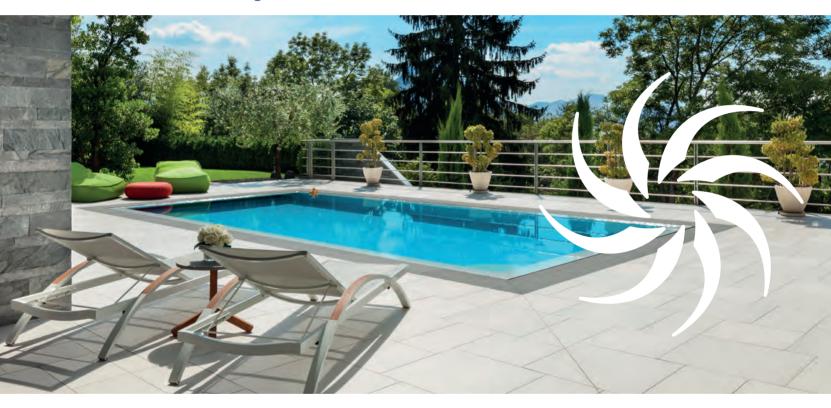
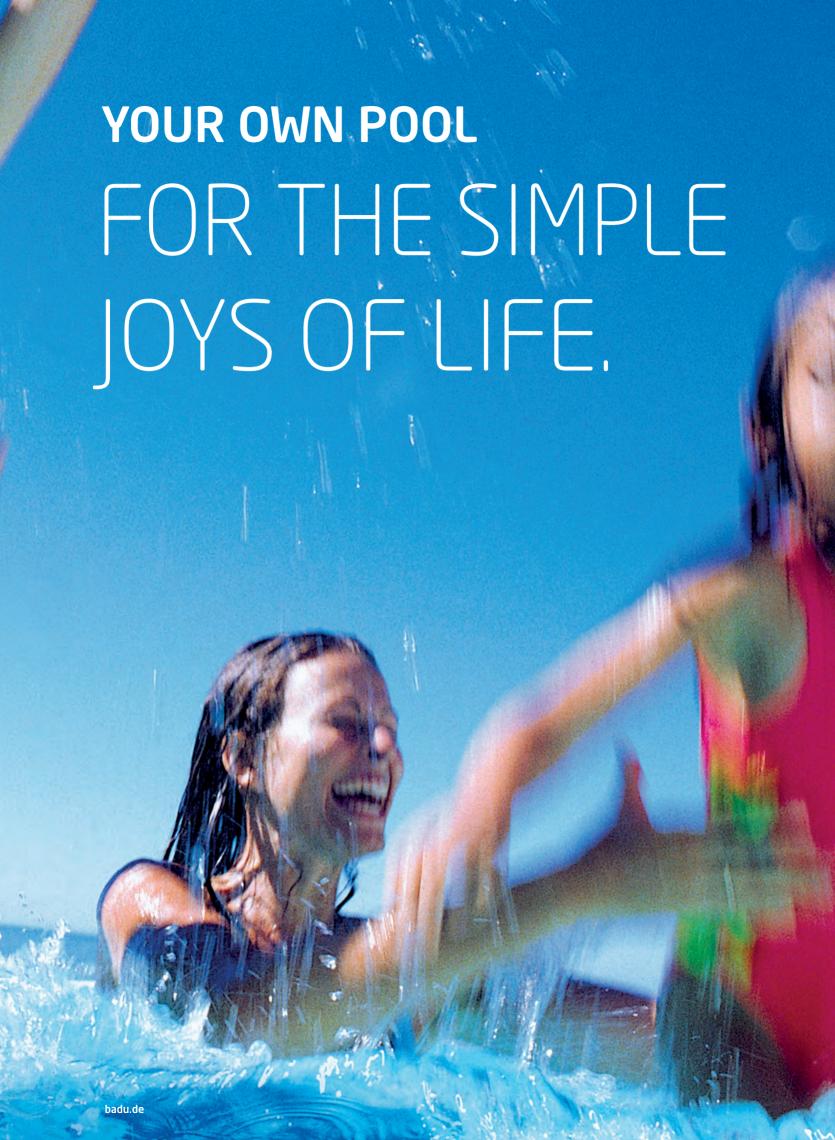


Pool technologies and solutions...



swimming pool **private > premium**



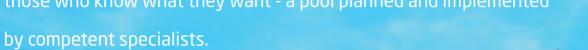


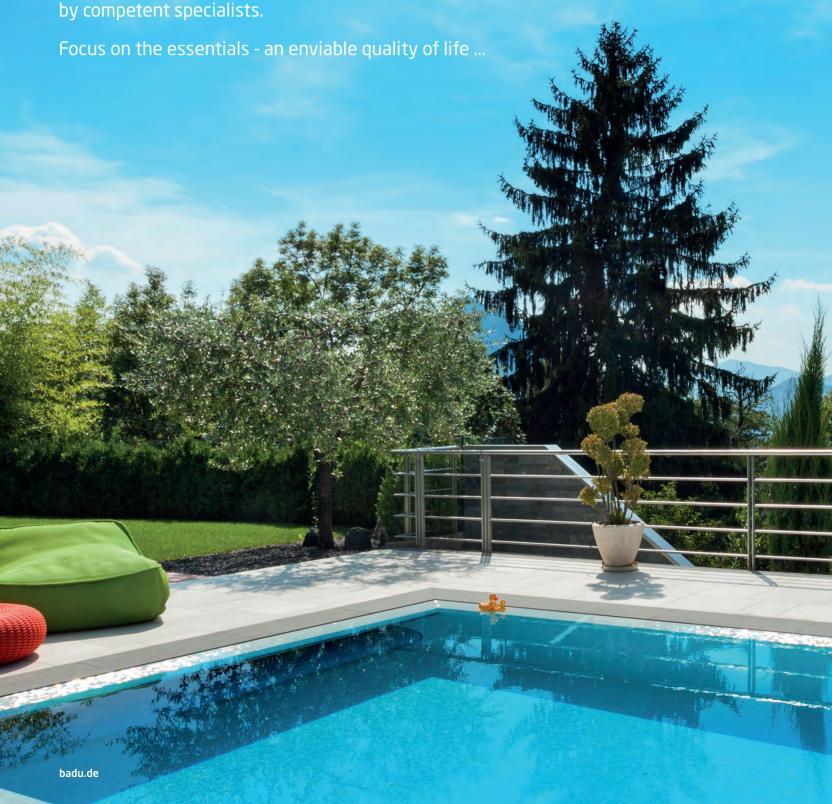
HELLO

Finally your own pool. Enjoy the sun.

Leave your troubles behind. Relax in refreshingly cool water.

BADU PREMIUM offers powerful, high-quality products for the highest demands. For those who know what they want - a pool planned and implemented





CONTENTS



POOL TECHNOLOGY	8
OPERATION	114
ACCESSORIES	136
SERVICE	146

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, 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.



WARRANTY

The two year warranty applies to every BADU product. Should anything not function as intended, simply contact BADU customer services. We will be happy to help you competently, unbureaucratically and efficiently. For more details please visit badu.de.

BADU GREEN

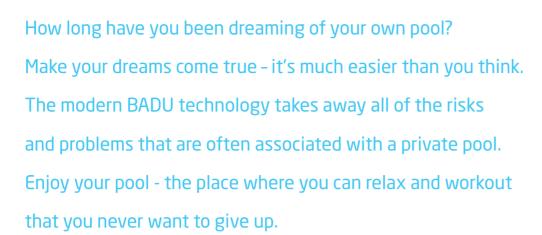
Enjoy your pool with a clear conscience whilst saving energy and protecting the environment.

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.



BADUJET Primavera Deluxe Submerged counter swim unit made completely from stainless steel. Page 100







HOW A POOL WORKS

The heart of your pool is the circulation pump (1). It generates a water cycle for fresh and hygenic 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. A 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

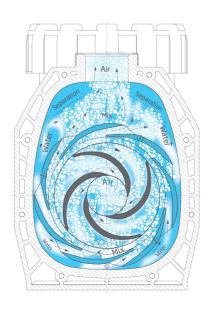
- Circulation pump
- 2 Filter (all manufacturers and brands)
- 3 Valve
- 4 Solar panel
- 5 Overhang counter swim unit
- 6 Submerged counter swim unit

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 Prime, self-priming, centrifugal pump.

BADU NEW



BADU Delta Eco VS
Page 18



BADU Gamma Page 30



BADU Alpha Eco Soft Page 48

BADU BESTSELLERS



BADU Prime
Page 32



BADU Resort Page 40



BADUJET Primavera Page 98



POOL TECHNOLOGY

BADU Delta . BADU Profi circulation pumps, self-priming	10
Circulation pumps, self-priming	24
BADU GREEN circulation pumps, self-priming	46
Circulation pumps, non-self-priming	62
Circulation pumps, lantern version	90
Counter swim units	92
Pool heating	108

Pump series for experts. Circulation pumps, self-priming

Self-priming circulation pumps from the BADU Profi and BADU Delta

series have a very clear claim: they are the best, without compromise.

Their phenomenal quality and technical standards require

specialist knowledge during planning and installation.

Available from qualified swimming pool retailers.

Product overview





NEW

BADU Delta

Performance: 8-28 m³/h Pool size: 30-150 m³

Page 12



BADU Profi

Performance: 22-48 m³/h Pool size: 90-210 m³

Page 14



BADU Profi-MK

Performance: 18-44 m³/h Pool size: 90-210 m³

Page 16



NICI.

BADU Delta Eco VS

Performance: 30 m³/h Pool size: 30-150 m³

Page 18



BADU Profi Eco VS

Performance: 37 m³/h Pool size: 30-180 m³

Page 20



BADU Profi-MK Eco VS

Performance: 33 m³/h Pool size: 30-180 m³

Page 22



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

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° Delta

New high-class standard in the BADU Profi series. Wider performance range. Exclusive for specialist retailers.

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

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

Technical data at 50 Hz	BADU Delta	9	13	17	22	28
Inlet Sa/outlet connection Da d ⁴⁾		50/50	50/50	63/63	63/63	63/63
Rec. inlet/outlet pipe, PVC pipe, d4)		50/50	50/50	63/50	63/63	63/63
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.50/0.30	0.69/0.45	0.87/0.55	1.10/0.75	1.40/1.00
Rated current (A)	1~ 230 V	2.40	3.00	4.00	5.20	6.70
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	0.44/0.30	0.63/0.45	0.75/0.55	0.93/0.75	1.26/1.00
Rated current (A)	3~ Y/∆ 400/230 V	0.95/1.65	1.25/2.15	1.55/2.70	1.95/3.40	2.25/3.90

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
210.3070.038	BADU Delta 9	1~ 230 V	0.30 kW	587.39 € 699.00 €
210.3120.038	BADU Delta 13	1~ 230 V	0.45 kW	609.24 € 725.00 €
210.3170.038	BADU Delta 17	1~ 230 V	0.55 kW	629.41 € 749.00 €
210.3220.038	BADU Delta 22	1~ 230 V	0.75 kW	738.66 € 879.00 €
210.3280.038	BADU Delta 28	1~ 230 V	1.00 kW	915.13 € 1,089.00 €
210.3070.037	BADU Delta 9	3~ Y/∆ 400/230 V	0.30 kW	587.39 € 699.00 €
210.3120.037	BADU Delta 13	3~ Y/∆ 400/230 V	0.45 kW	609.24 € 725.00 €
210.3170.037	BADU Delta 17	3~ Y/∆ 400/230 V	0.55 kW	629.41 € 749.00 €
210.3220.037	BADU Delta 22	3~ Y/∆ 400/230 V	0.75 kW	738.66 € 879.00 €
210.3280.037	BADU Delta 28	3~ Y/∆ 400/230 V	1.00 kW	915.13 € 1,089.00 €

Universal opening device included in delivery. See page 142.

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







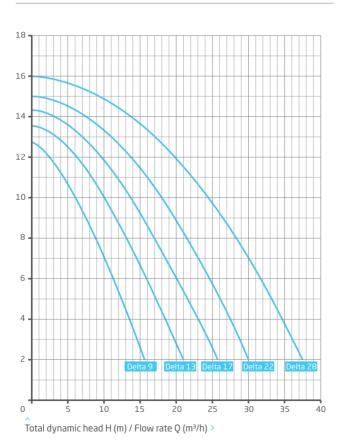




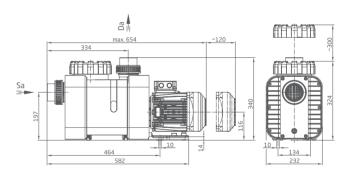
Pending approval







Dimensions



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

Technical data at 50 Hz	BADU Profi	22	26	32	38	48
Inlet Sa/outlet connection Da $\mathrm{D}_{\mathrm{outer}}$. $\mathrm{D}_{\mathrm{inner}}^{4)}$		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, d4)		63/63	63/63	75/75	90/90	90/90
Power input P ₁ /output P ₂ ¹⁾ (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 ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 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/∆ 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 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
210.2220.038	BADU Profi 22	1~ 230 V	0.75 kW	725.21 € 863.00 €
210.2260.038	BADU Profi 26	1~ 230 V	1.00 kW	897.48 € 1.068.00 €
210.2320.038	BADU Profi 32	1~ 230 V	1.30 kW	1,012.61 € 1.205.00 €
210.2380.038	BADU Profi 38	1~ 230 V	1.80 kW	1,110.08 € 1.321.00 €
210.2480.038	BADU Profi 48	1~ 230 V	2.20 kW	1,280.67 € 1.524.00 €
210.2220.037	BADU Profi 22	3~ Y/∆ 400/230 V	0.75 kW	725.21 € 863.00 €
210.2260.037	BADU Profi 26	3~ Y/∆ 400/230 V	1.00 kW	897.48 € 1.068.00 €
210.2320.037	BADU Profi 32	3~ Y/∆ 400/230 V	1.30 kW	1,012.61 € 1.205.00 €
210.2380.037	BADU Profi 38	3~ Y/∆ 400/230 V	1.80 kW	1,110.08 € 1.321.00 €
210.2480.037	BADU Profi 48	3~ Y/∆ 400/230 V	2.20 kW	1,280.67 € 1.524.00 €

Universal opening device included in delivery. See page 142.

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







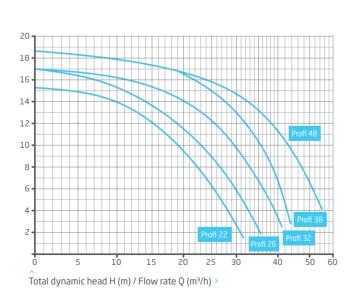


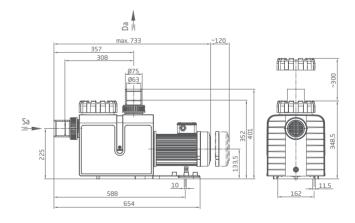












BADU® Profi-MK

First 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 the water

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 I 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	PP GF 30
Gland housing	PP GF 30
Lid for gland houisng	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
LidPC, trans	
Slide bearing	SiC/SiC
Screws	
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 _{outer} . D _{inner}	1)	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, d4)		63/63	63/63	75/75	90/90	90/90
Power input P ₁ /output P ₂ ¹⁾ (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 ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 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/∆ 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 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
210.2220.238	BADU Profi-MK 18	1~ 230 V	0.75 kW	1,021.01 € 1,215.00 €
210.2260.238	BADU Profi-MK 22	1~ 230 V	1.00 kW	1,060.50 € 1,262.00 €
210.2320.238	BADU Profi-MK 28	1~ 230 V	1.30 kW	1,126.89 € 1,341.00 €
210.2380.238	BADU Profi-MK 34	1~ 230 V	1.80 kW	1,152.10 € 1,371.00 €
210.2480.238	BADU Profi-MK 44	1~ 230 V	2.20 kW	1,403.36 € 1,670.00 €
210.2220.237	BADU Profi-MK 18	3~ Y/∆ 400/230 V	0.75 kW	1,021.01 € 1,215.00 €
210.2260.237	BADU Profi-MK 22	3~ Y/∆ 400/230 V	1.00 kW	1,060.50 € 1,262.00 €
210.2320.237	BADU Profi-MK 28	3~ Y/∆ 400/230 V	1.30 kW	1,126.89 € 1,341.00 €
210.2380.237	BADU Profi-MK 34	3~ Y/∆ 400/230 V	1.80 kW	1,152.10 € 1,371.00 €
210.2480.237	BADU Profi-MK 44	3~ Y/∆ 400/230 V	2.20 kW	1,403.36 € 1,670.00 €

Universal opening device included in delivery. See page 142.

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







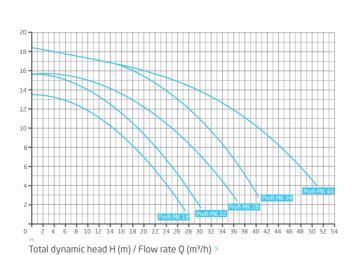


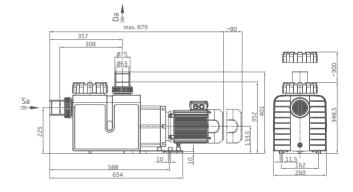






Dimensions





BADU° Delta Eco VS

New high-class standard with variable speed motor. Wider performance range. Exclusive for specialist retailers.

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

Can be controlled with the BADU Eco Logic pump remote control. See page 122.

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

Technical data at 50/60 Hz	BADU Delta Eco VS	
Inlet Sa/outlet connection Da D _{outer} . D _{inner} ⁴⁾		63/63
Rec. inlet/outlet pipe, PVC pipe, d4)		63/63
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.08-1.40/0.03-1.10
Rated current (A)	1~ 230 V	0.60-6.10

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
210.3281.138	BADU Delta Eco VS	1~ 230 V	1.10 kW	1,226.05 € 1,459.00 €

Universal opening device included in delivery. See page 142.

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



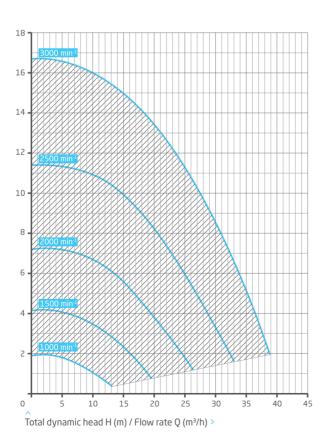




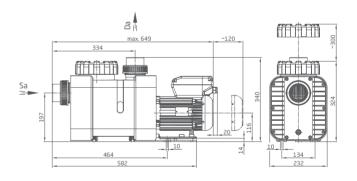








Dimensions



BADU° Profi Eco VS

Exclusive premium pump with maximum energy efficieny. 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

Can be controlled with the BADU Eco Logic pump remote control. See page 122.

Materials used

PP GF 30
PP GF 30
PP GF 30
PP
PA 66 GF 30
PP GF 30
PP
insparent/PA 66 GF 30
carbon/ceramic/NBR
stainless steel
PVC-U

Technical data at 50/60 Hz	BADU Profi Eco VS	
Inlet Sa/outlet connection Da D _{outer} . D _{inner} 4)		75/75 . 63/63
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		75/75
Power input P_1 /output $P_2^{(1)}$ (kW) 1~ 230 V		0.09-1.80/0.05-1.40
Rated current (A)	1~ 230 V	0.65-7.80

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
210.2321.138	BADU Profi Eco VS	1~ 230 V	1.40 kW	1,175.63 €	1,399.00€

Universal opening device included in delivery. See page 142.

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





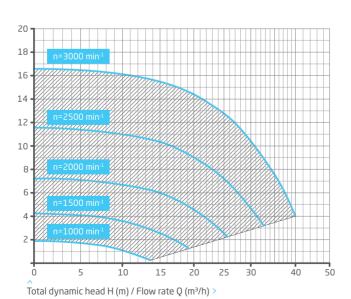


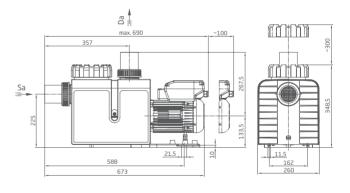






Dimensions





BADU° Profi-MK Eco VS

First sealless pump for the pool. With variable speed control.

Field of application

plete electrical separation.

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

Design

Monoblock-type pump with integrated strainer tank.

Motor/pump shaft has no contact with the pool water providing com-

Strainer tank capacity approx. 4 I Strainer basket mesh size approx. 3.2 x 2.6 mm

Can be controlled with the BADU Eco Logic pump remote control. See page 122.

Materials used

Pump housing PP GF	30
Intermediate housing PP GF	30
Gland housing PP GF	
Lid for gland housing	PΡ
Can PP GF	30
Intermediate flange PP GF	30
Volute casing	PΡ
Diffuser PA 66 GF	30
Impeller PP GF	30
Strainer basket	PΡ
LidPC, transparent/PA 66 GF	
Slide bearing	SiC
Screws stainless ste	
ElastomersNI	BR
Glue sockets PVC	:-U

Technical data at 50/60 Hz	BADU Profi-MK Eco VS	
Inlet Sa/outlet connection Da D _{outer} . D _{inner} ⁴⁾		75/75 . 63/63
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		75/75
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.28-1.80/0.24-1.40
Rated current (A)	1~ 230 V	1.34-7.80°)

For more detailed information regarding the motor protection please see page 155.

*) At speed n = 2000-3000 rpm

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
210.2321.438	BADU Profi-MK Eco VS	1~ 230 V	1.40 kW	1,611.76 € 1,918.00 €

Universal opening device included in delivery. See page 142.

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









www.tuv.com ID 0000021507

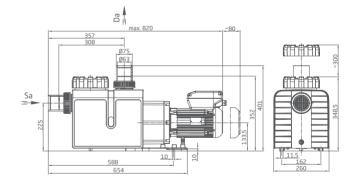
Performance

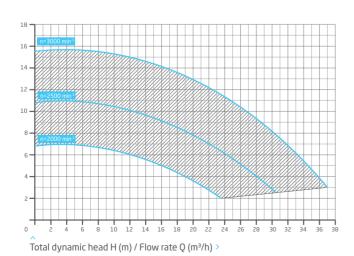






Dimensions





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 49 performance varieties, these BADU PREMIUM pumps are suitable for pool volumes of up to 500 m³.

Product overview





NEW

BADU Alpha

Performance: 4-11 m³/h Pool size: 10-60 m³

Page 26



BADU Magna

Performance: 8-14 m³/h Pool size: 30-90 m³

Page 28



INCV

BADU Gamma

Performance: 7-32 m³/h Pool size: 30-150 m³

Page 30



BESTSELLER

BADU Prime

Performance: 7-20 m³/h Pool size: 30-120 m³

Page 32



BADU Prime

Performance: 25-48 m³/h Pool size: 90-210 m³

Page 34



BADU EasyFit/connection sets

Performance: 9-45 m³/h Pool size: 30-210 m³

Page 36



BESTSELLER

BADU Resort

Performance: 30-110 m³/h Pool size: 120-500 m³

Page 40



BADU Bronze

Performance: 7-30 m³/h Pool size: 30-150 m³

Page 42



BADU 93

Performance: 30-110 m³/h Pool size: 120-500 m³

Page 44

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[®] 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

Materials used

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

Technical data at 50 Hz	BADU Alpa	6	8	10	12
Inlet Sa/outlet connection Da	Special union with glue s	ocket d = 50 or hose adapter	for 1¼" and/or 1½" hose	included in delivery.	
Rec. inlet/outlet pipe, PVC pipe, d4)		50/50	50/50	50/50	50/50
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.34/0.18	0.40/0.25	0.60/0.40	0.65/0.45
Rated current (A)	1~ 230 V	1.70	2.00	2.70	3.20

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
210.4060.038	BADU Alpha 6	1~ 230 V	0.18 kW	331.93€	395.00 €
210.4080.038	BADU Alpha 8	1~ 230 V	0.25 kW	343.70 €	409.00 €
210.4100.038	BADU Alpha 10	1~ 230 V	0.40 kW	357.14€	425.00 €
210.4120.038	BADU Alpha 12	1~ 230 V	0.45 kW	368.91€	439.00 €







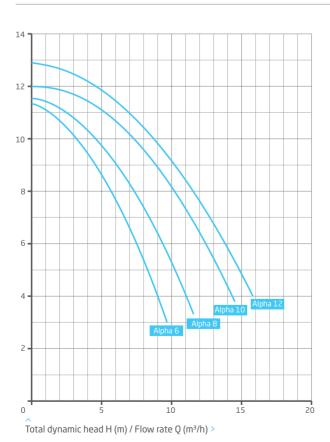


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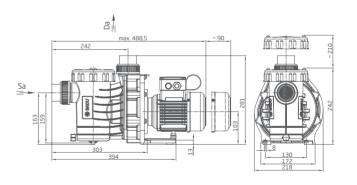
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Dimensions



BADU[®] 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

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

Technical data at 50 Hz	BADU Magna	8	12	14
Inlet Sa/outlet connection Da Rp ²⁾		2/1½	2/1½	2/1½
Rec. inlet/outlet pipe, PVC pipe, d4)		50/50	50/50	63/50
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.50/0.30	0.65/0.45	0.97/0.65
Rated current (A)	1~ 230 V	2.60	3.20	4.70

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
219.0088.038	BADU Magna 8	1~ 230 V	0.30 kW	360.50 €	429.00€
219.0128.038	BADU Magna 12	1~ 230 V	0.45 kW	385.71€	459.00€
219.0148.038	BADU Magna 14	1~ 230 V	0.65 kW	410.92 €	489.00 €

Sickel opening device included in delivery. See page 142.

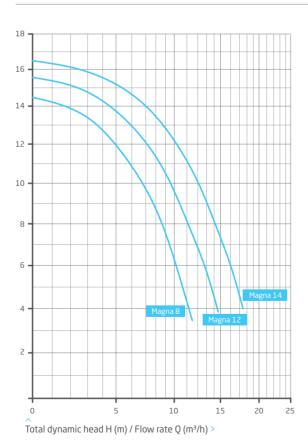




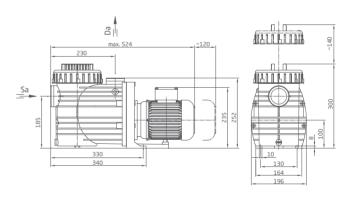








Dimensions



BADU[®] Gamma

The new bestseller 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

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 with glue sockets	PVC-U

Technical data at 50 Hz	BADU Gamma	7	11	15	20	23	29	32
Inlet Sa/outlet connection Da d ⁴⁾		50/50	50/50	63/63	63/63	63/63	75/75	75/75
Rec. inlet/outlet pipe, PVC pipe, d4)		50/50	50/50	63/50	63/63	63/63	75/63	75/75
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.50/0.30	0.69/0.45	0.87/0.55	1.10/0.75	1.40/1.00	1.74/1.30	2.00/1.50
Rated current (A)	1~ 230 V	2.40	3.00	4.00	5.20	6.70	7.80	8.90
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	0.44/0.30	0.63/0.45	0.75/0.55	0.93/0.75	1.26/1.00	1.56/1.30	1.77/1.50
Rated current (A)	3~ Y/∆ 400/230 V	0.95/1.65	1.25/2.15	1.55/2.70	1.95/3.40	2.25/3.90	2.80/4.85	3.30/5.72

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7
210.5070.038	BADU Gamma 7	1~ 230 V	0.30 kW	578.99€	689.00 €
210.5110.038	BADU Gamma 11	1~ 230 V	0.45 kW	621.01€	739.00 €
210.5150.038	BADU Gamma 15	1~ 230 V	0.55 kW	646.22 €	769.00 €
210.5200.038	BADU Gamma 20	1~ 230 V	0.75 kW	688.24€	819.00 €
210.5230.038	BADU Gamma 23	1~ 230 V	1.00 kW	743.70 €	885.00 €
210.5290.038	BADU Gamma 29	1~ 230 V	1.30 kW	923.53€	1,099.00€
210.5320.038	BADU Gamma 32	1~ 230 V	1.50 kW	932.77 €	1,110.00€
210.5070.037	BADU Gamma 7	3~ Y/∆ 400/230 V	0.30 kW	553.78€	659.00 €
210.5110.037	BADU Gamma 11	3~ Y/∆ 400/230 V	0.45 kW	587.39 €	699.00 €
210.5150.037	BADU Gamma 15	3~ Y/∆ 400/230 V	0.55 kW	637.82 €	759.00 €
210.5200.037	BADU Gamma 20	3~ Y/∆ 400/230 V	0.75 kW	654.62 €	779.00 €
210.5230.037	BADU Gamma 23	3~ Y/∆ 400/230 V	1.00 kW	668.07 €	795.00 €
210.5290.037	BADU Gamma 29	3~ Y/∆ 400/230 V	1.30 kW	881.51€	1,049.00€
210.5320.037	BADU Gamma 32	3~ Y/∆ 400/230 V	1.50 kW	957.14€	1,139.00€

Universal opening device included in delivery. See page 142.







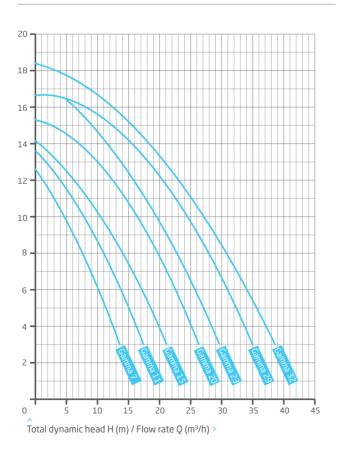




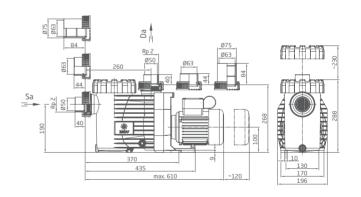
Pending approval







Dimensions



BADU® Prime

Extra quiet, high quality bestseller. Premium 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

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

Technical data at 50 Hz	BADU Prime	7	11	13	15	20
Inlet Sa/outlet connection Da Rp ²⁾		1½/1½	1½/1½	2/1½	2/1½	2/1½
Rec. inlet/outlet pipe, PVC pipe, d4)		50/50	50/50	63/50	63/50	63/63
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.50/0.30	0.69/0.45	0.87/0.55	1.10/0.75	1.40/1.00
Rated current (A)	1~ 230 V	2.40	3.00	4.00	5.20	6.70
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	0.44/0.30	0.63/0.45	0.75/0.55	0.93/0.75	1.26/1.00
Rated current (A)	3~ Y/∆ 400/230 V	0.95/1.65	1.25/2.15	1.55/2.70	1.95/3.40	2.25/3.90

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7
219.0078.038	BADU Prime 7	1~ 230 V	0.30 kW	563.87 €	671.00 €
219.0118.038	BADU Prime 11	1~ 230 V	0.45 kW	604.20 €	719.00€
219.0138.038	BADU Prime 13	1~ 230 V	0.55 kW	622.69€	741.00 €
219.0158.038	BADU Prime 15	1~ 230 V	0.75 kW	673.95€	802.00€
219.0208.038	BADU Prime 20	1~ 230 V	1.00 kW	721.01€	858.00 €
219.0078.037	BADU Prime 7	3~ Y/∆ 400/230 V	0.30 kW	540.34 €	643.00 €
219.0118.037	BADU Prime 11	3~ Y/∆ 400/230 V	0.45 kW	570.59€	679.00€
219.0138.037	BADU Prime 13	3~ Y/∆ 400/230 V	0.55 kW	610.92 €	727.00 €
219.0158.037	BADU Prime 15	3~ Y/∆ 400/230 V	0.75 kW	634.45 €	755.00 €
219.0208.037	BADU Prime 20	3~ Y/∆ 400/230 V	1.00 kW	645.38€	768.00 €

Universal opening device included in delivery. See page 142.









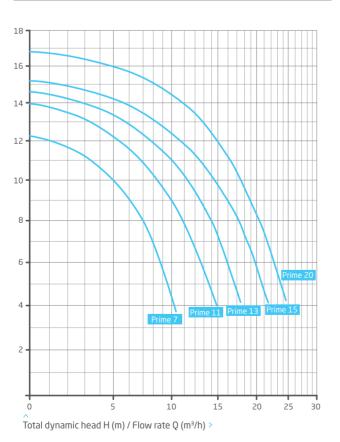


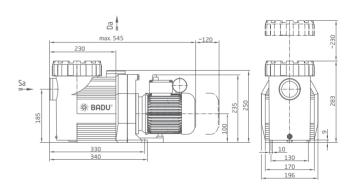
Dimensions

30-120 m³

7-20 m³/h







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

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

Technical data at 50 Hz	BADU Prime	25	30	40	48
Inlet Sa/outlet connection Da d ⁴⁾		75/75	75/75	90/90	90/90
Rec. inlet/outlet pipe, PVC pipe, d4)		75/75	75/75	90/90	110/110
Power input P ₁ /output P ₂ ¹⁾ (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 ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	1.55/1.30	1.77/1.50	2.55/2.20	3.00/2.60
Rated current (A)	3~ Y/∆ 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 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
219.0258.038	BADU Prime 25	1~ 230 V	1.30 kW	1,006.72 € 1,198.00 €
219.0308.038	BADU Prime 30	1~ 230 V	1.50 kW	1,096.64 € 1,305.00 €
219.0408.038	BADU Prime 40	1~ 230 V	2.20 kW	1,284.03 € 1,528.00 €
219.0488.038	BADU Prime 48	1~ 230 V	2.60 kW	1,671.43 € 1,989.00 €
219.0258.037	BADU Prime 25	3~ Y/∆ 400/230 V	1.30 kW	928.57 € 1,105.00 €
219.0308.037	BADU Prime 30	3~ Y/∆ 400/230 V	1.50 kW	1,021.01 € 1,215.00 €
219.0408.037	BADU Prime 40	3~ Y/∆ 400/230 V	2.20 kW	1,184.87 € 1,410.00 €
219.0488.037	BADU Prime 48	3~ Y/∆ 400/230 V	2.60 kW	1,311.76 € 1,561.00 €

Three-way opening device included in delivery. See page 142.



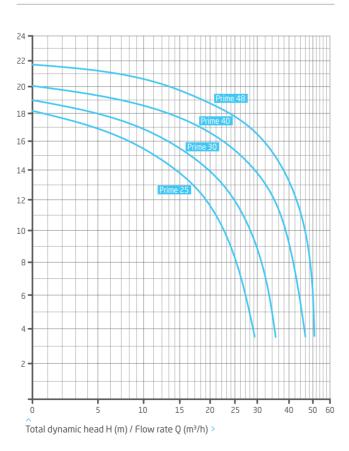




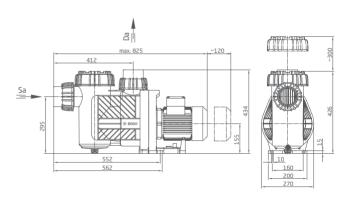








Dimensions



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 I 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

Technical data at 50 Hz	BADU EasyFit	9	12	15	18	24	29	36	45
Inlet Sa/outlet connection Da d ⁴⁾		50/50	63/50	63/63	63/63	63/63	63/63	75/75	75/75
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		63/50	63/50	63/63	63/63	63/63	75/63	75/75	75/75
Power input P ₁ /output P ₂ ¹⁾ (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	2.20/1.80	2.90/2.20
Rated current (A)	1~ 230 V	2.60	3.20	4.70	5.30	6.40	7.40	10.00	12.60
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	0.58/0.30	0.66/0.45	0.90/0.65	1.00/0.80	1.32/1.00	1.65/1.30	2.10/1.80	2.54/2.20
Rated current (A)	3~ Y/∆ 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

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP
207.6100.038	BADU EasyFit 9	1~ 230 V	0.30 kW	489.08 € 582.00 €
207.6140.038	BADU EasyFit 12	1~ 230 V	0.45 kW	544.54 € 648.00 €
207.6170.038	BADU EasyFit 15	1~ 230 V	0.65 kW	570.59 € 679.00 €
207.6200.038	BADU EasyFit 18	1~ 230 V	0.80 kW	632.77 € 753.00 €
207.6260.038	BADU EasyFit 24	1~ 230 V	1.00 kW	796.64 € 948.00 €
207.6320.038	BADU EasyFit 29	1~ 230 V	1.30 kW	877.31 € 1,044.00 €
207.6380.038	BADU EasyFit 36	1~ 230 V	1.80 kW	1,026.05 € 1,221.00 €
207.6400.038	BADU EasyFit 45	1~ 230 V	2.20 kW	1,241.18 € 1,477.00 €
207.6100.037	BADU EasyFit 9	3~ Y/∆ 400/230 V	0.30 kW	528.57 € 629.00 €
207.6140.037	BADU EasyFit 12	3~ Y/∆ 400/230 V	0.45 kW	604.20 € 719.00 €
207.6170.037	BADU EasyFit 15	3~ Y/∆ 400/230 V	0.65 kW	615.13 € 732.00 €
207.6200.037	BADU EasyFit 18	3~ Y/∆ 400/230 V	0.80 kW	673.95 € 802.00 €
207.6260.037	BADU EasyFit 24	3~ Y/∆ 400/230 V	1.00 kW	820.17 € 976.00 €
207.6320.037	BADU EasyFit 29	3~ Y/∆ 400/230 V	1.30 kW	900.84 € 1,072.00 €
207.6380.037	BADU EasyFit 36	3~ Y/∆ 400/230 V	1.80 kW	1,040.34 € 1,238.00 €
207.6400.037	BADU EasyFit 45	3~ Y/∆ 400/230 V	2.20 kW	1,399.16 € 1,665.00 €

Universal opening device included in delivery. See page 142.



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



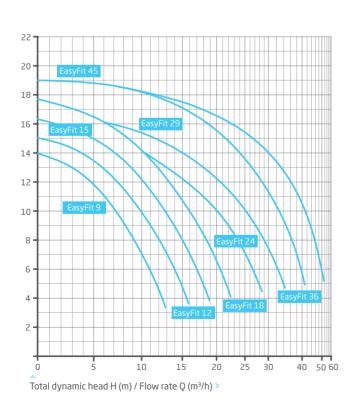




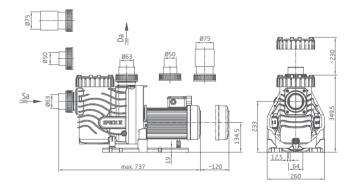




Performance



Dimensions



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 7)
290.1472.105	Connection set 1 compatible with Pentair® "Ultra-Flow®" pumps*)	32.77€	39.00 €
290.1472.106	Connection set 2 compatible with Pentair® "WhisperFlo®" pumps*)	32.77€	39.00 €
290.1472.107	Connection set 3 compatible with Hayward® "Super Pump" pumps*)	32.77€	39.00 €
290.1472.108	Connection set 4 compatible with Sta-Rite® "5P2R" pumps*)	32.77€	39.00 €
290.1472.111	Connection set 5 compatible with Astral "Super Sprint", Astral "Victoria Plus" and Wilo "Filtec FBS" pumps*)	32.77€	39.00 €
290.1472.112	Connection set 6 compatible with Sta-Rite® "5MPR (Dyna-Glas™)" pumps*)	32.77€	39.00 €

"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.









- Standard connection
- 1 Connection set 1*)
- Connection set 2*)
- Connection set 3*)Connection set 4*)
- 5 Connection set 5
- 6 Connection set 6

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

BADU 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

For glue sockets made from PVC suitable for BADU Resort 50 to BADU Resort 110 please see page 145.

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	t/PA 66 GF 30
Glue sockets	ABS
Mechanical seal carbon	
Screwss	tainless steel

Technical data at 50 Hz	BADU Resort	30	40	45	50	55	60	70	80	110
Inlet Sa/outlet connection Da d4)		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 ⁴		75/75	90/90	90/90	110/110	110/110	110/110	110/110	140/140	160/140
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	1.77/1.50	2.55/2.20	3.00/2.60	3.45/3.00	-/-	3.00/2.60	3.45/3.00	-/-	-/-
Rated current (A)	3~ Y/∆ 400/230 V	3.30/5.72	4.60/8.00	5.50/9.50	6.20/10.70	-/-	5.50/9.50	6.20/10.70	-/-	-/-
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 690/400 V	-/-	-/-	-/-	-/-	4.55/4.00	-/-	-/-	4.55/4.00	6.15/5.50
Rated current (A)	3~ Y/∆ 690/400 V	-/-	-/-	-/-	-/-	4.60/7.90	-/-	-/-	4.60/7.90	6.00/10.40

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
219.5308.037	BADU Resort 30	3~ Y/Δ 400/230 V	1.50 kW	1,273.11 € 1,515.00 €
219.5408.037	BADU Resort 40	3~ Y/Δ 400/230 V	2.20 kW	1,417.65 € 1,687.00 €
219.5458.037	BADU Resort 45	3~ Y/Δ 400/230 V	2.60 kW	1,451.26 € 1,727.00 €
219.5508.037	BADU Resort 50	3~ Y/Δ 400/230 V	3.00 kW	1,603.36 € 1,908.00 €
219.5558.037	BADU Resort 55	3~ Y/Δ 690/400 V	4.00 kW	1,984.87 € 2,362.00 €
219.5608.037	BADU Resort 60	3~ Y/Δ 400/230 V	2.60 kW	1,526.89 € 1,817.00 €
219.5708.037	BADU Resort 70	3~ Y/Δ 400/230 V	3.00 kW	1,683.19 € 2,003.00 €
219.5808.037	BADU Resort 80	3~ Y/Δ 690/400 V	4.00 kW	2,016.81 € 2,400.00 €
219.5118.037	BADU Resort 110	3~ Y/Δ 690/400 V	5.50 kW	2,283.19 € 2,717.00 €

Three-way opening device included in delivery. See page 142.







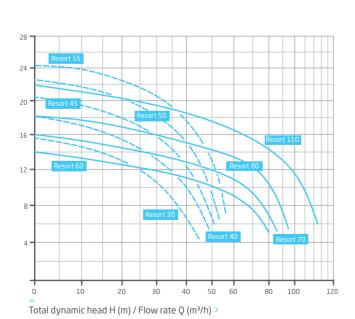


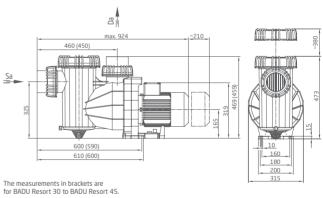












BADU[®] Bronze

Corrosion resistant, pure bronze pump. Durable and extra quiet. For large pools and swimming baths.

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. Heavy bronze housing, quiet running and high stability.

Strainer tank capacity approx. 4.5 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/PP GF 30
Impeller	PP GF 30
Strainer basket	PP
Lid	PC, transparent/PA 66 GF 30
Mechanical seal	carbon/ceramic/NBR
Screws	

Technical data at 50 Hz	BADU Bronze	7	11	14	22	25	30
Inlet Sa/outlet connection Da Rp ²⁾		2/2	2/2	2/2	2/2	2/2	2/2
Rec. inlet/outlet pipe, PVC pipe, d ⁴		50/50	50/50	63/50	63/63	63/63	75/63
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.50/0.30	0.69/0.45	0.87/0.55	1.40/1.00	1.74/1.30	2.00/1.50
Rated current (A)	1~ 230 V	2.40	3.00	4.00	6.70	7.80	8.90
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	0.44/0.30	0.63/0.45	0.75/0.55	1.26/1.00	1.56/1.30	1.77/1.50
Rated current (A)	3~ Y/∆ 400/230 V	0.95/1.65	1.25/2.15	1.55/2.70	2.25/3.90	2.80/4.85	3.30/5.72

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
210.1007.038	BADU Bronze 7	1~ 230 V	0.30 kW	1,089.92 € 1,297.00 €
210.1011.038	BADU Bronze 11	1~ 230 V	0.45 kW	1,112.61 € 1,324.00 €
210.1014.038	BADU Bronze 14	1~ 230 V	0.55 kW	1,147.90 € 1,366.00 €
210.1022.038	BADU Bronze 22	1~ 230 V	1.00 kW	1,224.37 € 1,457.00 €
210.1025.038	BADU Bronze 25	1~ 230 V	1.30 kW	1,277.31 € 1,520.00 €
210.1030.038	BADU Bronze 30	1~ 230 V	1.50 kW	1,415.97 € 1,685.00 €
210.1007.037	BADU Bronze 7	3~ Y/∆ 400/230 V	0.30 kW	1,089.92 € 1,297.00 €
210.1011.037	BADU Bronze 11	3~ Y/∆ 400/230 V	0.45 kW	1,112.61 € 1,324.00 €
210.1014.037	BADU Bronze 14	3~ Y/∆ 400/230 V	0.55 kW	1,147.90 € 1,366.00 €
210.1022.037	BADU Bronze 22	3~ Y/∆ 400/230 V	1.00 kW	1,224.37 € 1,457.00 €
210.1025.037	BADU Bronze 25	3~ Y/∆ 400/230 V	1.30 kW	1,277.31 € 1,520.00 €
210.1030.037	BADU Bronze 30	3~ Y/∆ 400/230 V	1.50 kW	1,415.97 € 1,685.00 €

Universal opening device included in delivery. See page 142.

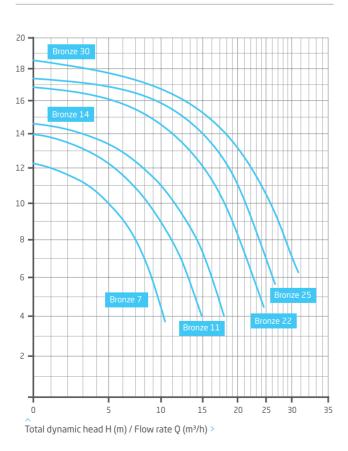




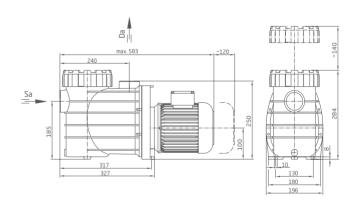








Dimensions



BADU° 93

Corrosion resistant, pure bronze pump. For constant use in swimming pools, attractions and therapy 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

Materials used

Pump casing	G-Cu Sn 10
Housing cover	G-Cu Sn 10
Diffuser	G-Cu Sn 10
Strainer basket	PP
Star handles	
Impeller	
Shaft	
Lid	PC, transparent
Glue sockets	ABS
Mechanical seal	carbon/ceramic/NBR
Screws	stainless steel
Impeller nut	PP GF 30

Technical data at 50 Hz	BADU 93/	30 H	40 H	45 H	50 H	55 H	60	70	80	110
Inlet Sa/outlet connection Da d ⁴⁾		110/110	110/110	110/110	110/110	110/110	110/110	110/110	110/110	110/110
Rec. inlet/outlet pipe, PVC pipe, d4)		110/75	110/90	110/90	110/90	110/110	140/110	140/125	140/140	160/140
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	1.77/1.50	2.55/2.20	3.00/2.60	3.45/3.00	-/-	3.00/2.60	3.45/3.00	-/-	-/-
Rated current (A)	3~ Y/∆ 400/230 V	3.30/5.72	4.60/8.00	5.50/9.50	6.20/10.70	-/-	5.50/9.50	6.20/10.70	-/-	-/-
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 690/400 V	-/-	-/-	-/-	-/-	4.55/4.00	-/-	-/-	4.55/4.00	6.15/5.50
Rated current (A)	3~ Y/∆ 690/400 V	-/-	-/-	-/-	-/-	4.60/7.90	-	-	4.60/7.90	6.00/10.40

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 73
219.3300.037	BADU 93/30 H	3~ Y/∆ 400/230 V	1.50 kW	3,663.87 € 4,360.00 €
219.3400.037	BADU 93/40 H	3~ Y/∆ 400/230 V	2.20 kW	3,685.71 € 4,386.00 €
219.3450.037	BADU 93/45 H	3~ Y/∆ 400/230 V	2.60 kW	3,710.92 € 4,416.00 €
219.3500.037	BADU 93/50 H	3~ Y/∆ 400/230 V	3.00 kW	3,726.05 € 4,434.00 €
219.3550.037	BADU 93/55 H	3~ Y/∆ 690/400 V	4.00 kW	3,913.45 € 4,657.00 €
219.3600.037	BADU 93/60	3~ Y/∆ 400/230 V	2.60 kW	3,468.91 € 4,128.00 €
219.3700.037	BADU 93/70	3~ Y/∆ 400/230 V	3.00 kW	3,499.16 € 4,164.00 €
219.3800.037	BADU 93/80	3~ Y/∆ 690/400 V	4.00 kW	3,686.55 € 4,387.00 €
219.3910.037	BADU 93/110	3~ Y/∆ 690/400 V	5.50 kW	4,289.08 € 5,104.00 €

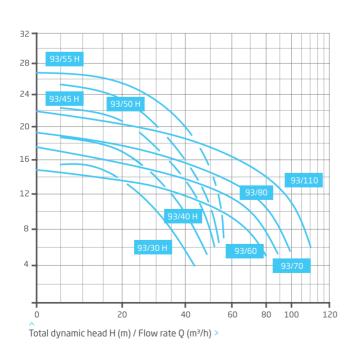


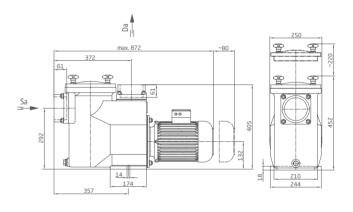






Dimensions







Circulation pumps, self-priming

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





NEM

BADU Alpha Eco Soft

Performance: 25 m³/h Pool size: 30-90 m³

Page 48



BESTSELLER

BADU Eco Soft

Performance: 25 m³/h Pool size: 30-90 m³

Page 50



BADU EasyFit Eco VS

Performance: 28 m³/h Pool size: 30-90 m³

Page 52



NEV

BADU Gamma Eco VS

Performance: 28 m³/h Pool size: 30-120 m³

Page 54



BADU Prime Eco VS

Performance: 28 m³/h Pool size: 30-90 m³

Page 56



BADU Bronze Eco VS

Performance: 28 m³/h Pool size: 30-90 m³

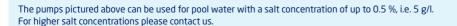
Page 58



BADU Eco Motion

Performance: 40 m³/h Pool size: 30 -200 m³

Page 60



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

Materials used

Pump casing	
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

Technical data at 50/60 Hz	BADU Alpha Eco Soft	
Inlet Sa/outlet connection Da d ⁴⁾		50/50
Rec. inlet/outlet pipe, PVC pipe, d4)		50/50
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.04-0.75/0.02-0.50
Rated current (A)	1~ 230 V	0.30-3.20

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
210.4000.038	BADU Alpha Eco Soft	1~ 230 V	0.50 kW	760.50 €	905.00€









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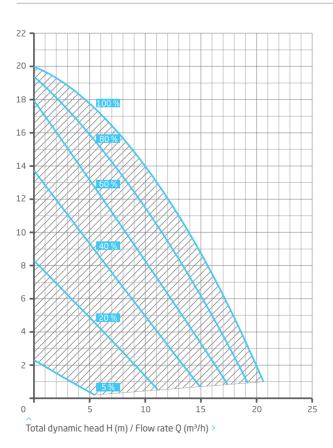
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BADU GREEN

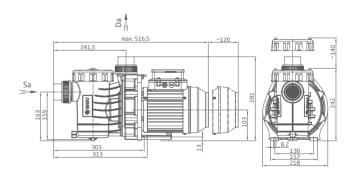




Performance



Dimensions



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 capacityapprox. 3 I Strainer basket mesh size approx. 3.2 x 2.6 mm

Can be controlled using the BADU Eco Logic remote control. See page 122.

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

Technical data at 50/60 Hz	BADU Eco Soft	
Inlet Sa/outlet connection Da d ⁴⁾		63/50
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		63/50
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.06-1.10/0.03-0.75
Rated current (A)	1~ 230 V	0.45-5.00

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
219.0008.138	BADU Eco Soft	1~ 230 V	0.75 kW	973.95€	1,159.00 €

Universal opening device included in delivery. See page 142.





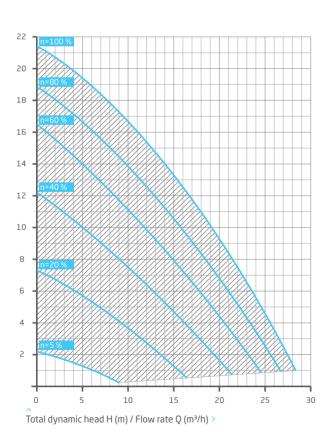




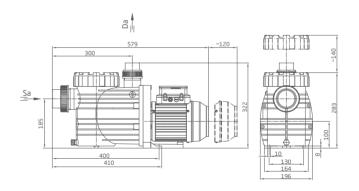








Dimensions



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 I Strainer basket mesh size approx. 3.2 x 2.6 mm

For connection variations please see pages 38-39. Can be controlled using the BADU Eco Logic remote control. See page 122.

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

Technical data at 50/60 Hz	BADU EasyFit Eco VS	
Inlet Sa/outlet connection Da d4)		63/63
Rec. inlet/outlet pipe, PVC pipe, d4)		63/63
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.08-1.40/0.03-1.10
Rated current (A)	1~ 230 V	0.60-6.10

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
207.6261.138	BADU EasyFit Eco VS	1~ 230 V	1.10 kW	1,115.13 €	1,327.00€

Universal opening device included in delivery. See page 142.







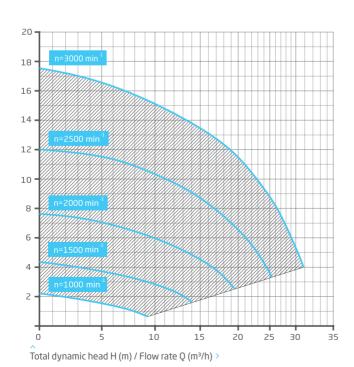


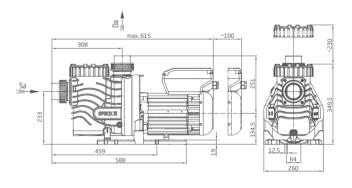






Dimensions





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 I Strainer basket mesh size approx. 3.2 x 2.6 mm

Can be controlled using the BADU Eco Logic remote control. See page 122.

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 with glue sockets	PVC-U

Technical data at 50/60 Hz	BADU Gamma Eco VS	
Inlet Sa/outlet connection Da d ⁴⁾		63/63
Rec. inlet/outlet pipe, PVC pipe, d4)		63/63
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.08-1.40/0.03-1.10
Rated current (A)	1~ 230 V	0.60-6.10

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
210.5231.138	BADU Gamma Eco VS	1~ 230 V	1.10 kW	1,184.87 €	1,410.00€

Universal opening device included in delivery. See page 142.







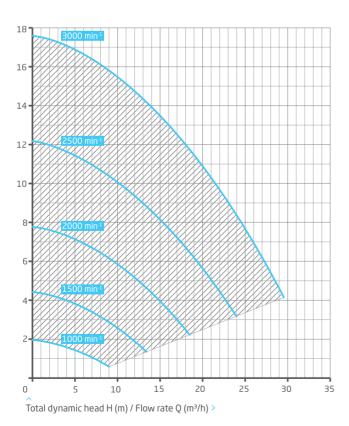
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Pending approval



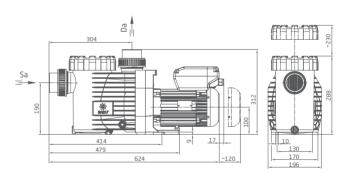






Dimensions

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 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 I Strainer basket mesh size approx. 3.2 x 2.6 mm

Can be controlled using the BADU Eco Logic remote control. See page 122.

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 basketPP
LidPC, transparent/PA 66 GF 30
Mechanical seal carbon/ceramic/NBR
Screws stainless steel

Technical data at 50/60 Hz	BADU Prime Eco VS		
Inlet Sa/outlet connection Da Rp ²⁾		2/1½	
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		63/63	
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.08-1.40/0.03-1.10	
Rated current (A)	1~ 230 V	0.60-6.10	

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
219.0208.138	BADU Prime Eco VS	1~ 230 V	1.10 kW	1,089.92 € 1,297.00 €

Universal opening device included in delivery. See page 142.







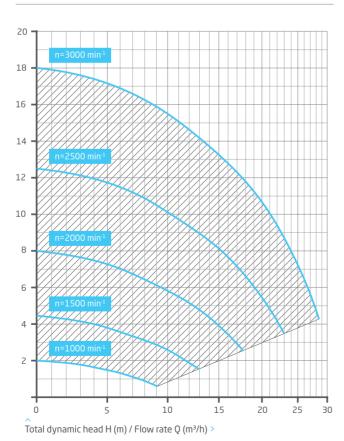
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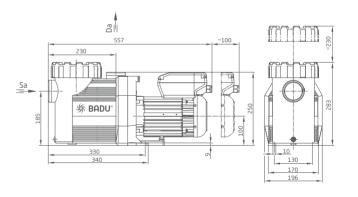




Performance



Dimensions



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 bellow-type mechanical seal is mounted on a plastic shaft protector sleeve. Heavy bronze housing, quiet running and high stability.

Strainer capacity approx. 4.5 I Strainer basket mesh size approx. 3.2 x 2.6 mm

Can be controlled using the BADU Eco Logic remote control. See page 122.

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

Technical data at 50/60 Hz	BADU Bronze Eco VS	
Inlet Sa/outlet connection Da Rp ²⁾		2/2
Rec. inlet/outlet pipe, PVC pipe, d4)		63/63
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.08-1.40/0.03-1.10
Rated current (A)	1~ 230 V	0.60-6.10

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
210.1022.138	BADU Bronze Eco VS	1~ 230 V	1.10 kW	1,921.85 €	2,287.00€

Universal opening device included in delivery. See page 142.







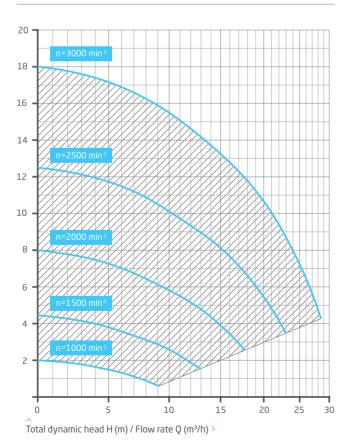
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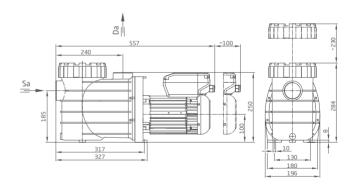




Performance



Dimensions



BADU° Eco Motion

Easy installation and easy setup. Highly efficient circulation pump 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

Technical data at 50/60 Hz	BADU Eco Motion	
Inlet Sa/outlet connection Da d ⁴⁾		90/90
Rec. inlet/outlet pipe, PVC pipe, d4)		90/90
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.25-2.50/0.20-2.20
Rated current (A)	1~ 230 V	1.80-14.90

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
219.0408.138	BADU Eco Motion	1~ 230 V	2.20 kW	1,444.54 € 1,719.00 €

Three-way opening device included in delivery. See page 142.



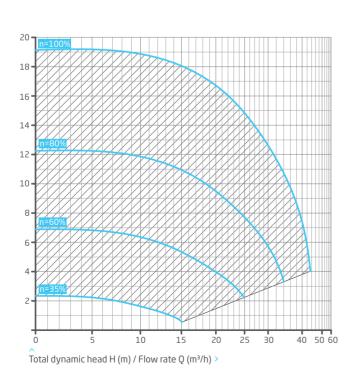


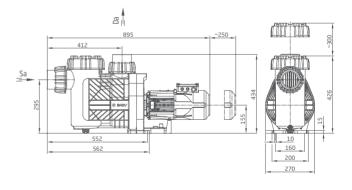






Dimensions





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 65 performance varieties, these BADU pumps are suitable for pool volumes of up to 180 m³.

Product overview





BADU FA Performance: 35-45 m³/h Pool size: 90-180 m³

Page 64



BADU 44 Performance: 1-12 m³/h Pool size: 1-30 m³ Page 72



BADU 21-40 Performance: 12-30 m³/h Pool size: 1-30 m³ Page 80



BADU 21-81 Performance: 40-80 m³/h





BESTSELLER

BADU 42 Performance: 2-12 m³/h Pool size: 10-60 m³ Page 66



BADU 45 Performance: 7-13 m³/h Pool size: 1-30 m³

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BESTSELLER

BADU 21-41 Performance: 12-30 m³/h Pool size: 1-30 m³

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BADU 43 Performance: 15-32 m³/h Pool size: 30-150 m³



BESTSELLER

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BADU 46 Performance: 5-22 m³/h Pool size: 1-30 m³

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BADU 21-50/21-60 Performance: 20-50 m³/h Pool size: 30-100 m³ Page 84



BADU 73 Performance: 2-5 m³/h Pool size: 10-30 m³ Page 70



BADU 47 Performance: 5-22 m³/h Pool size: 1-30 m³ Page 78



BADU 21-80 Performance: 40-80 m³/h Pool size: 30-100 m³ Page 86



Page 88

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° FA

Solid monoblock-type pump with large strainer tank. For attractions and creative water ideas.

Field of application

Swimming pool water circulation in filter systems in intake mode, up to a flow rate of 56 m³/h.

Design

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

Strainer tank materials

Filter housing	PP TV 40
Lid	PC, transparent
Star handles	PA 6 GV
Strainer basket	PP
Base plate	ABS

Pump materials

Pump casing (BADU 21-80) PPE GF 30
Pump casing (BADU 21-50, BADU 21-60) PP GF 30
Housing cover PPE GF 30
Impeller (BADU FA 21-50/36) POM GF 30
Impeller (BADU FA 21-60/45, BADU FA 21-80/56) PP GF 30
Wear ring stainless steel
Mechanical seal carbon/ceramic/NBR
Impeller nut PP GF 30
Clamping ring (BADU 21-50, BADU 21-60) aluminium
Screws stainless steel
Motor shaft stainless steel

Technical data at 50 Hz	BADU FA	21-50/36	21-60/45	21-80/56
Inlet Sa/outlet connection Da d ⁴⁾		3/63	3/63	3/75 or 90
Rec. inlet/outlet pipe, PVC pipe, d4)		90/90	90/90	110/110
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	2.55/2.20	3.00/2.60	3.45/3.00
Rated current (A)	3~ Y/∆ 400/230 V	4.60/8.00	5.50/9.50	6.20/10.70

For more detailed information regarding the motor protection please see page 155.

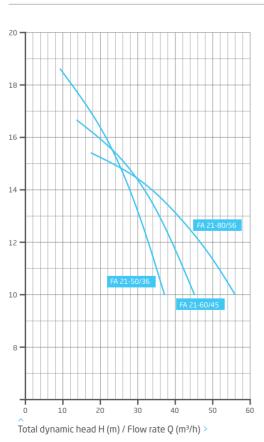
Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
270.4700.000	BADU FA 21-50/36	3~ Y/∆ 400/230 V	2.20 kW	1,252.94 € 1,491.00 €
270.4800.000	BADU FA 21-60/45	3~ Y/∆ 400/230 V	2.60 kW	1,373.95 € 1,635.00 €
270.4900.000	BADU FA 21-80/56	3~ Y/∆ 400/230 V	3.00 kW	1,578.99 € 1,879.00 €



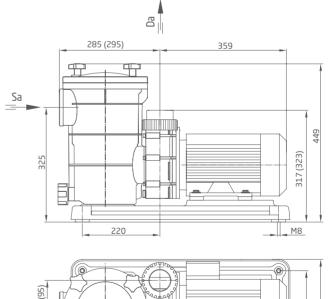


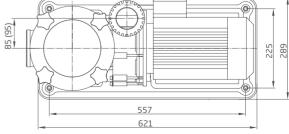






Dimensions





BADU[®] 42

Small jet pump and additional pump, available in 3 designs. For bath tubs and small whirlpools.

Field of application

The BADU 42/6, BADU 42/9 and BADU 42/12 are the perfect jet pumps for bath tubs and whirlpools.

Design

Monoblock-type pump with a closed bellow-type mechanical seal 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 GF 30
Housing cover	PP GF 30
Impeller (BADU 42/6, BADU 42/9)	PP GF 30
Impeller (BADU 42/12)	PA 66 GF 30
Mechanical seal	carbon/ceramic/NBR
Screws	galvanised steel

Technical data at 50 Hz	BADU 42/	6	9	12
Inlet Sa/outlet connection Da Rp ²⁾		1½/1½	1½/1½	1½/1½
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		50/50	50/50	50/50
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.50/0.30	0.69/0.45	0.97/0.65
Rated current (A)	1~ 230 V	2.40	3.00	4.70
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	0.44/0.30	0.63/0.45	0.97/0.65
Rated current (A)	3~ Y/∆ 400/230 V	0.95/1.65	1.25/2.15	1.75/3.00

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
204.2060.138	BADU 42/6	1~ 230 V	0.30 kW	404.20 €	481.00 €
204.2090.138	BADU 42/9	1~ 230 V	0.45 kW	445.38 €	530.00 €
204.2120.138	BADU 42/12	1~ 230 V	0.65 kW	452.10 €	538.00 €
204.2060.137	BADU 42/6	3~ Y/∆ 400/230 V	0.30 kW	378.15 €	450.00 €
204.2090.137	BADU 42/9	3~ Y/∆ 400/230 V	0.45 kW	429.41€	511.00 €
204.2120.137	BADU 42/12	3~ Y/∆ 400/230 V	0.65 kW	435.29 €	518.00 €





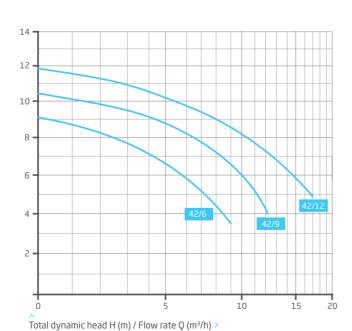


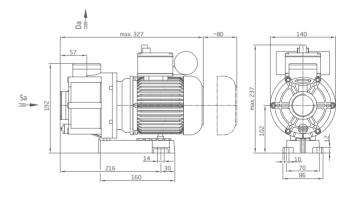












BADU° 43

Medium-size jet pump and additional pump. For whirlpools and added support in water circuits.

Field of application

The BADU 43 pump series with its flow rate from 15 to 32 $\,\mathrm{m}^3/\mathrm{h}$ are the perfect jets and filter pumps for whirlpools.

Design

Monoblock-type pump with a closed bellow-type mechanical seal 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 20/GF 10
Intermediate housing	PP GF 30
Gland housing	PP GF 30
Diffuser	PP GF 30
Impeller	PP GF 30
Mechanical seal	carbon/ceramic/NBR
Screws	galvanised steel

Technical data at 50 Hz	BADU 43/	15	21	26	32
Inlet Sa/outlet connection Da Rp ²⁾		2/2	2/2	2/2	2/2
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		63/63	75/63	75/75	75/75
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	1.10/0.75	1.40/1.00	2.00/1.50	2.00/1.50
Rated current (A)	1~ 230 V	5.20	6.70	8.90	8.90
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	0.93/0.75	1.26/1.00	1.77/1.50	1.77/1.50
Rated current (A)	3~ Y/∆ 400/230 V	1.95/3.40	2.25/3.90	3.30/5.72	3.30/5.72

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
204.3150.038	BADU 43/15	1~ 230 V	0.75 kW	580.67 €	691.00€
204.3210.038	BADU 43/21	1~ 230 V	1.00 kW	645.38 €	768.00€
204.3260.038	BADU 43/26	1~ 230 V	1.50 kW	957.98 €	1,140.00 €
204.3320.038	BADU 43/32	1~ 230 V	1.50 kW	967.23 €	1,151.00€
204.3150.037	BADU 43/15	3~ Y/∆ 400/230 V	0.75 kW	557.14€	663.00€
204.3210.037	BADU 43/21	3~ Y/∆ 400/230 V	1.00 kW	600.84 €	715.00€
204.3260.037	BADU 43/26	3~ Y/∆ 400/230 V	1.50 kW	827.73€	985.00€
204.3320.037	BADU 43/32	3~ Y/∆ 400/230 V	1.50 kW	836.97 €	996.00€





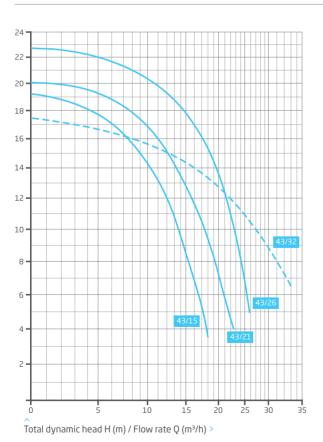




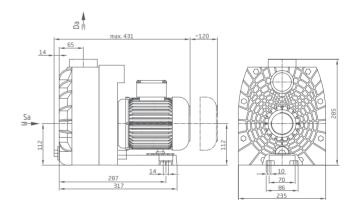




www.tuv.com ID 0000021507



Dimensions



BADU° 73

Large jet pump with great power. For swimming pools, whirlpools and high pressure pool cleaners.

Field of application

Circulation through filter systems in private swimming pools and whirlpools with increased friction loss. Due to their great power they are also suitable for different types of automatic pool cleaners, e.g. pressure cleaners.

Design

Monoblock-type pump with a closed bellow-type mechanical seal 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 GF 30
Suction lid	PP GF 30
Impeller	PP GF 30
Suction side impeller (BADU 73-2)	PP GF 30
Mechanical seal	carbon/ceramic/NBR
Screws	galvanised steel/stainless steel

Technical data at 50 Hz	BADU 73-	1	2
Inlet Sa/outlet connection Da G ³⁾		11/4/1	11/4/1
Rec. inlet/outlet pipe, PVC pipe, d4)		50/40	50/40
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	1.20/0.80	1.50/1.10
Rated current (A)	1~ 230 V	5.30	6.50

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
237.3100.138	BADU 73-1	1~ 230 V	0.80 kW	442.86 €	527.00€
237.3200.138	BADU 73-2	1~ 230 V	1.10 kW	476.47 €	567.00€



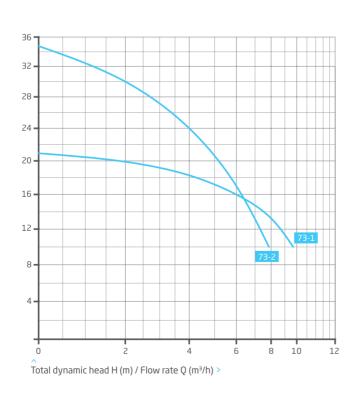


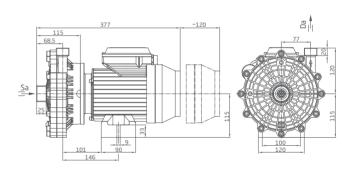




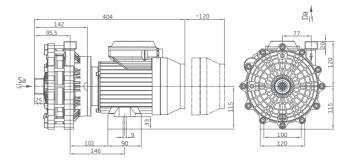
Dimensions

Detailed dimensions available on request or at badu.de





^ BADU 73-1



^ BADU 73-2

BADU[®] 44

Convenient monoblock-type pump with self-draining unit. For larger bath tubs and whirlpools.

Field of application

The BADU 44 pump series with self-draining unit and a flow rate of up to $14 \, \text{m}^3\text{/h}$ are the perfect jet pumps for bath tubs and whirlpools.

Design

Monoblock-type pump with integrated self-draining unit. 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.

Materials used

Pump casing	PP
Housing cover	PP TV 40
Impeller	PA 66 GF 30/PC
Unions with glue sockets	ABS
Mechanical seal	carbon/ceramic/NBR
Screws	galvanised steel

Technical data at 50 Hz	BADU 44/	4	8	12	15
Inlet Sa/outlet connection Da d4)		50/50	50/50	50/50	50/50
Rec. inlet/outlet pipe, PVC pipe, d4)		50/50	50/50	50/50	50/50
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.35/0.18	0.45/0.25	0.65/0.45	0.97/0.65
Rated current (A)	1~ 230 V	1.95	2.30	3.20	4.70

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
204.4040.038	BADU 44/4	1~ 230 V	0.18 kW	441.18€	525.00 €
204.4080.038	BADU 44/8	1~ 230 V	0.25 kW	450.42 €	536.00 €
204.4120.038	BADU 44/12	1~ 230 V	0.45 kW	462.18€	550.00 €
204.4150.038	BADU 44/15	1~ 230 V	0.65 kW	471.43 €	561.00 €



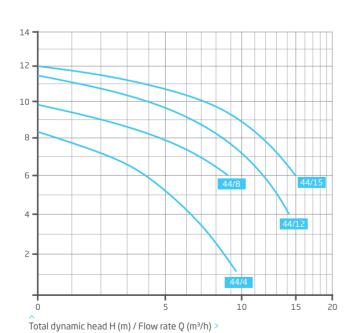


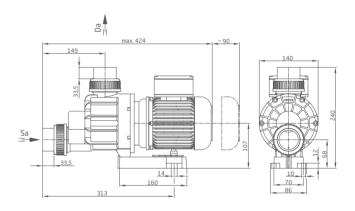






Dimensions





BADU[®] 45

Solid, small jet pump with self-draining unit. For bath tubs and whirlpools.

Field of application

With a flow rate from 7.5 to 15 m^3/h at 11 m head, the BADU 45 series of self-draining pumps are the ideal jet pumps for bath tubs and whirlpools.

Design

Monoblock-type pump with integrated self-draining unit. 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.

Materials used

Pump casing PP TV 40
Housing cover PP TV 40
Impeller (BADU 45/6, BADU 45/11) PP GF 30
Impeller (BADU 45/16) PA 66 GF 30
Unions with glue sockets ABS
Mechanical seal carbon/ceramic/NBR
Screws brass/stainless steel

Technical data at 50 Hz	BADU 45/	6	11	16
Inlet Sa/outlet connection Da d ⁴⁾		50/50	50/50	50/50
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		50/50	50/50	63/50
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.69/0.45	0.97/0.65	1.20/0.80
Rated current (A)	1~ 230 V	3.20	4.70	5.30

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
204.5060.038	BADU 45/6	1~ 230 V	0.45 kW	367.23€	437.00 €
204.5110.038	BADU 45/11	1~ 230 V	0.65 kW	381.51€	454.00 €
204.5160.038	BADU 45/16	1~ 230 V	0.80 kW	397.48 €	473.00 €





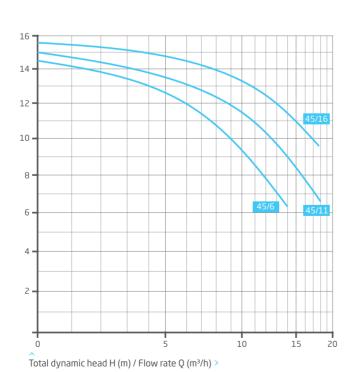


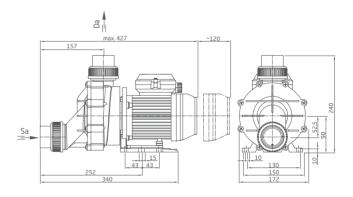






Dimensions





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 m³/h at 8 m head, the BADU 46 series are the ideal pumps for jacuzzis, whirlpools and for use in spas.

Design

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.

Materials used

Pump casing	PP TV 40
Housing cover	PP GF 15
Impeller (BADU 46/5, BADU 46/10, BADU 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

Technical data at 50 Hz	BADU 46/	5	10	15	22
Inlet Sa/outlet connection Da d ⁴⁾		63/50	63/50	63/50	63/50
Rec. inlet/outlet pipe, PVC pipe, d4)		50/50	50/50	50/50	63/50
Power input P ₁ /output P ₂ ¹⁾ (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 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
204.6050.038	BADU 46/5	1~ 230 V	0.30 kW	257.14€	306.00 €
204.6100.038	BADU 46/10	1~ 230 V	0.45 kW	266.39€	317.00 €
204.6150.038	BADU 46/15	1~ 230 V	0.65 kW	284.03 €	338.00 €
204.6220.038	BADU 46/22	1~ 230 V	0.80 kW	300.00€	357.00 €



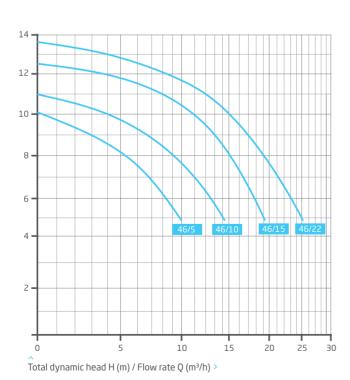


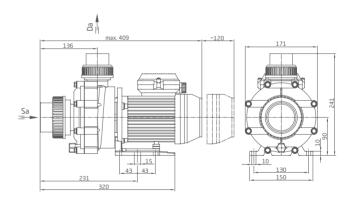






Dimensions





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 m³/h at 8 m head, the BADU 47 series are the ideal pumps for jacuzzis, whirlpools and for use in spas.

Design

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.

Materials used

Pump casing	PP TV 40
Housing cover	PP GF 15
Impeller (BADU 47/5, BADU 47/10, BADU 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

Technical data at 50 Hz	BADU 47/	5	10	16	22
Inlet Sa/outlet connection Da d ⁴⁾		63/50	63/50	63/50	63/50
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		50/50	50/50	50/50	63/50
Power input P ₁ /output P ₂ ¹⁾ (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 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
204.7050.038	BADU 47/5	1~ 230 V	0.30 kW	257.98€	307.00 €
204.7100.038	BADU 47/10	1~ 230 V	0.45 kW	266.39 €	317.00 €
204.7160.038	BADU 47/16	1~ 230 V	0.65 kW	284.03 €	338.00 €
204.7220.038	BADU 47/22	1~ 230 V	0.80 kW	300.00€	357.00 €







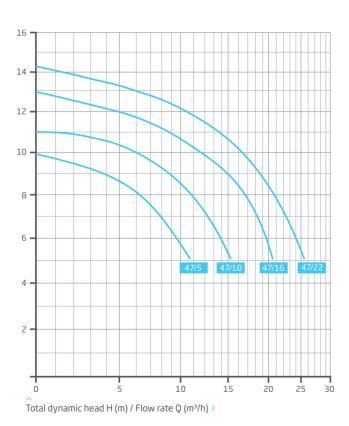




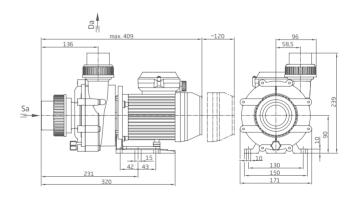
5-22 m³/h



Performance



Dimensions



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 m³/h.

Design

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.

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 144.

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	galvanised steel/stainless steel

Technical data at 50 Hz	BADU 21-40/	53 G/H G	54 G/H G	55 G/H G	55 H9 G PU	56 G/H G	58 G/H G
Inlet Sa/outlet connection Da G ³⁾		2/2*)	2/2*)	2/2*)	2/2*)	2/2*)	2/2*)
Rec. inlet/outlet pipe, PVC pipe, d4)		63/63	63/63	63/63	63/63	63/63	75/75
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.90/0.55	1.10/0.75	1.33/1.00	0.50/1.40 / 0.22/1.00	-/-	2.00/1.50
Rated current (A)	1~ 230 V	4.20	5.20	6.50	2.25/6.60	-/-	8.80
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230	V -/-	-/-	-/-	-/-	1.33/1.10	1.77/1.50
Rated current (A)	3~ Y/∆ 400/230	V -/-	-/-	-/-	-/-	2.40/4.15	3.30/5.72

For more detailed information regarding the motor protection please see page 155.

 $^{^{\diamond})}$ Also available with Ø 50/Ø 40 hose adapters.

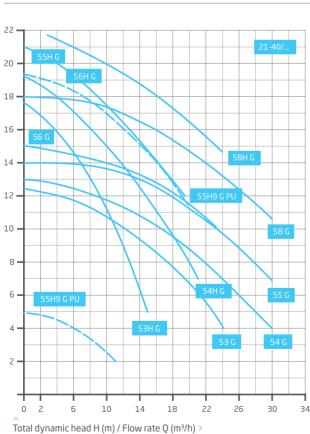
Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
234.0530.138	BADU 21-40/53 G	1~ 230 V	0.55 kW	472.27 €	562.00 €
234.0530.338	BADU 21-40/53H G	1~ 230 V	0.55 kW	485.71€	578.00 €
234.0540.138	BADU 21-40/54 G	1~ 230 V	0.75 kW	567.23€	675.00 €
234.0540.338	BADU 21-40/54H G	1~ 230 V	0.75 kW	584.03€	695.00€
234.0550.138	BADU 21-40/55 G	1~ 230 V	1.00 kW	615.97 €	733.00 €
234.0550.338	BADU 21-40/55H G	1~ 230 V	1.00 kW	630.25€	750.00 €
234.0551.238	BADU 21-40/55H9 G PU	1~ 230 V	0.22/1.00 kW	978.15 €	1,164.00 €
234.0580.138	BADU 21-40/58 G	1~ 230 V	1.50 kW	745.38 €	887.00 €
234.0580.338	BADU 21-40/58H G	1~ 230 V	1.50 kW	757.14€	901.00€
234.0560.137	BADU 21-40/56 G	3~ Y/∆ 400/230 V	1.10 kW	642.86€	765.00 €
234.0560.337	BADU 21-40/56H G	3~ Y/∆ 400/230 V	1.10 kW	659.66€	785.00 €
234.0580.137	BADU 21-40/58 G	3~ Y/∆ 400/230 V	1.50 kW	680.67 €	810.00 €
234.0580.337	BADU 21-40/58H G	3~ Y/∆ 400/230 V	1.50 kW	697.48 €	830.00€



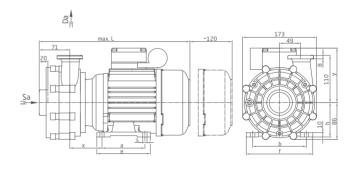








Dimensions



Туре		a	b	e	f	h	s	х	у	L
BADU 21-40/53 G/H G	1~	90	112	115	138	71	7	84	132	313
BADU 21-40/53 G/H G	3~	90	112	115	138	71	7	84	111	313
BADU 21-40/54 G/H G	1~	90	112	115	138	71	7	84	132	313
BADU 21-40/54 G/H G	3~	90	112	115	138	71	7	84	119	313
BADU 21-40/55 G/H G	1~	100	125	125	153	80	9	75	128	351
BADU 21-40/56 G/H G	1~	100	125	125	153	80	9	75	128	351
BADU 21-40/55H9 G PU	J 1~	100	140	155	170	90	10	81	142	351
BADU 21-40/58 G/H G	1~	100	125	125	153	80	9	75	142	351
BADU 21-40/58 G/H G	3~	100	125	125	153	80	9	75	128	376

BADU° 21-41

Connection variant for the BADU 21-40 universal circulation pump. 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 m³/h.

Design

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.

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 144.

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	galvanised steel/stainless steel

Technical data at 50 Hz	BADU 21-41/	53 G/H G	54 G/H G	55 G/H G	55 H9 G PU	56 G/H G	58 G/H G
Inlet Sa glue socket d4/outlet connection Da	a G ³⁾	63/2	63/2	63/2	63/2	63/2	63/2
Rec. inlet/outlet pipe, PVC pipe, d4)		63/63	63/63	63/63	63/63	63/63	75/75
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	0.90/0.55	1.10/0.75	1.33/1.00	0.50/1.40/0.22/1.00	-/-	2.00/1.50
Rated current (A)	1~ 230 V	4.20	5.20	6.50	2.25/6.60	-/-	8.80
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230	V -/-	-/-	-/-	-/-	1.33/1.10	1.77/1.50
Rated current (A)	3~ Y/∆ 400/230	V -/-	-/-	-/-	-/-	2.40/4.15	3.30/5.72

For more detailed information regarding the motor protection please see page 155.

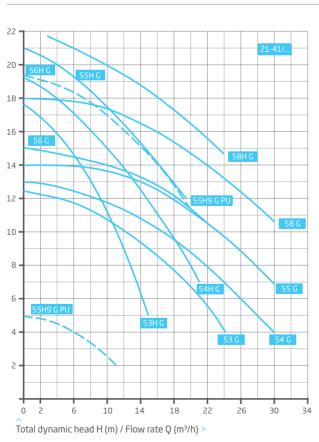
Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
234.1530.138	BADU 21-41/53 G	1~ 230 V	0.55 kW	472.27 €	562.00 €
234.1530.338	BADU 21-41/53H G	1~ 230 V	0.55 kW	485.71€	578.00 €
234.1540.138	BADU 21-41/54 G	1~ 230 V	0.75 kW	567.23€	675.00 €
234.1540.338	BADU 21-41/54H G	1~ 230 V	0.75 kW	584.03€	695.00€
234.1550.138	BADU 21-41/55 G	1~ 230 V	1.00 kW	616.81€	734.00 €
234.1550.338	BADU 21-41/55H G	1~ 230 V	1.00 kW	630.25€	750.00 €
234.1550.538	BADU 21-41/55H9 G PU	1~ 230 V	0.22/1.00 kW	978.15€	1,164.00 €
234.1580.138	BADU 21-41/58 G	1~ 230 V	1.50 kW	745.38 €	887.00 €
234.1580.338	BADU 21-41/58H G	1~ 230 V	1.50 kW	757.14€	901.00€
234.1560.137	BADU 21-41/56 G	3~ Y/∆ 400/230 V	1.10 kW	642.86 €	765.00 €
234.1560.337	BADU 21-41/56H G	3~ Y/∆ 400/230 V	1.10 kW	659.66€	785.00 €
234.1580.137	BADU 21-41/58 G	3~ Y/∆ 400/230 V	1.50 kW	680.67 €	810.00 €
234.1580.337	BADU 21-41/58H G	3~ Y/∆ 400/230 V	1.50 kW	697.48€	830.00€



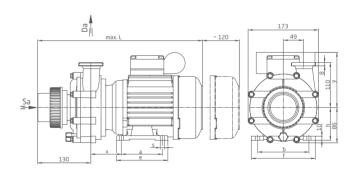








Dimensions



Туре		a	b	е	f	h	s	х	у	L
BADU 21-41/53 G/H G	1~	90	112	115	138	71	7	84	132	372
BADU 21-41/53 G/H G	3~	90	112	115	138	71	7	84	111	372
BADU 21-41/54 G/H G	1~	90	112	115	138	71	7	84	132	372
BADU 21-41/54 G/H G	3~	90	112	115	138	71	7	84	119	372
BADU 21-41/55 G/H G	1~	100	125	125	153	80	9	75	128	410
BADU 21-41/56 G/H G	1~	100	125	125	153	80	9	75	128	410
BADU 21-41/55H9 G PU	J 1~	100	140	155	170	90	10	81	142	410
BADU 21-41/58 G/H G	1~	100	125	125	153	80	9	75	142	410
BADU 21-41/58 G/H G	3~	100	125	125	153	80	9	75	128	435

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 m³/h.

Design

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.

Discharge outlet swivels infinitely.

For suitable connection unions please see page 144.

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	
Mechanical seal	carbon/ceramic/NBR
Impeller nut	PP GF 30
Clamping ring	
Screws	galvanised steel
Motor shaft	stainless steel

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 ³⁾⁾		23/4/23/4	23/4/23/4	23/4/23/4	23/4/23/4	23/4/23/4	23/4/23/4
Rec. inlet/outlet pipe, PVC pipe, d4)		90/75	90/75	90/75	90/75	90/75	90/75
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	1.63/1.10	2.27/1.60	2.90/2.20	2.27/1.60	2.90/2.20	3.90/3.00
Rated current (A)	1~ 230 V	7.20	10.00	13.00	10.00	13.00	17.00
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230	V 1.33/1.10	1.90/1.60	2.55/2.20	1.90/1.60	2.55/2.20	3.45/3.00
Rated current (A)	3~ Y/∆ 400/230	V 2.40/4.15	3.30/5.70	4.60/8.00	3.30/5.70	4.60/8.00	6.20/10.70

For more detailed information regarding the motor protection please see page 155.

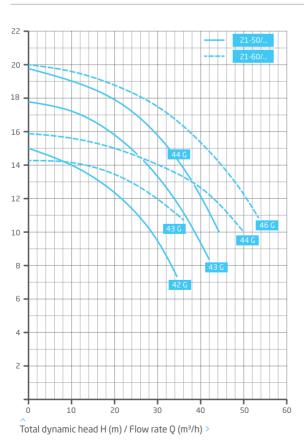
Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
235.0420.138	BADU 21-50/42 G	1~ 230 V	1.10 kW	820.17 € 976.00 €
235.0430.138	BADU 21-50/43 G	1~ 230 V	1.60 kW	898.32 € 1,069.00 €
235.0440.138	BADU 21-50/44 G	1~ 230 V	2.20 kW	1,075.63 € 1,280.00 €
236.0430.138	BADU 21-60/43 G	1~ 230 V	1.60 kW	937.82 € 1,116.00 €
236.0440.138	BADU 21-60/44 G	1~ 230 V	2.20 kW	1,087.39 € 1,294.00 €
236.0460.138	BADU 21-60/46 G	1~ 230 V	3.00 kW	1,302.52 € 1,550.00 €
235.0420.137	BADU 21-50/42 G	3~ Y/∆ 400/230 V	1.10 kW	741.18 € 882.00 €
235.0430.137	BADU 21-50/43 G	3~ Y/∆ 400/230 V	1.60 kW	784.87 € 934.00 €
235.0440.137	BADU 21-50/44 G	3~ Y/∆ 400/230 V	2.20 kW	859.66 € 1,023.00 €
236.0430.137	BADU 21-60/43 G	3~ Y/∆ 400/230 V	1.60 kW	831.93 € 990.00 €
236.0440.137	BADU 21-60/44 G	3~ Y/∆ 400/230 V	2.20 kW	893.28 € 1,063.00 €
236.0460.137	BADU 21-60/46 G	3~ Y/∆ 400/230 V	3.00 kW	1,048.74 € 1,248.00 €



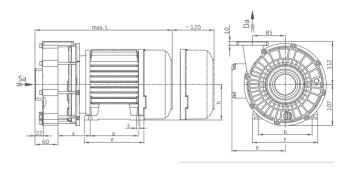








Dimensions



Туре		a	b	е	f	h	s	х	У	L
BADU 21-50/42 G	1~	125	140	155	170	90	9	85	139	358
BADU 21-50/42 G	3~	100	125	125	156	80	9	94	129	333
BADU 21-50/43 G	1~	125	140	155	170	90	9	85	139	358
BADU 21-50/43 G	3~	125	140	155	170	90	9	100	139	382
BADU 21-50/44 G	1~	125	140	155	170	90	9	100	139	373
BADU 21-50/44 G	3~	140	160	176	195	100	12	107	155	407
BADU 21-60/43 G	1~	125	140	155	170	90	9	85	139	358
BADU 21-60/43 G	3~	125	140	155	170	90	9	100	139	382
BADU 21-60/44 G	1~	125	140	155	170	90	9	100	139	373
BADU 21-60/44 G	3~	140	160	176	195	100	12	107	155	407
BADU 21-60/46 G	1~	140	160	176	195	100	12	107	154	427
BADU 21-60/46 G	3~	140	160	176	195	100	12	107	155	407

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 m³/h.

Design

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.

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 144.

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	galvanised steel

Technical data at 50 Hz	BADU 21-80/	31R G	32R G	32 G	33 G	34 G
Inlet Sa/outlet connection Da R ²⁾		23/4/23/4**)	23/4/23/4**)	23/4/23/4**)	23/4/23/4**)	23/4/23/4**)
Rec. inlet/outlet pipe, PVC pipe, d ⁴⁾		110/110	110/110	110/110	140/110	140/110
Power input P ₁ /output P ₂ ¹⁾ (kW)	1~ 230 V	2.27/1.60	2.90/2.20	-/-	3.90/3.00	-/-
Rated current (A)	1~ 230 V	10.00	13.00	-/-	17.00*)	-/-
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 400/230 V	1.90/1.60	2.55/2.20	3.00/2.60	3.45/3.00	-/-
Rated current (A)	3~ Y/∆ 400/230 V	3.30/5.70	4.60/8.00	5.50/9.50	6.20/10.70	-/-
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~ Y/∆ 690/400 V	-/-	-/-	-/-	-/-	4.55/4.00
Rated current (A)	3~ Y/∆ 690/400 V	-/-	-/-	-/-	-/-	4.60/7.90

For more detailed information regarding the motor protection please see page 155.

*)Start-up current approx. 82 A. **)Pumps also available with Ø 82 mm hose connections.

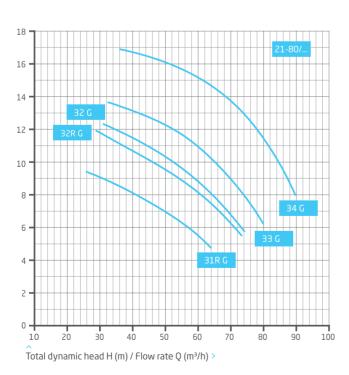
Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7
238.0310.138	BADU 21-80/31R G	1~ 230 V	1.60 kW	1,100.84 € 1,310.00 €
238.0320.138	BADU 21-80/32R G	1~ 230 V	2.20 kW	1,259.66 € 1,499.00 €
238.0330.138	BADU 21-80/33 G	1~ 230 V	3.00 kW	1,904.20 € 2,266.00 €
238.0310.137	BADU 21-80/31R G	3~ Y/∆ 400/230 V	1.60 kW	981.51 € 1,168.00 €
238.0320.537	BADU 21-80/32R G	3~ Y/∆ 400/230 V	2.20 kW	1,049.58 € 1,249.00 €
238.0320.137	BADU 21-80/32 G	3~ Y/∆ 400/230 V	2.60 kW	1,175.63 € 1,399.00 €
238.0330.137	BADU 21-80/33 G	3~ Y/∆ 400/230 V	3.00 kW	1,175.63 € 1,399.00 €
238.0340.137	BADU 21-80/34 G	3~ Y/∆ 690/400 V	4.00 kW	1,612.61 € 1,919.00 €



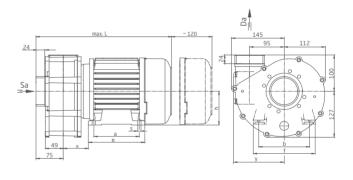








Dimensions



Туре		a	b	e	f	h	S	х	У	L
BADU 21-80/31R G	1~	125	140	155	170	90	9	85	139	373
BADU 21-80/31R G	3~	125	140	155	170	90	9	100	139	397
BADU 21-80/32R G	1~	125	140	155	170	90	9	100	139	388
BADU 21-80/32R G	3~	140	160	176	195	100	12	107	155	422
BADU 21-80/32 G	3~	140	160	176	195	100	12	107	155	422
BADU 21-80/33 G	1~	140	160	176	195	100	12	107	154	442
BADU 21-80/33 G	3~	140	160	176	195	100	12	107	155	422
BADU 21-80/34 G	3~	140	160	176	195	100	12	107	155	439

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 m³/h.

Design

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.

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 144.

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	
Mechanical seal	carbon/ceramic/NBR
Motor shaft	stainless steel
Screws	galvanised steel

BADU 21-81/	31R G	32R G	32 G	33 G	34 G
	90/90	90/90	90/90	90/90	90/90
	110/110	110/110	110/110	140/110	140/110
1~ 230 V	2.27/1.60	2.90/2.20	-/-	3.90/3.00	-/-
1~ 230 V	10.00	13.00	-/-	17.00*)	-/-
3~ Y/∆ 400/230 V	1.90/1.60	2.55/2.20	3.00/2.60	3.45/3.00	-/-
3~ Y/∆ 400/230 V	3.30/5.70	4.60/8.00	5.50/9.50	6.20/10.70	-/-
3~ Y/∆ 690/400 V	-/-	-/-	-/-	-/-	4.55/4.00
3~ Y/∆ 690/400 V	-/-	-/-	-/-	-/-	4.60/7.90
	1~ 230 V 1~ 230 V 3~ Y/Δ 400/230 V 3~ Y/Δ 400/230 V 3~ Y/Δ 690/400 V	90/90 110/110 1~ 230 V 2.27/1.60 1~ 230 V 10.00 3~ Y/Δ 400/230 V 1.90/1.60 3~ Y/Δ 400/230 V 3.30/5.70 3~ Y/Δ 690/400 V -/-	90/90 90/90 110/110 110/110 1~ 230 V 2.27/1.60 2.90/2.20 1~ 230 V 10.00 13.00 3~ Y/Δ 400/230 V 1.90/1.60 2.55/2.20 3~ Y/Δ 400/230 V 3.30/5.70 4.60/8.00 3~ Y/Δ 690/400 V -//-	90/90 90/90 90/90 110/110 110/110 110/110 1~ 230 V 2.27/1.60 2.90/2.20 -/- 1~ 230 V 10.00 13.00 -/- 3~ Υ/Δ 400/230 V 1.90/1.60 2.55/2.20 3.00/2.60 3~ Υ/Δ 400/230 V 3.30/5.70 4.60/8.00 5.50/9.50 3~ Υ/Δ 690/400 V -///-	90/90 90/90 90/90 90/90 90/90 110/110 110/110 110/110 140/110 1~ 230 V 2.27/1.60 2.90/2.20 -/- 3.90/3.00 1~ 230 V 10.00 13.00 -/- 17.00°) 3~ Υ/Δ 400/230 V 1.90/1.60 2.55/2.20 3.00/2.60 3.45/3.00 3~ Υ/Δ 400/230 V 3.30/5.70 4.60/8.00 5.50/9.50 6.20/10.70 3~ Υ/Δ 690/400 V -////-

For more detailed information regarding the motor protection please see page 155.

*)Start-up current approx. 82 A.

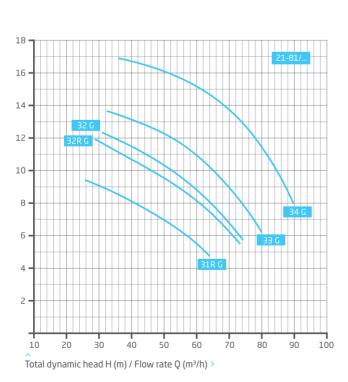
Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP 7)
238.1310.238	BADU 21-81/31R G	1~ 230 V	1.60 kW	1,100.84 € 1,310.00 €
238.1320.238	BADU 21-81/32R G	1~ 230 V	2.20 kW	1,259.66 € 1,499.00 €
238.1330.338	BADU 21-81/33 G	1~ 230 V	3.00 kW	1,904.20 € 2,266.00 €
238.1310.237	BADU 21-81/31R G	3~ Y/∆ 400/230 V	1.60 kW	981.51 € 1,168.00 €
238.1320.237	BADU 21-81/32R G	3~ Y/∆ 400/230 V	2.20 kW	1,049.58 € 1,249.00 €
238.1320.337	BADU 21-81/32 G	3~ Y/∆ 400/230 V	2.60 kW	1,175.63 € 1,399.00 €
238.1330.337	BADU 21-81/33 G	3~ Y/∆ 400/230 V	3.00 kW	1,175.63 € 1,399.00 €
238.1340.337	BADU 21-81/34 G	3~ Y/∆ 690/400 V	4.00 kW	1,612.61 € 1,919.00 €



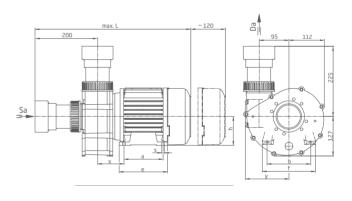








Dimensions



Туре		a	b	е	f	h	S	х	У	L
BADU 21-81/31R G	1~	125	140	155	170	90	9	85	139	498
BADU 21-81/31R G	3~	125	140	155	170	90	9	100	139	522
BADU 21-81/32R G	1~	125	140	155	170	90	9	100	139	513
BADU 21-81/32R G	3~	140	160	176	195	100	12	107	155	547
BADU 21-81/33 G	3~	140	160	176	195	100	12	107	155	547
BADU 21-81/33 G	1~	140	160	176	195	100	12	107	154	567
BADU 21-81/33 G	3~	140	160	176	195	100	12	107	155	547
BADU 21-81/34 G	3~	140	160	176	195	100	12	107	155	564

BADU[®] AK version

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





ABADU Prime-AK

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.

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

Motors

Special motors on request.1)

Available types

BADU Magna, 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.

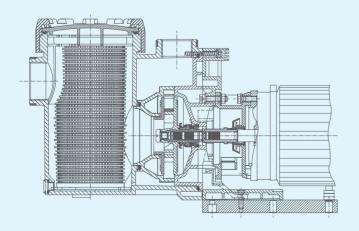




^ BADU 21-50/...-AK

See standard version.

Sectional drawing BADU Prime-AK



Dimensions

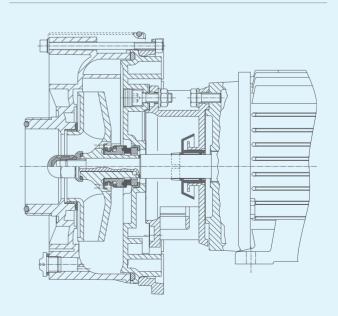
Detailed dimensions available on request or at badu.de

See standard version.

Note:

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

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





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

There are powerful BADUJET 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







BADUJET Vogue Performance: 58 m³/h Page 94



UPDATE

BADU JET Vogue Deluxe Performance: 58 m³/h Page 96



BADUJET Primavera Performance: 85 m³/h Page 98



BADUJET Primavera Deluxe Performance: 85 m³/h Page 100



BESTSELLER

BADUJET Perla Performance: 40 m³/h Page 102



BADUJET Riva Performance: 58 m³/h Page 104



BADUJET Stella Performance: 75 m³/h



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

For recommended accessories see page 140.

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.

Materials used

(over	stainless steel
N	lain housing	ABS
	lozzle housing	
	nterior parts	ABS/stainless steel
5	uction/pressure line	PVC
F	Rall valves and fittings	PVC

Technical data at 50 Hz	BADUJET Vogue	21-60/45 GT 27°	21-60/44 GT 27°
Pump flow rate (m³/h)	3~/1~	58	54
Voltage	3~/1~	3 N~ 400/230 V	1~ 230 V
Power input P ₁ /output P ₂ ¹⁾ (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 155.

Article no	Description	Variation	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
232.1100.000	BADUJET Vogue ⁶⁾	Pre-assembly kit			300.00€	357.00 €
232.2400.000	BADUJET Vogue ⁶⁾ - white LED	Final assembly kit	1~ 230 V	2.20 kW	2,873.95 €	3,420.00€
232.2420.000	BADUJET Vogue ⁶⁾ - multicoloured LED	Final assembly kit	1~ 230 V	2.20 kW	3,021.01€	3,595.00€
232.2200.000	BADUJET Vogue ⁶⁾ - white LED	Final assembly kit	3 N~ 400/230 V	2.60 kW	2,772.27 €	3,299.00€
232.2220.000	BADUJET Vogue ⁶⁾ - multicoloured LED	Final assembly kit	3 N~ 400/230 V	2.60 kW	2,917.65 €	3,472.00€
232.1300.001	Ball valve kit				112.61€	134.00€
232.2000.402	Stainless steel hand rail for BADUJ	ET Vogue, complete ⁶⁾			642.86 €	765.00 €

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

If you require a unit in the ball valve version, please also order the ball valve kit.

⁶⁾ NB: Please contact SPECK Pumpen before installing a BADUJET Vogue submerged counter swim unit in a salt water pool.



With stainless steel cover >

Optional stainless steel hand rail >

















Scope of supply

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°

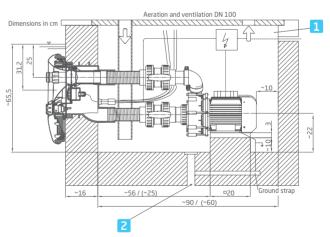
Note

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

Detailed dimensions available on request or at badu.de

Recommended installation example



Sufficiently dimensioned drain required

Dimensions in brackets - version without ball valves

- 1 Shaft width min. 70 cm
- Floor drainage

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 BADUJET Vogue, however with nozzle and control elements made from stainless steel.

For recommended accessories see page 140.

Materials used

Cover stainless steel
Main housing ABS
Nozzle housing ABS
Interior parts ABS/stainless steel
Suction/pressure linePVC
Ball valves and fittingsPVC
Control elements stainless steel
Nozzle ABS/stainless steel

Technical data at 50 Hz	BADUJET Vogue Deluxe	21-60/45 GT 27°	21-60/44 GT 27°
Pump flow rate (m³/h)	3~/1~	58	54
Voltage	3~/1~	3 N~ 400/230 V	1~ 230 V
Power input P ₁ /output P ₂ ¹⁾ (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 155.

Article no	Description	Variation	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
232.1100.000	BADUJET Vogue Deluxe ⁶⁾	Pre-assembly kit			300.00€	357.00 €
232.4400.000	BADUJET Vogue Deluxe ⁶⁾ - white LED	Final assembly kit	1~ 230 V	2.20 kW	3,353.78€	3,991.00€
232.4420.000	BADUJET Vogue Deluxe ⁶⁾ - multicoloured LED	Final assembly kit	1~ 230 V	2.20 kW	3,500.84 €	4,166.00€
232.4200.000	BADUJET Vogue Deluxe ⁶⁾ - white LED	Final assembly kit	3 N~ 400/230 V	2.60 kW	3,251.26 €	3,869.00€
232.4220.000	BADUJET Vogue Deluxe ⁶⁾ - multicoloured LED	Final assembly kit	3 N~ 400/230 V	2.60 kW	3,399.16 €	4,045.00 €
232.1300.001	Ball valve kit				112.61€	134.00 €
232.2000.402	Stainless steel hand rail for BADUJET	Vogue Deluxe, com	plete ⁶⁾		642.86 €	765.00 €

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

If you require a unit in the ball valve version, please also order the ball valve kit.

⁶⁾ NB: Please contact SPECK Pumpen before installing a BADUJET Vogue Deluxe submerged counter swim unit in a salt water pool.



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°

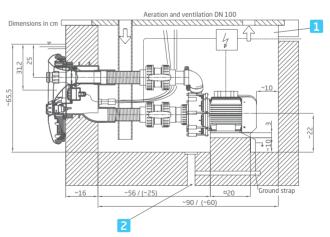
Note

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

Detailed dimensions available on request or at badu.de

Recommended installation example



Sufficiently dimensioned drain required

Dimensions in brackets - version without ball valves

- 1 Shaft width min. 70 cm
- 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

For recommended accessories see page 140.

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.

Materials used

i laterials ased	
Main housing	ABS
Nozzle housing	
Interior parts	
Suction/pressure line	
Shut-off valve and fittings	
Cover/hand rail	
CUVEI/Hallu Iall	Stall liess steel

Technical data at 50 Hz	BADUJET 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 ₁ /output P ₂ ¹⁾ (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 nozzle (bar)	3~/1~	1.00	1.00
Flow velocity in centre 2 m from the nozzle (m/s)	3~/1~	1.10	1.20
Massage pressure (bar) max.	3~/1~	1.60	1.80
Multi-directional swivel nozzle (degrees)		60	60

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Variation	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
232.6100.000	BADUJET Primavera ⁶⁾	Pre-assembly kit			515.97 €	614.00 €
232.7400.000	BADUJET Primavera ⁶⁾ - white LED	Final assembly kit	1~ 230 V	3.00 kW	3,095.80 €	3,684.00 €
232.7420.000	BADU JET Primavera ⁶⁾ - multicoloured LED	Final assembly kit	1~ 230 V	3.00 kW	3,095.80 €	3,684.00 €
232.7200.000	BADUJET Primavera ⁶⁾ - white LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	2,991.60€	3,560.00 €
232.7220.000	BADU JET Primavera ⁶⁾ - multicoloured LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	2,991.60€	3,560.00 €
232.7800.000	BADUJET Primavera ⁶⁾ - white LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	3,200.00€	3,808.00€
232.7820.000	BADU JET Primavera ⁶⁾ - multicoloured LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	3,200.00€	3,808.00€
232.6100.100	BADUJET Primavera ⁶⁾ additional kit for	tiled pools			41.18€	49.00 €

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

⁶⁾ NB: Please contact SPECK Pumpen before installing a BADU JET Primavera submerged counter swim unit in a salt water pool.



With stainless steel cover >

Delivery with stainless steel hand rails >















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°

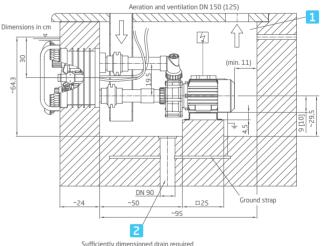
Note

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

Detailed dimensions available on request or at badu.de

Recommended installation example



Dimensions in brackets [] only for BADU 21-81/33 1~ and BADU 21-81/34 3~

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

BADUJET Primavera Deluxe

A material variation on the BADU JET 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 BADU JET Primavera, however with nozzles and control elements made from stainless steel.

For recommended accessories see page 140.

Materials used

Main housing ABS	ľ
Nozzle housing ABS	N
Interior parts PP/PC/ASA	-
Suction/pressure linePVC	2
Shut-off valve and fittingsPVC	5
Cover/hand rail stainless steel	(
Control elements stainless steel	(
Nozzles ABS/stainless steel	N

Technical data at 50 Hz	BADUJET Primavera De	luxe 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 ₁ /output P ₂ ¹⁾ (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 nozzle (bar)	3~/1~	1.00	1.00
Flow velocity in centre 2 m from the nozzle (m/s)	3~/1~	1.10	1.20
Massage pressure (bar) max.	3~/1~	1.60	1.80
Multi-directional swivel nozzle (degrees)		60	60

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Variation	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
232.6100.000	BADUJET Primavera Deluxe ⁶⁾	Pre-assembly kit			515.97 €	614.00 €
232.7401.000	BADUJET Primavera Deluxe ⁶⁾ - white LED	Final assembly kit	1~ 230 V	3.00 kW	3,302.52€	3,930.00€
232.7421.000	BADUJET Primavera Deluxe ⁶⁾ - multicoloured LED	Final assembly kit	1~ 230 V	3.00 kW	3,302.52€	3,930.00€
232.7201.000	BADUJET Primavera Deluxe ⁶⁾ - white LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	3,198.32 €	3,806.00€
232.7221.000	BADUJET Primavera Deluxe ⁶⁾ - multicoloured LED	Final assembly kit	3 N~ 400/230 V	3.00 kW	3,198.32 €	3,806.00 €
232.7801.000	BADUJET Primavera Deluxe ⁶⁾ - white LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	3,407.56 €	4,055.00 €
232.7821.000	BADUJET Primavera Deluxe ⁶⁾ - multicoloured LED	Final assembly kit	3 N~ Δ 400 V	4.00 kW	3,407.56 €	4,055.00 €
232.6100.100	BADUJET Primavera Deluxe additional ki	t for tiled pools			41.18€	49.00 €

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

⁶⁾ NB: Please contact SPECK Pumpen before installing a BADUJET Primavera Deluxe submerged counter swim unit in a salt water pool.



Cover, nozzles and control elements made from stainless steel >

Nozzle housing with piezo button >

Delivery with stainless steel hand rails >







Scan the QR code for the BADUJET counter swim units application video...









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°

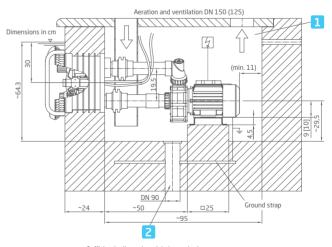
Note

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

Detailed dimensions available on request or at badu.de

Recommended installation example



Sufficiently dimensioned drain required

Dimensions in brackets [] only for BADU 21-81/33 1~ and BADU 21-81/34 3~

- 1 Shaft width min. 70 cm
- Floor drainage

BADUJET Perla

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.

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 can be fitted with an easy-care, high quality, wood-look design inlay.

For recommended accessories see page 140.

Materials used

Housing	ABS/PMMA
Interior parts	
Control elements	ABS
Suction/pressure line	PVC/ABS

BADUJET Perla	21-81/31 RG	21-81/31 RG
3~/1~	40	40
3~/1~	3 N~ 400/230 V	1~ 230 V
3~/1~	2.07/1.60	2.12/1.60
	1	1
3~/1~	0.90	0.90
3~/1~	1.10	1.10
3~/1~	1.20	1.20
	60	60
	3~/1~ 3~/1~ 3~/1~ 3~/1~	3~/1~ 40 3~/1~ 3 N~ 400/230 V 3~/1~ 2.07/1.60 1 1 3~/1~ 0.90 3~/1~ 1.10 3~/1~ 1.20

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
231.7600.000	BADU JET Perla - white LED	1~ 230 V	1.60 kW	2,018.49 €	2,402.00 €
231.7620.000	BADUJET Perla - multicoloured LED	1~ 230 V	1.60 kW	2,158.82 €	2,569.00€
231.7500.000	BADUJET Perla - white LED	3 N~ 400/230 V	1.60 kW	1,966.39€	2,340.00€
231.7520.000	BADUJET Perla - multicoloured LED	3 N~ 400/230 V	1.60 kW	2,106.72€	2,507.00€
231.9851.000	Telescopic foot			154.62€	184.00€

The pumps in the counter swim units 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.



^ With white or multicoloured LED



^ Also available with a telescopic foot for above ground pools



^ Also available with design inlay





Scan the QR code for the BADUJET counter swim units application video...

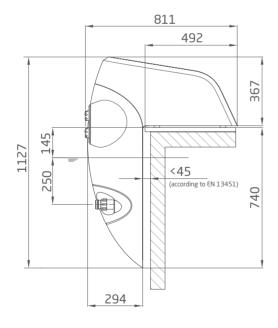


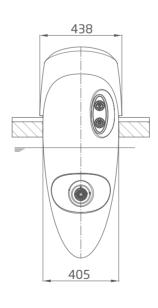


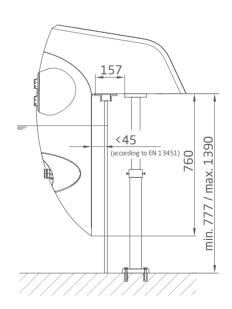




Dimensions







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.

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 can be fitted with an easy-care, high quality, wood-look design inlay.

For recommended accessories see page 140.

Materials used

Housing	ABS/PMMA
Interior parts	
Control elements	ABS
Suction/pressure line	PVC/ABS

Technical data at 50 Hz	BADUJET Riva	21-81/32 G	21-81/32 RG
Pump flow rate (m³/h)	3~/1~	58	54
Voltage	3~/1~	3 N~ 400/230 V	1~ 230 V
Power input P ₁ /output P ₂ ¹⁾ (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 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
231.8600.000	BADUJET Riva - white LED	1~ 230 V	2.20 kW	2,536.97 €	3,019.00€
231.8620.000	BADUJET Riva - multicoloured LED	1~ 230 V	2.20 kW	2,675.63 €	3,184.00€
231.8500.000	BADUJET Riva - white LED	3 N~ 400/230 V	2.60 kW	2,484.87 €	2,957.00€
231.8520.000	BADUJET Riva - multicoloured LED	3 N~ 400/230 V	2.60 kW	2,624.37 €	3,123.00€
231.9851.000	Telescopic foot			154.62€	184.00€

The pumps in the counter swim units 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.







^ Also available with a telescopic foot for above ground pools



Also available with design inlay





Scan the QR code for the BADUJET counter swim units application video...

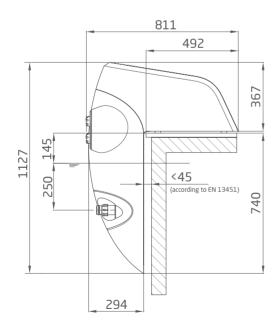


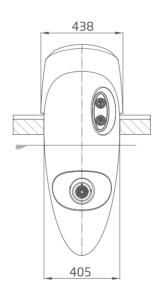


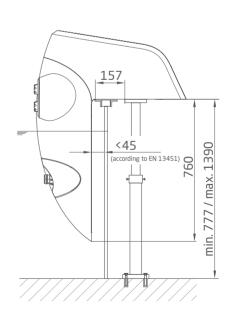




Dimensions







BADUJET 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.

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 BADUJET Stella can be fitted with an easy-care, high quality, wood-look design inlay.

For recommended accessories see page 140.

Materials used

Housing A	BS/PMMA
Interior parts PP/ABS/stain	
Control elements	
Suction/pressure line	PVC/ABS

Technical data at 50 Hz	BADUJET Stella	21-81/33 G
Pump flow rate (m³/h)	3~	75
Voltage	3~	3 N~ 400/230 V
Power input P ₁ /output P ₂ ¹⁾ (kW)	3~	3.74/3.00
Number of nozzles (Ø 40 mm)	3~	2
Flow pressure at nozzle (bar)	3~	1.00
Flow velocity in centre 2 m from the nozzle (m/s)	3~	1.40
Massage pressure (bar) max.	3~	1.60
Multi-directional swivel nozzle (degrees)	3~	60

For more detailed information regarding the motor protection please see page 155.

Article no	Description	Voltage	Power output P ₂	Net RRP	Gross RRP 7)
231.9500.000	BADU JET Stella - white LED	3 N~ 400/230 V	3.00 kW	2,898.32 €	3,449.00 €
231.9520.000	BADUJET Stella - multicoloured LED	3 N~ 400/230 V	3.00 kW	3,038.66 €	3,616.00€
231.9851.000	Telescopic foot			154.62€	184.00€

The pumps in the counter swim units 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.







^ Also available with a telescopic foot for above ground pools



^ Also available with design inlay





Scan the QR code for the BADUJET counter swim units application video ...



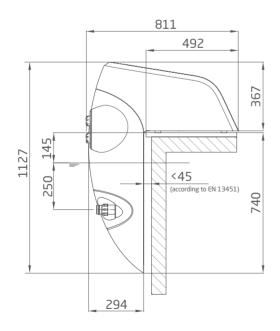


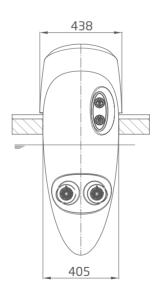


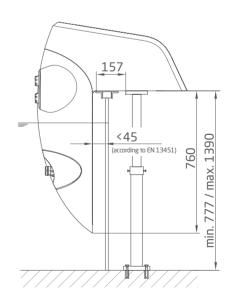


Dimensions

Detailed dimensions available on request or at badu.de







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 $\rm CO_2$ 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 126-127. 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, weather-proof 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 panel unit in an outdoor pool.

Pool situation

Pool surface	
Pool volume45 m ³	
Desired water temperatureapprox. 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.

 $32 \text{ m}^2 \times 0.7 \times 1.2 = \text{approx. } 27 \text{ m}^2$

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 $0.85 \le I$ 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 m² pool surface

Number of panels >
$$\frac{\text{pool surface}}{\text{panel surface}}$$
 > $\frac{32.0 \text{ m}^2}{\text{supplease}}$ > 8.65 x 0.7 (70 %) > 6.06 > 6 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 (m²)		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 (I/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.

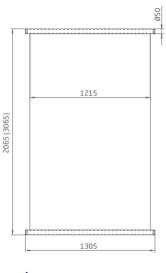
Article no	Description	Net RRP	Gross RRP 7)
250.2000.000	BADU BK 250 solar panel	284.87 €	339.00 €
250.4000.000	Aluminium frame for BADU BK 250	177.31 €	211.00 €
250.1000.000	BADU BK 370 solar panel	328.57 €	391.00 €
250.3000.000	Aluminium frame for BADU BK 370	205.04 €	244.00 €



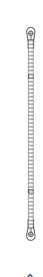


Dimensions Dimensions in brackets for BADU BK 370. Possible dimensional tolerances ± 1 %.

Detailed dimensions on request or at badu.de



1125 (2155) 11275 (2155) 1305

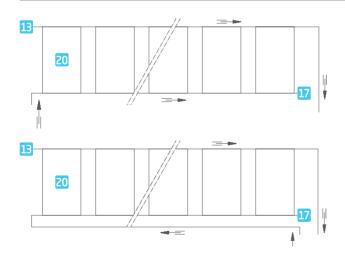


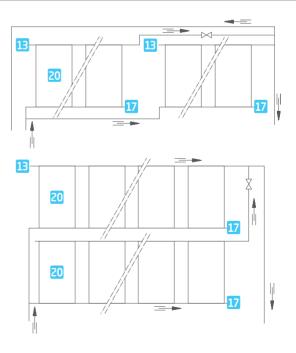
^ Individual solar panel

Solar panel in aluminium frame

Side view

Installation





Installation example for solar panels in one bank (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).

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

- 20 BADU BK solar panel
- 17 End plug
- 13 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
- 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

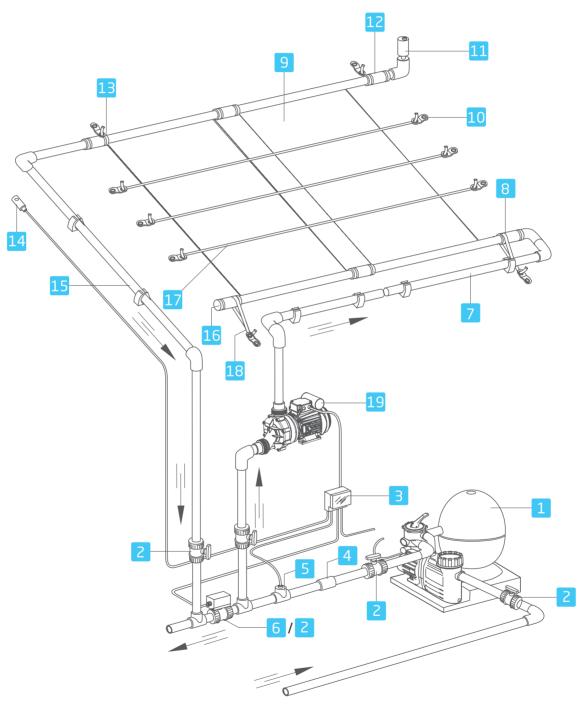
Article no	Description	Net RRP Gross RRP 7
250.2020.000	Solar panel set, 2 x BADU BK 250 with accessories	716.81 € 853.00 €
250.2030.000	Solar panel set, 3 x BADU BK 250 with accessories	1,018.49 € 1,212.00 €
250.2040.000	Solar panel set, 4 x BADU BK 250 with accessories	1,324.37 € 1,576.00 €
250.2050.000	Solar panel set, 5 x BADU BK 250 with accessories	1,589.08 € 1,891. 00 €
250.2060.000	Solar panel set, 6 x BADU BK 250 with accessories	1,936.97 € 2,305.00 €
250.1020.000	Solar panel set, 2 x BADU BK 370 with accessories	805.04 € 958.00 €
250.1030.000	Solar panel set, 3 x BADU BK 370 with accessories	1,148.74 € 1,367.00 €
250.1040.000	Solar panel set, 4 x BADU BK 370 with accessories	1,495.80 € 1,780.00 €
250.1050.000	Solar panel set, 5 x BADU BK 370 with accessories	1,829.41 € 2,177.00 €
250.1060.000	Solar panel set, 6 x BADU BK 370 with accessories	2,195.80 € 2,613.00 €





Installation

Detailed information and dimensions available on request or at badu.de



- 1 Filter unit with pump
- Ball valve
- 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
- Outlet BADU BK solar panel unit
- 14 Air temperature sensor
- 15 Return pipe

- 16 End plug
- 17 Long polyester tape
- 18 Short polyester tape
- Additional pump, optional

BADU[®] NEW



BADU OmniTronic
Page 128

BADU BESTSELLERS



BADU Eco Drive II
Page 116



BADU Eco Logic
Page 122



BADU BNR 300 Page 125



OPERATION

Frequency converters	116
Filter units	118
Controllers	122
Backwash units	128

BADU[®] Eco Drive II

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

Field of application

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

Mode of operation

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.

Performance characteristics

- Unnecessary energy loss, e.g. through a shut-off valve, is avoided.
- Energy saving potential through adjustable flow rate, e.g. in public pools with low pool usage or outside pool operating hours.
- Pump is always run at its optimal and most economic operating point.

Control

The frequency converter offers a wide range of control options: direct control via buttons, digital inputs to approach fixed speeds or external control via the 0-10 V or 4-20 mA interface. It can therefore be integrated into building control systems. Relay output functions e.g. indicating operational readiness or motor overload, relay input functions e.g. "start" or "stop", PTC thermistor sensor evalution and time functions round up its range of applications. Please check special on site requirements on the opposite page.

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

For more detailed information regarding device protection please see page 155

Article no	Description	Voltage	Net RRP Gross RRP 7)
297.0075.402	Frequency converter BADU Eco Drive II for 0.75 kW	3~ 380-480 V	800.00 € 952.00 €
297.0150.402	Frequency converter BADU Eco Drive II for 1.50 kW	3~ 380-480 V	928.57 € 1,105.00 €
297.0220.402	Frequency converter BADU Eco Drive II for 2.20 kW	3~ 380-480 V	1,058.82 € 1,260.00 €
297.0400.402	Frequency converter BADU Eco Drive II for 4.00 kW	3~ 380-480 V	1,373.11 € 1,634.00 €
297.0550.402	Frequency converter BADU Eco Drive II for 5.50 kW	3~ 380-480 V	1,732.77 € 2,062.00 €
297.0000.001	Programming flat rate BADU Eco Drive II		on request

Further capacities on request.





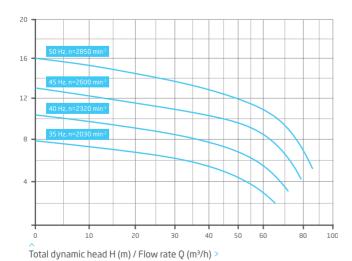
Graphic display >

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).



BADU[®] Star

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 $\mu m)$ 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.

Material 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*)	69/24*)	69/36*)	913/12**)	913/24**)	913/36**)
Inlet Sa/outlet connection Da Rp ²⁾		1½/1½	1½/1½	1½/1½	1½/1½	1½/1½	1½/1½
Rec. inlet/outlet pipe, d ⁴⁾		50/50	50/50	50/50	50/50	50/50	50/50
Flow rate (m³/h)***)		9	9	9	13	13	13
Number of filter cartridges		12	24	36	12	24	36
Filtration area (m²)		7	14	21	7	14	21
Filtration velocity (m/h)		1.30	0.64	0.43	1.60	0.93	0.62
Power input P ₁ /output P ₂ 1) (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~ 230 V	2.40	2.40	2.40	3.00	3.00	3.00
Power input P ₁ /output P ₂ 1) (kW)	3~ Y/∆ 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/∆ 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 155. "Un to approx. 50 m² pool volume. "Un to approx. 80 m² pool volume. ""With clean filter and no resistance on site.

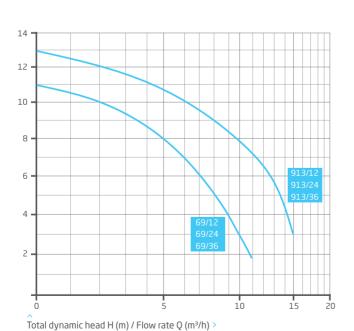
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Article no	Description	Voltage	Power output P ₂	Net RRP Gross RRP
220.1100.000	BADU Star 69/12	1~ 230 V	0.30 kW	1,490.76 € 1,774.00 €
220.2100.000	BADU Star 69/24	1~ 230 V	0.30 kW	1,847.06 € 2,198.00 €
220.3100.000	BADU Star 69/36	1~ 230 V	0.30 kW	2,165.55 € 2,577.00 €
220.1300.000	BADU Star 913/12	1~ 230 V	0.45 kW	1,528.57 € 1,819.00 €
220.2300.000	BADU Star 913/24	1~ 230 V	0.45 kW	1,885.71 € 2,244.00 €
220.3300.000	BADU Star 913/36	1~ 230 V	0.45 kW	2,200.00 € 2,618.00 €
220.1000.000	BADU Star 69/12	3~ Y/∆ 400/230 V	0.30 kW	1,479.83 € 1,761.00 €
220.2000.000	BADU Star 69/24	3~ Y/∆ 400/230 V	0.30 kW	1,826.05 € 2,173.00 €
220.3000.000	BADU Star 69/36	3~ Y/∆ 400/230 V	0.30 kW	2,142.02 € 2,549.00 €
220.1200.000	BADU Star 913/12	3~ Y/∆ 400/230 V	0.45 kW	1,518.49 € 1,807.00 €
220.2200.000	BADU Star 913/24	3~ Y/∆ 400/230 V	0.45 kW	1,873.95 € 2,230.00 €
220.3200.000	BADU Star 913/36	3~ Y/∆ 400/230 V	0.45 kW	2,191.60 € 2,608.00 €

Opening device for locking handles included in delivery. See page 142.

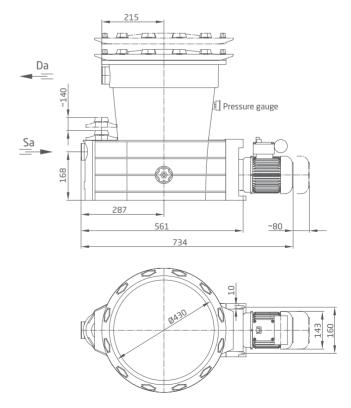




Performance









Small, compact and robust. The complete filter for small pools, whirlpools and plunge pools.

Field of application

Perfectly suited for smaller pools up to 20 m³ and whirlpools as well as for keeping sauna plunge pools clean.

For recommended accessories see page 145.

Designs

- Type 1 with one filter cartridge.
- Type 2 with two filter cartridges.
- Type 4 with four filter cartridges.

Technical data	BADU Quick	Type 1	Type 2	Type 4
Max. flow rate (m³/h)		4.50	6.50	8.50
Number of filter cartridges, mesh	ı size approx. 50 μm	1	2	4
Filter area (m²)		0.60	1.20	2.40
Inlet		R 1½	R 1½	R 1½
Outlet		R 1½	R 1½	R 1½

Article no	Description	Net RRP	Gross RRP 7)
240.2100.000	BADU Quick type 1, without pump	118.49 €	141.00 €
240.1000.000	BADU Quick type 2, without pump	212.61€	253.00 €
240.4000.000	BADU Quick type 4, without pump	286.55€	341.00 €
227.4500.050	Polystar long life filter cartfidge approx. 50 μm*)	11.93€	14.20 €

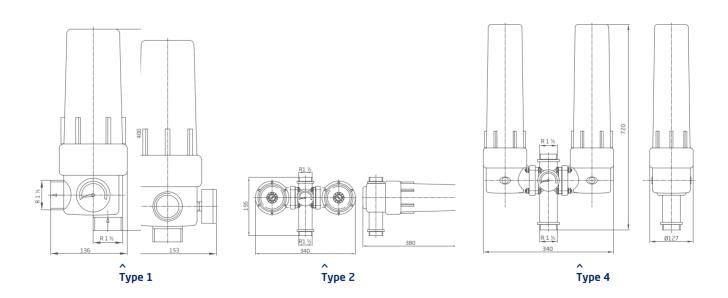
^{*)} For images and descriptions please see page 145.





Dimensions

Detailed dimensions available on request or at badu.de





BADU[®] Eco Logic

Automatic timer with many extras. Speed control for BADU GREEN pumps.



Field of application

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

Performance characteristics

- Easily understandable full text display for convenient handling and multilingual menu.
- Simple menu for fast programming and evaluation of the operating
- The control unit is equipped for individual programming with three switch programmes per day.
- The regulation of BADU GREEN pumps is carried out both via speed phases and with a control voltage of 0 to 10 V.

- An integrated additional relay allows the programming of your pool lighting, for example, or can be used to control a heat pump.

The BADU Eco Logic is constructed in an integrated switching technology.

Components:

- Electronic control unit with modern clamp connection technology.
- Sensors to display bathing water temperature (optionally available).

Article no	Description	Voltage	Net RRP	Gross RRP 7)
271.6606.000	BADU Eco Logic	1~ 230 V, 50/60 Hz	374.79 €	446.00 €

BADU° Suction safety system



Safety with automatic shut-down technology. For reliable protection in swimming pools.



Field of application

The BADU Suction safety system can be integrated in all existing systems.

Mode of operation

The BADU Suction safety system eliminates the hidden risk posed to swimming pool users by suction points in public facilities e.g. hotel pools, wellness spas or private pools. The fitting of redundant sensors increases the reliability of the system further. The potential danger posed at sucton points was known even before the publication of the bulletin 60.03 "Avoidance of Risks at Suction, Drain and Intake Points in Swimming Pools" issued by the German Swimming Pool Association (Deutsche Gesellschaft für das Badewesen e.V.). In extreme cases the suction points can trap pool users by their swimwear, hair or limbs at openings, which can lead to serious

physical injury or even death by drowning.
The BADU Suction safety system reliably eliminates this hazard.
As specified in bulletin 60.03, it demonstrates "safe characteristics" instead of indirectly creating other safety gaps.

Performance characteristics

- Redundant sensors.
- Prevention of accidental restart.

In extreme cases the BADU Suction safety system control box immediately switches the pump off and a signal is sent. The trapped person is released without delay. In order to ensure maximum funtional reliability, the sensors are made from materials suitable for use in swimming pool water. They are also protected from overload as a result of over pressure and under pressure.

Article no	Description	Connections	Voltage	Net RRP	Gross RRP 7)
230.0000.801	BADU Suction safety system for integration in an EMERGENCY OFF system	d 63*)	1~ 230 V	792.44 €	943.00€
230.0000.803	BADU Suction safety system up to 4.00 kW with low voltage coil	d 63*)	1~ 230 V	987.39€	1,175.00€

For more detailed information regarding the device protection please see page 155.

 $\ensuremath{^{\circ}}\xspace$ Alternative sized glue sockets must be provided on site.

BADU® BNR 55

Proven water level control. With intelligent level detector.

Field of application

For observation of the environment surrounding the pool and technology equipment.

Design

- Electronic control unit with modern clamp connection technology.
- Mounting rail.
- Level detector.
- Magnetic valve Rp ½ (at an additional cost).



Level detector included in delivery >

Technical data at 50 Hz	BADU	BNR 55
Temperature range		15 °C-35 °C
Rated voltage		1~ 230 V, 50 Hz
Relay switching capacity		5.0 A at 1~ 230 V
On/off switching delay		approx. 1-4 min.
Cable lengths		5 m standard length/max. cable length 30 m, required cable cross section 2 x 1.5 mm 2
Level detector		waterproof, welded with safety low voltage approx. 12 V

For more detailed information regarding device protection please see page 155.

Article no	Description	Voltage	Net RRP	Gross RRP 7)
271.6055.000	BADU BNR 55 with sensor and magnetic valve	1~ 230 V	412.61€	491.00 €
271.6055.001	BADU BNR 55 with sensor, without magnetic valve	1~ 230 V	318.49 €	379.00 €
271.6070.003	Magnetic valve Rp 1/2, seperate		94.96 €	113.00€
271.6070.002	Spare level detector with 5 m cable		36.72 €	43.70 €

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:

- Electronic control unit with modern clamp connection technology.
- Mounting rail for float switch.
- Safety shutdown system with threefold proctection.
- 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
On/off switching delay		approx. 1-4 min., individually programmable
Cable lengths		$10m$ standard length/max. cable length $25m$, required cable cross section $2x0.25mm^2$
Float switch		waterproof

For more detailed information regarding device protection please see page 155.

Article no	Description	Voltage	Net RRP	Gross RRP 7)
271.6605.010	BADU BNR 300 with magnetic valve	1~ 230 V	400.84 €	477.00 €
271.6605.000	BADU BNR 300 without magnetic valve	1~ 230 V	307.56 €	366.00 €
271.6070.003	Magnetic valve Rp ½, seperate		94.96 €	113.00 €
271.6090.005	Level switch with 10 m cable*)		70.08 €	83.40 €

^{*)} Further cable lengths on request.

BADU° Logic 1-3

Relax and enjoy with fully automatic controllers. For convenient regulation of temperature and filtration times. Optionally available with the web manager.

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 vour 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.
- With the BADU Logic 3 the unit can be monitored on smart phones or tablets via an optional web manager and various parameters can be regulated.

Designs

- BADU Logic 1 Basic controller for solar pool heating, including two temperature
- BADU Logic 2 Additional filter pump control and running time optimization including two temperature sensors.
- BADU Logic 3 Additional multistage filter pump control for BADU GREEN motors, e.g. BADU Eco Soft and BADU Prime Eco VS, including two temperature sensors.

Technical data at 50/60 Hz	BADU	Logic 1-3
Temperature range		0 °C-40 °C
Rated voltage		1~ 230 V, 50/60 Hz
Relay switching capacity		4.0 A at 1~ 230 V or transitor outputs for BADU GREEN pumps for BADU Logic 3 $$
Parameter		All data indivdually adjustable
Cable length		5 m and 10 m

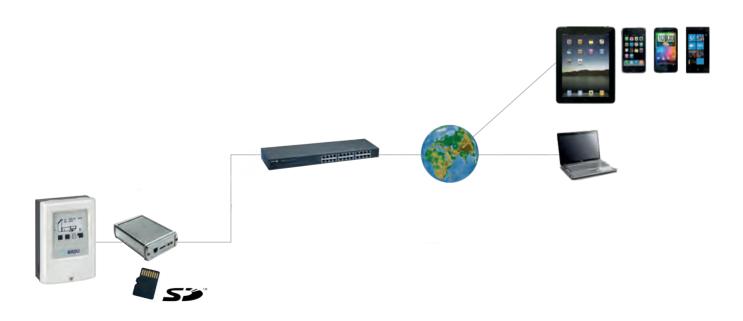
For more detailed information regarding the device protection please see page 155

Article no	Description	Voltage	Net RRP	Gross RRP 7)
271.6601.000	BADU Logic 1		420.17 €	500.00 €
271.6602.000	BADU Logic 2		540.34 €	643.00 €
271.6603.000	BADU Logic 3		629.41€	749.00 €
271.6604.000	BADU Logic web manager for BADU Logic 3		479.83 €	571.00 €
250.0012.900	Ball valve LH 50 with actuator	1~ 230 V	363.87 €	433.00 €
230.9011.000	Ball valve LH 63 with actuator	1~ 230 V	577.85 €	687.64 €
271.6600.403	Water sensor		42.77 €	50.90 €





Application representation for BADU Logic 3



BADU[®] OmniTronic

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.

Performance features

- BADU GREEN pumps, such as BADU Prime Eco VS, can be connected directly to the backwash device.
- A battery and a capacitor are built in, thus the current time and programmed backwash times cannot be lost.
- Functions can also be triggered via pressure switches.
- Free inputs and outputs can be used for level controls with optional
- All functions and parametres can be set individually via an illuminated display.
- All six valve positions can be accessed.
- Various inputs and outputs with additional fuctions e.g. pressure switch trigger and remote control.
- Display with plain text display and multilingual menu.
- Operation in combination with a separate filter control possible.

Technical data	BADU OmniTronic	
Circuit board	microprocess	or controlled
Operating voltage	1~ 230 \	<i>V</i> , 50 Hz
Connection value (motor capacity P ₁)	max. 1.	00 kW
Fuse, only for actuator/pump	315 mA dela	ıy/4 A delay
Max. permissable load current	250 V	//4 A
Operating pressure	max. 2	2 bar

For more detailed information regarding the device protection please see page 155.

Article no	Description	Connections	Voltage	Net RRP	Gross RRP 7)
260.6000.041	BADU OmniTronic with BADU Mat R 41/3 A	Rp 1½	1~ 230 V	755.46 €	899.00 €
260.6000.051	BADU OmniTronic with BADU Mat R 51/3 A	Rp 2	1~ 230 V	780.67 €	929.00€
260.6402.087	Pressure transducer +500 +1500 mbar, incl. assembly accessories			62.90€	74.85 €
260.6000.001	Accessory: BADU OmniTronic display wall assembly		41.17 €	49.00 €	
260.6000.002	Accessory: Relay >1.00 kW pumps, max. 1.50 kW		41.17 €	49.00 €	
240.9102.063	Special non-return valve*) d 63		135.29 €	161.00 €	
271.6090.005	Level switch with 10 m cable**)		70.08 €	83.40 €	
271.6090.012	Bracket for level switch		8.85 €	10.53 €	

^{*)} Further cable lengths on request.

^{**)} For sewage pipes when the BADU OmniTronic is installed **below** the water level





Oelivery
with BADU Mat R 41/3 A
or BADU Mat R 51/3 A

Product details

Switching function

- On/Off rocker switch.
- Automatic backwash and filtering according to programme selection.
- Backwash and rinsing times can be set individually.
- Backwash and rinse cycles can be started automatically, manually or externally.
- BADU GREEN pumps can be connected directly.
- Magnetic valve can be controlled optionally.

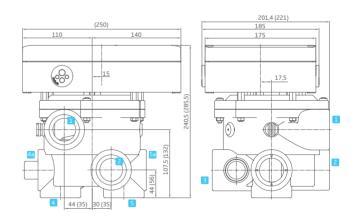
Installation tip

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.

NB: constant current supply required.

Dimensions

Detailed dimensions available on request or at badu.de





Pool

3 Sewage, see page 135

4 / 4a to the filter

5 / 5a from the filter

The measurements in brackets are for BADU OmniTronic with BADU Mat R 51/3 A.

BADU Mat T 1 Topmount Mat T 1 G Topmount

Simple and efficient for optimal water distribution. Manual filter backwash unit as a topmount 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 using the 6-way multiport valve. 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 55 or BADU BNR 300, see pages 124-125. The 6-way multiport valve can be mounted directly on top of the filter container.

Designs

- BADU Mat T 1 Topmount With Ø 38 socket connection for hose, Ø 177 flange.
- BADU Mat T 1 G Topmount d 50 glue connection / d 50 glue union, Ø 177 flange.

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 ba	ar

Due to optimal water flow there is minimal flow noise and flow loss. See flow characteristics on page 131.

Article no	Description	Flange diameter	Connections	Net RRP	Gross RRP 7)
262.3000.000	BADU Mat T 1 Topmount	Ø 177	Ø 38 socket connection	60.67 €	72.20 €
262.4000.000	BADU Mat T 1 G Topmount*)	Ø 177	d 50	60.67 €	72.20 €

^{*)} Glue inserts with Rp 1½ inside thread also available





^ BADU Mat T 1 Topmount valve

^ BADU Mat T 1 G Topmount valve

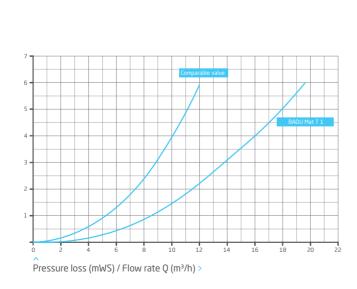
Flow characteristics

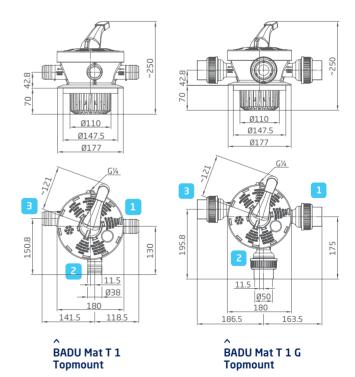
Dimensions

Pump
 Pool

Sewage

Detailed dimensions available on request or at badu.de





BADU Mat T 1 Sidemount Mat T 1 G Sidemount

Simple and efficient for optimal water distribution.

Manual filter backwash unit 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 using the 6-way multiport valve. 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 55 or BADU BNR 300, see pages 124-125. The 6-way multiport valve can be mounted directly on top of the filter container.

Designs

- BADU Mat T 1 Sidemount
 With Ø 38 socket connection for hose, d 50 filter connection.
- BADU Mat T 1 G Sidemount
 d 50 glue connection / d 50 glue union, d 50 filter connection.

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 l	oar

Due to optimal water flow there is minimal flow noise and flow loss. See flow characteristics on page 133.

Article no	Description	Filter connections	Connections	Net RRP	Gross RRP 7)
262.3600.000	BADU Mat T 1 Sidemount	d 50	Ø 38 socket connection	80.34 €	95.60 €
262.4600.000	BADU Mat T 1 G Sidemount*)	d 50	d 50	80.34 €	95.60 €

 $^{^{\}circ}$) Glue inserts with Rp 1½ inside thread also available.



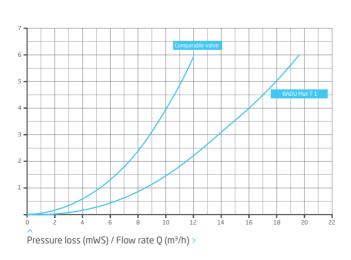






^ BADU Mat T 1 G Sidemount valve

Flow characteristics

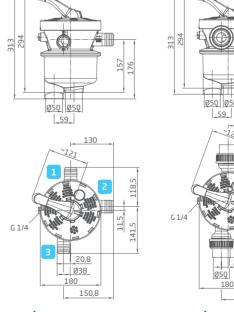


Dimensions

Detailed dimensions available on request or at badu.de

195,8

BADU Mat T 1 G Sidemount



BADU Mat T 1 Sidemount

- 1 Pump
- Pool
- Sewage

Product advice - we're happy to help: phone +49 9123 949-400.

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 55 or BADU BNR 300, see pages 124-125.

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 n	nax. 2.5 l	bar

Due to optimal water flow there is minimal flow noise and flow loss. See flow characteristics on page 135.

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 RRP	Gross RRP 7
263.5000.000	BADU Mat R 41/3 GK	Rp 1½/d 50	108.40 €	129.00€
263.3300.000	BADU Mat R 41/3 G	Rp 1½	108.40 €	129.00€
263.3700.000	BADU Mat R 41/3 A	Rp 1% , with two R 1% sealing plugs	119.33€	142.00€
263.3600.000	BADU Mat R 41/3 K	d 50	108.40 €	129.00€
264.5000.000	BADU Mat R 51/3 GK	Rp 2/d 63	143.70 €	171.00 €
264.3300.000	BADU Mat R 51/3 G	Rp 2	143.70 €	171.00 €
264.3700.000	BADU Mat R 51/3 A	Rp 2, with two R 1½ sealing plugs	152.94 €	182.00€
264.3600.000	BADU Mat R 51/3 K	d 63	143.70 €	171.00 €







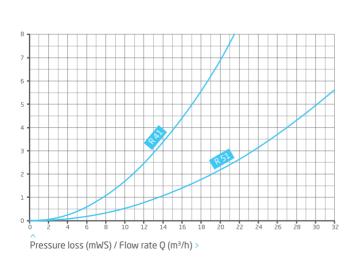


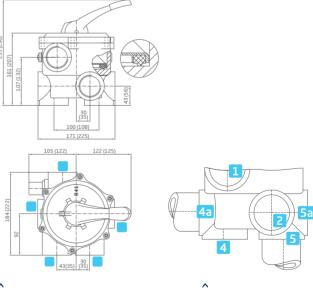
^ BADU Mat R 51 Sidemount valve

Flow characteristics

Dimensions

Detailed dimensions available on request or at badu.de





^ BADU Mat R 41/ BADU Mat R 51

^ Version 3

- Pump
- Pool
- 3 Sewage
- 4 / 4a to the filter
- 5 / 5a from the filter

The measurements in brackets are for BADU Mat R 51.

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...



ACCESSORIES

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BADU[®] Massage units





Wall/floor nozzle

Version I Ø 40 mm Version II Ø 28 mm

Field of application

For mounting into walls and floors of all pool models as an attraction and for underwater massages (consult physician). The BADU wall/floor nozzles can be built in together with the BADU suction housing.





Wall nozzle

Version III 5 x Ø 19 mm Rp 2 connections or d 75 mm glue socket

Field of application

For mounting into walls of all pool models as an attraction and for underwater massages (consult physician). The BADU wall nozzle can be built in together with the BADU suction housing.



Suction housing

d 110 mm glued connections

Field of application

The swimming pool water flows via the BADU suction housing to the swimming pool circulation pump, such as a BADU 21 pump, see pages 80-89 or the BADU Resort, see pages 40-41, to be provided by the user.

Technical data	Massage units	Version I	Version II	Version III
Nozzle(s) Ø (mm)		40	28	5 x 19
Flow rate Q (m³/h)		35-55	20-35	35-55
Total dynamic head H - Flow pressure at nozzle(s) ((bar)	0.80-1.20	0.80-1.00	0.80-1.20

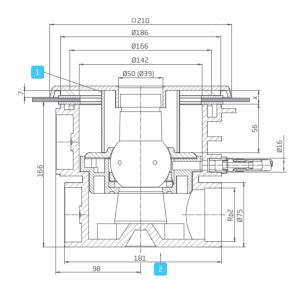
Article no	Description	Net RRP	Gross RRP 7)
230.8000.000	BADU wall/floor nozzle, version I with one nozzle, Ø 40 mm	456.30 €	543.00 €
230.8200.000	BADU wall/floor nozzle, version II with one nozzle, Ø 28 mm	456.30 €	543.00 €
230.8100.000	BADU wall nozzle, version III with five nozzles, each \emptyset 19 mm	456.30 €	543.00 €
230.8310.000	BADU suction housing	421.85 €	502.00€
230.8600.000	Installation frame for BADU wall/floor nozzle	178.99€	213.00 €

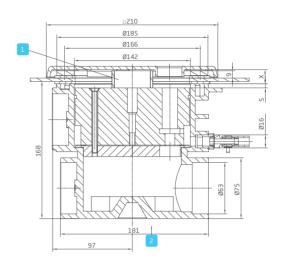
Pumps, switching devices and pneumatic buttons on request.



Dimensions Version I/II

Version III, wall nozzle only





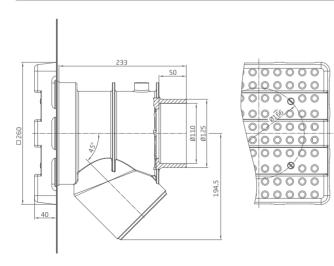
- Supporting pipe included in delivery to be shortened by the user.
 I = 56 + X; d = 90 mm.
- 2 Connection from below is available. Please state when ordering.

Measurements in brackets for version II.

- 1 Supporting pipe included in delivery to be shortened by the user. I = 4 + X; d = 50 mm.
- 2 Connection from below is available. Please state when ordering.

Dimensions Suction housing

Detailed dimensions available on request or at badu.de



BADU° Counter swim units











BADUJET wireless control

Waterproof remote control for all BADUJET submerged counter swim units. For control of the BADUJET 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 and 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.



Design inlay for BADUJET Perla, BADUJET Riva, BADUJET Stella

The design inlay is supplied separately and assembled by the customer.

< The design inlay in use

Article no	Description	Net RRP	Gross RRP
232.0000.403	BADUJET wireless control	395.80 €	471.00 €
230.0001.000	Massage hose for large nozzle, Ø 40 mm	79.83 €	95.00€
230.0002.000	Massage hose for small nozzle, Ø 28 mm	79.83 €	95.00€
230.0003.000	Massage hose with large pulsating massage nozzle, Ø 40 mm	191.60 €	228.00€
230.0004.000	Massage hose with small pulsating massage nozzle, \emptyset 28 mm	191.60€	228.00€
230.0005.000	Pulsator for large nozzle, Ø 40 mm	151.26 €	180.00€
230.0006.000	Pulsator for small nozzle, Ø 28 mm	151.26 €	180.00€
230.0007.000	Large pinpoint massage nozzle, Ø 40 mm	26.05 €	31.00€
230.0008.000	Small pinpoint massage nozzle, Ø 28 mm	26.05 €	31.00€
230.0022.000	Blind cap for large nozzle, Ø 40 mm	26.05 €	31.00€
230.0023.000	Blind cap for small nozzle, Ø 28 mm	26.05 €	31.00€
231.9800.904	Design inlay for BADUJET Perla, BADUJET Riva, BADUJET Stella	315.97 €	376.00 €

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

BADU° BK 250 / BK 370











^ Panel connector

ênd plug

^ Polyester tape

Plastic double eyelet









^ Aerator and ventilator

Élbow

^ 2-way ball valve LH 50 with actuator

^ 2-way ball valve LH 63 with actuator

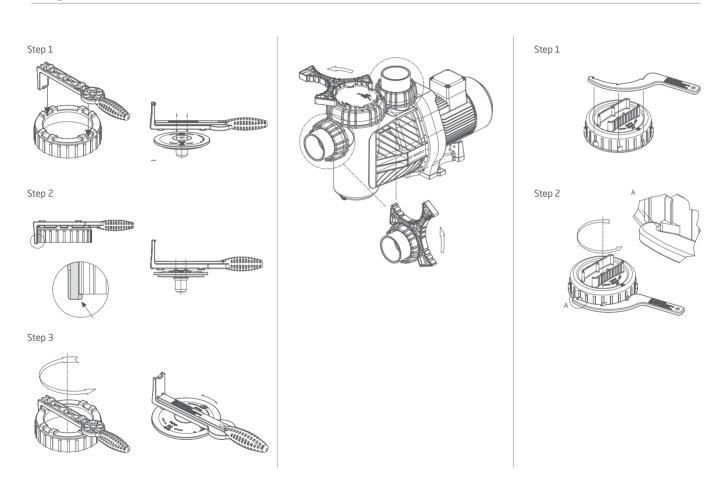
Article no	Description	Net RRP	Gross RRP 7)
250.0001.000	Panel connector with two stainless steel hose clamps d 50 mm	8.57 €	10.20 €
250.0002.000	PVC end plug d 50	4.20 €	5.00 €
250.0005.000	1 roll polyester tape 50 m	38.49 €	45.80 €
250.0006.000	Plastic double eyelet	0.92 €	1.09€
250.0007.000	Aerator and ventilator R ³/s	20.50€	24.40 €
250.0008.000	Elbow for aerator and ventilator with connection piece d 50/connection thread Rp ³ / ₈	29.92€	35.60 €
250.5100.000	Repair set II: cartridge with sealing compound*)	28.24€	33.61 €
250.0012.700	2-way ball valve LH 50 with actuator, 1~ 24 V	363.03 €	432.01 €
230.9011.000	2-way ball valve LH 63 with actuator, 1~ 230 V	577.85€	687.64 €

[&]quot;)Flexible sealant for smaller repairs on the solar panel.

BADU Opening devices



Usage



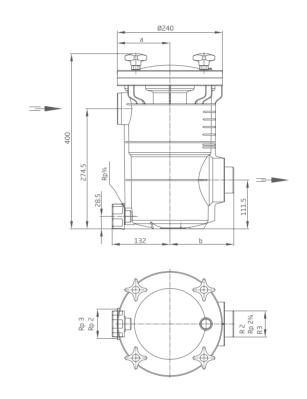
Article no	Description	Net RRP	Gross RRP 7)
292.1157.700	Universal opening device	5.10 €	6.07 €
290.2099.800	Three-way opening device	13.70 €	16.30 €
292.1199.800	Sickel opening device	2.80 €	3.33 €

BADU° Plastic strainer tank





Dimensions Detailed dimensions available on request or at badu.de.



Field of application

For pool water circulation pumps with a capacity of max. 56 $\,$ m³/h, at 60 °C, 2.5 bar.

Design

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

Materials used

Strainer tank	PP TV 40
Lid	PC, transparent
Star handle	PA 6 GV
Strainer basket	PP
Recommended pressu	ıre line
DN (mm)	75

Article no	Description	Dimensions a/b	Net RRP	Gross RRP 7)
292.0912.490	Plastic filter housing, cpl., intake connection Rp 2/pump connection R 2	120/146	273.11€	325.00 €
292.0912.491	Plastic filter housing, cpl., intake connection Rp 3/pump connection R 3	130/146	273.11€	325.00 €
292.0912.493	Plastic filter housing, cpl., intake connection Rp 3/pump connection Rp 23/4*)	130/121	266.39 €	317.00 €
292.0912.494	Plastic filter housing, cpl., intake connection Rp 3/pump connection Rp 2 ³ / ₄ **)	130/129	266.39 €	317.00 €

[&]quot;) 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 $2\frac{3}{4}$ 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 1% outer thread with d 50 glue socket or R 2 x d 50 or R 2 x d 63

Article no	Description	Net RRP	Gross RRP 7
280.5120.050	Union made from PVC for BADU 21-40/, G 2 inside thread with d 50 glue socket	8.57 €	10.20 €
290.2072.153	Union made from ABS, d 110 / d 110 glue sockets	51.26€	61.00€
292.3172.100	Union made from ABS for BADU 21-80/, Rp 2¾ inside thread with d 110 glue socket	51.26€	61.00 €
230.0031.000	Union made from PVC for BADU 21-50/ BADU 21-60/, G 2¾ inside thread with d 63 glue socket	26.05€	31.00 €
230.0027.000	Plastic adapter made from ABS, Rp 2% x Rp 3 inside thread with d 110 glue adapter	25.21€	30.00 €
230.0028.000	Plastic adapter made from ABS, Rp 2¾ inside thread with d 75 glue socket and d 90 glue adapter	25.21€	30.00 €
230.0026.000	Plastic adapter made from PVC, Rp 2¾ inside thread with d 90 glue adapter	22.69€	27.00 €
230.0029.000	Plastic adapter made from ABS, Rp 2% inside thread with R 1% outer thread	25.21€	30.00€
586.3305.003	Union made from ABS, R 1½ outer thread with d 50 glue socket	8.35 €	9.94 €
586.3305.004	Union made from ABS, R 2 outer thread with d 50 glue socket	9.60 €	11.42 €
586.3306.302	Union made from ABS, R 2 outer thread with d 63 glue socket	6.80 €	8.09 €

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

BADU[®] Union sets













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 RRP	Gross RRP 7)
292.1672.134	Flange sleeve made from PVC-U with d 50 glue socket	9,50€	11,31 €
292.1472.126	Flange sleeve made from PVC-U with d 63 glue socket	12,30€	14,64 €
292.1472.118	Flange sleeve made from PVC with d 63 glue socket and d 75 glue adapter ¹⁾	18,80 €	22,37 €
290.2072.113	Flange sleeve made from PVC with d 90 glue socket ²⁾	25,65€	30,52 €
290.2072.115	Flange sleeve made from PVC with d 110 glue socket ³⁾	29,90€	35,58 €

¹⁾ for BADU Profi, BADU EasyFit (without connection set options) and BADU 21-81/..

BADU° Filter cartridge



Article no	Description	Net RRP	Gross RRP 7)
227.4500.050	Polystar long life filter cartridge approx. 50 μm, length 248 mm	11.93€	14.20 €

²⁾ for BADU Prime 25 to BADU Prime 48 and BADU Resort 30 to BADU Resort 45

 $^{^{\}scriptscriptstyle 3)}$ for BADU Resort 50 to BADU Resort 110

BADU 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...

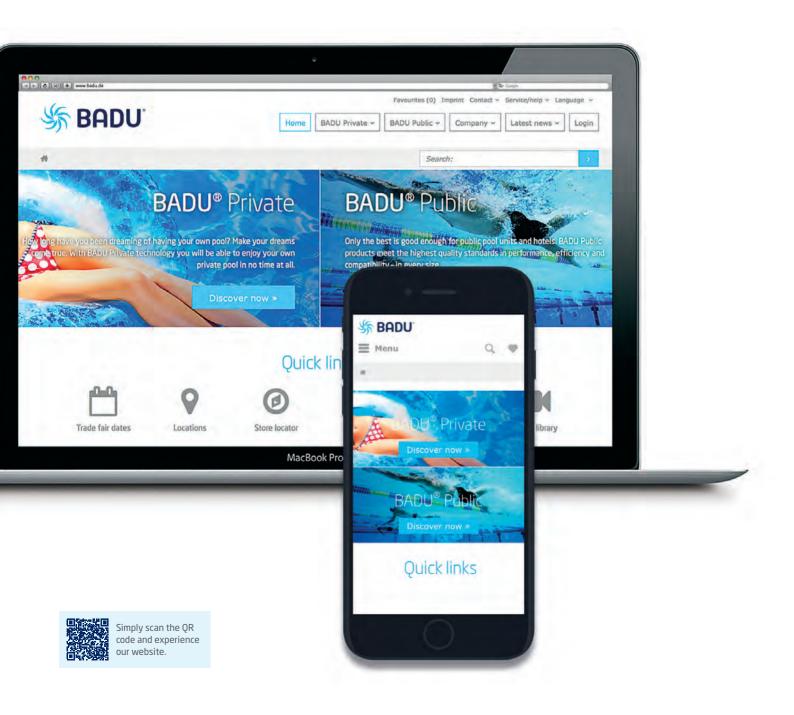


SERVICE

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BADU.DE

POOL TECHNOLOGY ONLINE.



Knowledge is very valuable when you're planning your pool.

BADU is there to help, simply and flexibly online, with know-how and competence as well as more than 50 years' experience.

We have something to help you manage your energy costs so that your love of your pool will never die:

the BADU Eco Check App (for iOS and Android).



BADU.DF...

- All BADU products for private and public pools, in detail.
- > Modern design, clearly presented and simple to operate.
- > Useful tools for searching, planning and collecting ideas.
- > All important information at a glance.
- > Upcoming trade fair dates.

PRODUCT FINDER

There are BADU products for every use. The BADU product finder provides you with a clear overview of suitable products perfect for your field of application and individual requirements.

SPECK PUMPEN WORLDWIDE

Find BADU representations in your local area.

VIDEO LIBRARY

Having your own pool is such a joy. Now you can experience the sensation and possibilities of a private pool online - take a look at the videos and you can start dreaming and planning.

FAR AND WIDE

You can access the BADU website at any time and from any place; on your computer, tablet and mobile phone - with uncomprimising quality and always with access to the entire content.

BADU° Eco Check

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 Eco Check App for iOS and Android operating systems.

Size: 10 MB
Android Tablet: 2.2 or higher
Apple iPad: 2.2 or higher







SPECIALIST RETAIL PRODUCT PRESENTATION.



BADU Prime sectional model



BADU Mat R 41 sectional model



BADUJET Vogue display



BADUJET Primavera display



BADUJET Perla/Riva/Stella display

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

Actions speak louder than words. That's why we offer all BADU pumps as sectional models, individually finished by hand, to specialist retailers.

Use these clear consultation aids to explain the functions and benefits of each pump type and to answer any questions.

Article no	Description	Net RRP	Gross RRP 7)
219.0000.097	BADU Prime sectional model	252.10€	300.00€
263.0000.099	Mat R 41 sectional model	33.36 €	39.70 €

The prices indicated are fixed prices, without deductions.

Counter swim unit displays

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.

Artikel-Nr.	Тур	Maße (BxHxT)	UVP netto	UVP brutto ⁷⁾
232.7420.200	BADUJET Vogue display with white LED	77 x 181 x 57 cm	500.00 €	595.00€
232.7420.400	BADUJET Primavera display with white LED	77 x 181 x 57 cm	500.00€	595.00€
231.7500.098	BADUJET Perla or BADUJET Riva display with white LED	95 x 204 x 87 cm	500.00 €	595.00 €
231.9500.098	BADUJET Stella display with white LED	95 x 204 x 87 cm	500.00€	595.00 €

The prices indicated are fixed prices, without deductions.

We're happy to advise specialist retailers regarding the BADU brand. Call us on +49 9123 949-400



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 excluively available to buy in specialist retail stores, because sophisticated products belong in competent hands.

OUALITY

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

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.

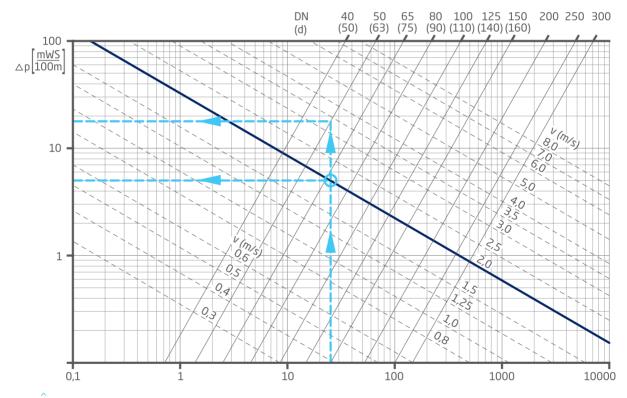
DN > Inner pipe diameter in mm

d > Outer pipe diameter in mm

Optimum flow rate in the pipe

-- > Example

O > DN 65 or PVC d 75



Pressure loss (mWS) / Flow rate Q (m³/h) >

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 > BADUJET Vogue . **75** > BADUJET Primavera

Q (m³/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 of all motors that are used in BADU PREMIUM pumps.

BADU Delta, BADU Profi, BADU Profi-MK, BADU Alpha, BADU Magna,	BADU 21-40/55H9 G PU, BADU 21-41/55H9 G PU
BADU Gamma, BADU Prime, BADU EasyFit, BADU Resort,	Motor protection class IP 5
BADU Bronze, BADU 42, BADU 43, BADU 44, BADU 45, BADU 46,	Class of insulation
BADU 47, BADU Star	Approx. motor speed (rpm) 1420/284
Motor protection class IP 55	Max. water temperature (°C) 6
Class of insulation F	Max. casing pressure (bar)2.
Approx. motor speed (rpm) 2840	
Max. water temperature (°C)	
Tida. casing pressure (bar)	
BADU Delta Eco VS, BADU Profi Eco VS, BADU Profi-MK Eco VS,	BADU Eco Drive II
BADU Alpha Eco Soft, BADU Eco Soft, BADU EasyFit Eco VS,	Device protection class IP 5
BADU Gamma Eco VS, BADU Prime Eco VS, BADU Bronze Eco VS, BADU Eco Motion	
Motor protection class IP 55	
Class of insulation F	
Approx. motor speed (rpm) variabel	
Max. water temperature (°C)	
Max. casing pressure (bar)	
BADU 93	BADU Eco Logic, BADU Suction safety system, BADU BNR 55,
Motor protection class IP 55	BADU BNR 300, BADU Logic 1-3, BADU OmniTronic
Class of insulation F	Device protection class IP X
Approx. motor speed (rpm)	
Max. water temperature (°C)	
Max. casing pressure (bar) 3.0	
BADU FA, BADU 21-40, BADU 21-41, BADU 21-50, BADU 21-60,	BADUJET Vogue, BADUJET Vogue Deluxe, BADUJET Primavera,
BADU 21-80, BADU 21-81	BADUJET Primavera Deluxe, BADUJET Perla, BADUJET Riva,
Motor protection class IP 55	BADU JET Stella
Class of insulation F	Device protection class IP X
Approx. motor speed (rpm) 2850	
Max. water temperature (°C)	
Max. casing pressure (bar)	
BADU 73	
Motor protection class IP 55	
Class of insulation F	
Approx. motor speed (rpm) 2840	
Max. water temperature (°C) 60	

Maximum permitted ambient temperature 40 °C.

BADU° Q&A

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.

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.

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 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 pages 162-163.

Footnotes . Abbreviations

 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 154. 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, pH value 6.8 - 8.2.

7) Recommended retail price for Germany incl. 19 % VAT. Valid from 01.02.2018 until 30.06.2018. 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

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

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

Characteristics measured according to EN ISO 9906; Flow rate Q = \pm 10 %, total dynamic head H = \pm 8 %.

Self-priming pumps are tested according to DIN EN 16713-2. Minimum geodetic suction height 1.5 m. Average approx. 3 m (ca. 0.5 m for BADU 21-80 S). Pumps must be filled with water when priming.

BADU GLOSSARY OF TERMS

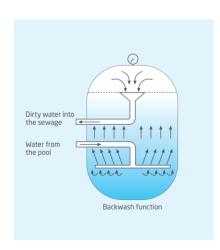
On the following pages you will find explanations for professional and technical terminology. Because knowledge leads to better decisions.

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.

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 Prime 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 maintenancefree. 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 regrading BADU materials please see page 157 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 regrading 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 45) 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 independenly. 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.



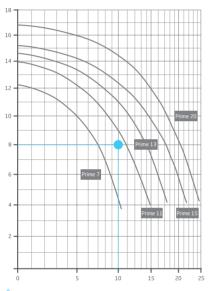
Operating point

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

 $10 \text{ m}^3/\text{h}$ for sand filter, generally 0.8 bar (8 m) **Result**

The BADU Prime 11 reaches the desired flow rate of $10 \, \text{m}^3\text{/h}$ with the required total dynamic head of at least 8 metres.



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

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 154 you can calculate the pipe friction loss and the flow speed and determine your optimum pipe dimensioning.

Pre and final assembly kits

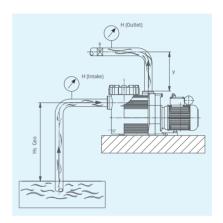
BADUJET submerged counter swim units always consist of two different sets of components which together make a functioning unit. In the pre-assembly kit you will find all of the parts required when building your pool. For example the main housing which is installed in the pool wall. The final assembly 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.

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

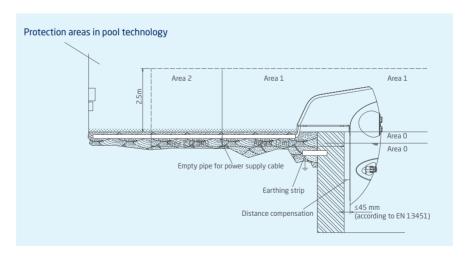
This is the time a pump needs to prime the water until the suction line is completely evacuated. This time depends on the length and diameter of the pipe, how high above the water level the pump is positioned and of course the pump itself, e.g. capacity and type.



Protection area

There are various protection areas from 0 to 2 for connecting and equipping 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 (Internaional 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.

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 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 necessray 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.

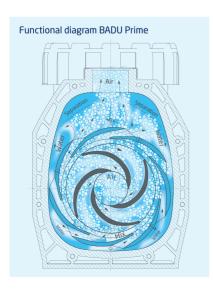
Salt electrolysis

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 and units in standard variations are suitable for a total salt concentration of 0.5 %, i.e. 5g/l, for this procedure.

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.



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.

Telescopic foot

A so-called telescopic support foot is available for BADUJET 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.

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.



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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Latest information...

INFO SERVICE

At BADU you get first class pool products and valuable knowledge. We help you to make the pool of your dreams - with extensive info material and individual consultation:

Phone +49 9123 949-0.



E-MAIL NEWSLETTER

There's always a lot going on at BADU. You can read about new products and solutions for your pool and valuable tips regularly in the BADU e-mail newsletter. Subscribe right away at badu.de > Service/help.

IMPRINT

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Editorial and content

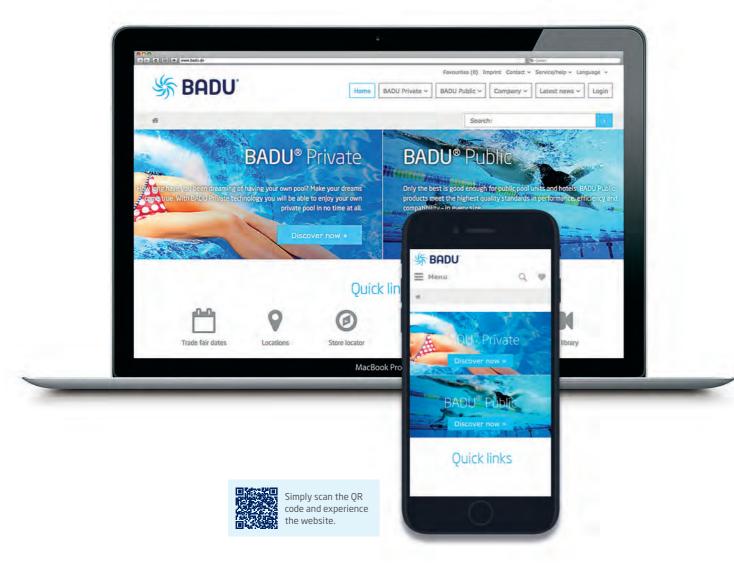
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Circulation pumps



Performance

The maximum amount of water that can be transported by a pump.

Specification in cubic metres per hour (m³/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.

Counter swim units



Performance

The maximum amount of water that can be transported by a pump.

Specification in cubic metres per hour (m³/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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