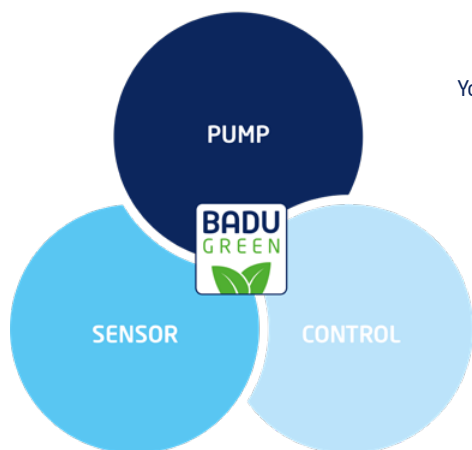


You will find further information on page 50.

### BADU PRODUCT NEWS

You will find further information regarding our new products here:

[badu.de/en/badu-green-complete](http://badu.de/en/badu-green-complete)



# BADU GREEN COMPLETE TAKES CARE OF IT!

**BADU FlowSonic/ BADU FlowSonic+ –** Flow measurement via ultrasound  
Ultrasonic technology is an established method for flow measurement. With the new BADU FlowSonic and BADU FlowSonic+ flowmeters from SPECK, an exact and loss-free measurement of the volume flow is now possible.



You will find further information on page 124.



### BADU Blue/BADU Blue Pro – Have all your swimming pool components under control

Intelligent pool controls minimise the time spent on pool maintenance, as they control all swimming pool components quickly, reliably, and centrally.

You will find further information on page 130.



### BADU NetLink – Incorporate existing variable speed pumps into a smart home

The BADU NetLink system transforms existing variable speed pumps such as the BADU Eco Touch, BADU Eco Soft, BADU Eco VS and BADU Eco Flex into smart, remotely controllable devices.

You will find further information on page 136.

# BADU® Green Complete

The new, innovative, all-round carefree packages with price savings

## BADU Green Complete 1 consisting of:


BADU FlowSonic, BADU Prime Neo VS, BADU Blue, BADU JET Turbo light complete unit and Technology shaft for Turbo units.

<b>PACKAGE PRICE 11,400.00 € NET</b>	
Price advantage over individual purchase: Approx. 1,270.00 EUR	

Article no	Description	Net RRP	Gross RRP <sup>7)</sup>
271.6510.002	BADU FlowSonic		
219.7203.038	BADU Prime Neo VS		
271.6500.500	BADU Blue		
232.8300.000	BADU JET Turbo Light complete unit		
232.5000.000	BADU JET Technology shaft		
		<b>11,400.00€</b>	<b>13,566.00€</b>

## BADU Green Complete 2 consisting of:

BADU FlowSonic, BADU Delta Eco VS, BADU Blue, BADU JET Turbo light complete unit and Technology shaft for Turbo units.

<b>PACKAGE PRICE 15,800.00 € NET</b>	
Price advantage over individual purchase: Approx. 1,740.00 EUR	

Article no	Description	Net RRP	Gross RRP <sup>7)</sup>
271.6510.002	BADU FlowSonic		
210.3281.138	BADU Delta Eco VS		
271.6500.500	BADU Blue		
232.8300.000	BADU JET Turbo Light complete unit		
232.5000.000	BADU JET Technology shaft		
		<b>15,800.00€</b>	<b>18,802.00€</b>

## BADU Green Complete 3 consisting of:

BADU FlowSonic, BADU Eco Future, BADU Blue Pro, BADU JET Turbo light complete unit and Technology shaft for Turbo units.

<b>PACKAGE PRICE 20,300.00 € NET</b>	
Price advantage over individual purchase: Approx. 2,320.00 EUR	

Article no	Description	Net RRP	Gross RRP <sup>7)</sup>
271.6510.002	BADU FlowSonic		
210.6000.038	BADU Eco Future		
271.6500.501	BADU Blue Pro		
232.8300.000	BADU JET Turbo Light complete unit		
232.5000.000	BADU JET Technology shaft		
		<b>20,300.00€</b>	<b>24,157.00€</b>



# BADU® pool products



BADU Massage units



## BADU® Added value

We live for the pool experience.

We offer accessories - for pumps and counter swim units, to supplement or replace - in BADU Premium quality, so that BADU technologies and solutions can make you completely happy. It's often the small things that make a big difference.

The difference is BADU.

Further information regarding these pool products can be found on [badu.de](http://badu.de).  
Scan the QR code and you will be taken directly to the product information page.





# BADU® Counter swim units



## BADU JET Wireless Control II

Waterproof remote control for all BADU JET submerged counter swim units. For control of the BADU JET unit and integrated LED lights. Upgrades are also available for further functions for the pool unit such as light control, roll-up cover etc.



## Massage hose for 40 mm or 28 mm nozzle

1.50 m long, connection coupling and massage nozzle, completely assembled. Fits all counter swim unit jet nozzles.



## Massage hose with pulsator

1.50 m long, connection coupling and pulsating massage nozzle (pulsator) attached. For 28 mm or 40 mm nozzle. Fits all counter swim unit jet nozzles.



## Massage attachments for pulsator, pinpoint massage nozzle & blind cap

To be plugged directly into the jet nozzle, without a massage hose. The blind cap is included in delivery for units with two nozzles.



## Winter panel kit for BADU JET Primavera

Protects the main housing from dirt and leaves and prevents water from penetrating through the housing into the mechanics shaft when shutting down the system for winter. Also allows a higher water level and thus saves adding water in spring.

Article no	Description	Net RPR	Gross RPR <sup>*)</sup>
232.0000.503	BADU JET wireless control II, cpl., 4 channel, IP 65	478.86 €	569.84 €
232.0000.507	BADU JET wireless control II, cpl., 2 channel, IP 20*)	363.57 €	432.65 €
230.0001.000	Massage hose for large nozzle, Ø 40 mm	99.96 €	118.95 €
230.0002.000	Massage hose for small nozzle, Ø 28 mm	99.96 €	118.95 €
230.0003.000	Massage hose with large pulsating massage nozzle, Ø 40 mm	239.93 €	285.52 €
230.0004.000	Massage hose with small pulsating massage nozzle, Ø 28 mm	239.93 €	285.52 €
230.0005.000	Pulsator for large nozzle, Ø 40 mm	188.93 €	224.83 €
230.0006.000	Pulsator for small nozzle, Ø 28 mm	188.93 €	224.83 €
230.0007.000	Large pinpoint massage nozzle, Ø 40 mm	32.69 €	38.90 €
230.0008.000	Small pinpoint massage nozzle, Ø 28 mm	32.69 €	38.90 €
230.0022.000	Blind cap for large nozzle, Ø 40 mm	32.69 €	38.90 €
230.0023.000	Blind cap for small nozzle, Ø 28 mm	32.69 €	38.90 €
230.0100.021	Winter panel kit for BADU JET Vogue, BADU JET Vogue Deluxe	127.46 €	151.68 €
232.6000.418	Winter panel kit for BADU JET Primavera, BADU JET Primavera Deluxe	176.22 €	209.70 €

\*) Receiver without housing

Please indicate whether massage hoses and attachments are for Ø 28 mm or Ø 40 mm nozzles.

# BADU® BK 250 / BK 370



Accessories



Panel connector



End plug



Polyester tape



Plastic double eyelet



Aerator and ventilator



Elbow



2-way ball valve  
LH II 50 solar  
with actuator



2-way ball valve  
LH II 50 massage unit  
with actuator



2-way ball valve  
LH II 63 solar  
with actuator



2-way ball valve  
LH II 63 massage unit  
with actuator

Article no	Description	Net RPR	Gross RPR <sup>7)</sup>
250.0001.000	Panel connector with two stainless steel hose clamps d 50 mm	20.68 €	24.61 €
250.0002.000	PVC end plug d 50	5.29 €	6.30 €
250.0005.001	1 roll polyester tape 50 m	48.38 €	57.57 €
250.0006.000	Plastic double eyelet	1.20 €	1.43 €
250.0007.000	Aerator and ventilator R 3/8	25.79 €	30.69 €
250.0008.000	Elbow for aerator and ventilator with connection piece d 50/connection thread Rp 3/8	37.60 €	44.74 €
250.5100.000	Repair set II: cartridge with sealing compound*)	54.43 €	64.77 €
250.0014.050	2-way ball valve LH II 50 solar with actuator, 1~ 230 V	456.86 €	543.66 €
250.0014.150	2-way ball valve LH II 50 massage unit with actuator, 1~ 230 V	648.74 €	772.00 €
250.0014.063	2-way ball valve LH II 63 solar with actuator, 1~ 230 V	725.03 €	862.79 €
250.0014.163	2-way ball valve LH II 63 massage unit with actuator, 1~ 230 V	1,031.70 €	1,227.72 €

\*) Flexible sealant for smaller repairs on the solar panel.

## BADU® Filter cartridge

### Field of application

Polystar long life filter cartridge for use with BADU Star and BADU Quick



Artikel-Nr.	Description	Net RPR	Gross RPR <sup>7)</sup>
227.4500.050	Polystar long life filter cartridge approx. 50 µm, length 248 mm	12.61 €	15.00 €

# BADU® Omni actuator

## 6-way valve actuator.

For the execution of backwash and rinse procedures.

### Field of application

Depending on the size and load, filter units have to be backwashed on a regular basis in order to wash away debris that has been filtered in. The BADU Omni actuator control valve is a reliable and time-saving alternative to manual backwash valves in order to move the valve to one of the 6 positions.

### Mode of operation

An external control or other remote switch can specify which position the BADU Omni actuator should move its valve insert to.

Seeing as the external control can only turn the filter pump on when the BADU Omni actuator has reached one of the 6 positions, the usual z1-z2 enabling contact can be used to stop the pump.

The external control can specify the position selection either via the potential-free inputs or the BADU Omni actuator's 230 V inputs.

### Performance features

All six valve positions can be accessed.

### NB

You will find the automatic backwash unit BADU OmniTronic on page 140.

Technical data	BADU Omni actuator
Circuit board	microprocessor controlled
Operating voltage	1~ 230 V, 50/60 Hz
Fuse	315 mA delay
Operating pressure	max. 2 bar
Net weight (kg)	4.00

For more detailed information regarding the motor protection please see page 167.

Technical data may vary.

Article no	Description	Net RPR	Gross RPR <sup>7)</sup>
260.6100.041	BADU Omni actuator with R 41/3 A	784.00 €	932.96 €
260.6100.051	BADU Omni actuator with R 51/3 A	795.00 €	946.05 €
240.9102.063	Special non-return valve d 63	169.97 €	202.26 €



^  
Delivery  
with BADU Mat R 41/3 A  
or BADU Mat R 51/3 A

## Product details

### Switching function

- > On/Off rocker switch.
- > If no digital input is engaged, the BADU Omni actuator will move to the "filter" position.
- > With 5 inputs to be connected with potential-free contacts, the valve can move to one of 6 possible target positions.

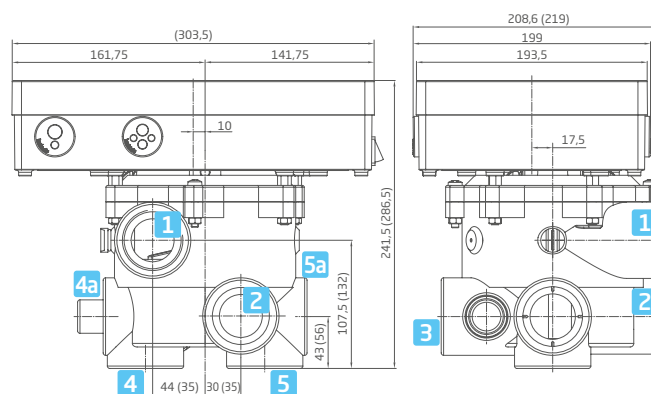
Alternatively, three 230 V inputs can be used for the target positions "Backwash", "Rinse" and "Drain".

### Installation tip

Do not install lower than 3 m below water level.  
Lead the sewage pipe above the water level in a loop.  
In case this is not feasible, install a spring-loaded non-return valve in the sewage pipe.  
Too large temperature differences (>20 K) between the environment and the pumped medium lead to condensation.

**NB:** constant power supply required.

## Dimensions



The measurements in brackets are for BADU OmniTronic with BADU Mat R 51/3 A.  
Detailed dimensions available on request or at badu.de

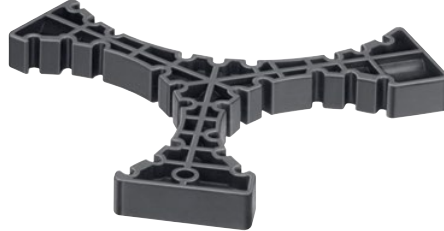
1 Pump  
2 Pool  
3 Sewage

4 / 4a to the filter  
5 / 5a from the filter

# BADU® Opening devices



Universal opening device



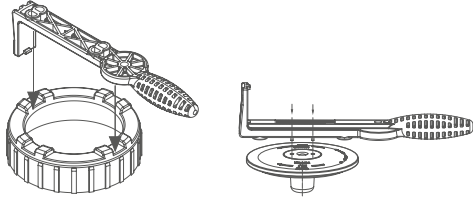
Three-way opening device



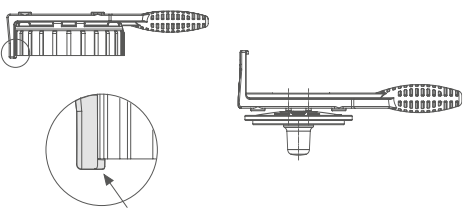
Sickel opening device

## Usage

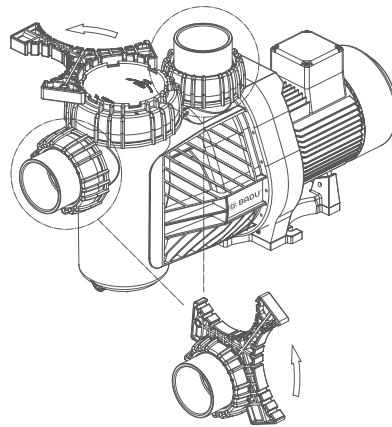
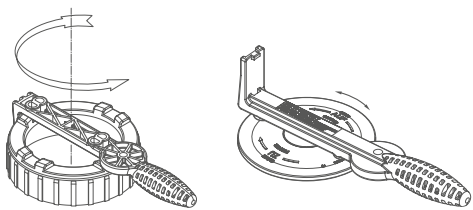
Step 1



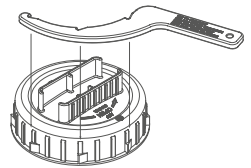
Step 2



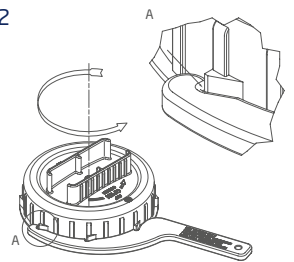
Step 3



Step 1



Step 2



Article no	Description	Net RPR	Gross RPR <sup>7)</sup>
292.1157.700	Universal opening device	6.43 €	7.65 €
290.2099.800	Three-way opening device	17.19 €	20.46 €
292.1199.800	Sickel opening device	3.51 €	4.18 €

# BADU® Plastic strainer tank



## Field of application

For pool water circulation pumps with a capacity of max. 56 m<sup>3</sup>/h, at 60 °C, 2.5 bar.

## Design

Strainer tank capacity ..... approx. 8 l  
 Strainer basket mesh size ..... approx. 3.4 x 3.2 mm  
 Intake and pump connection.

## Materials used

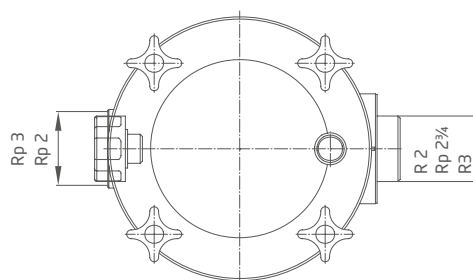
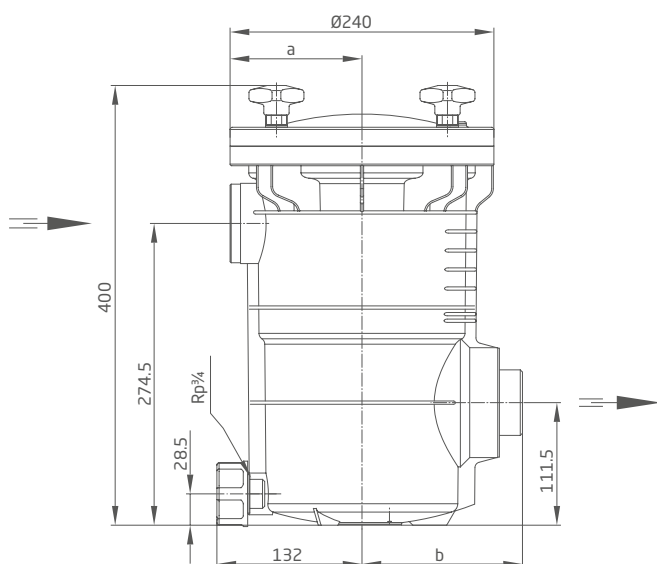
Strainer tank ..... PP TV 40  
 Lid ..... PC, transparent  
 Star handle ..... PA 6 GV  
 Strainer basket ..... PP

## Recommended pressure line

DN (mm) ..... 75



## Dimensions



Detailed dimensions available on request or at badu.de

Article no	Description	Dimensions a/b	Net RPR	Gross RPR <sup>7)</sup>
292.0912.490	Plastic filter housing, cpl., intake connection Rp 2/pump connection R 2	120/146	342.90 €	408.05 €
292.0912.491	Plastic filter housing, cpl., intake connection Rp 3/pump connection R 3	130/146	342.90 €	408.05 €
292.0912.493	Plastic filter housing, cpl., intake connection Rp 3/pump connection Rp 2 <sup>3/4</sup> *	130/121	333.90 €	397.34 €
292.0912.494	Plastic filter housing, cpl., intake connection Rp 3/pump connection Rp 2 <sup>3/4</sup> **	130/129	333.90 €	397.34 €

\*) For BADU FA 21-50/36 and BADU FA 21-60/45. | \*\*) For BADU FA 21-80/56 and for separate use.

# BADU® Union sets



**Union made from PVC for BADU 21-40/..**

G 2 inside thread with d 50 glue socket



**Union made from ABS**

With d 110/d 110 glue sockets



**Union made from ABS for BADU 21-80/..**

Rp 2¾ inside thread with d 110 glue socket



**Union made from PVC for BADU 21-50/.. / 21-60/..**

G 2¾ inside thread with d 63 glue socket



**Plastic adapter made from ABS**

Rp 2¾ x Rp 3 inside thread with d 110 glue adapter



**Plastic adapter made from ABS**

Rp 2¾ inside thread with d 75 glue socket and d 90 glue adapter



**Plastic adapter made from PVC**

Rp 2¾ inside thread with d 90 glue adapter



**Union made from ABS**

R 1½ outer thread with d 50 glue socket or R 2 x d 50 or R 2 x d 63

Article no	Description	Net RPR	Gross RPR <sup>7)</sup>
280.5120.050	Union made from PVC for BADU 21-40/.., G 2 inside thread with d 50 glue socket	10.81 €	12.86 €
290.2072.153	Union made from ABS, d 110/d 110 glue sockets	64.28 €	76.49 €
292.3172.100	Union made from ABS for BADU 21-80/.., Rp 2¾ inside thread with d 110 glue socket	64.28 €	76.49 €
230.0031.000	Union made from PVC for BADU 21-50/.., BADU 21-60/.., G 2¾ inside thread with d 63 glue socket	32.69 €	38.90 €
230.0027.000	Plastic adapter made from ABS, Rp 2¾ x Rp 3 inside thread with d 110 glue adapter	31.69 €	37.71 €
230.0028.000	Plastic adapter made from ABS, Rp 2¾ inside thread with d 75 glue socket and d 90 glue adapter	31.69 €	37.71 €
230.0026.000	Plastic adapter made from PVC, Rp 2¾ inside thread with d 90 glue adapter	28.49 €	33.90 €
230.0029.000	Plastic adapter made from PVC, Rp 2¾ inside thread with R 3 outer thread	31.69 €	37.71 €
586.3305.003	Union made from ABS, R 1½ outer thread with d 50 glue socket	10.70 €	12.73 €
586.3305.004	Union made from ABS, R 2 outer thread with d 50 glue socket	12.29 €	14.63 €
586.3306.302	Union made from ABS, R 2 outer thread with d 63 glue socket	8.74 €	10.40 €

NB: All unions are only available individually. One union is required per connection side on the pump.





**Flange sleeve made from PVC**  
with d 50 glue socket



**Flange sleeve made from PVC**  
with d 63 glue socket



**Flange sleeve made from PVC**  
with d 63 glue socket and d 75 glue adapter



**Flange sleeve made from PVC**  
with d 90 glue socket



**Flange sleeve made from PVC**  
with d 110 glue socket

Article no	Description	Net RPR	Gross RPR <sup>2)</sup>
292.1672.134	Flange sleeve made from PVC-U with d 50 glue socket	11.96 €	14.23 €
292.1472.126	Flange sleeve made from PVC-U with d 63 glue socket	15.47 €	18.41 €
292.1472.118	Flange sleeve made from PVC with d 63 glue socket and d 75 glue adapter <sup>1)</sup>	23.62 €	28.11 €
290.2072.113	Flange sleeve made from PVC with d 90 glue socket <sup>2)</sup>	32.18 €	38.29 €
290.2072.115	Flange sleeve made from PVC with d 110 glue socket <sup>3)</sup>	37.52 €	44.65 €

<sup>1)</sup> for BADU Gamma, BADU Delta, BADU Profi, BADU EasyFit (without connection set options) and BADU 21-81/..

<sup>2)</sup> for BADU Prime 25 to BADU Prime 48 and BADU Resort 30 to BADU Resort 45

<sup>3)</sup> for BADU Resort 50 to BADU Resort 110

## BADU® LED transparent lid

### Field of application

Transparent lid with integrated LED lighting for simple visual inspections of the pre-filter.



Article no	Description	Net RPR	Gross RPR <sup>2)</sup>
292.1116.012	Transparent lid, PC, with LED lighting	63.83 €	75.96 €

# BADU<sup>®</sup> our promise

Quality is the reason customers buy BADU products.  
Service is the reason customers are always happy.  
That's perfect because that's exactly how we think and trade.  
Our aim is always to give more than you expect from BADU.  
That's why we're always there for you with help and solutions,  
from planning to decision making and implementation.  
And of course with our after sales service including customer  
and repair services - personally, in store and online.



# Product presentation

BADU products are made for life and to be experienced at specialist retail stores - touch them and understand how they work with sectional models and sample products in attractive displays. For BADU specialist retailers and customers alike.

## Pump sectional models



### Sectional model

BADU Delta

Actions speak louder than words. That's why we offer all BADU pumps as sectional models, individually finished by hand, to specialist retailers.



### Sectional model

BADU Mat R 41

Use these clear consultation aids to explain the functions and benefits of each pump type and to answer any questions.

Articel no	Description	Net RRP	Gross RRP <sup>7)</sup>
210.3000.399	BADU Delta sectional model	308.10 €	366.64 €
263.0000.099	BADU Mat R 41 sectional model	37.44 €	44.55 €

The prices indicated are fixed prices, without deductions.



## Counter swim unit displays



**Display**  
BADU JET Vogue



**Display**  
BADU JET Primavera



**Display**  
BADU JET Perla / Riva / Stella

The counter swim unit's design and materials are most convincing in real life. For example in sales displays at specialist retailers.

Depending on the version and model, the displays have effect lighting, a built-in screen showing the product video and are delivered with sales literature.

Articel no	Description	Dimensions (WxHxD)	Net RRP	Gross RRP <sup>7)</sup>
232.7420.200	BADU JET Vogue display with white LED	77 x 181 x 57 cm	500.00 €	595.00 €
232.7420.400	BADU JET Primavera display with white LED	77 x 181 x 57 cm	500.00 €	595.00 €
231.7500.098	BADU JET Perla or BADU JET Riva display with white LED	95 x 204 x 87 cm	500.00 €	595.00 €
231.9500.098	BADU JET Stella display with white LED	95 x 204 x 87 cm	500.00 €	595.00 €

The prices indicated are fixed prices. without deductions.

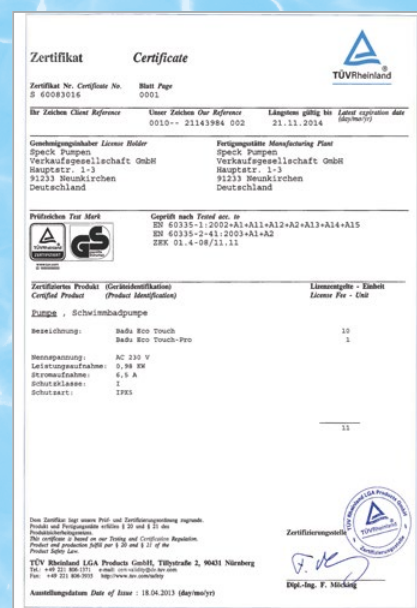


Product quality

The original.  
With certified.  
Safety.



Trust in a sophisticated brand.  
 You may find pool technology cheaper elsewhere, but if it's quality you're looking for then BADU is definitely the right choice for you - with innovative technology and functionality; certified safety; excellent design; and reliable service. This is our promise and our guarantee.



### Made in Germany

BADU Premium products are developed and produced in Germany according to the highest material and quality standards and with the experience of a meticulous family business, SPECK Pumpen in Neunkirchen am Sand, Bavaria.

BADU products are exclusively available to buy in specialist retail stores, because sophisticated products belong in competent hands.

### Quality

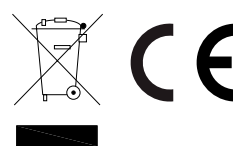
BADU Premium products are made using high quality materials in order to ensure longevity, constant and reliable use and in order to protect the environment and its resources. BADU products are also easy to maintain.

### Certification

BADU products are completely safe and are thoroughly tested - by SPECK Pumpen during production and by independent examination institutions and associations. From device safety to the materials used and complete documentation, you can rest assured that your BADU experience will be a good one.

### Recycling

Even the best products don't last forever. However BADU is very responsible. Most materials can be re-used and we always have a supply of wear and tear parts as well as spare parts.



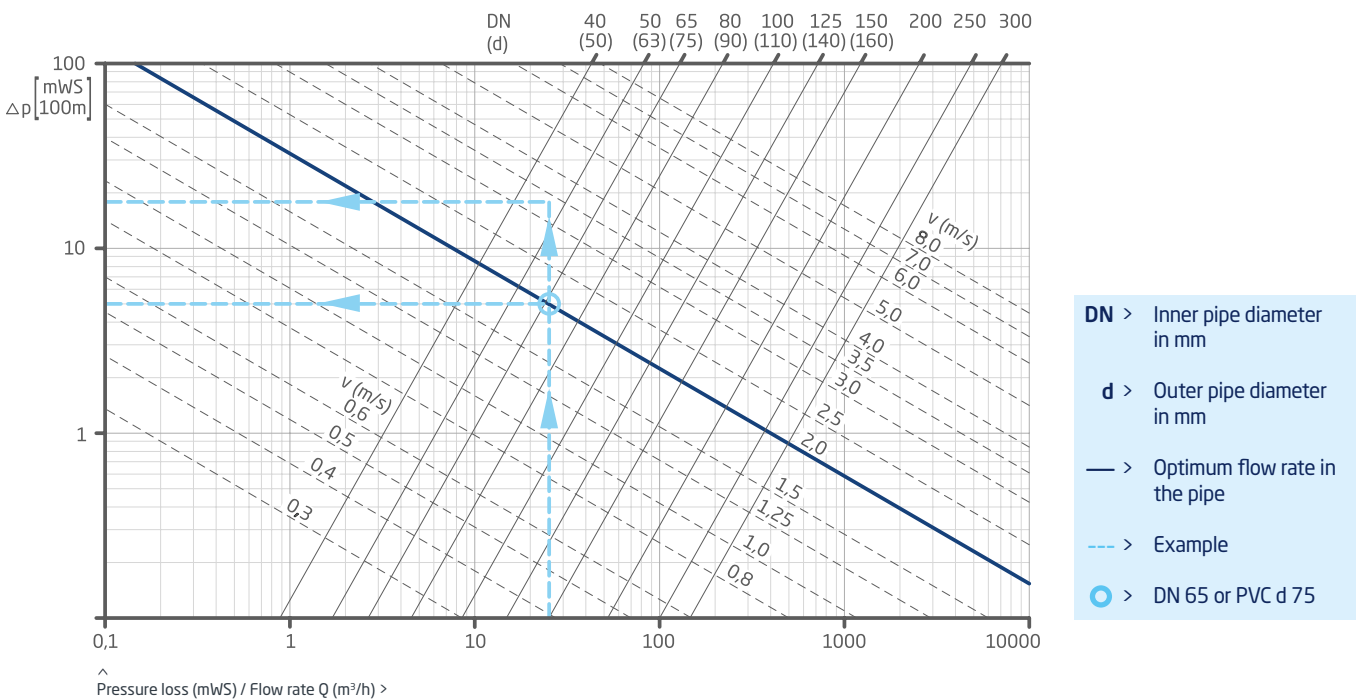
# Pipework

The following graphic will help you when determining pipe friction characteristics and calculating the correct pipe diameters.

## Circulation pumps

<b>Example</b>	Q = 25 m <sup>3</sup> /h, 20 m plastic pipe with	<b>DN 50 <math>\triangleq</math> d 63</b>	<b>DN 65 <math>\triangleq</math> d 75</b>
<b>Verlusthöhe</b>	Expected loss reading as seen in the table	H <sub>V</sub> = 18.00 m per 100 m	5.00 m per 100 m
	20 m pipe (x 10/100)	H <sub>V</sub> = 3.60 m	1.00 m
	Monitored flow speed	v = 3.40 m/s (too high)	2.00 m/s (acceptable)

The pressure loss in this example is valid for clear water at 20 °C and for liquids of similar kinetic viscosity and for new PVC U-pipes.  
The pipework loss applies to new PVC-U pipes with nominal pressure rating PN 10.



## Counter swim units

To achieve an almost loss free operation of counter swim units use the table to the right to dimension the pipe diameter.

The example is based on:  
suction pipe (S) with two elbows and  
the pressure line (D) with three elbows

58 > BADU JET Vogue . 75 > BADU JET Primavera

Q (m <sup>3</sup> /h)		Length of pipe		
		5 m	7.5 m	10 m
58	Suction line (S)	d 140	d 140	d 140
	Pressure line (D)	d 140	d 140	d 140
75	Suction line (S)	d 160	d 160	d 160
	Pressure line (D)	d 140	d 140	d 140



# Motor/device protection classifications



This overview shows the safety classifications that are used in BADU Premium pumps.

BADU Delta\*), BADU Delta-MK\*), BADU Profi, BADU Profi-MK, BADU Alpha, BADU Magna, BADU Gamma, BADU Prime, BADU EasyFit, BADU Resort, BADU 46, BADU 47

Motor protection class ..... IP 55  
 Class of insulation ..... F  
 Approx. motor speed (rpm) ..... 2840  
 Max. water temperature (°C) ..... 40 (60)<sup>5)</sup>  
 Max. casing pressure (bar) ..... 2.5

BADU Eco Drive II

Device protection class ..... IP 55

BADU Delta Eco VS\*), BADU Delta-MK Eco VS\*), BADU Profi Eco VS, BADU Profi-MK Eco VS, BADU Alpha Eco Soft, BADU Eco Soft, BADU EasyFit Eco VS, BADU Gamma Eco VS, BADU Prime Eco VS, BADU Bronze Eco VS, BADU Eco Flex

Motor protection class ..... IP 55  
 Class of insulation ..... F  
 Approx. motor speed (rpm) ..... variable  
 Max. water temperature (°C) ..... 40 (60)<sup>5)</sup>  
 Max. casing pressure (bar) ..... 2.5

BADU Eco Logic, BADU Logic, BADU BNR 300, BADU BNR 402, BADU OmniTronic, BADU Omni actuator, BADU Blue, BADU Blue Pro

Device protection class ..... IP 54

BADU 21-40, BADU 21-41, BADU 21-50, BADU 21-60, BADU 21-80, BADU 21-81

Motor protection class ..... IP 55  
 Class of insulation ..... F  
 Approx. motor speed (rpm) ..... 2850  
 Max. water temperature (°C) ..... 60  
 Max. casing pressure (bar) ..... 2.5

BADU JET Vogue, BADU JET Vogue Deluxe, BADU JET Primavera, BADU JET Primavera Deluxe, BADU JET Perla, BADU JET Riva, BADU JET Stella, BADU BNR 402

Device protection class ..... IP X5

BADU Variostar

Motor protection class ..... IP 55  
 Class of insulation ..... F  
 Approx. motor speed (rpm) ..... 600/1800  
 Max. water temperature (°C) ..... 60  
 Max. casing pressure (bar) ..... 2.5

BADU JET Turbo, BADU JET Turbo Pro, BADU JET Turbo Salt, BADU JET Turbo Pro Salt

Frequency converter protection class ..... IP 66  
 Motor protection class ..... IP 65  
 Class of insulation (motor) ..... F  
 Approx. motor speed (rpm) ..... variable  
 Max. water temperature (°C) ..... 40

Maximum permitted ambient temperature 40 °C.

\*) Maximum permitted water temperature 40 °C.

# FAQ

There are some things you need to know about having your own pool in order to make the right decisions and as you're not the only one with a few questions, we've listed the most frequently asked ones for you here. You'll be diving into your pool in no time at all.

## How high can a pump prime?

Theoretically the maximum suction height is 10.33 m. This depends on air pressure (1033 hPa=normal). Technically a maximum suction height of approximately 7-8 m can be gained. Resistance loss in the pump, connecting lines and fixtures must be deducted. Medium dependent factors (e.g. vapour pressure, density or viscosity), may reduce the suction height further.

## What is a self-priming pump?

A self-priming pump has the ability to handle air and gas content and can aerate the suction line independently (evacuate air). During the initial start-up, the pump must first be filled with water.

## Why must a self-priming pump first be filled with water?

A self-priming pump must have a sufficient amount of water in the pump housing. Only then can air content be transported in the suction line. Therefore it is necessary to fill your BADU pump up to the inlet connection with water. Failing this, the pump may be damaged by dry running. Furthermore you shouldn't interrupt the suction process by continually turning the pump off and on, as the process will have to restart as a result.

## What are the maintenance requirements of the BADU pumps?

BADU pumps are generally maintenance free. In order to guarantee a constant flow rate and sufficient filtering of the pool water, the strainer basket must be cleaned at regular intervals. From time to time you may also carry out a visual inspection.

## How should the pump be started following a long period of disuse?

Before turning the pump on after a long period of disuse (e.g. winter), check to make sure that it can be moved easily. To do this, rotate the motor shaft lightly with the help of a screwdriver. Should the motor stick at all, this will loosen it. Should the pump still remain tight or an unusual noise become audible, have the pump examined by a trained professional.

## What are wear parts?

Wear parts are the sealing and rotating elements of a pump - the mechanical seal, O-rings, gaskets, the

impeller and ball bearings. Unfortunately wear parts are not covered under the warranty, as the wear and tear of these parts is physically unavoidable - just like the tyres on your car which have to be replaced once they've been run down.

## How should I best store my pump over the winter season?

It's simple: drain the pump and store it in a dry place, protected against frost. Cover it with a dust sheet.

## How should I best store my counter swim unit over the winter season?

Counter swim units installed in outdoor pools should be protected against frost over the winter season. Lower the water level in the pool to the bottom edge of the inlet connection. Disassemble the pump and store this in a dry room. Leave the valves half open so that the space in between can be drained.

## How should I best store my solar panel unit over the winter season?

At the end of the bathing season the solar panel unit must be completely drained in order to avoid frost damage. In addition, for solar panels on flat roofs or roofs with a decline of up to 30 degrees, connecting sockets must be opened and the plates individually raised until they are completely drained.

## Are BADU products certified?

SPECK Pumpen examine all of their products regularly and have them additionally tested by independent bodies. The high safety and quality standards are confirmed by various up to date examination and certification stamps. Therefore the most modern technology, standards and certified safety specifications are standard for BADU products. You will find CE, GS and other stamps on BADU products. We will be more than happy to provide you with more detailed information regarding these official seals.

## Should the pump be turned off when the 6-way valve is being switched over manually?

We recommend turning the pump off in order to avoid a surge in the unit and for ease of handling.



## How does the backwash function in the sand filter unit work?

The water from swimming pools is mainly cleaned using sand filters. These must be regularly backwashed in order to loosen up the sand bed and drain off the impurities that have been filtered into it. Filter backwash units assume the various operating functions of the 6-way valve, which can be set manually by hand. However our electronic backwash valves from the BADU Tronic series can take over this task fully automatically providing a simple and convenient alternative.

## How do I determine the correct pump and device type?

Every BADU product has its own classification. This can generally be found on the name plate on the pump housing. The name plate contains all important information.

## Where can I buy BADU products?

BADU products are distributed exclusively to specialist retailers. To find a representation in your local area please visit the BADU website at badu.de or contact our regional SPECK Pumpen offices, see page 178.

# Footnotes / Abbreviations

- 1) Most **single phase motors** 1~ 230 V are fitted with a built-in overload switch or a protective winding contact as a series feature. Further information can be found in the pump data sheet. Three-phase motors are not fitted with a motor protection device. Special voltage, special frequency, 2-speed or direct current motors on request. Suitable for standard voltage according to DIN IEC 60038 and DIN EN 60034 (Euro voltage), i.e. suitable for continuous operation at:  
1~ 220-240 V.  
3~ Y/Δ 380-420 V/220-240 V.  
3~ Y/Δ 660-725 V/380-420 V.  
Tolerances ± 5 %.  
GS approved pumps according to EN 60335-1.
- 2) **Thread** according to DIN EN 10226-1 and ISO 7-1. Descriptions for pipe thread **sealing inside the thread**.  
Internal pipe thread: e. g. Rp 1½,  
External pipe thread: e. g. R 1½.  
(sealed with teflon tape only)
- 3) Thread according to DIN ISO 228-1. Description for pipe thread **sealing at the end face**.  
Internal pipe thread: e. g. G 2,  
External pipe thread: e. g. G 2.  
(sealed with teflon tape only)
- 4) **Pipe friction characteristics** on page 142. Effects of pipe diameters and internal pipe friction on the flow quantity of a suction line or pressure line.
- 5) **Clarification of water temperature 40 °C (60 °C)**  
40 °C is the max. water temperature allowed according to GS approval, however the pump is suitable/configured for a max. water temperature of 60 °C.
- 6) **Permitted limits for stainless steel parts**  
Chloride ion content max. 400 mg/l (400 mg/l chloride is equivalent to 0.66 g/l salt = 0.066 %), pH value 6.8 - 8.2.
- 7) Recommended retail price for Germany incl. 19 % VAT. **The prices quoted are valid from 1 January 2024 to 31 December 2024, provided that no force majeure or unforeseen circumstances, such as natural disasters, political unrest or other events beyond our control, have a significant impact on pricing. In such cases, we reserve the right to make price adjustments to reflect the new circumstances.**  
All previous prices are therefore no longer valid. When ordering please always specify the article number. Sales exclusively via specialist retailers. Carriage paid and packaging included on orders within Germany from a net order value of 1.500.00 €. Delivery of goods below a net order value of 50.00 € are generally without deduction, ex-works. Subject to additional material charges depending on DEL notice rates. Sales according to our general terms and conditions.

### Materials:

ABS	Acrylonitrile butadiene styrene copolymer
ASA	Acrylonitrile styrene acrylate
G-Cu Sn 10	Cast bronze
GG-20	Cast iron
NBR	Acrylonitrile butadiene rubber (perbunan)
PA	Polyamide
PA 66 GF 30	Polyamide, glass fibre reinforced
PC	Polycarbonate
PMMA	Polymethyl methacrylate
POM GF 30	Polyoxymethylene, glass fibre reinforced
PP	Polypropylene
PP GF 30	Polypropylene, glass fibre reinforced
PP TV 40/PP TV 20	Polypropylene, talc reinforced
PPE GF 30	Polyphenylene Ether, glass fibre reinforced
PVC	Polyvinyl chloride
SAN	Styrene-acrylonitrile copolymer

1 bar = 100:000 Pa  
1 bar = 10.2 m water column

Minimum geodetic suction height 1.5 m.  
Average approx. 3 m (approx. 0.5 m for BADU 21-80 S).  
Pumps must be filled with water when priming.

Characteristics measured according to EN ISO 9906;  
Flow rate Q = ± 10 %, total dynamic head H = ± 8 %.  
Self-priming pumps are tested according to DIN EN 16713-2.

# Glossary of terms

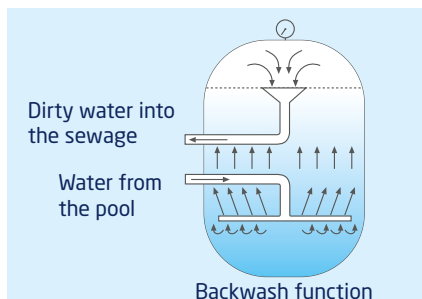
On the following pages you will find explanations for professional and technical terminology. Because knowledge leads to better decisions.

## 2-phase operation

A three-phase motor has three windings. If one winding fails, for example because a phase in the supply line fails, the motor continues to run with excessive current consumption and can overheat. A motor overload switch is required to monitor the three-phase motor (set to motor rated current).

## Backwash

Your filter must be cleaned on a regular basis because some dirt remains in the medium during filtering. In pool technology this takes place according to the simple principle of backwashing: the flow direction of the filter current is reversed. Pieces of dirt in the filter are loosened and are led by the backwash water out of the filter and into the sewage. The backwash procedure can be carried out manually with the BADU Mat valve or fully automatically, for example with the BADU EasyTronic.



## BADU Green

The intelligent and maximum efficiency products in the BADU Green range are developed with the aims of saving energy and protecting the environment – for a clear conscience and more bathing pleasure.



## Ball bearings

Are a sub-group of anti-friction bearings in which the balls serve as the rolling elements. Bearings are important in order to support the power on moving parts (e.g. motor shaft). In addition to this they reduce power loss caused by friction and minimise material wear. As ball bearings are dynamic, rotating parts, they belong to the wear and tear parts.

## Built-in overload switch

A bimetal switch found in many single phase motors which protects the motor winding from overheating. In other words it switches the motor off when the heat reaches a certain temperature. The built-in overload switch isn't a switch in the classic sense. You can't find it and press it because it is installed deep inside the motor. It works fully automatically and is self-resetting: it turns the motor back on after cooling down. For safety reasons please interrupt the power supply and call your pool specialist nevertheless, should your pump turn itself off due to obvious overheating.

## CE symbol

An EU label documenting that a product meets all valid standards and requirements. The CE symbol is not strictly a test seal. It's more of an administration symbol expressing the marketability within the European Single Market. You can download the declaration of conformity for your BADU product online at [badu.de](http://badu.de).



## Characteristics

Describes the pump capacity of a BADU pump per hour depending on

the flow rate in metres.

The characteristics are often used to determine the working point or operating point. This point should be in the middle area so that your pump works at optimal efficiency.

## Circulation pump

All BADU pumps are centrifugal pumps. This pump construction type works with a rotating impeller, which turns inside the pump housing at high speed. The impeller is driven either by a motor on the same drive shaft or by a motor which is separated from the pump housing.

## Continuous sound intensity level

Describes the volume of a sound source. The size of a sound pressure level was introduced so that the range of values 0 to 150 dB (A), which the human ear can process, are used and portrayed sensibly. As a guide: a calm conversation creates a sound pressure level of approx. 60 dB (A) – the BADU Delta Eco VS pump range, for example, is quieter. You will find the exact values for BADU products in the data sheet which is included in delivery and these are of course also available on request. Values are measured at a distance of 1 m with a phonometer according to DIN 45635.

## Counter swim unit

Brings movement to your pool. An integrated, powerful centrifugal pump primes pool water extensively and at a low priming speed. The water is returned to the swimming pool under high pressure via one or more adjustable nozzles. Counter swim units are a great attraction – for fun, sport and as a massage device.



### Electrical separation

Due to the impeller construction and the insulating plastic components, all pumps in the BADU plastic ranges have electrical separation. Therefore the motor shaft has no contact with the pool water. This is not the case for BADU cast iron and bronze ranges, which don't have electrical separation.

### Filter dimensioning

The filter surface required for your sand filter is calculated from the pump's flow rate and the flow speed in the filter. This should not exceed 50 m/h. The slower the filter speed, the more effective the filter is.

### Flow rate

Indicates the water quantity that can be handled. The flow rate and the total dynamic head are the most important criteria when selecting a circulation pump. The values are directly related and result in the operating point.

### GS symbol

A German test seal assigned by independent, external examination boards (e.g. the technical control board TÜV). GS, meaning "certified safety", certifies a product as corresponding to the requirements of the product safety law established in the German DIN and European CEN standards.

BADU products are regularly GS tested. Therefore, from an independent view, they are up to date with current technology and correspond to the current standards.



### Maintenance

BADU products are generally maintenance-free. For self-priming BADU pumps the strainer basket must be checked and cleaned on a regular basis (once a week). A regular sight check to see whether the pump and unit are working correctly and are water tight is also a good idea. Before the first frost, the pumps and counter swim units must be correctly prepared for winter storage. Please see the relevant instruction manual for more details.

### Materials used

As a trademark of SPECK Pumpen, BADU has decades of experience in the construction of innovative pumps and in pump technology as well as in using plastics for constructing pumps. BADU products are predominantly made of glass fibre or talc-reinforced plastic. The materials used stand up to the requirements of swimming pool water (and the typical chemicals used). They are corrosion resistant and can, almost without exception, be recycled after use.

For more information regarding BADU materials please see page 169 of this catalogue.

### Mechanical seal

Dynamic seals which seal the rotating shaft reliably against a wall. For example, the motor shaft against the pump housing. They consist of two components which slide against each other (slide ring and counter ring). As the mechanical seal is a dynamic, rotating part, it belongs to the wear and tear parts.

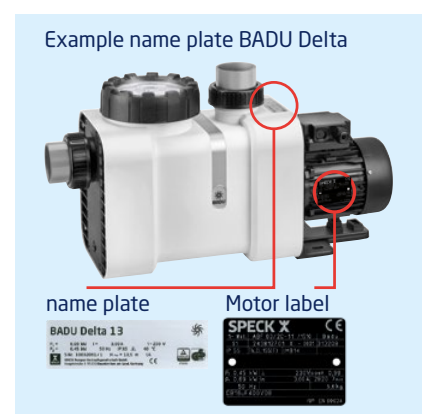
### Motor overload switch

Protects the motor against overloading. Unlike a built-in overload switch, the motor overload is not self-resetting. It must be manually reset after having been triggered. Please do not attempt to reset the motor overload switch yourself, but contact your pool professional. Three-phase motors don't have an integrated motor overload switch, but

require an individual solution from the professional electrician on site. A motor overload switch is, for example, built into the single phase versions of the BADU Prime 7 to BADU Prime 20 and BADU Bronze ranges.

### Name plate

Every pump or counter swim unit has a type description. This can be found on the pump housing, on a silver sticker. This name plate includes all important information regarding the product (description, rated current, voltage, serial number). Should you have any questions at all, note down the description and serial number and pass these on to your swimming pool specialist or to us. Even if you simply require some spare parts, these details are very important.



### Non-self-priming pumps

As opposed to self-priming pumps, non-self-priming pumps (e.g. BADU 46) cannot transport air. Non-self-priming pumps generally have to be installed below the water level so that the water to be pumped can flow to it independently. They are often a good choice for pool attractions, counter swim units and whirlpools.



## Operating capacitor

An electrical component which can save electric loads and therefore also energy. This can be compared to a battery. The amount of energy saved is called electrical capacity, measured in the unit "Farad". Capacitors are built into BADU pumps in order to absorb changes in voltage. This component belongs to the wear and tear parts.

## Operating point

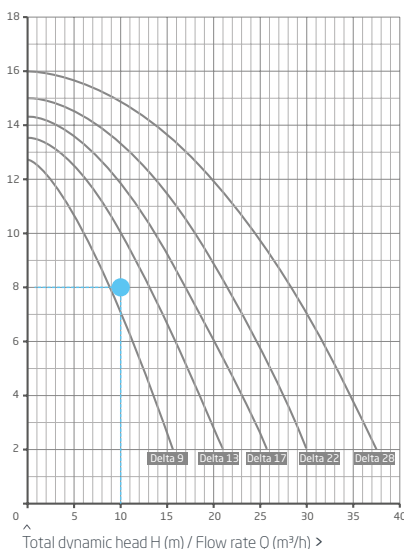
The operating point or working point is a specific point on the characteristics diagram or curve of a pump which is defined as a reference for the current application situation. When selecting the optimal filter pump a variety of factors have to be taken into consideration, therefore an experienced pool professional should always be appointed to do this. These specialists know all of the requirements and can balance and set the system components.

### Calculation example - operating point

10 m<sup>3</sup>/h for sand filter, generally 0.8 bar (8 m)

### Result

The BADU Delta 13 reaches the desired flow rate of 10 m<sup>3</sup>/h with the required total dynamic head of at least 8 metres.



## Permanent magnet motors (PM)

Built like a three-phase synchronous motor. The rotor has a permanent magnet and the fixed stator comprises the coils which are controlled

at staggered intervals by an electric switch. Permanent magnet motors are especially efficient. Almost all BADU Green pumps work with this motor type. Many other ranges can be individually fitted with PM motors on request.

## Pipe assembly

Depending on the connection variations of the pump type, teflon band is used for thread connections or the unions enclosed are used for assembling the pipes. ABS unions have a minimum curing time of 12 hours. Important: plastic threads may not be sealed using hemp.

## Pipe dimensioning

In a pipe there is physical frictional loss. The higher the flowing speed of the pumped medium (e.g. water), the higher the frictional loss. Pipe friction loss must be taken into consideration in the planning phase so that the calculated pipe dimensioning doesn't prevent efficient operation of the pool system. Using the pipe characteristics on page 166 you can calculate the pipe friction loss and the flow speed and determine your optimum pipe dimensioning.

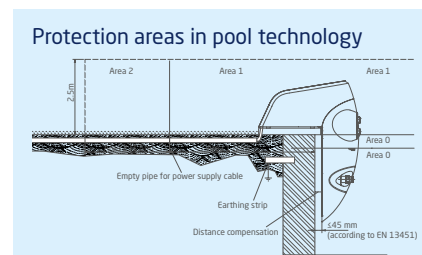
## Pre and final assembly kits

BADU JET submerged counter swim units always consist of two different sets of components which together make a functioning unit. In the pre-assembly kit you will find all of the parts required when building your pool. For example the main housing which is installed in the pool wall. The final assembly kit is needed when the building phase is advanced enough for the cover, nozzles, pump and electronics to be installed. You can install the pre-assembly kit first of all and complete your unit at a later stage with the final assembly kit.

## Protection area

There are various protection areas from 0 to 2 for connecting and equip- electrical devices in the pool

area. BADU pumps and counter swim units may be installed in protection area 1. The degree of protection for motors in this protection area is defined with IP X5/4 and is met by BADU products. The high supply voltage is irrelevant in this case as the products are permanently installed.



## Protection classification

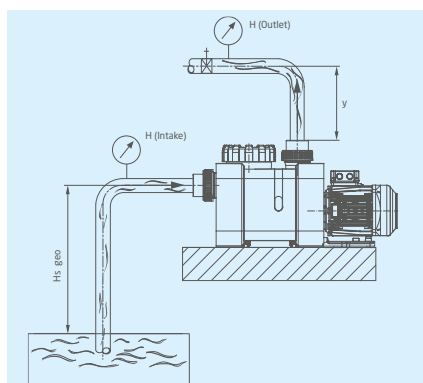
Indicates the suitability, for example of motors, for various environmental conditions. In addition it protects people against potential danger when using them. Pumps and counter swim units have to work safely, under difficult conditions for many years. With regard to their suitability for various conditions, the products are divided into so-called IP codes (International Protection Codes). BADU pumps and counter swim units are generally configured for the protection classification IP X5. That means that motors are protected against hose water from any angle.

## Priming speed

Describes the water speed in m/s at the priming point (the suction). This is an important measurement, for example when reviewing counter swim units. BADU products are developed for safety. The priming speed of a BADU counter swim unit corresponds to or exceeds the valid EU norms and standards.

## Priming time

This is the time a pump needs to prime the water until the suction line is completely evacuated. This time depends on the length and diameter of the pipe, how high above the water level the pump is positioned and of course the pump itself, e.g. capacity and type.



### Self-priming pumps

The typical circulation pump in pools and swimming baths. Self-priming pumps can, unlike non-self-priming pumps, transport air and can evacuate the suction line independently once the pump housing has been filled for the first time. This is a very flexible pump concept. Self-priming pumps can be installed above or below the water level.

### Telescopic foot

A so-called telescopic support foot is available for BADU JET overhang counter swim units. This is necessary for above ground pools which don't have a suitable edge. The foot provides stability necessary for the unit and its height can be adjusted.

### Three-phase motor

Three-phase asynchronous motors are mostly operated on a special three phase power supply system with 400 V - commonly known as a high voltage current. The motor normally consists of two parts: an external, fixed stator and a rotor, which rotates inside it. Because of the three phases, these motors generally also have three windings. Attention must be paid to the direction of rotation during connection and the initial start-up (arrow on motor housing). Under certain conditions (see PTC resistor sensor), three-phase motors are suitable for operation on external frequency transformers for variable speed adjustment.

### PTC resistor sensor

If the motor speed decreases, the cooling of the motor is also reduced. If the speed drops too much, the cooling may no longer be sufficient. PTC resistor sensors, or PTC thermistors, are built into the motor winding of the BADU Prime 25 to BADU Prime 48, BADU Profi and BADU Resort ranges. They serve as a continuous and precise temperature monitor in the motor - in particular where the motor speed is controlled via an external frequency converter. When the temperature increases, the electrical resistance in a PTC resistor sensor increases. This temperature monitoring concept is much more precise than the commonly used rated current monitoring, which is built into frequency converters.

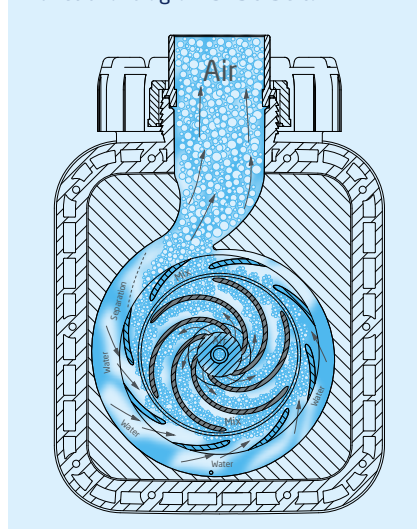
### Rinsing

Following a backwash cycle it is necessary to carry out the rinsing procedure. Any residue or erosion from the filter materials remaining following the backwash will be drained off during rinsing. This procedure takes 30 to 60 seconds.

### Salt electrolysis

Over the last few years salt water electrolysis has become a popular alternative to the classic chlorine disinfection. During this disinfection procedure the water is enriched with salt (total salt concentration approx. 0.4 %). BADU pumps in standard variations are suitable for a total salt concentration of 0.5 %, i.e. 5g/l, for this procedure.

Functional diagram BADU Delta



### Single phase asynchronous motor

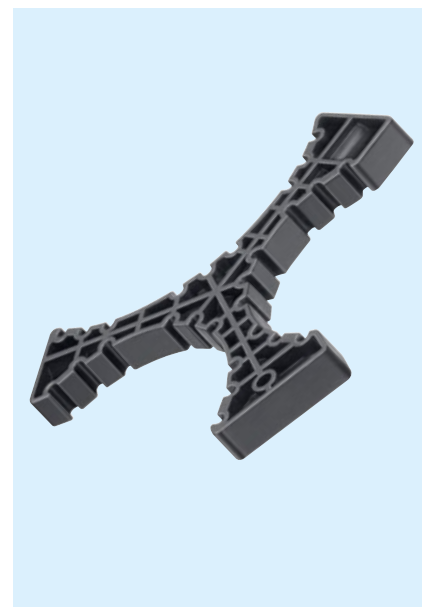
Operated with one phase and 230 V - normal household electricity. The motor consists of two parts: an external, fixed stator and a rotor, which rotates inside it. All BADU single phase motors are equipped with an integrated operating capacitor and have two windings (main and auxiliary winding).

### Strainer basket

Stops larger pieces of debris from getting to the pump and protects against faults and blockages. You should therefore never run your pump without the strainer basket. Depending on the location of your pool and the time of year, the strainer basket is contaminated to varying degrees. If the strainer basket is contaminated or full, the pump's flow rate will decrease and it is no longer possible for a sufficient circulation to take place. It's best to check the strainer basket once a week.

### Three-way opening device

Used to open the lids of the BADU Prime 25 to BADU Prime 48 and BADU Resort quickly and easily. With this special tool the screw connections can be opened easily.



## Total dynamic head

Indication of the height from the water level to the highest point of the pressure line. Warning: as well as the height difference, values for the total dynamic head also include the pressure loss resulting from pipework and installation pieces. The calculations should always be carried out by a trained pool specialist.

## Universal opening device

Special tool for opening the lid on various BADU pumps easily. Also available in sickel form for the BADU Magna.

Universal opening device



Sickel opening device



## Water level

Refers to the height level of the water surface of your pool.

## Wear and tear

BADU products are made from high quality materials. Moreover they are designed to withstand the requirements and strains of their applications for as long as possible. However, in technology, wherever things move and parts rub against each other, material consumption and erosion occurs -wear, on wear and tear parts. Wear and tear cannot be completely remedied. However it can be avoided. BADU products are optimised for minimal wear during each phase of their development. In doing so, we protect resources, the environment and our customer's patience. The few remaining wear and tear parts are readily available via our BADU customer service: rotating/dynamic parts, mechanical seals, ball bearings etc. Now you'll surely appreciate why wear and tear parts are not covered under warranty.

## Winter storage

Before the first frost you should empty your circulation pump because the water inside will expand as it freezes and thereby damage the pump. The instruction manual explains in detail how to approach this properly.





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# Locations

## Sales regions Germany

### Sales region South/East

Hauptstraße 3  
91233 Neunkirchen am Sand  
Phone +49 9123 949235  
Fax +49 9123 949245  
neunkirchen@speck-pumps.com  
speck-pumps.com

### Sales region South

Lindberghstraße 7  
82178 Puchheim  
Phone +49 89 800709930  
Fax +49 89 80070993609  
muenchen@speck-pumps.com  
speck-pumps.com

### Sales region South/West

Phone +49 711 341901112  
Fax +49 711 341901118  
stuttgart@speck-pumps.com  
speck-pumps.com

### Sales region Central

Philipp-Reis-Straße 5  
63110 Rodgau-Jügesheim  
Phone +49 6106 28578121  
Fax +49 6106 28578129  
rodgau@speck-pumps.com  
speck-pumps.com

### Sales region West

Volmerswerther Straße 86  
40221 Düsseldorf  
Phone +49 211 30200760  
Fax +49 211 30200769  
duesseldorf@speck-pumps.com  
speck-pumps.com

### Sales region North/East

Farmsener Landstraße 2  
22359 Hamburg  
Phone +49 40 45063427414  
Fax +49 40 45063427419  
hamburg@speck-pumps.com  
speck-pumps.com

## SPECK Pumpen worldwide – online

BADU products and accessories can only be purchased from qualified specialist retailers.  
Visit the BADU website to find a representation in your local area:  
[badu.de](http://badu.de) > [Quick links](#) > [Locations](#)





## Europe

### Belgium

Duktrad International BVBA  
Ambachtenlaan 32  
B-3001 Leuven  
Phone +32 475 598346

chris.den.hartog@speck-pumps.com  
speck-pumps.com

### Denmark

Welldana A/S  
Randersvej 6  
DK-6700 Esbjerg  
Phone +45 7527 2333  
Fax +45 7527 2111  
info@welldana.com  
welldana.com

### Finland

Agentuuri Neumann Oy  
Eteläpuisto 13 A 10  
FI-28100 Pori  
Phone +358 2 6333333  
Fax +358 2 6334089  
info@agentuuri-neumann.fi  
agentuuri-neumann.fi

### France

SPECK France SAS  
33, Cours Albert Thomas,  
F-69003 Lyon  
Phone +33 0 478181940

info@speck-pumps.com  
speck-pumps.com

### Great Britain

Duktrad International BVBA  
Ambachtenlaan 32  
B-3001 Leuven  
Phone +32 475 598346

chris.den.hartog@speck-pumps.com  
speck-pumps.com

### Italy

Gerit S.r.l.  
Sede legale Via Giotto 15  
I-39100 Bolzano (BZ)  
Phone +39 0471 917327  
Fax +39 0471 202588  
info@gerit.net  
gerit.net

### Netherlands

SPECK Pompen Nederland B. V.  
Stationspoort 10  
NL-6902 KG Zevenaar  
Phone +31 316 331757  
Fax +31 316 528618  
info@speck.nl  
speck.nl

### Norway

BWT Birger Christensen AS  
Røykenveien 142 A  
N-1386 Asker  
Postboks 136  
N-1371 Asker  
Phone +47 67 177000  
Fax +47 67 177001  
firmapost@bwtwater.no  
bwtwater.no

### Austria

SPECK Pumpen GmbH  
Kauttenstraße 10  
A-4060 Leonding/Linz  
Phone +43 732 3820660  
Fax +43 732 38206613  
info@speck-pumpen.at  
speck-pumpen.at

### Poland

Basen Hurt  
ul. Towarowa 6  
PL-62-090 Mrowino  
Phone +48 61 8144851  
Fax +48 61 8552627b  
iuro@basenhurt.pl  
basenhurt.pl

### Poland

Basen i Sauna Sp. z o.o.  
ul. Gdańska 8  
PL-86-022 Aleksandrowo  
Phone +48 52 3402540

office@basenis sauna.pl  
basenis sauna.pl

### Sweden

EnviroProcess AB  
Borgås Gårdsväg 9  
S-43439 Kungsbacka  
Phone +46 300 837000  
Fax +46 300 837099  
info@processing.se  
processing.se

### Switzerland

Aqua Solar AG  
Industriering 66  
CH-4227 Büsserach  
Phone +41 61 7899100  
Fax +41 61 7899119  
info@aquasolar.ch  
aquasolar.ch

### Spain, Portugal

SPECK-Española, S.A.  
C/. Can Fenosa, s/n. Nave 7  
Pol. Ind. Martorelles  
E-08107 Martorelles/Barcelona  
Phone +34 93 5702004  
Fax +34 93 5701949  
info@speck-bombas.com  
speck-bombas.com

### Turkey

SPECK-Pompa Ltd.Sti.  
Girne Mah., Küçükalyi Is Merkezi  
B Blok No. 12  
TR-34852 Maltepe/Istanbul  
Phone +90 216 3757505  
Fax +90 216 3757533  
info@speckpompa.com.tr  
speckpompa.com.tr

# Contact

We're happy to help!

## Sales BADU swimming pool technology, Aquaculture

Phone +49 9123 949-400  
Fax +49 9123 949-206  
info@badu.de

## Sales domestic technology

Phone +49 9123 949-500  
Fax +49 9123 949-211  
vertrieb@speck-pumps.com

## Sales industrial technology

Phone +49 9123 949-600  
Fax +49 9123 949-211  
industrie@speck-pumps.com

## Domestic shipping/Export

Phone +49 9123 949-900 . Domestic shipping  
Phone +49 9123 949-800 . Export  
Fax +49 9123 949-316  
versand@speck-pumps.com  
export@speck-pumps.com

## Cumstomer services, repairs and spare parts services

Phone +49 9123 949-700  
Fax +49 9123 949-245  
service@speck-pumps.com

## Marketing

Phone +49 9123 949-242  
Fax +49 9123 949-284  
marketing@speck-pumps.com

## Current BADU news



[speck-pumps.com](http://speck-pumps.com)



[speck-wissenswelle.com](http://speck-wissenswelle.com)



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[LinkedIn](#)

## Imprint

### Editor

SPECK Pumpen Verkaufsgesellschaft GmbH  
Hauptstraße 3  
91233 Neunkirchen am Sand, Germany  
Phone +49 9123 949-0  
info@badu.de  
**badu.de**

### Editorial and content

Armin Herger, Christoph Ott,  
Technik-Team

### Translation

Gemma Snowden,  
Sonja Knodel-Sarraf

### Illustrations

Ramona Erb

### Photos

Adobe Stock:  
whyframeshot, Joyce,  
Alexandre Zveiger,

Getty Images:  
Yasinguneyasu, Martin  
Barraud

iStock:  
Tom Merton, amri-  
photo, hobo\_018

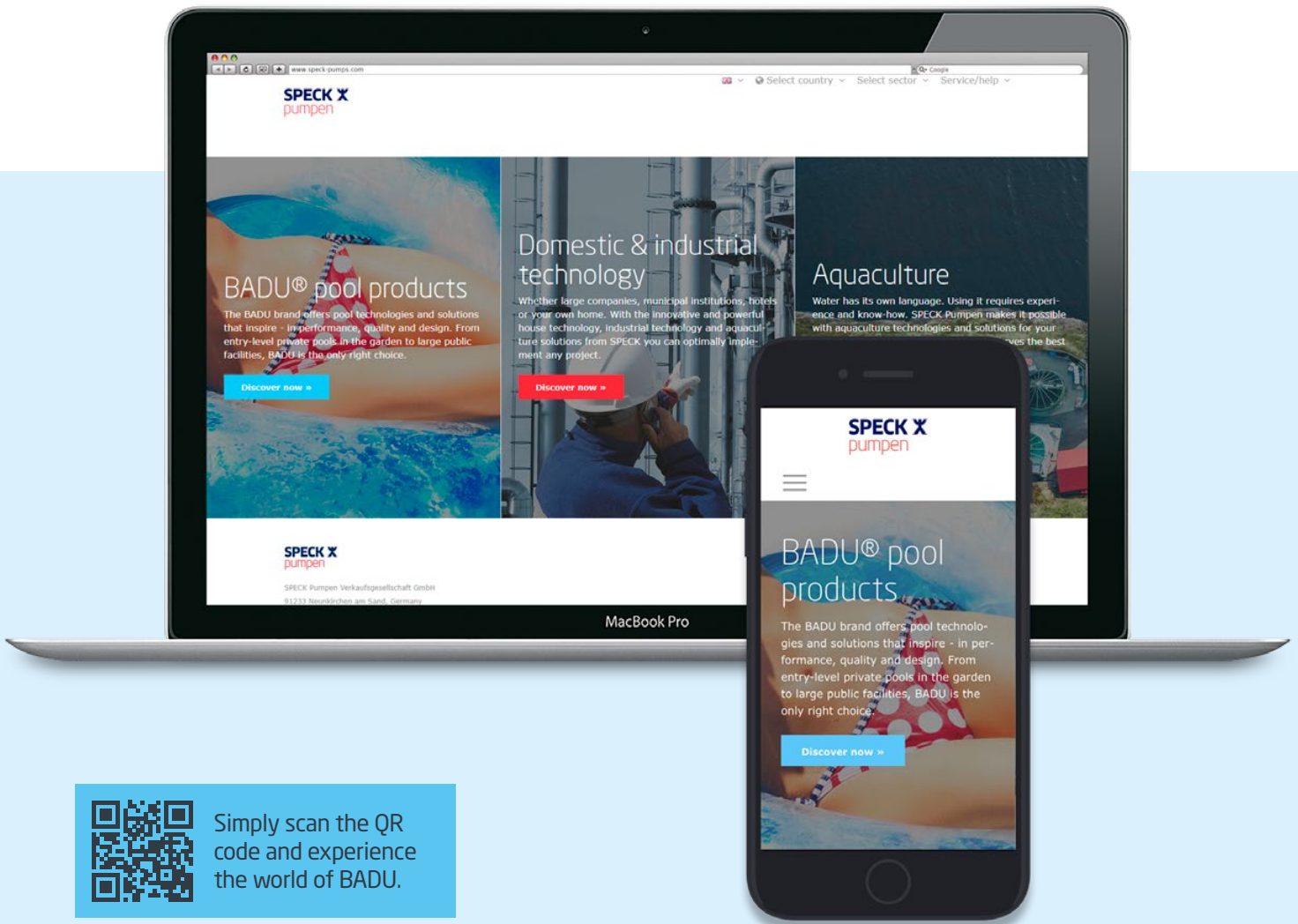
SPECK Pumpen

### Graphics, compositions and layout

arsmedium ag, 90419 Nuremberg  
arsmedium.com

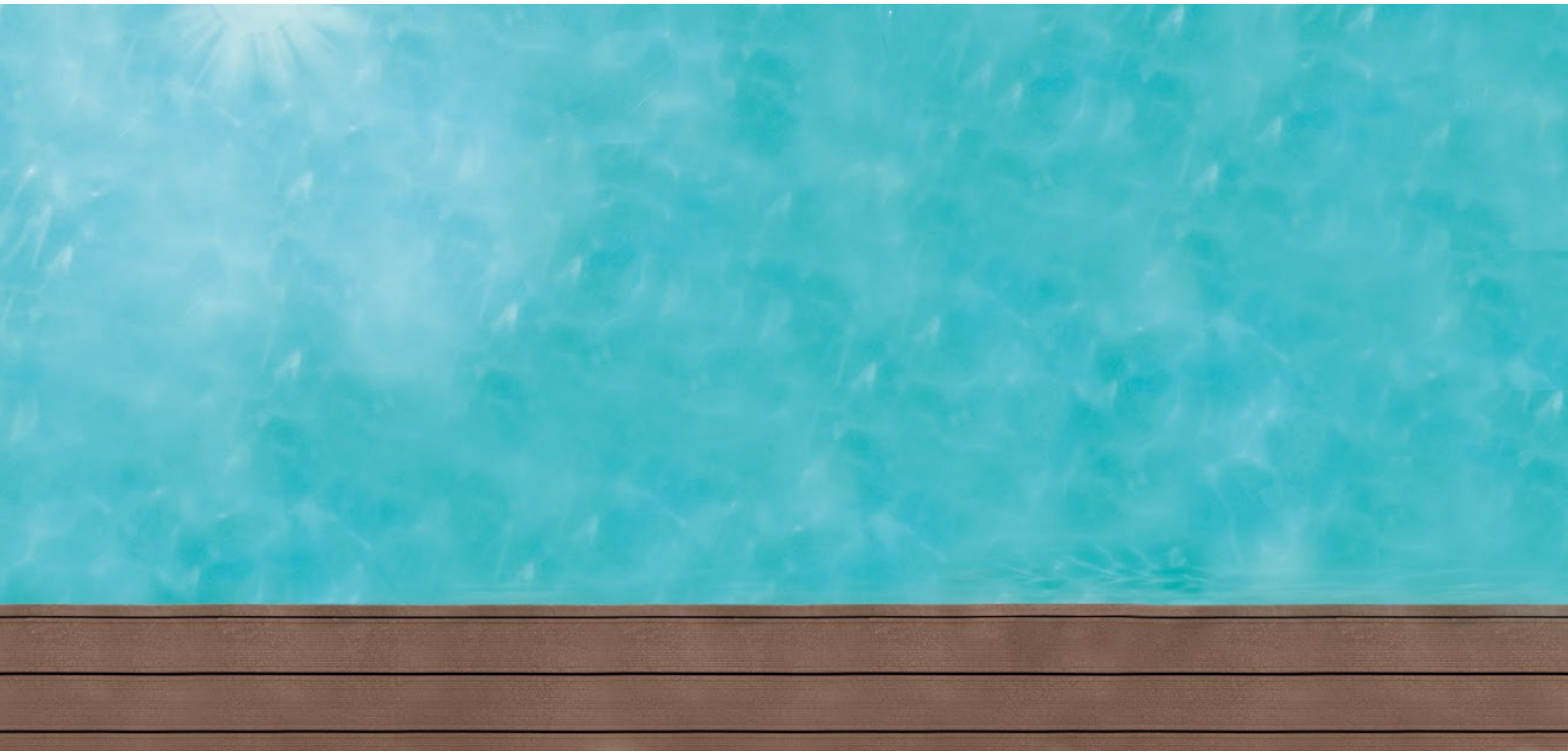
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Hauptstraße 3  
91233 Neunkirchen am Sand, Germany

Phone +49 9123 949-0

Fax +49 9123 949-260

[info@badu.de](mailto:info@badu.de)

[badu.de](http://badu.de)