



Pool technologies and solutions...



swimming pool  
**green products**



# do it right green products

Enjoy the sun. Swim. Relax in warm water. And all of this with a clear conscience, because you're saving energy and protecting the environment.

BADU makes it possible with pool technologies and solutions from BADU GREEN.

For private starter pools in the back garden to large public units.

You can now find the efficient and intelligent BADU GREEN products in this brochure.

BADU - for the simple joys of life ...

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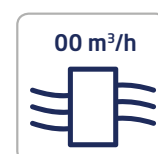
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## ICONS



### 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 size

The maximum pool volume that a pump can handle at optimum performance. Specification in cubic metres.  
1 cubic metre = 1,000 litres.

# 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



< NEW with analog input  
0-10 V and 4-20 mA

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

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	
Net weight (kg)	1~	7.00	

For more detailed information regarding the motor protection please see page 143.

Technical data may vary.

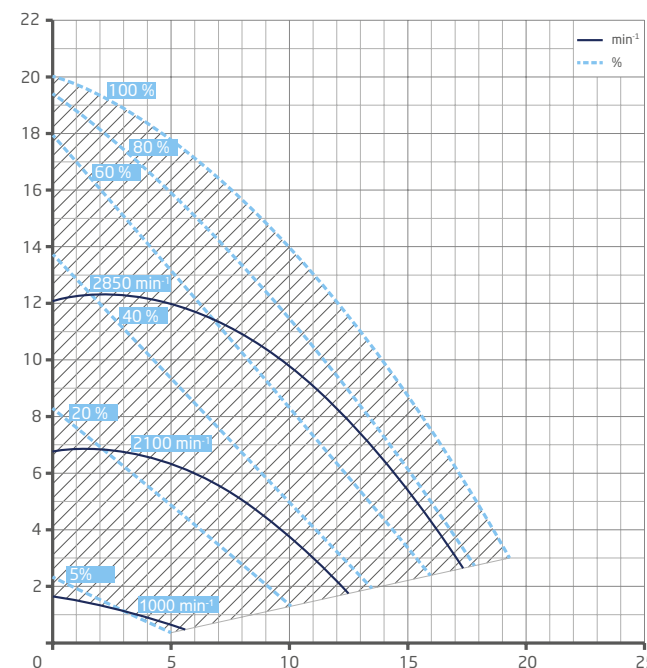
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.4000.038	BADU Alpha Eco Soft	1~ 230 V	0.50 kW	923.32 €	1,098.75 €

Universal opening device included in delivery. See page 132.



Siehe Legende

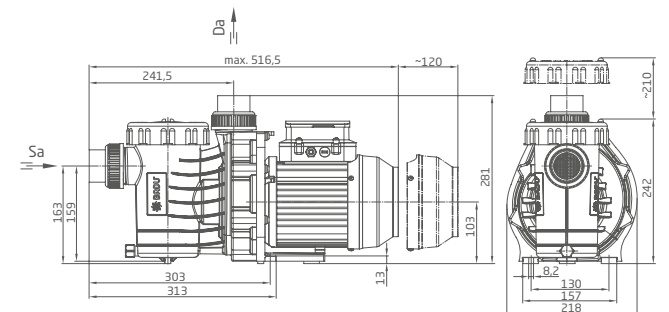
### Performance



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

### 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 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

Can be controlled using the BADU Eco Logic remote control.  
See page 118.

### 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



< NEW with analog input  
0-10 V and 4-20 mA

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

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	
Net weight (kg)	1~	12.50	

For more detailed information regarding the motor protection please see page 143.

Technical data may vary.

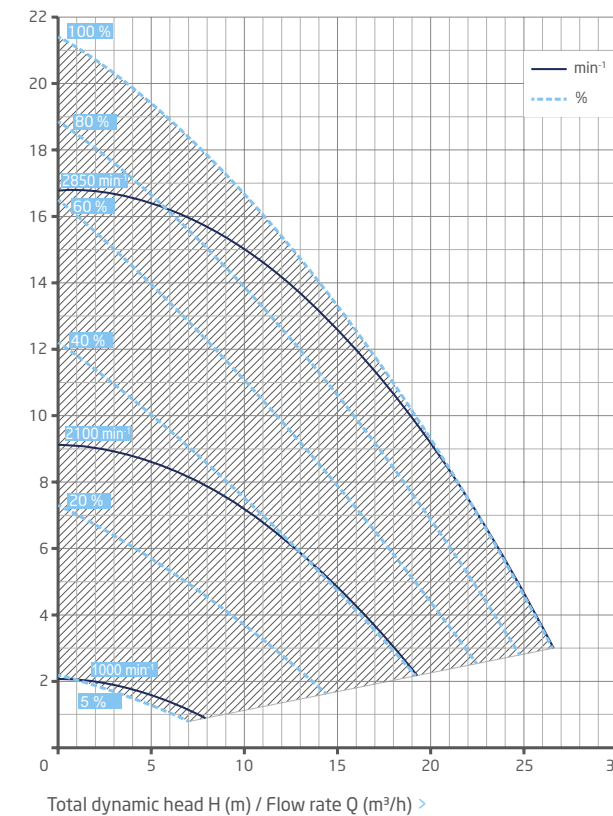
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
219.0008.138	BADU Eco Soft	1~ 230 V	0.75 kW	1,182.44 €	1,407.10 €

Universal opening device included in delivery. See page 132.



see key

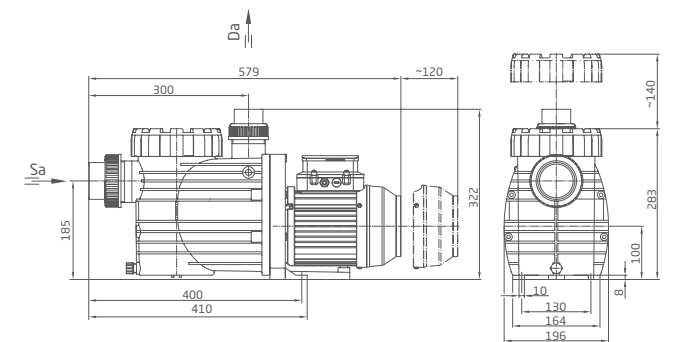
### Performance



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

### 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 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 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 pages 34-35.  
Can be controlled using the BADU Eco Logic remote control.  
See page 118.

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
Net weight (kg)	1~	11.50

For more detailed information regarding the motor protection please see page 143.

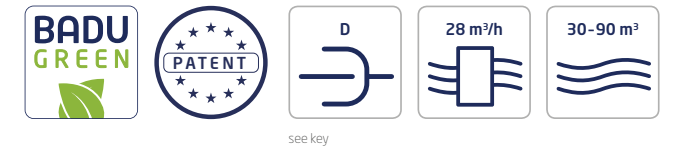
Technical data may vary.

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	1,329.40 €	1,581.99 €

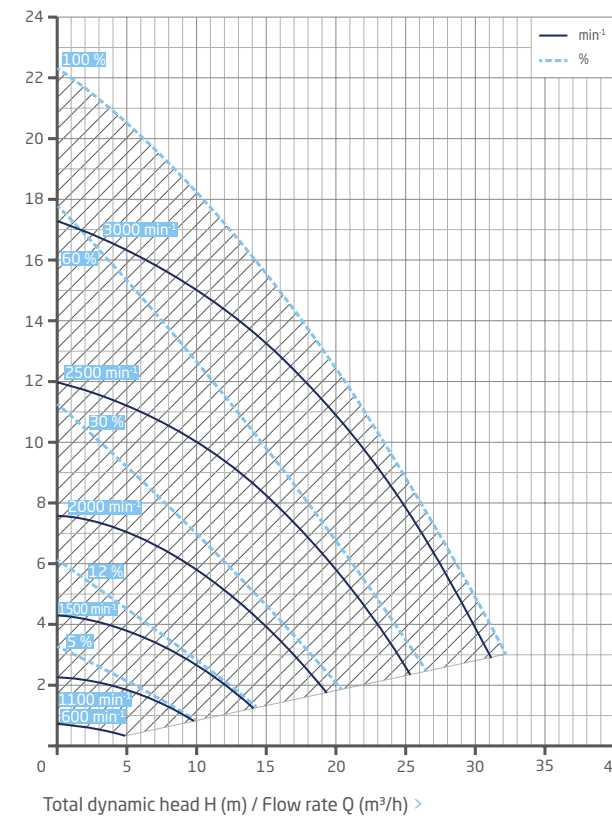
Universal opening device included in delivery. See page 132.



< Motor display with intuitive control



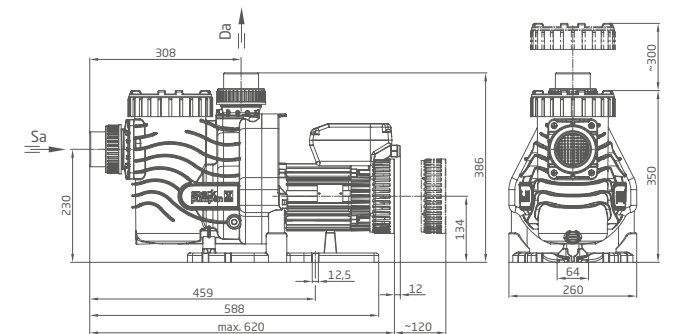
### Performance



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

### 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 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

Can be controlled using the BADU Eco Logic remote control.  
See page 118.

## 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>	Rp 2	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
Net weight (kg)	1~	12.00

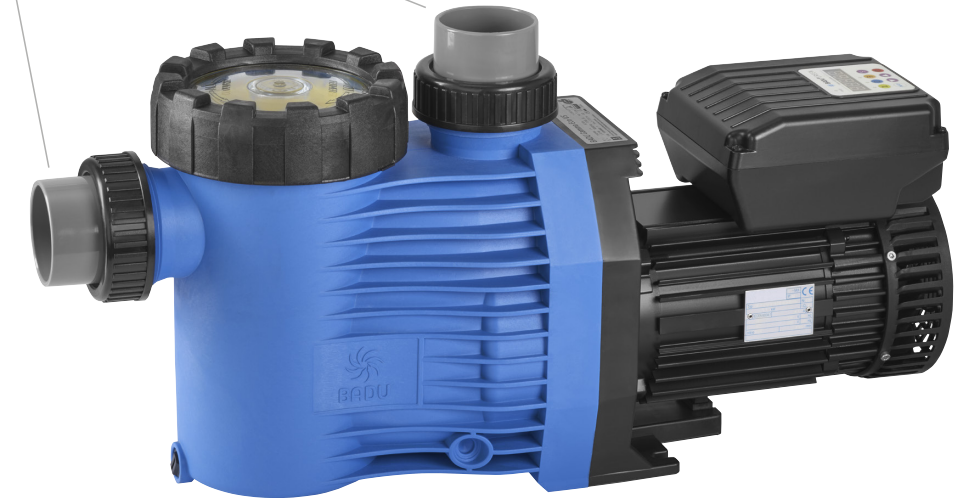
For more detailed information regarding the motor protection please see page 143.

Technical data may vary.

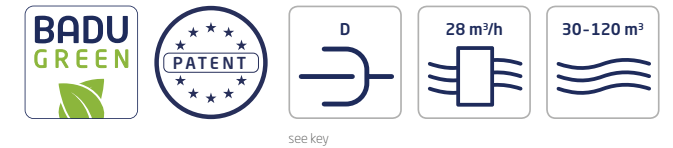
Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.5231.138	BADU Gamma Eco VS	1~ 230 V	1.10 kW	1,437.68 €	1,710.84 €

Universal opening device included in delivery. See page 132.

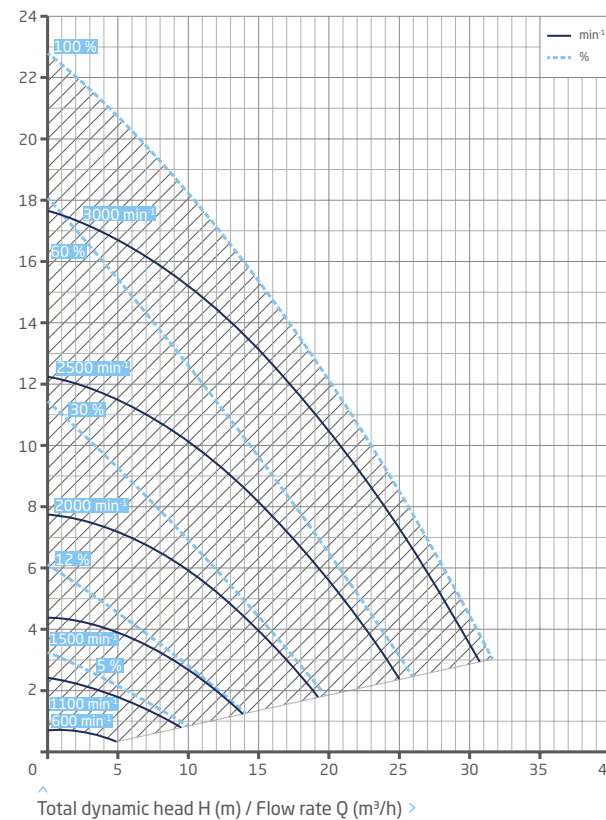
With inner and outer thread



< Motor display with intuitive control



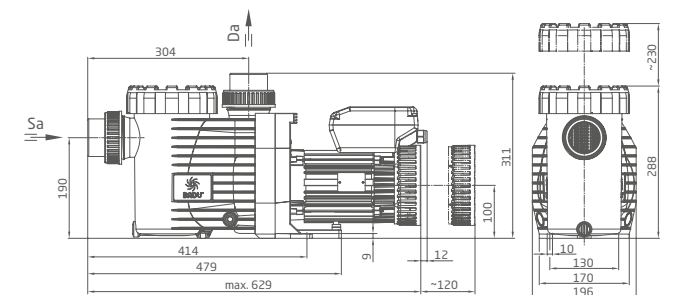
## Performance



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

## Dimensions

Detailed dimensions available on request or at badu.de



# BADU® Prime Eco VS



Exceptionally economical and exceptionally quiet.  
Intelligent circulation pump for discerning customers.

### 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  
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

Can be controlled using the BADU Eco Logic remote control.  
See page 118.

Technical data at 50/60 Hz	BADU Prime Eco 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
Net weight (kg)	1~	11.00

For more detailed information regarding the motor protection please see page 143.

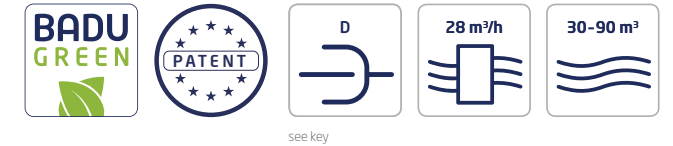
Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
219.0208.138	BADU Prime Eco VS	1~ 230 V	1.10 kW	1,322.63 €	1,573.93 €

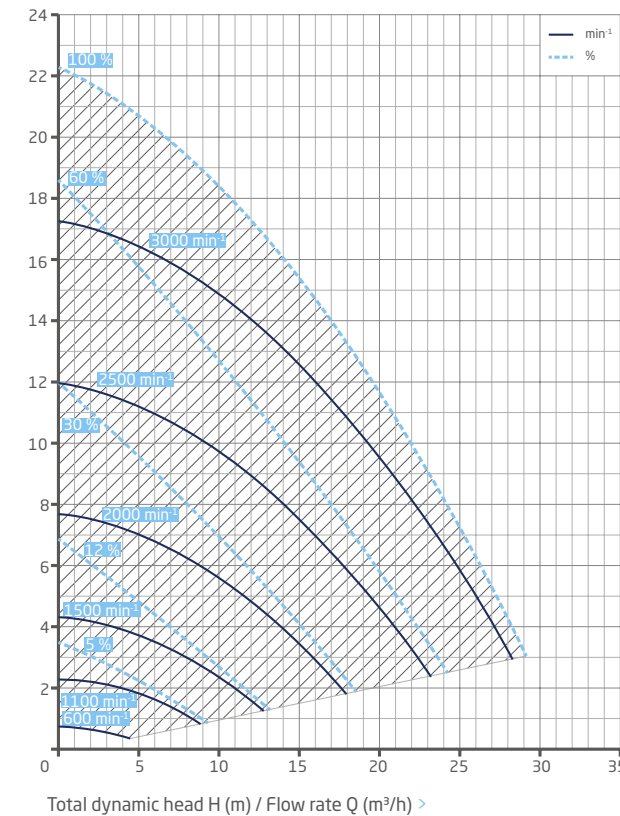
Universal opening device included in delivery. See page 132.



< Motor display with intuitive control



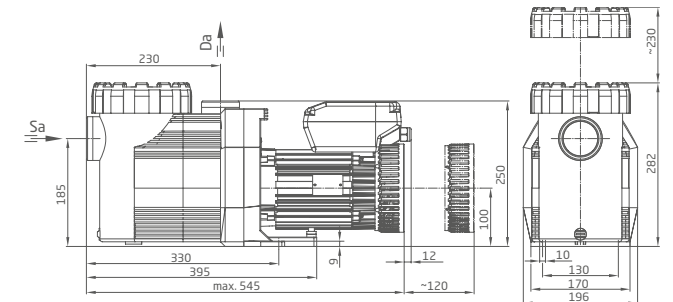
### Performance



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

### Dimensions

Detailed dimensions available on request or at badu.de



Circulation pumps, energy-saving

Circulation pumps, energy-saving

# BADU® Bronze Eco VS



Exceptionally economical, exceptionally quiet and made from bronze.  
Intelligent circulation pump for discerning customers.

### Field of application

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

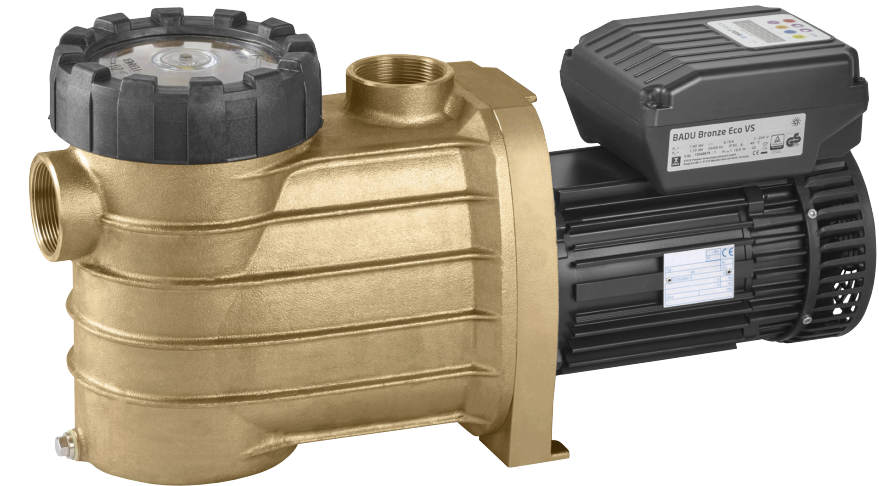
### Design

Monoblock-type pump with integrated strainer tank.  
The bellows-type mechanical seal is mounted on a plastic shaft protector sleeve. Heavy bronze housing, quiet running and high stability.  
Strainer capacity ..... approx. 3 l  
Strainer basket mesh size ..... approx. 3.2 x 2.6 mm

### Materials used

Pump casing ..... G-Cu Sn 10  
Housing cover ..... G-Cu Sn 10  
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

Can be controlled using the BADU Eco Logic remote control.  
See page 118.



< Motor display with intuitive control

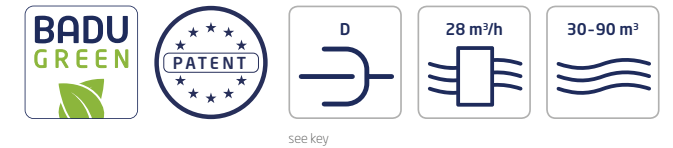
Technical data at 50/60 Hz	BADU Bronze Eco VS	
Inlet Sa/outlet connection Da Rp <sup>2)</sup>	2/2	
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>	63/63	
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.03-1.40/0.01-1.10
Rated current (A)	1~ 230 V	0.50-6.10
Net weight (kg)	1~	24.00

For more detailed information regarding the motor protection please see page 143.

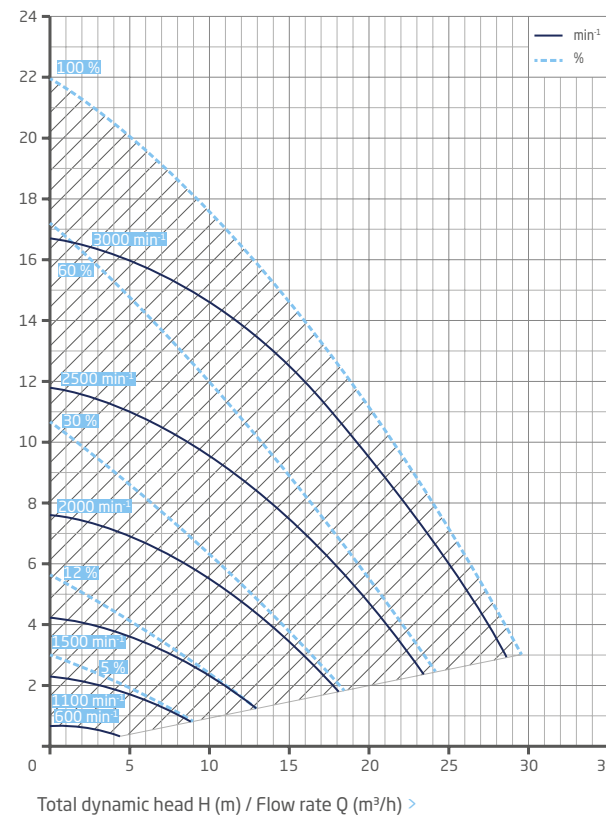
Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>7)</sup>
210.1022.138	BADU Bronze Eco VS	1~ 230 V	1.10 kW	2,332.00 €	2,775.08 €

Universal opening device included in delivery. See page 132.



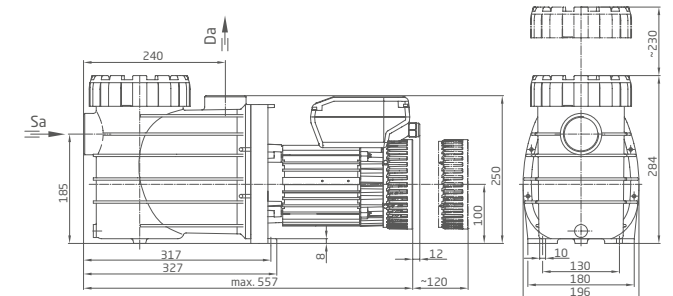
### Performance



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

### Dimensions

Detailed dimensions available on request or at badu.de



Circulation pumps, energy-saving

Circulation pumps, energy-saving



# 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 below-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 Eco Logic pump remote control.  
See page 118.

## 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	
Net weight (kg)	1~	14.00	

For more detailed information regarding the motor protection please see page 143.

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	1,487.96 €	1,770.67 €

Universal opening device included in delivery. See page 132.



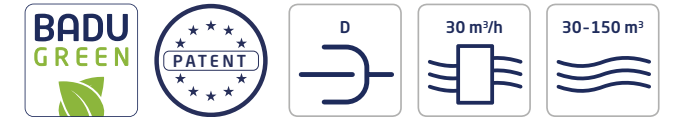
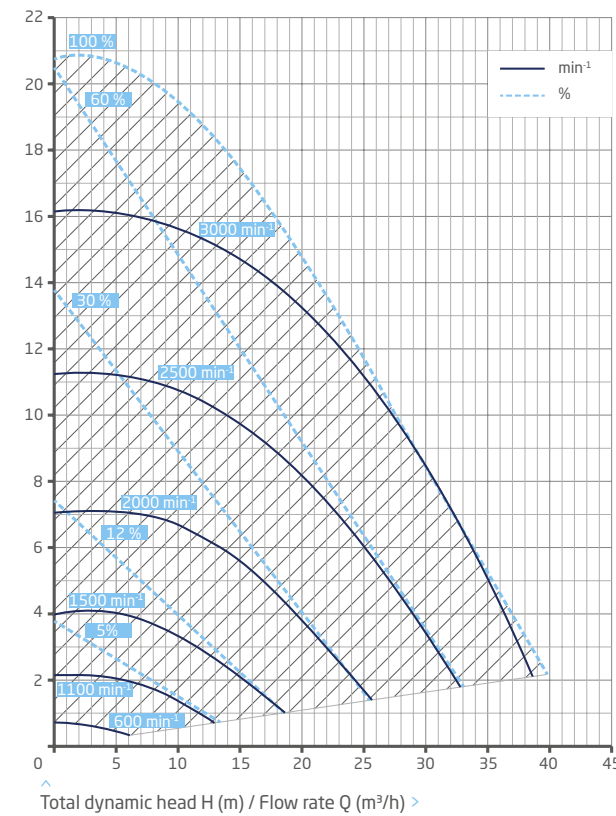
Transparent lid with integrated LED lighting



Impeller fan and guard for reduced operating noise



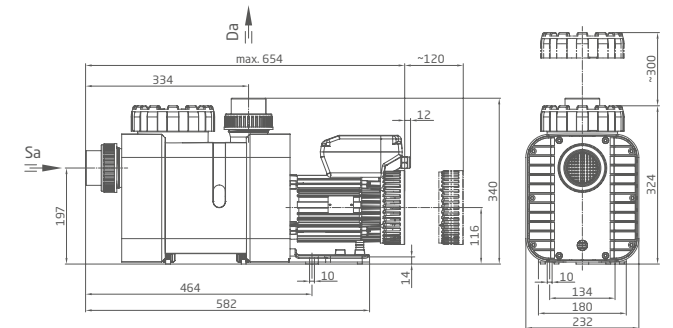
## Performance



see key

## 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

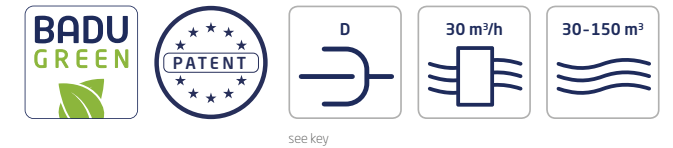
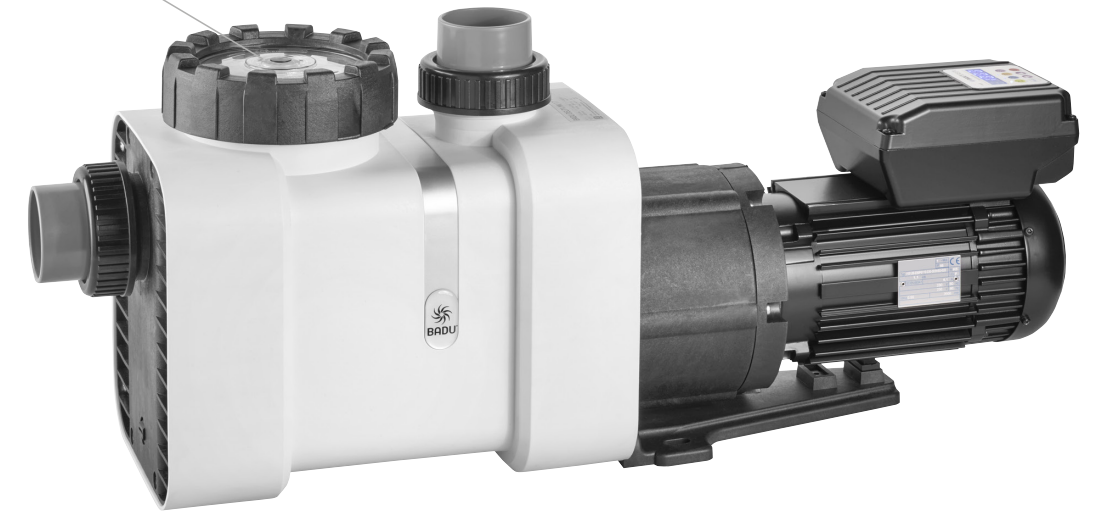
Can be controlled with the BADU Eco Logic pump remote control.  
See page 118.

### 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



Transparent lid with integrated LED lighting



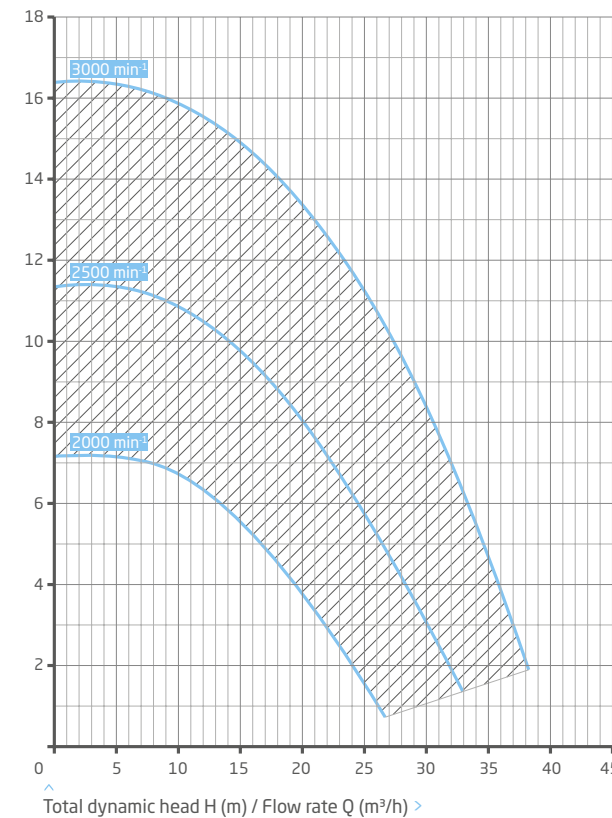
Technical data at 50/60 Hz	BADU Delta-MK Eco VS	
Inlet Sa/outlet connection Da <sup>4)</sup>	63/63	
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>	63/63	
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.48-1.80/0.37-1.40
Rated current (A)	1~ 230 V	2.15-7.80 <sup>1)</sup>
Net weight (kg)	1~	19.00

For more detailed information regarding the motor protection please see page 143. <sup>1)</sup>At speed n = 2000-3000 rpm | Technical data may vary.

Article no	Description	Voltage	Power output P <sub>2</sub>	Net RRP	Gross RRP <sup>2)</sup>
210.3281.438	BADU Delta-MK Eco VS	1~ 230 V	1.40 kW	1,815.72 €	2,160.71 €

Universal opening device included in delivery. See page 132.

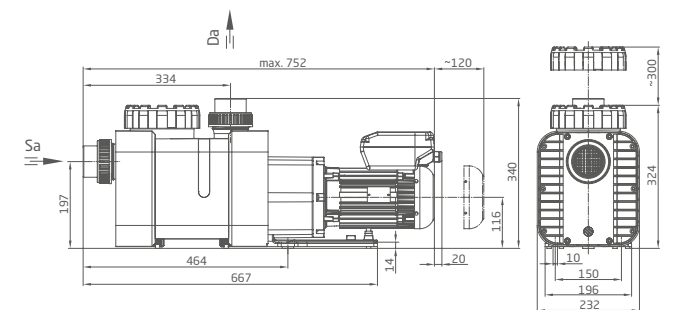
### Performance



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

### 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 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

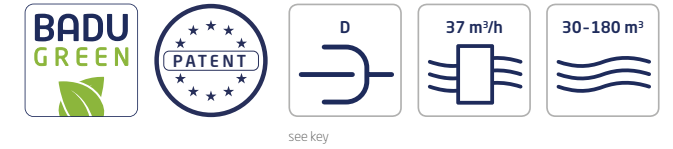
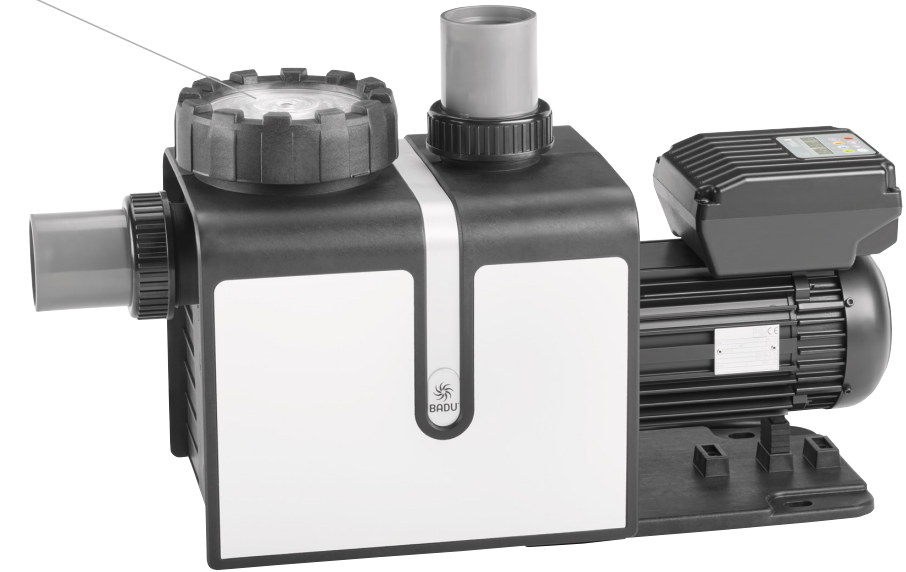
Can be controlled with the BADU Eco Logic pump remote control.  
See page 118.

### Materials used

Pump housing ..... PP GF 30  
Intermediate housing ..... PP GF 30  
Gland housing ..... PP GF 30  
Volute casing ..... 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



Transparent lid with integrated LED lighting



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
Net weight (kg)	1~	17.00

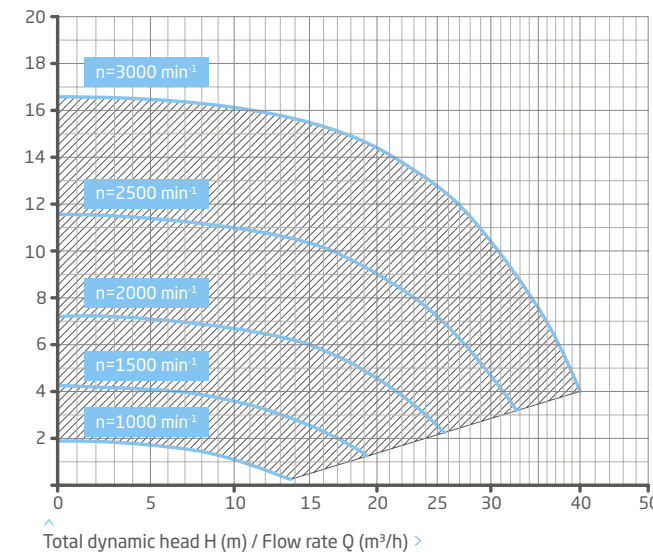
For more detailed information regarding the motor protection please see page 143.

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	1,426.09 €	1,697.05 €

Universal opening device included in delivery. See page 132.

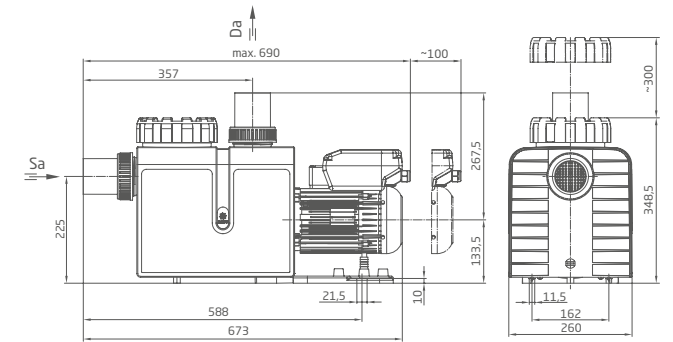
### Performance



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

### Dimensions

Detailed dimensions available on request or at badu.de



BADU Profi pumps are only available to buy from qualified swimming pool retailers...  
Call us on +49 9123 949-400

# 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 Eco Logic pump remote control.  
See page 118.

### 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
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 50/60 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 <sup>1)</sup>
Net weight (kg)	1~	21.00

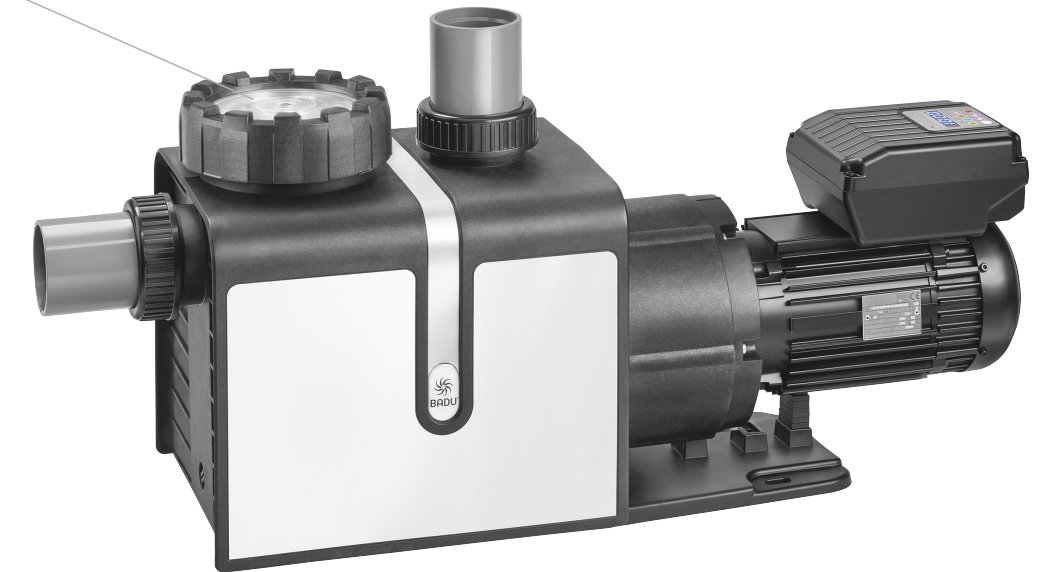
For more detailed information regarding the motor protection please see page 143. <sup>1)</sup>At speed n = 2000-3000 rpm | Technical data may vary.

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	1,955.91 €	2,327.53 €

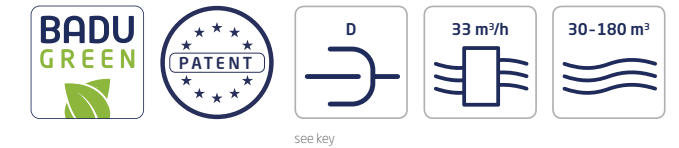
Universal opening device included in delivery. See page 132.



Transparent lid with integrated LED lighting

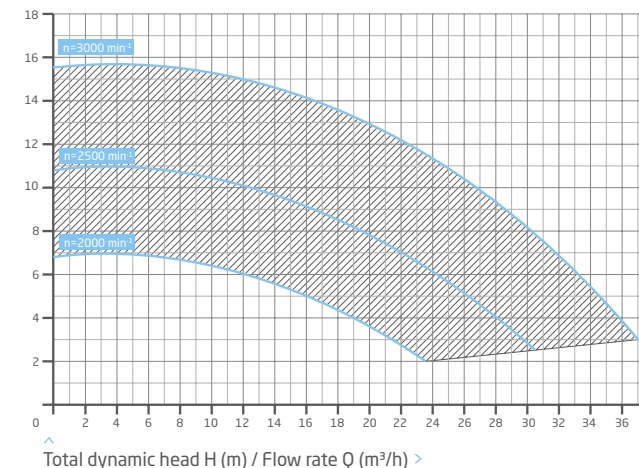
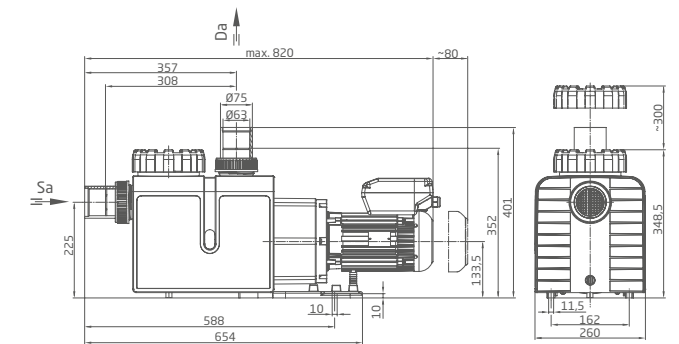


### Performance



### Dimensions

Detailed dimensions available on request or at badu.de



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

BADU Profi pumps are only available to buy from qualified swimming pool retailers...  
Call us on +49 9123 949-400

# 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 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 50/60 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	
Net weight (kg)	1~	24.50	

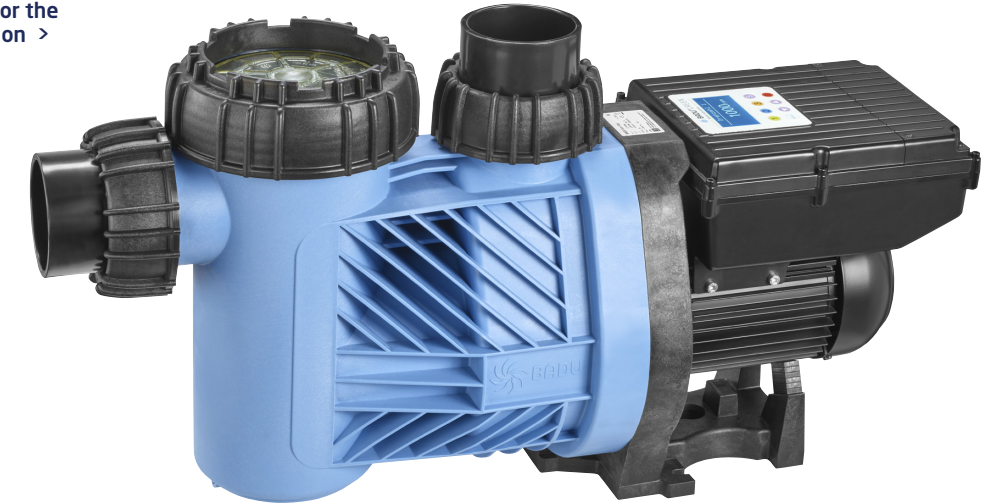
For more detailed information regarding the motor protection please see page 143.

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	1,752.88 €	2,085.93 €

Three-way opening device included in delivery. See page 132.

Replacement for the BADU Eco Motion >

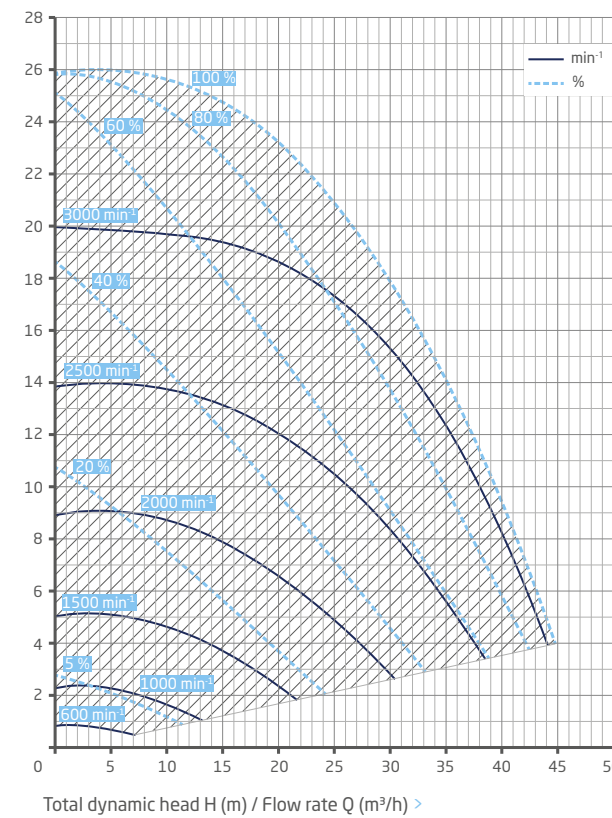


< Motor display with intuitive control



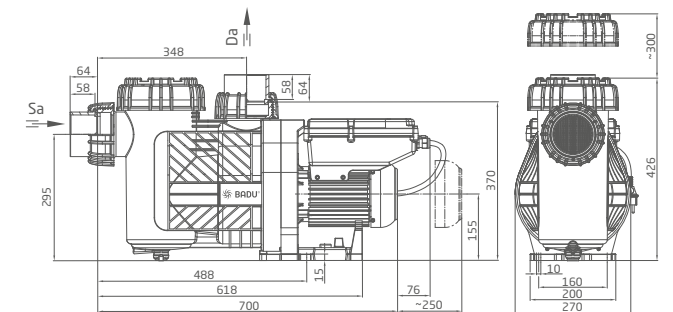
see key

### Performance



### 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 90 m³/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



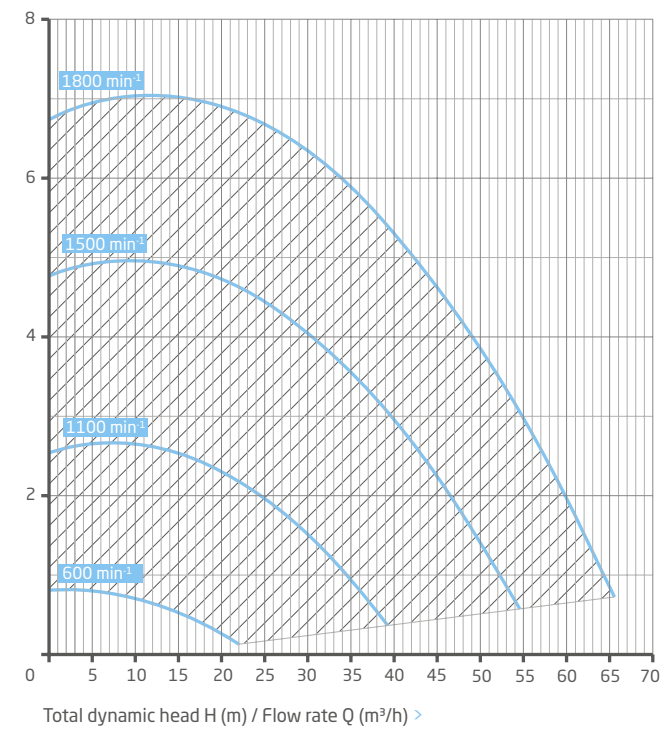
Technische Daten bei 50/60 Hz	BADU Variostar	
Inlet Sa/outlet connection Da Rp <sup>2)</sup>	90/90	
Rec. inlet/outlet pipe, PVC pipe, d <sup>4)</sup>	110/110	
Power input P <sub>1</sub> /output P <sub>2</sub> <sup>1)</sup> (kW)	1~ 230 V	0.07-1.15/0.03-0.85
Rated current (A)	1~ 230 V	0.60-4.95
Net weight (kg)	1~	11.00

For more detailed information regarding the motor protection please see page 143.

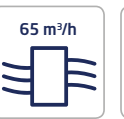
Technical data may vary.

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	2,101.90 €	2,501.26 €

### Performance

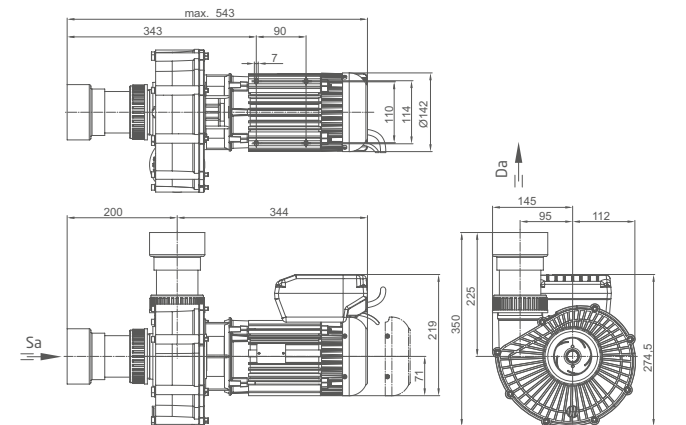


see key



### Dimensions

Detailed dimensions available on request or at badu.de



# 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 Eco VS
Flow rate Q max. (m³/h)		20	26	30	30	28
Power input P <sub>1</sub> (kW)		0,04-0,75	0,06-1,10	0,03-1,40	0,03-1,40	0,03-1,40
Power output P <sub>2</sub> (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	D, A	D	D	D
Motor performance P (%)		5-100	5-100	5-100	5-100	5-100
Motor speed n (rpm)		–	–	600-3000	600-3000	600-3000
Replacement alternative	BADU	Eco Soft	Gamma Eco VS	Gamma Eco VS	Delta Eco VS	Gamma Eco VS
GS symbol		●	●	●	●	●

\*) Special voltages on request.  
V - Union  
IG - Inner thread  
D - Digital potential-free  
A - Analogue 0-10 V and 4-20 mA  
R - RS485



Comparison parameters	Bronze Eco VS	Delta Eco VS	Delta-MK Eco VS	Profi Eco VS	Profi-MK Eco VS	Eco Flex	Variostar
Flow rate Q max. (m³/h)	28	37	37	38	37	45	65
Power input P <sub>1</sub> (kW)	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
Power output P <sub>2</sub> (kW)	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
Single phase 1~ 230 V*)	●	●	●	●	●	●	●
Three-phase 3~ 400/230 V*)	○	○	○	○	○	○	○
LED transparent lid	○	●	●	●	●	○	○
Lid opening device	●	●	●	●	●	●	○
Separable strainer basket	○	●	●	●	●	○	○
Glue socket d (mm)	–	63	63	75/63	75/63	90	90
Glue socket materials	–	PVC-U	PVC-U	PVC-U	PVC-U	ABS	ABS
Connection options	2" IG	V	V	V	V	V	V
Motor control	D	D	D	D	D	D, A, R	D, A
Motor performance P (%)	5-100	5-100	–	–	–	5-100	–
Motor speed n (rpm)	600-3000	600-3000	2000-3000	1000-3000	2000-3000	600-3000	600-1800
Replacement alternative	Prime Eco VS	Profi Eco VS	Profi MK Eco VS	Delta Eco VS	Delta-MK Eco VS	–	–
GS symbol	●	●	●	●	●	○	○

# Pool heating

Your pool is as beautiful as the water is warm.

The BADU BK heating system means you don't have to agonize 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 pool control, see pages 119. 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 chemi-cals 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 panel unit 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 pool with pool cover to avoid heat loss
- Bathing season from May to September
- Heat requirement during this time is 16,000 kWh

### Required panel surface

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

**Cost of a BADU BK swimming pool solar panel unit incl. assembly and control technology** ..... approx. 4,500.00 €

**Cost without a BADU BK swimming pool solar panel unit, using an oil heating unit** ..... approx. 1,600.00 € per year

The amortisation period for a BADU BK swimming pool solar panel unit is less than three years.

The example is based on basic oil heating charges of 0.85 €/l as well as panel positioning towards the south with a 60° horizontal inclination.

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

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

The total cost is an estimated 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.

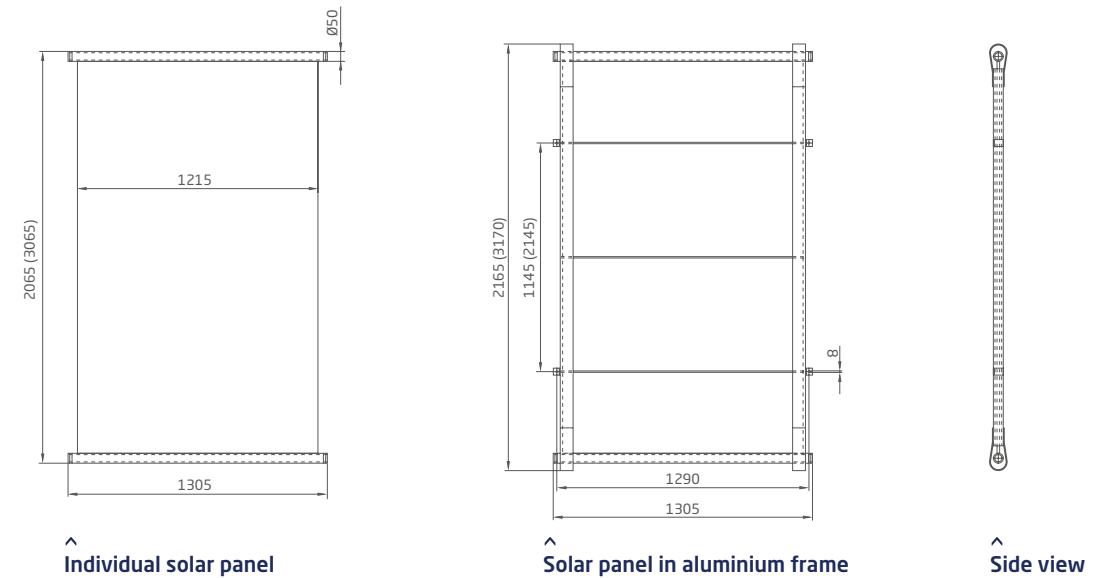
Technical data	BADU BK	370	370 R	250	250 R
Surface (m <sup>2</sup> )		3.70	3.70	2.50	2.50
Weight without water (kg)		9	17	7	12
Weight with water (kg)		19	27	13	18
Operating pressure (bar) max.		1.50	1.50	1.50	1.50
Flow rate (l/h)		1000	1000	750	750
Collector pipe with socket connection (mm)		50	50	50	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
Net weight (kg)		9.00	18.00	8.00	16.00

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

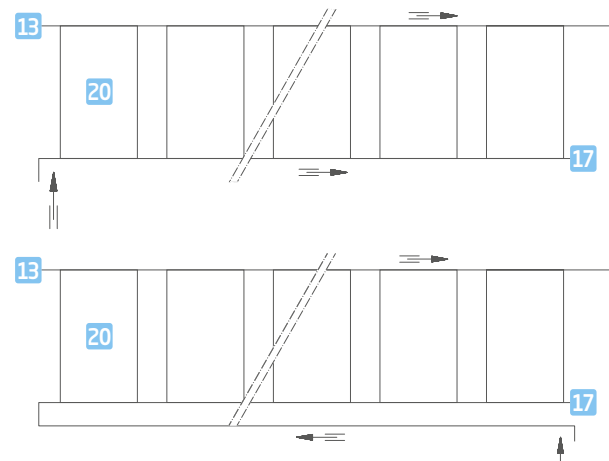
Article no	Description	Net RRP	Gross RRP <sup>(7)</sup>
250.2000.000	BADU BK 250 solar panel	356.89 €	424.70 €
250.4000.000	Aluminium frame for BADU BK 250	222.93 €	265.29 €
250.1000.000	BADU BK 370 solar panel	411.89 €	490.15 €
250.3000.000	Aluminium frame for BADU BK 370	257.93 €	306.94 €

**Dimensions** Dimensions in brackets for BADU BK 370. Possible dimensional tolerances ± 1 %.

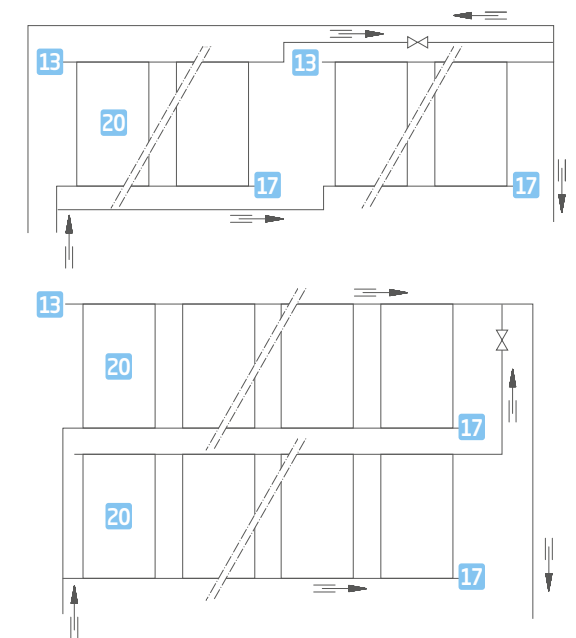
Detailed dimensions on request or at badu.de



### 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<sub>total</sub>)

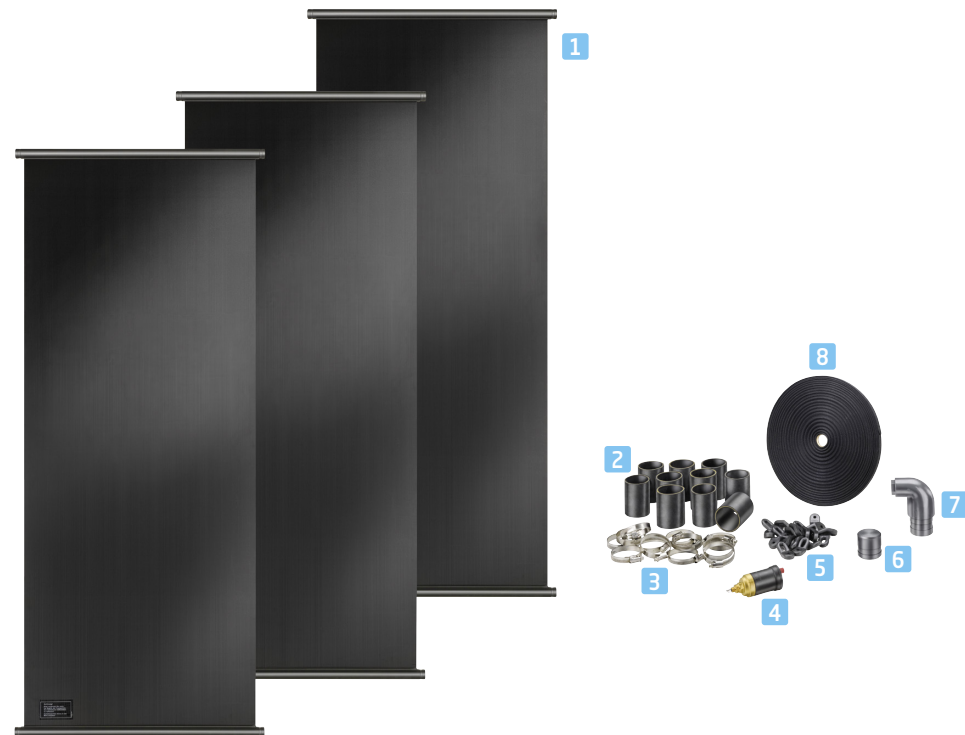
H<sub>total</sub> = Difference in height between the water level and the highest point of the panels plus the resistance inside the panels, pipes, fittings and other individual resistances (filter, backwash valve, nozzles etc).

- 20 BADU BK solar panel
- 17 End plug
- 13 Aeration and ventilation valve

For BADU BK solar panel accessories please see page 129.

# 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.

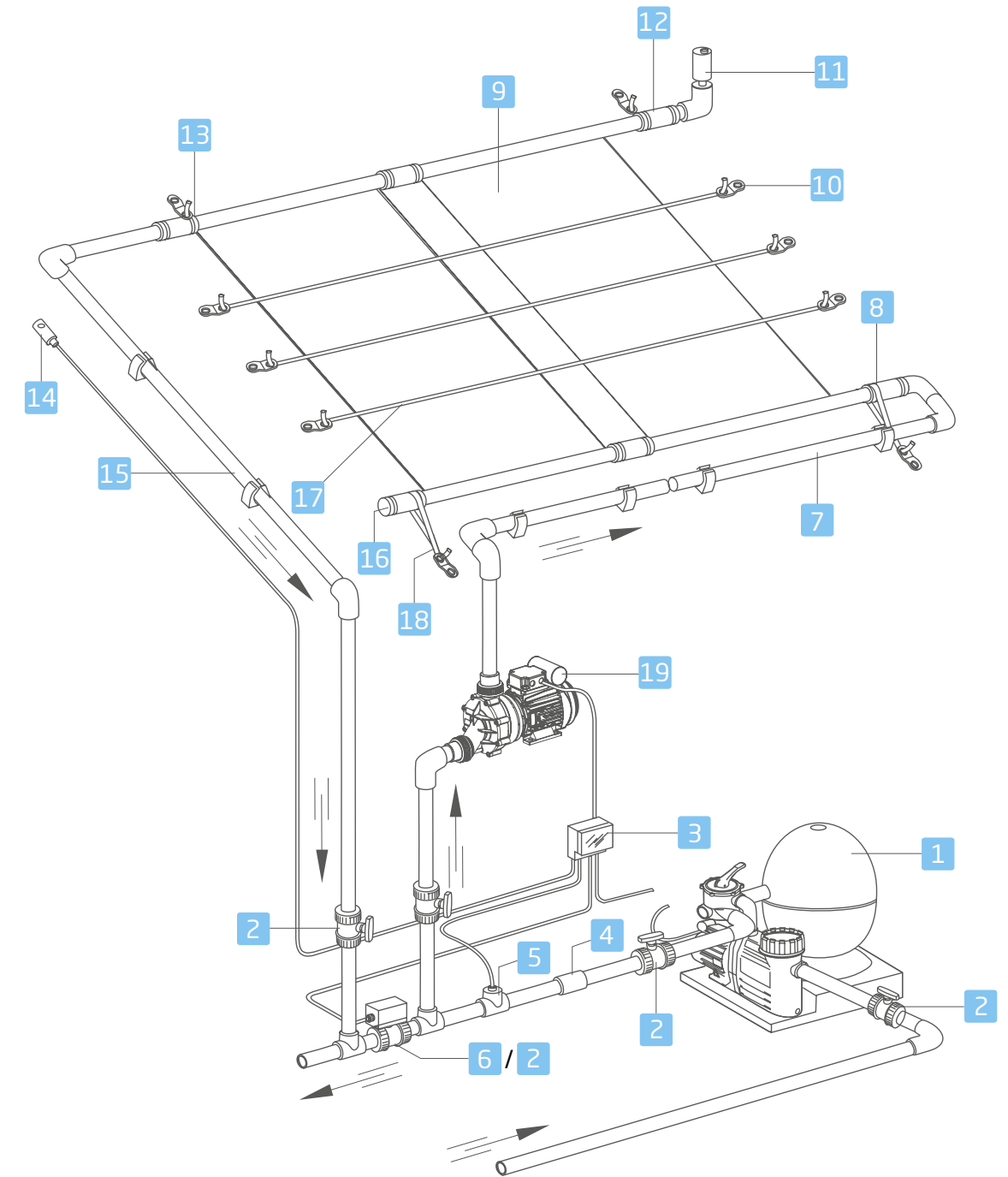
- 1 Solar panel BADU BK 250 or BADU BK 370
- 2 Panel connectors
- 3 Hose clamps
- 4 Vent unit R ¾
- 5 Plastic double eyelet
- 6 End plugs
- 7 Elbow for vent unit
- 8 Polyester tape

Article no	Description	Net RRP	Gross RRP <sup>*)</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 information and dimensions available on request or at badu.de



- 1 Filter unit with pump
- 2 Ball valve
- 3 BADU Logic pool control, optional
- 4 Non-return valve
- 5 Sensor for water temperature with T-fitting
- 6 Actuator or ball valve
- 7 Feed pipe
- 8 Inlet - BADU BK solar panel unit
- 9 BADU BK solar panel
- 10 Double eyelet
- 11 Vent unit
- 12 Panel connectors
- 13 Outlet - BADU BK solar panel unit
- 14 Air temperature sensor
- 15 Return pipe
- 16 End plug
- 17 Long polyester tape
- 18 Short polyester tape
- 19 Additional pump, optional



**SPECK X**  
pumpen

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