



**BASENHURT  
EXPORT**

# swimming pool technique 2014/2015





## **We invite you to explore our catalog of Pool Technique.**

We present you next edition of the catalog of swimming pool technique, where you can find almost everything what you need to build and equip the pool. The catalog has been published since 14 years and our 20-years experience allows us to offer you the best products and solutions. The wide selection allows you to the beneficial configuration of the elements which will suit to your needs and capabilities. In this catalog you will find a wide range of goods from which everyone can choose something for themselves. For all products are offered spare parts. Are offered only tested, the best devices, both of those cheaper as well as from more expensive. You must have a choice, because there are many dilemmas, but the choice is one. At the present time, especially when everyone looks only at the price, we would like to encourage you to more thorough analysis of the received offers. To your choice were conscious and apt, it should be performed taking into account a variety of factors, not only the price. The rule is simple: cheaper goods, worse goods. About this conservatively simple rule need to remember selecting the products. You have to penetrate into to essence of the product, its detailed and positive features. Having such full knowledge you can compare. It is always worth to rely on the knowledge and long standing experience of our company. The employees of our company will bring closer, explain and propose the best products and solutions corresponding to your expectations and budget.

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In the catalog you will find goods of the following companies and brands:

- Tebas
- Basen Hurt
- Bunger&Frese
- Rainbow
- AllFit
- FitStar
- Speck Pumpen
- IML
- Renolit
- Peraqua
- IBG
- Flexinox
- Fluidra
- MKT
- Coraplast
- Kripsol
- and others



In this catalog were used images with the permission and knowledge of the above-mentioned companies.





## **POOLS – FOUNTAINS – STAIRS**

Steel pools	6
Wooden pools TEBAS Natura	8
Concrete panel pools	9
Steel panel pools	10
Liner inserts	14
Ocean pool membranes	15
Alkorplan membranes	16
Boundary and gutter stones	20
Elements of fountains	27

## **FILTERS – PUMPS**

Introduction	30
Filter Jupiter Poly	32
Filter Kripsol	33
Filter Swim Tec	34
Filter Saturn	35
Filter Sandy	36
Filter San Sebastian Standard	37
Filter Caribic Standard	38
Filter San Sebastian Public	39
Filter Artik Public	40
Filter Altea Public	41
Filter Nordik Public	42
Cartridge filters	44
Accessories for filters	45
Automatic valves	47

## **POOL PUMPS – CONTROL BOXES – HEATING**

Speck pool pumps	50
PSH pool pumps	55
Speck pool pumps	56



IML pool pumps	57
Accessories for pumps	60
Control boxes	61
Overflow pool – gratings, ready-made gutters, stones & grills	64
Heating – introduction	68
Heat pumps, electric heaters	69
Heat exchangers and solar collectors	72

## ELEMENTS of POOL INSTALLATION

Introduction	78
Bronze Edition – elements from bronze	84
White-Steel de LUXE Edition – elements from plastic and steel	91
Stainless Edition – elements from steel	92
White-Steel Edition – elements from plastic and steel	94
Black Edition – black elements from plastic	95
White Edition – elements from plastic	96
White de LUXE Edition – elements from plastic	97
Chrome Edition – chrome elements from plastic	98
Other plastic elements	99
Water level regulators	100
Lighting in pool – introduction	101
Pool LED lamps and traditional lamps	102
LED lighting – examples in the pictures	110

## HYDRO MASSAGE DEVICES

Introduction	112
Standard and Double from bronze	113
Tajfun Jet from bronze	114
Tajfun DUO Jet from bronze	115
Jet Swim and bottom massage from bronze	116
Combi Whirl from bronze, underwater switches	117



Hurricane, Tender, Smart from plastic	118
Badu Jet Super-Sport from plastic	119
Cyclon, Cyclon Duo, Libra from plastic and steel	120
Suspended massage Badu Jet, Startblock from plastic	121
Air massages	123
Elements of hydro massages	125
Pumps for hydro massages	131
Water curtains, stream showers, water attractions	132

## ADDITIONAL EQUIPMENT

Pool handrails	140
Showers	142
Ladders	143
Pool shutter covers, electric winding reels	146
Solar bubble covers, manual winding reels	152
Safety covers	154

## TREATMENT/CLEANING

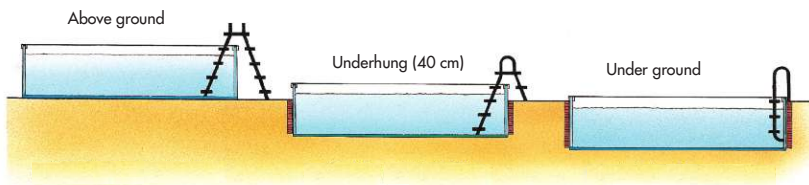
Introduction	156
Pool accessories	158
Chemical agents	162
Automatic dosing systems	167
UV lamps	170
Semi-automatic vacuum cleaners	171
Automatic vacuum cleaners	172
Fittings, valves, PVC pipes	175
Products of TEBAS brands	181
Himan - Pool roofings	182



**Round steel pools**

Perfect swimming pools for the gardens and inside the house. Simple construction, fast installation, which you can do by yourself, long-term usage, round shape, low installation costs are advantages of these pools, that determine the choice of these pools by many people. The pool is placed on a hard, flat, leveled floor. The wall is mounted on the upper and lower profiles. Is connected together with special aluminum profile. The inside is lined with blue PCV liner. It gives the color of the water. The liner can also be ordered in other colors. The liner is equipped with a special roller, which is mounted in the profile mounted on the wall of the pool. This allows the exchange of the liner in the future, there is no need to remove stones located on the edge of the pool. Durability of the pool wall, depending on the amount of the groundwater in the year, is 15-20 years. Durability of the liner, depending on the type and amount of used chemicals, is 8-12 years. The set consists: steel wall made of sheet, protected by dip galvanized and covered with plastic, lower and upper profiles, blue liner PCV 0,6mm. Each steel pool must be equipped with sand filter with pump, skimmer, nozzles and lighting. It is worth to enrich your pool with heating, automatic chemical dosing, coping stones, massage system, water attractions, pool cover, robotic pool cleaner. These elements can be found in the rest of our catalog.

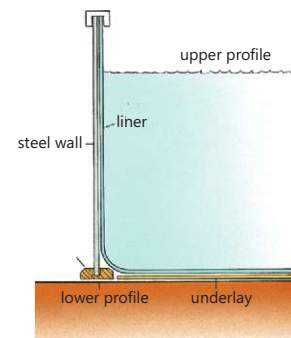
Ways of installation



Finished pool

**Round steel pools**

Diam. (m)	Code 120cm	Vol. (m <sup>3</sup> )	Code 150cm	Vol. (m <sup>3</sup> )
3,0	17110	8	040305	10
3,5	17112	11	17130	14
4,2	17114	15	17132	19
4,5	17116	19	17134	24
5,0	17118	22	17136	28
5,5	17120	26	17138	33
6,0	17122	31	17140	39
7,0	040030	42	040330	53



Review of the pool

**Accessories**

- Underlay for liner 1 m<sup>2</sup> - code 16050
- Liner repair kit - code 16070



The way of mounting the liner


**Oblong steel pools**

Dimensions (cm) width x length	Code 120 cm	Vol.(m <sup>3</sup> )	Code 150 cm	Vol.(m <sup>3</sup> )
250 x 500	18350	12	18380	15
300 x 570	18352	16	18382	20
300 x 700	18356	20	18385	26
350 x 620	18359	20	18388	26
350 x 750	18363	25	18390	32
360 x 630	18360	21	18391	27
400 x 800	18366	30	18392	39
420 x 820	18368	32	18395	42
420 x 950	18370	38	18396	49
500 x 900	18372	42	18398	53
500 x 1.030	18374	46	18400	62


**Octal steel pools**

Dimensions (cm) szer. x dlug.	120 cm Kod	Poj. w m <sup>3</sup>	150 cm Kod	Poj. w m <sup>3</sup>
320 x 525 cm	17800	15	17850	19
350 x 540 cm	17805	17	17855	22
360 x 625 cm	17810	20	17860	26
420 x 650 cm	17815	17	17865	29
460 x 725 cm	17820	24	17870	31
500 x 770 cm	17825	34	17875	44
500 x 855 cm	17830	38	17880	49
600 x 920 cm	-----	---	17882	63







**Wooden pools Tebas NATURA**

Just like your house roof design, you can choose the pool made of the same material. The NATURA pool with good maintenance of wooden wall, the same as the other garden accessories, serves you for many years. Tebas Natura pools are a perfect complement to your garden landscape. Radiate the harmony of perfectly shaped pool. The natural beauty of the wood and pure water will provide you complete relaxation and rejuvenation. The simplicity of the form in combination with the nature, create a wonderful atmosphere of the bath. Tebas Natura pools are made from natural and ecological materials. Your Natura pool is a proof of your good taste and favorable approach to the environmental problems. Created by professionals, complete sets of Natura pools are ready to use immediately after installation.

**NATURA OCTA**



**NATURA HEXA**



**NATURA LONG**

- \* Only this pool offers the highest comfort of using
- \* Wood wall is NOT to the destruction
- \* At any time, you can easily dismantle the pool and move to another location
- \* Not disfigures a garden such as plastic construction
- \* Pool created by professionals
- \* Made from ECO-FRIENDLY materials
- \* Sturdy wood construction made of pressure-impregnated monoblocks
- \* The pool can be placed on the ground or dig to any depth
- \* Wood can be painted in any color or clearcoat, preserving the natural texture of wood
- \* All pools are offered with complete equipment enabling the use of the pool immediately after installation

Poolpackage of Tebas NATURA includes: PVC profile for mount liner insert, miniskimmer, ladder + flanges, filter + pump, inlet nozzles, hose unions, quartz sand, wooden structure, liner insert, vlies, masking frame for miniskimmer, suction hoses, clamps, wood screws. Optional - wooden chest for filtering system.

**Wooden pools Tebas NATURA - poolpackages**

name of the product	code	name of the product	code
Tebas NATURA HEXA, external dim. 434x376x116 mm	tebHEXA	Tebas NATURA LONG Mini, external dim. 563x352x124 mm	tebLONGMi
Tebas NATURA OCTA Mini, external dim. 537x496x116 mm	tebOCTAMi	Tebas NATURA LONG Standard, external dim. 727x396x138 mm	tebLONGSt
Tebas NATURA OCTA Standard, external dim. 560x517x129 mm	tebOCTASt	Tebas NATURA LONG Maxi, external dim. 814x460x138 mm	tebLONGMa
Tebas NATURA OCTA Maxi, external dim. 616x569x129 mm	tebOCTAMa		

Wooden structures (without equipment) are also available, on request.



### Concrete panel pools

Here comes the slow end of the era of molded concrete pools. Today comes a new time for panel concrete pools. The concrete panel pools is a new technology allows to build a swimming pool in a reasonable manner. Complete pool walls are delivered, with height of 150 cm, which allow to create a pool at any size. Depth can be freely adjusted via pool bottom. Elements of the wall have to be placed on a stable surface, which can be a concrete floor, paving stones, concrete slabs, sand with cement or ground. The walls are connected together by screws and are anchored to the substrate that must have the dimensions larger of 60 cm on each side, than the dimensions of the pool.

Advantages of concrete panel pools:

- low cost of executing the pool walls
- reduce the time of building pool walls up to 1 day
- no need of plastering, because the panel has perfectly smooth surface
- durability of the elements is the same like in traditional concrete pools
- perfect precision and accuracy of the walls
- availability of ideally made curves with radius of 1,5 or 2 m
- possibility of placing elements on the ground
- low transport costs for ex. pool 4x8 m delivery on 4 pallets



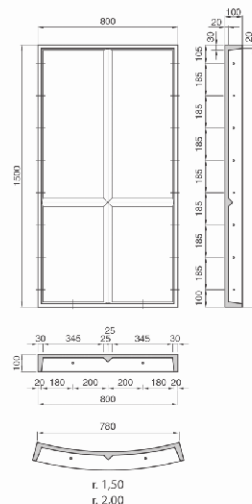
Walls inside can be covered liner, mosaic or tiles as well as in the traditional pool.

Concrete panel, straight, length 80 x height 150 cm - code 15800

Concrete panel, curve with radius of 1,5 m- code 15802

Concrete panel, curve with radius of 2 m - code 15804

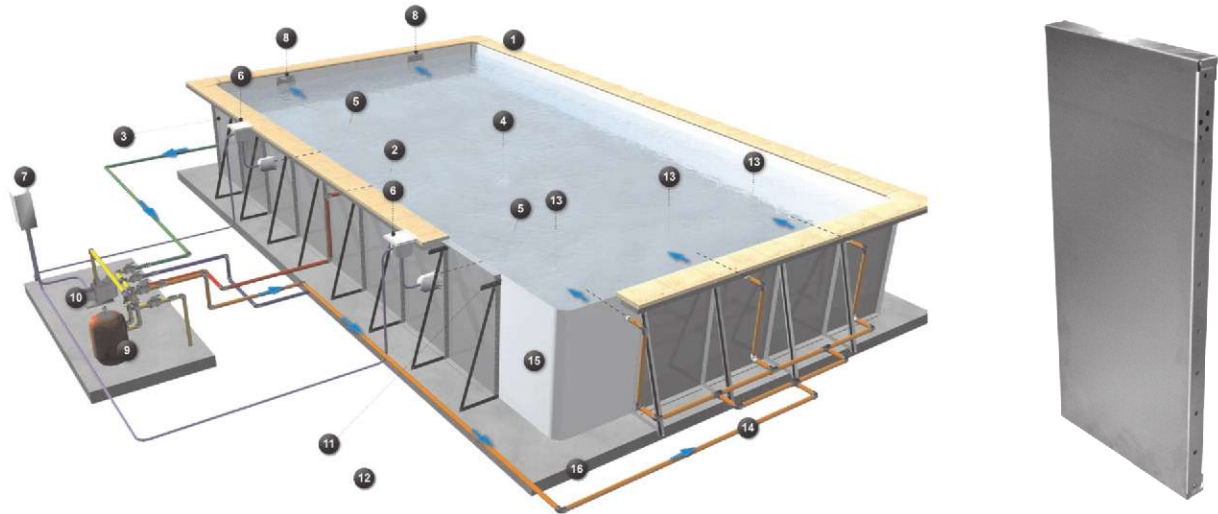
Transport of concrete panels - code 15806





## Steel panel pools ORION

The ORION pools is a new generation of pools manufactured in Europe in accordance with EN 10346. The pool is created with a unique steel panel with thickness of 2 mm, covered with a special double galvanic layer of zinc and aluminium 750/800 g/m<sup>2</sup> + exceptional, patented magnesium layer named Spectron. This gives incredible resistance to corrosion, that is why the panels have a 30 years of warranty. Thanks to the most modern, fully automated manufacturing technology, developed in collaboration with a leading producer of solutions for airlines, the panel twice stronger and more durable was created in comparing with traditional methods. The Spectron layer works as a protective armor and secures structure of the panel on each side from the effects of salt, the oxidation process and aggressive chemicals such as chlorides and ammonia compounds. The steel panel is coated with the Spectron layer several times, in process of bathing in hot solution. The panels undergo rigorous tests, in according to the norms ISO EN 3497, EN 2808, EN 9227 and EN 4628. The advantage of ORION pool is also self-supporting construction, thanks to which you can overwhelm the pool with ground, remaining from the trench. Individual panels are placed on prepared concrete floor and are fixed to it with anchors and screwed together with bolts. The whole forms a stable structure ready to finish. The pool interior is covered with liner 0,75 mm, in the form of ready-made insert or with membrane 1,5 mm welded on site. The membranes assembled in ORION pool does not require a non-woven primer to the walls. The steel panel pool ORION is an inexpensive alternative for pools with post-galvanized constructions, stainless steel or polyester. The ORION pool can be easily dismantled at any time and moved to another location. The ORION pools are offered in several equipment versions and rectangular sizes, as a complete mount kits, that include: panels with height of 1,4 mm, skimmer, nozzles, pump, filter with valve and sand, blue liner 0,75 mm, 3-steps ladder. It is worth to order also set of gutters, mounted to the pool wall, thanks to which you will put boundary stones without any problems. Another equipment have to be ordered separately.





### Steel panel pools ORION

Complete pool is supplied with all necessary equipment, with economic depth of 140 cm, which allows to derive the same pleasure from use as a depth of 1,5 m and giving lower maintenance costs. The pool can modify to the traditional depth of 150 cm using an additional panel. In standard version the pool is offered with miniskimmer, filter Saturn with pump, 3-steps ladder, blue Alkorplan liner 0,75 mm. The set is offered without pipes and PVC fittings.

Name

ORION

pool dimensions	equipment version	code
3x6 x 1,4	standard	orion100
3x7 x 1,4	standard	orion103
4x7 x 1,4	standard	orion106
4x8 x 1,4	standard	orion109
3x6 x 1,4	without equipment	orion112
3x7 x 1,4	without equipment	orion113
4x7 x 1,4	without equipment	orion114
4x8 x 1,4	without equipment	orion115



The set of gutters mounted to the pool wall, thanks to which you will put boundary stones without any problems.

name	code	name	code
pool 3x6	orion130	pool 4x7	orion132
3x7	orion131	4x8	orion133

The ORION pool can also be easily configured with other elements of equipment in any pool dimensions.

name	code
steel panel ORION width 1 m, height 1,4 m	orion120
steel panel ORION width 0,5 m, height 1,4 m	orion121
steel panel ORION width 0,25 m, height 1,4 m	orion122
panel support, height 1,4 m	orion123
corner ORION R15, height 1,4 m	orion124
corner connector R15,	orion125
fastening screws 20 pcs./1 panel	orion126
anchoring bolts to the floor 5 pcs./1 panel	orion127
modifier of panel height of 10 cm	orion128
glue for anchoring bolts 1 pcs./25 bolts	orion129



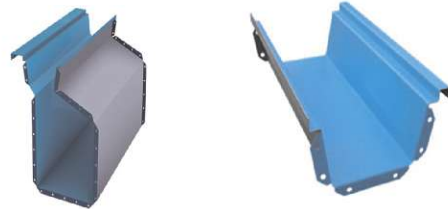


**Steel panel pools wuth gutter**

The ORION pools can be delivered with ready overflow gutter. The basic length of one gutter element is 2 lin.m and is mounted on 3 supports. The gutter is made from the same steel as the panel and is covered with PVC liner. Installation of swimming pool with overflow gutter is very easy. You just have to know dimensions of the pool and calculate its circumference, which will be the length of the overflow gutter.

Steel gutter of ORION pool:

name	code
overflow gutter of Orion pool, length 2 lin.m	orion140
right corner of overflow gutter	orion143
left corner of overflow gutter	orion144
gutter support	orion145



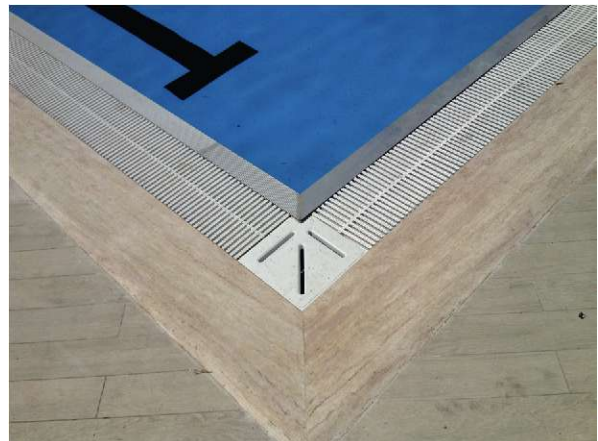
Steel gutter with overflow tank of ORION pool:

name	code
gutter with overflow tank, length 1 lin.m	orion150
gutter with overflow tank, length 0,5 lin.m	orion151
support of gutter with overflow tank	orion152
gutter end cap, right	orion153
gutter end cap, left	orion154



ORION pool – wall construction

name	code
ORION pool 3x6 x 1,4 without equipment	orion112
3x7 x 1,4 without equipment	orion113
4x7 x 1,4 without equipment	orion114
4x8 x 1,4 without equipment	orion115



The ORION pool can also be easily configured with other elements of equipment in any pool dimensions.

name	code
steel panel ORION width 1 m, height 1,4 m	orion120
steel panel ORION width 0,5 m, height 1,4 m	orion121
steel panel ORION width 0,25 m, height 1,4 m	orion122
panel support, height 1,4 m	orion123
corner ORION R15, height 1,4 m	orion124
corner connector R15	orion125
fastening screws 20 pcs./1 panel	orion126
anchoring bolts to the floor 5 pcs./1 panel	orion127
modifier of panel height of 10 cm	orion128
glue for anchoring bolts 1 pcs./25 bolts	orion129





### Steel public panel pools Dynamic

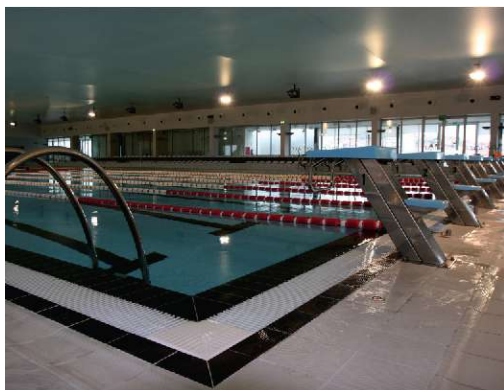
This technology grew out of the idea that the public pools can be functional, easy to install, inexpensive, provide maximum comfort, be competitive to traditional swimming pools, provide aesthetics and high quality finish. The structure of Dynamic pool is more affordable, efficient and environmentally friendly than traditional structures. It is an innovation developed and introduced to be an excellent alternative to traditional concrete construction and other prefabricated structures. The Dynamic pool it is a patented modular system of galvanized steel panels - Prima Steel - with thickness of 2 mm, tested and certified according to EN 9227. It is possible to build swimming pool to different purposes, such as olympic and semi-olympic pool, pool suitable for hotels, water parks, sport halls and many others. Our galvanization system is achieved by immersion the steel in hot chemical mixture of aluminium, zinc and magnesium. The excellent chemical metal coating composition, combined with the high thickness PVC coating, ensures a superficial layer that protects the panels against corrosion and long term wear in a much more efficient way than traditional galvanization processes. This new type of galvanization provides the best results in terms of corrosion resistance in aggressive environments and atmospheres with the presence of chlorides and ammonia.

The Dynamic pool can be delivered in the following depths:

0,80 m; 1,20 m; 1,40 m; 1,60 m; 1,80 m; 2,00 m. Mounted on the concrete floor.

Here are some samples size of swimming pools. The set includes wall construction with gutter, Alkorplan liner, gutter grating, inlet nozzles, bottom drain.

Dimensions	depth	code	Dimensions	depth	code
10 m x 5 m	120 cm	dyn100	10 m x 5 m	200 cm	dyn105
15 m x 7 m	120 cm	dyn110	15 m x 7 m	200 cm	dyn115
25 m x 12,5 m	120 cm	dyn120	25 m x 12,5 m	200 cm	dyn125
50 m x 25 m	120 cm	dyn130	50 m x 25 m	200 cm	dyn135

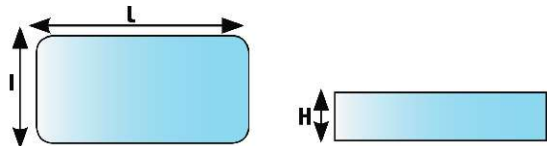




**Alkorplan liner inserts**

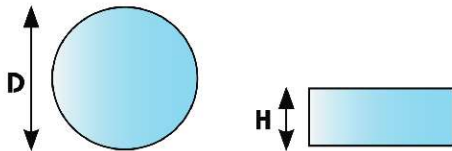
The liner insert can be used for 8-12 years. The liner inserts are delivered in size for a specific pool. The thickness of liner is 0,75 mm. The liner is equipped with a special roller, which is mounted in the profile suspended on the pool wall. Thanks to this solution during exchanging liner in the future there will no need to remove the stones located on the pool edge. The Alkorplan liners have 10-years of warranty for watertightness.

How many square meters you will need? Below you will find simply calculation:



$L \times l = S1 \quad (L + l) \times 2 \times H = S1 + S2 = S$  Example:

pool 10 x 5 wall height 1,50 m  
 bottom surface S1:  $10 \times 5 = 50 \text{ m}^2$   
 walls surface S2:  $(10 + 5) \times 2 \times 1,50 = 45 \text{ m}^2$   
 amount of liner S1+S2:  $50 + 45 = 95 \text{ m}^2$

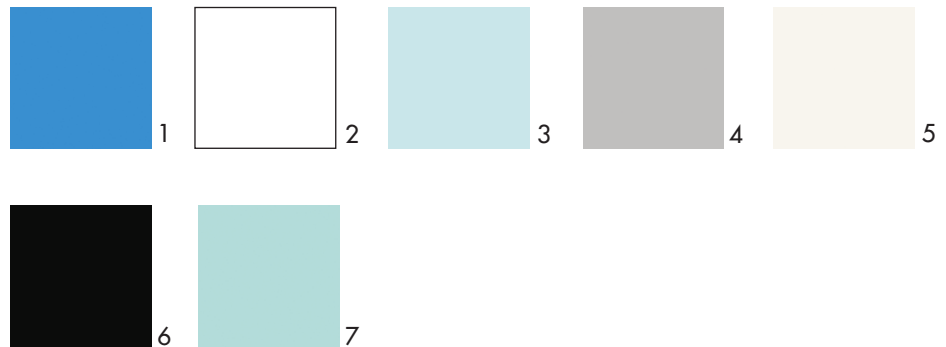


$D \times D = S1, 1,4 \times D \times H = S1 + S2 = S$  Example:

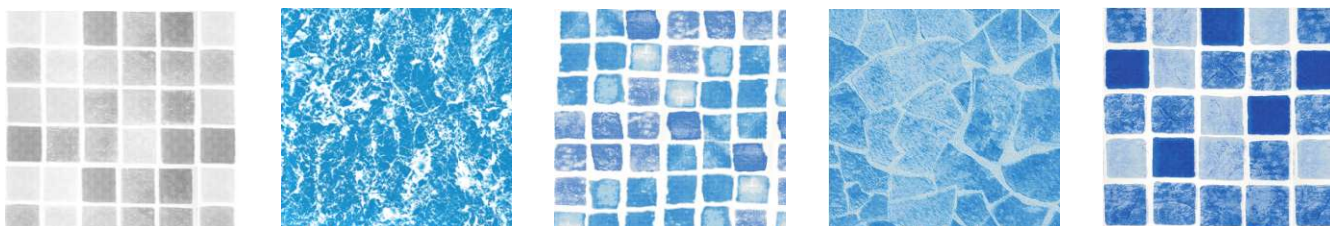
pool with diameter of 6 m, wall height 1,20 m  
 bottom surface S1:  $6 \times 6 = 36 \text{ m}^2$   
 walls surface S2:  $3,14 \times 6 \times 1,20 = 22,60 \text{ m}^2$   
 amount of liner S1+S2:  $36 + 22,60 = 58,60 \text{ m}^2 = 59 \text{ m}^2$

PVC liners ALKORPLAN 2010 and 3010 for making ready inserts, color you can choose from Basenhurt sampler. Delivery up to 4 weeks, but you can use express delivery: production within 48 h + delivery time 4-7 days. Require 50% deposit. Liner thickness 0,75 mm.

color	code
1 blue	02002
2 white	02003
3 light blue	02004
4 grey	02005
5 sand	02006
6 anthracite	02007
7 green	02008
transport	02012
mount.profile	02040



The insert (liner) for the pool can be also ordered from wide range of mosaic patterns - code 02010. They are made of Alkorplan Premium 3010 liner coated with 3 layers of lacquer for protection against stains caused by micro-organisms, migration of plasticizers and fungicides. These 3 layers ensure the maintenance of pattern on the liner in its original form, counteract the aging of the liner, protect against fungal attack.





**Ocean de Luxe pool membranes**

The first step to your perfect pool is a choice of pool membrane Ocean de Luxe. The manufacturer has 40 years of experience in the designing and technical production of swimming pool products. Ocean de Luxe is made of PVC reinforced with polyester fibers and coated a protective lacquer. Special materials used provide antibacterial finish. Thickness of the membrane is 1,5 mm and has the highest resistance to damage. The liner does not contain lead and cadmium, rotproof, cold-resistance, UV-resistance, suitable for recycling. Individual strips are joined together by heat. The pool membrane Ocean de Luxe stands out among the other liners economics of using. Significantly reduces the cost of your swimming pool.

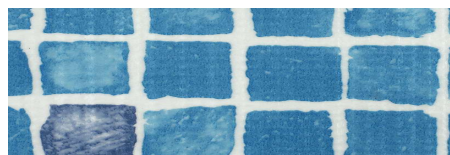


**Ocean de Luxe pool membranes**

Are subject to certificated validation of the national institute of normalization AFNOR methods according to norms: 1850-2 , 1848-2 , 1849-2 , 12311-2 , 12316-2 , 12316-2 , 1107-2 , 495-2.

Available in the following widths and colors. Roll length 25 linear meter.

Roll width	color	code
1,65 m	blue	069800
2,05 m	blue	069801
1,65 m	light blue	069802
2,05 m	light blue	069803
1,50 m	mosaic	069804







**Alkorplan 2000® and 3000®**



Few membranes can be direct competition towards the Alkorplan membranes. Other membranes have their own market, the specific advantages and disadvantages. These are for example reasonably priced and quickly mounted. But durability leaves much to be desired. That is why, after 3-4 years you will want to change the membrane in your pool for Alkorplan. So it is worth to think about it right away and choose the Alkorplan with higher durability. Alkorplan 2000® and 3000® are a smoothed membranes made from plasticized polyvinyl chloride (PVC-P) with two layers of PVC and polyester insert. These membranes are suitable for all pools regardless of shape, type or size. The Alkorplan 2000® is covered with two acrylic layers and the Alkorplan 3000® has three layers. The membrane is composed of two PVC layers joined together by heat, between which is insert made from polyester fiber. The result is a 1,5 mm thick liner with unusual strength. Acrylic coated surface makes a great sealing.

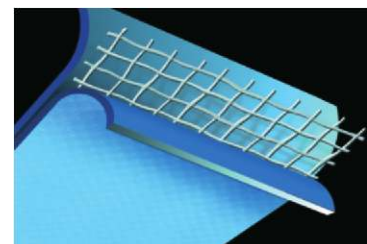
**Alkorplan 2000® and 3000® - accessories**

Name	Code
- solvent for weld filler	070040
- underlay 300 g/m <sup>2</sup> , stiff, impregnated	070150
- glue Alkorplus 5 kg for fixing underlay	070092
- steel sheet 1 x 2 m coated with PVC	070120
- angle steel 3 x 6 cm coated ext. PVC (1 linear meter)	070111
- angle steel 5 x 5 cm coated int. PVC (1 linear meter )	070112
- flat barwidth 5 cm coated with PVC (1 linear meter)	070110
- aluminium mounting rivets 200 szt.	070100
- blue silicone	070160
- disinfectant for concrete walls 1l/ for 75m <sup>2</sup>	070044



Weld filler (liquid liner) fulfills an important role in order to achieve greater tightness and nicer appearance of connections.

color	code	color	code
blue	070050	sand	070057
light blue	070052	platinum	070056
white	070054	light grey	070059
green	070053	dark grey	070051
transparent	070055	black	070058





## Alkorplan 2000® and 3000®

### The mounting diagram of the Alkorplan

Mounting of the membrane is directly on-site. It should be done by a company having a certificate of an authorized contractor.

Mounting the membrane requires skills and sense of aesthetics.

Prior to installation, carefully clean the pool and quickly, check the walls and the bottom of the pool in terms of

inequalities, which could be seen under the membrane. Before laying the membrane, the concrete surface of the pool should be

disinfected using the product code 070044. Before the fixing the membrane in the pool you must place the fleece

(underlay), code 070150. The fleece should be cut to size and then glued to the bottom and walls. To do this, use a glue called Alkorplus. At this stage, the fixing profiles are mounted. The Alkorplan membrane is welded with hot air, so as to form a homogeneous, water-proof surface.

At this stage, the fixing profiles are mounted. The Alkorplan membrane is welded with hot air, so as to form a homogeneous, water-proof surface.



### Stair membranes

Stair membranes with non-slip surface is available in rolls of a width 165 cm.

color	code
Persia blue	070028
Carrara	070029
light mosaic	070030
blue	070031
light blue	070032
green	070033
white	070035
sand	070038





**Alkorplan 2000®**

Monochrome Alkorplan 2000® membranes are covered with two layers of protective coating of acrylic. Ennobled and unique acrylic coating gives the structure of the membrane increased resistance to dirt, color durability, long-lasting flexibility and UV protection. Thanks to this, produced by calendering, Alkorplan membrane has no barriers in use. Is suitable for pools of any shape and form, as well as for various type of pools: private, public, hotel. Also suitable for use in saline pools. Can be successfully combined with several colors, by using the wide range, so as to your pool suit your expectations.

width	color	code		
165 cm	blue	069900	1	
205 cm		069903		
165 cm	light blue	069906	2	
205 cm		069908		
165 cm	sand	069909	3	
205 cm		069910		
165 cm	white	069912	4	
205 cm		069915		
165 cm	green	069917	5	
205 cm		069919		
165 cm	black	069954	6	
165 cm	dark grey	069962		
205 cm		069964	7	
165 cm	light grey	069959		
205 cm		069960	8	

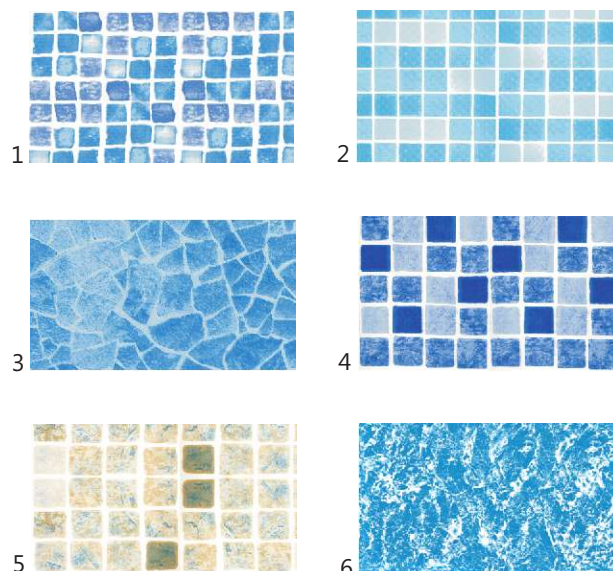
Available only whole rolls length 25 linear meter.



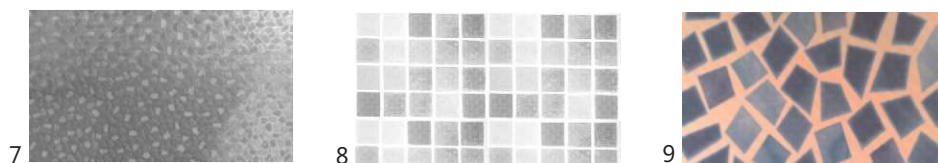

**Alkorplan 3000®**

The world's only production technology allows the production of membranes covered with 3 layers of acrylic. Arises than Alkorplan 3000®, the membrane with a wide range of patterns. Innovative acrylic coating protects a unique colorful pattern, that is why can withstand the passage of time. This choice induce to decorate your pool in different ways. Use a special configurator. Incredibly in the pool presents itself the world's only PLATINUM membrane. Its luminous reflections give the water unprecedented effect.

width	color		code
165 cm	dark mosaic	1	069930
165 cm	light mosaic	2	069935
165 cm	Carrara	3	069940
165 cm	Persia blue	4	069945
165 cm	Persia sand	5	069948
165 cm	Marble classic	6	069950
165 cm	Platinum	7	069952
165 cm	grey mosaic	8	069937
165 cm	Provence	9	069958



Available only whole rolls length 25 linear meter.


**Alkorplan 3000® TOUCH**

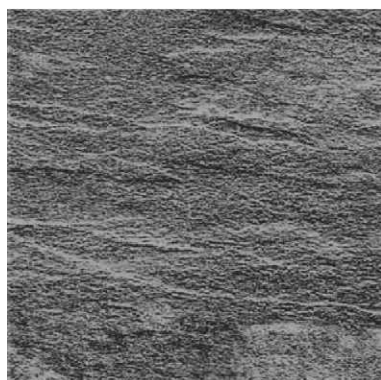
**About this membrane can not be much to write. To learn something about it, you have to touch it.**

A convex surface, not smooth, thickness of 2 mm, available in rolls with a width of 165 cm and length of 21 m.

name	code
Elegance	069966

name	code
Relax	069968

name	code
Authentic	069970





### Boundary stones type „Gratonit“

Boundary stones are made of cold-resistant blend of natural stones and cement. The result of special treatment is the non-slip surface and the appearance of natural stone imitation. Different colors are available. Shades may be slightly different depending on the batch.

#### Cover the surface with the boundary stones

The condition is equal surface of the edge of the pool, made of concrete, adapted for covering with the boundary stones. The stone shall not overhang more than 3 cm beyond the external edge of the pool.

Putting down the stones followed by using frost-resistant cement mortar or self-adhesive.

Keep in mind that both the substrate and the boundary stones should be well moistened with water.

Residues on the surface of the cement mortar wash immediately with water.

#### Grouting

For grouting, use widely available grouting mass for tiles or a blend of silica sand and white cement in the ratio of 1:1. The side edges of the stones should be treated the adhesive, in order to the grout between them will be more permanent.

#### Maintenance

For cleaning, use cleaning products and equipment for daily use, brushes and plenty of water.

Caution, when using a high pressure cleaner!

Always perform the cleaning test!

To prevent the formation of algae and pollution because of leaves, Bacteria Coli, bird droppings etc., we recommend the fixation of the stone surface by covering with the special impregnation detergent.

Note: Do not use the product after using which, the surface will be smooth and after the moisture will result in slippage.

All materials used, must be frost-resistant and approved for outdoor use.



Natur



Graphit



Atlantic



Korall





**Boundary stones GRATONIT**

Stones are used for finishing the edges of the pool.  
 Perfectly made, anti-slip stones fulfill a decorative function.  
 Available in four colors:  
 natural, grey, blue, red.  
 Made of minced, natural material. Color of the stone is uniform.  
 Boundary stones are unique finishing of the edge pool, adding elegance to it.  
 Through its uniform structure and color of the stones, sensationally harmonize with the water.  
 Additionally, contribute to the breaking waves.

To perform the joint between the stones, use the sand grout.



**Coping stones GRATONIT, white color**

	code
Straight stone, white (width 290 x 495 mm)	19900
White grout for coping stones, 20 kg	18300
Internal corner, white (dim. 400 x 400 mm)	19901
External corner, white (dim. 290 x 290 mm)	19903



Rounded stone with a diameter:	2,0 m	19910
	2,5 m	19911
	3,0 m	19912
	3,5 m	19914
	4,2 m	19916
	4,5 m	19917
	5,0 m	19918
	6,0 m	19919



**Corner GRATONIT for stairs**

	code
- for Roman stairs with diameter 2 m, right	19930
- for Roman stairs with diameter 2 m, left	19931
- for Roman stairs with diameter 2,5 m, right	19932
- for Roman stairs with diameter 2,5 m, left	19933
- for Roman stairs with diameter 3 m, right	19935
- for Roman stairs with diameter 3 m, left	19936

Boundary stones GRATONIT - colors: Graphit [grey], Atlantic [blue], Korall [red].	19902
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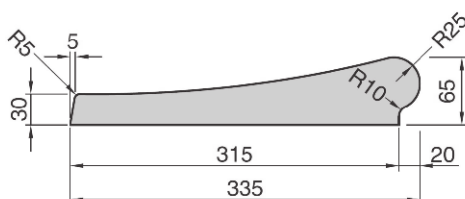


**Boundary stones GOBI**

35 years producent experience in the field of manufacturing pool stones. The leader in Europe in its sector in the swimming pool trade. The stones are made of mixture of a marble, cement and pigment. Resistant to high and very low temperatures. The innovative production technology, high-quality materials and perfect workmanship allow you to use the rim of the pool for many years. Thanks to its thickness, they are indestructible, there is no risk of breakage. Adjusting technology and production to the market and customer requirements puts our stones at the forefront both in Europe and in the world. The "Gobi" stones are characterized by high quality and modern design. From the detail, through design and ending on a high quality, these stones inspire trust and desire. One look is enough to make you wowed with them and wanted to have them. The "Gobi" stones are enjoying eyes calm and sunny warmth. The "Gobi" will create a unique look of your swimming pool, making a great atmosphere and perfect design. Both your pool and the whole garden can be a unique and exclusive place thanks to the "Gobi" stones, which provide a broad spectrum of designing the pool rim and the beach. The porous surface reduces the risk of slipping and facilitates water drainage.

Available in our warehouse the GOBI stones are sand-colored the Mongolian desert.

name	code
Gobi stone, straight, sand, dim. 60 x 31,5 cm	19810
Gobi stone, internal corner straight, sand	19811
Gobi stone, external corner straight, sand	19812
Gobi stone, internal corner curved, sand	19814
Gobi stone, beach tile, dim. 49,5 x 49,5 x 3,5 cm	19813
Gobi stone, curve, sand, radius 1m	19815
Gobi stone, curve, sand, radius 1,25 m	19816
Gobi stone, curve, sand, radius 1,5 m	19817
Gobi stone, curve, sand, radius 1,75 m	19818
fugue Gobi sand	19819
transport of 1 palett of stones on order, without transport costs in Poland	19850





### Boundary stones BORDO

The „Bordo“ stones will create a unique look of your swimming pool, making a great atmosphere and perfect design. Anxious texture and specific spatial distribution of the stone grains causing that your pool and whole garden can be a unique and exclusive place with well designed pool rim. The porous surface of the "Bordo" stone reduces the risk of slipping and facilitates water drainage.

name

Bordo stone, straight, white dim. 60 x 31,5 cm

Bordo stone, internal corner straight, white

Bordo stone, external corner straight, white

Bordo stone, beach tile, dim. 49,5 x 49,5 x 3,5 cm

Bordo stone, beach tile, dim. 24,5 x 49,5 x 3,5 cm

Bordo stone, curve, white, radius 1 m

Bordo stone, curve, white, radius 1,25 m

Bordo stone, curve, white, radius 1,5 m

Bordo stone, curve, white, radius 1,75 m

fugue Bordo white

transport of 1 palett of stones on order

The stones also available for radii from 2 to 5 m on order.

code

19800

19801

19802

19803

19804

19805

19806

19807

19808

19809

19850



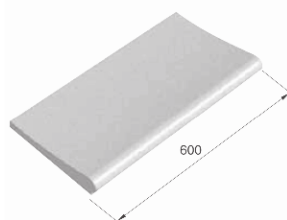
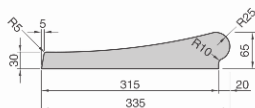
On order BORDO stones can be delivered in

colors: brick, pink and grey.

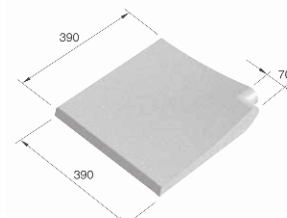
Codes from 19855 to 19863.

### Dimensions of the stones GOBI and BORDO:

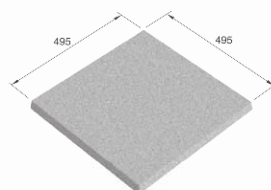
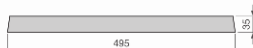
#### straight



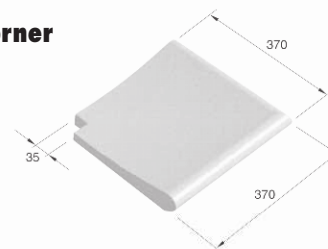
#### internal corner



#### beach tile



#### external corner







**Boundary stones CRYSTAL**

Boundary stones CRYSTAL is a series for the most demanding. It is even more unique and special in terms of stones design with pieces of natural pearl shells from the beaches of the South Pacific. The Crystal Series gives your swimming pool elegant and refined look. The shell pieces beautifully reflecting in the rays of the sun, giving an eye-pleasing effect. Properly sandblasted surface prevents slipping. Your pool will be more beautiful than you can imagine. The Crystal Series will make your dreams a reality. Available on order in 3 color options.

**Crystal series color Artic**

name	code	name	code
straight, dim. 60 x 31,5 cm	19820	fugue Artic white 25 kg	19835
straight, dim. 30 x 31,5 cm	19821	angle radius 1 m	19826
internal corner straight	19822	angle radius 1,25 m	18827
external corner curved	19823	angle radius 1,5 m	19828
beach tile dim. 49,5 x 49,5 x 3,5 cm	19824	angle radius 1,75 m	19829
		transport of stones on order	19850

**Crystal Series color Kalahari**

name	code	name	code
straight, dim. 60 x 31,5 cm	19830	fugue Kalahari sand 25 kg	19835
straight, dim 30 x 31,5 cm	19831	angle radius 1 m	19836
internal corner straight	19832	angle radius 1,25 m	19837
external corner curved	19833	angle radius 1,5 m	19838
beach tile dim. 49,5 x 49,5 x 3,5 cm	19834	angle radius 1,75 m	19839
		transport of stones on order	19850

**Crystal Series color Tenerife**

name	code	name	code
straight, dim. 60 x 31,5 cm	19840	fugue Tenerife grey 25 kg	19845
straight, dim. 30 x 31,5 cm	19841	angle radius 1 m	19846
internal corner straight	19842	angle radius 1,25 m	19847
external corner curved	19843	angle radius 1,5 m	19848
beach tile		angle radius 1,75 m	19849
dim. 49,5 x 49,5 x 3,5 cm	19844	transport of stones on order	19850

**Crystal Series color Artic**



**Crystal Series color Kalahari**



**Crystal Series color Tenerife**





### Beach tiles Woodstyle

Beach tiles Woodstyle imitating wood, well-made concrete slabs. Extremely resistant to climatic conditions and the pool water. Available in two colors wenge and oak, on request.

color wenge dim. 50 x 50 x 3,3 cm  
code 19864

color oak dim. 50 x 50 x 3,3 cm  
code 19865

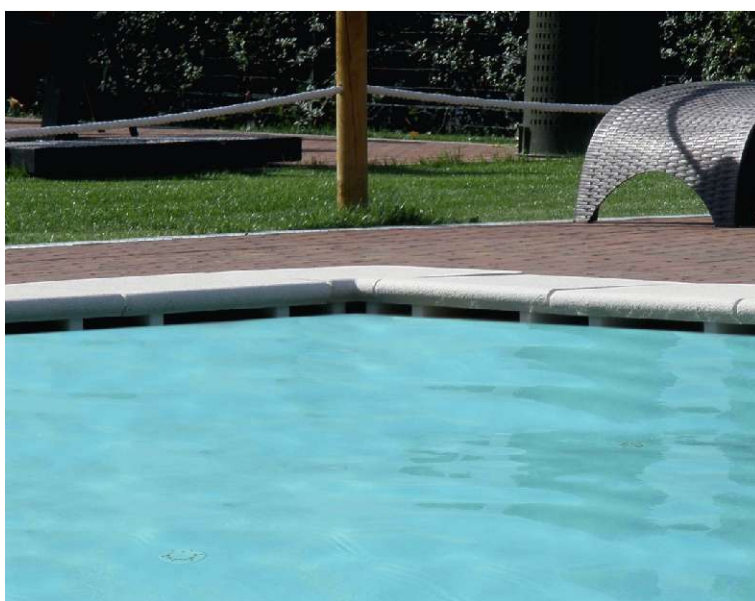
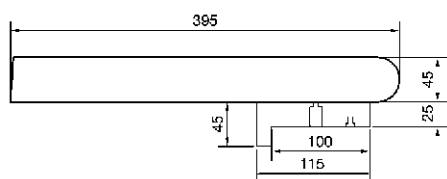
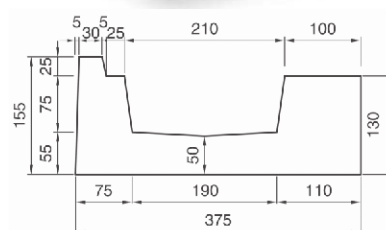
transport 1 pallet of stones  
code 19850



The gutter stones Laguna have two functions: cover the gutter and finish the pool rim.

Available in colors: white, sand, brick, pink, grey and as the Crystal Series with natural shells, wonderfully sparkling in the sunshine. To the gutter stones a special gutter is dedicated, with ideal dimensions, for covering with liner or mosaic. The gutter stones are delivered on request.

name	code
gutter dedicated to gutter stones	19878
gutter stone Laguna, straight, white, dim. 50 x 40 cm	19866
gutter stone Laguna, internal corner straight, white	19867
gutter stone Laguna, external corner, white	19868
gutter stone, curved, white	19869
gutter stone Laguna, straight, color, dim. 50 x 40 cm	19870
gutter stone Laguna, straight, Crystal, dim. 50 x 40 cm	19874
transport of 1 pallet of stones	19850





## Elements of fountains

You see, hear, feel – fountain is a delight for the senses, when spouting geysers touch your body.

Fountain with SpringFit nozzles, spouting up to 20 meters, is something for you.

All housing are made of high-quality gun metal. The surface is sandblasted and provided with a varnish, so that there is very noble design.

Technical data allows for selection of the pump, according to the desired height and strength of the stream, are in technical catalog, transmitted on request.

**Geyser nozzles** gives, regardless of the state of the water, narrow and foaming stream with cylindrical shape.



name	code
Geyser nozzle 20	4800050
Geyser nozzle 40	4800150
Geyser nozzle 60	4800250
Geyser nozzle 80	4800350
Geyser nozzle 100	4800450



**Cascade nozzles** stream coming out from wide base is like a sea welter.



name	code
Cascade nozzles 50	4820050
Cascade nozzles 70	4820150
Cascade nozzles 90	4820250
Cascade nozzles 110	4820350
Cascade nozzles 130	4820450




**Elements of fountains**

**Comet nozzles** are available in four diameters. Depending on the pump and the diameter of nozzles, you can reach the height up to 6 meters.

Connected together create pure and solid water stream. The ball joint allows to adjust the direction of the flow.



name	code
Comet nozzle 3-5	4823050
Comet nozzle 3-6	4823150
Comet nozzle 5-8	4823250
Comet nozzle 5-10	4823350
Comet nozzle 10-12	4823450
Comet nozzle 10-14	4823550
Comet nozzle 15-17	4823650
Comet nozzle 15-20	4823750

**Finger Ray nozzles** with spreading angle approx. 60°, provide precise, full streams, like finger coming out from the nozzle, creating an attractive fountain.



Finger Ray nozzle 13-4 code 4822050

Finger Ray nozzle 25-4 code 4822150

**Water distributor** is useful if the user wants to connect several nozzles to the pump and keep the same amount of the water in each nozzle. It is available in diameters of 150 mm and 250 mm and connection dimensions G1" i G2". Thereby it is possible to connect up to 3 attractions to water distributor with diameter of 150 mm and up to 6 attractions to water distributors with diameter of 250 mm.

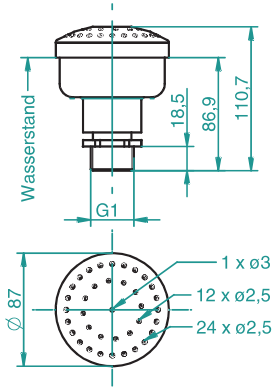


name	code
Ø 150, G2" I.T., 3 x G1" I.T.	4824050
Ø 150, G2" I.T., 3 x G1" I.T.	4824150
Ø 150, G2" I.T., 3 x G2" I.T.	4824250
Ø 250, G2" I.T., 6 x G1" I.T.	4825350
Ø 250, G2" I.T., 6 x G1" I.T.	4825450
Ø 250, G2" I.T., 6 x G2" I.T.	4825550

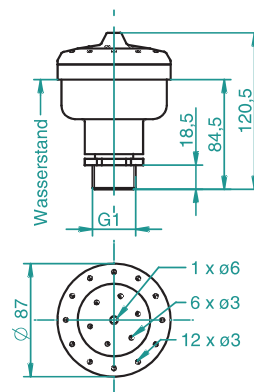


Elements of fountains

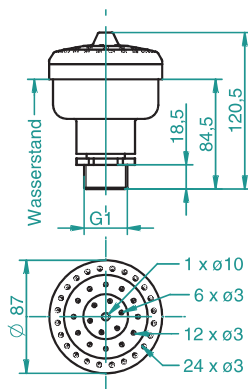
**Vulkano nozzle** create streams disintegrating on the several levels. Streams are resistant to the wind. The group includes three nozzles with different number of outlets: 37 outlets with diameter of 2,5 mm, 19 or 43 outlets with diameter of 3 mm and two nozzles Multi with Comet nozzles mounted in the body. Vulkano nozzles can reach 4-meter height stream with diameter 3,2 meter, using a suitable pump.



Vulcano nozzle 37-2,5 code 4821050



Vulcano nozzle 19-3 code 4821150

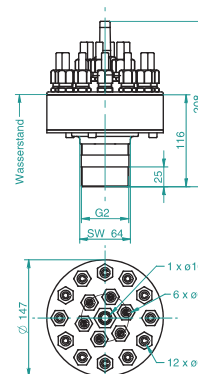


Vulcano nozzle 43-3 code 4821250

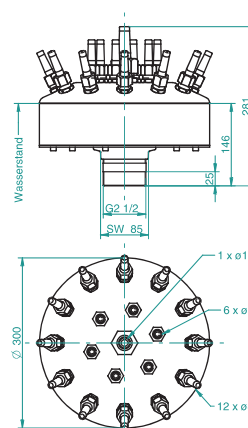




## Elements of fountains



Vulcano nozzle 200/19-6 code 4821350



Vulcano nozzle 300/19-8 code 4821450

**PLUG and PLAY** designed to build a fountain fast and easy. Depending on the model there are 3 Cascades, 3 Geysers, 3 or 6 Comet nozzles. All are equipped with energy-efficient LED underwater spotlights. You have to connect only pump.



name	code
set of 3 nozzles and lights Comet 10-14	4900050
set of 6 nozzles and lights Comet 10-14	4900150
set of 3 nozzles and lights Geyser	4910050
set of 3 nozzles and lights Cascade	4910150
cable transition for set of 3 nozzles and light	4920050
cable transition for set of 6 nozzles and light	4920150



**Sand filters for the swimming pools**

Water in the pool must be filtered. Without this will become cloudy and dirty. Various impurities, which are nutrient for micro-organisms, get into the water. They are removed from the water by filtration. Should be mounted sand filters. These only filter the water properly. Filters are made of polyester or polyethylene. The best are made of polyester, because they are virtually indestructible. Filters, made of polyethylene undergo a deflection after a few years and the filter tank is suitable for replacement. Sand filter has a special pump, which retrieves the water from the pool. The water, after passing through the sand layer is pumped back into the pool. The quartz sand creates a filter cartridge in the respective fractions. The water gets into the filter through a system of pipes, constituting the connection between the pool and the filter. The water in the pipes flows relatively quickly, but through the layer of sand pushes relatively slowly with speed of 20-50 m/h. This value is different depending on the diameter of the filter tank and the pump. Impurities remain on the grains of sand and the water becomes fresh and pure as spring water. The filter must be cleaned in the backwash process. Impurities are washed out of the sand and discharged into drain. The whole process takes up to 5 minutes.

Filter classes:

**PRESTIGE** - the highest quality and durability. The best effect of filtration, collector laterals or collector plate with PVC nozzles, high filtration bed 1 m or 1,2 m.

**PREMIUM** - high quality. Good effect of filtration, collector laterals, filtration bed 60 - 70 cm.

**STANDARD** - good quality. Acceptable durability and effect of filtration, filtration bed of 40-60 cm.

**PUBLIC** - for public swimming pools.

**EKO\*FILTERS**

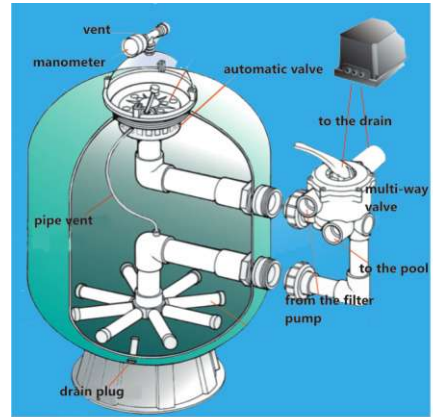
They are characterized by a high layer of the sand bed with a minimum height of 1 meter, a collector laterals or with PVC nozzles. With such filters, mounted in the private pool, is achieved perfectly clean water. The pump size should be selected, so that the entire volume of the pool is filtered within 2 hours.

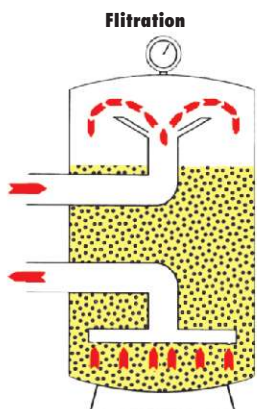
**Cartridge filters**

They are used for small pools. They do not need a large amount of water for rinsing.

**Pool pumps**

Filtering device are equipped only with the tested pumps, made specially for swimming pools. Housing are made of plastic, bronze or cast iron. Equipped with strainer tank (prefilter), which captures different, small elements to protect the impeller from damage. These are circulation pumps with different efficiency and dynamic head. All elements of the pumps are environmentally friendly and are suitable for recycling. Pumps have protection IP 54.

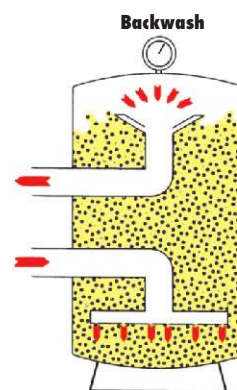




**Filtration:**

The water gets into the filter. At the top of the filter is a type of distributor. Now, the water is passed through the sand. Dirt remains on the grains of sand. Above the bottom of the filter tank is mounted collector laterals or collector plate with PVC nozzles. In the collector laterals there are small tubes with narrow slots, which ensure that the sand has been in the filter and clean water just flowed into the pool.

After setting 6-way valve in the right position, the water is passed through the slotted tubes from bottom to the filter. The sand is raised and mixing and the dirt can be separated from the grains of sand. All impurities flows into the drain through the upper divider. The filter is clean again.



**Backwash:**



**Filter valves**

Pre our filters are equipped with a manual 6-way valves. This valve can be replaced by an fully automatic 6-way back wash valve. In this case, the water level controller is necessary, because in the process of rinsing a few hundreds of water is poured into the drain an it has to add this amount immediately. Automatic valves enable backwash, even if the clock of the control box is currently set to turn the pump off.

**Control boxes**

Filtering installation usually works for 24 hours. This is not always necessary, often, even quiet hum of the pump can disturb at night. That is why, the filter should work with the control box. Built-in clock makes that the pump works only, when you wish. The control boxes also allow for connecting together several different devices, that their work is correlated. The boxes can have a built-in thermostat, which operates the heating in the pool. They allows you to turn off the filter for emptying time of the pump prefilter. With the control box you can synchronize work of multiple devices, by connecting to it: filter pump, pool heating, automatic filter valve, water level control for overflow collecting tank measurement and dosing devices, electronic water level control.





**Filter Jupiter Poly AK – made in EU , Premium class**

One of the best polyester filters on the market, Premium class, designed for swimming pools. Jupiter Poly AK is laminated filter made from polyester, reinforced with huge amount of fiberglass, which provides rigidity. The tank is mounted on the base. The cover with an admixture of fiberglass is screwed with stainless steel screws to the filter tank at the top. Outputs for 6-way valve are located at the side of the filter. Connects to them 6-way valve with internal threads using connections. Filtration bed depth is approx. 60 cm. The filter includes: collector laterals, 6-way valve with internal threads, cover with a diameter of 22 cm, pressure gauge, valve connections, manual purge valve. The filter can be mounted on the pools with salt water. Working pressure is 0,8-1,6 kg/cm. Maximum pressure is 2,0 kg/cm. Each filter is tested after manufacture with testing pressure 2,5 kg/cm. Recommended replacement of the sand every 1-2 years. Prior to installation, tighten the components inside the tank.

**Filter Jupiter Poly AK – technical data**

diameter in mm	filtration area m <sup>2</sup>	sand kg	for the pool up to m <sup>3</sup>	valve inches	flow 40 m/h	flow 50 m/h
640	0,32	150	60	1 ½"	12,8	16,0
760	0,45	225	75	2"	18,0	22,5
900	0,63	325	90	2"	25,2	31,5

All data can be modified without previous notice.

**Filter Jupiter Poly AK with valve**

diameter	code
640 mm	082000
760 mm	082005
900 mm	082010

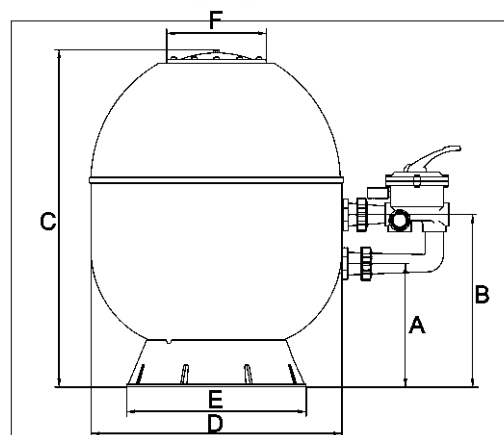
**Filter Jupiter Poly AK with pump and valve**

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter. Here are some good suggestions:

diameter	pump*	code	sand
640 mm	11 m <sup>3</sup> /h, 230V	082020	118150
	14 m <sup>3</sup> /h, 230V	082022	118150
760 mm	20 m <sup>3</sup> /h, 230V	082025	118260
	25 m <sup>3</sup> /h, 230V	082027	118260
900 mm	25 m <sup>3</sup> /h, 400V	082030	118265
	28 m <sup>3</sup> /h, 400V	082033	118265

\* flow rate of the pump given at H= 8 m

in mm	A	B	C	D	E	F
Poly 640	315	440	860	640	458	300
Poly 760	365	505	900	760	605	300
Poly 900	365	505	900	900	605	300





### Filter Kripsol BR – made in EU, Premium class

The best polyester filter, Premium class, for swimming pools. Kripsol BR is laminated filter made from polyester reinforced with huge amount of fiberglass, which provides rigidity. The tank is made completely together with the base, so that has a uniform, strong construction, providing trouble-free operation for 15-20 year. Here, there is no increased working pressure, which may damage the filter. Polypropylene cover with fiberglass is screwed to the filter with screws. Operations on the 6-way side valve are made thanks to the connections without the fear of damage the filter tank, as is in the case of filters with a valve mounted on the top of tank. Filtration bed depth is approx. 60 cm.

The filter includes: collector laterals, 6-way valve with internal threads, cover, pressure gauge, valve connections, manual purge valve. The filter can be mounted on the pools with salt water.

Working pressure is 0,8-1,6 kg/cm. Maximum pressure is 2,0 kg/cm. Each filter is tested after manufacture with testing pressure 2,5 kg/cm. Recommended replacement of the sand every 1-2 years. Prior to installation, tighten the components inside the tank.

### Filter Kripsol BR - technical data

diameter in mm	filtration area m <sup>2</sup>	sand kg	for the pool up to m <sup>3</sup>	valve inches	flow 40 m/h	flow 50 m/h
450	0,16	75	35	1½"	6,4	8,0
520	0,21	100	50	1½"	8,4	10,5
640	0,32	150	60	1½"	12,8	16,0
760	0,45	225	75	2"	18,0	22,5
900	0,63	325	90	2"	25,2	31,5

All data can be modified without previous notice.

### Filter Kripsol BR with valve

diameter	450 mm	520 mm	640 mm	760 mm	900 mm
code	03600	03630	03635	03640	03645

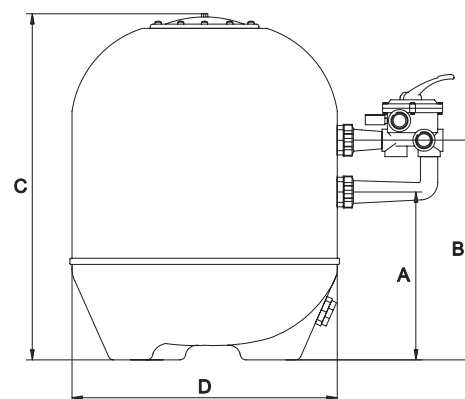
### Filter Kripsol BR with pump and valve

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter. Here are some good suggestions:

diameter	pump*	code	sand
450 mm	8 m <sup>3</sup> /h, 230V	03705	118050
520 mm	11 m <sup>3</sup> /h, 230V	03710	118100
640 mm	11 m <sup>3</sup> /h, 230V	03720	118150
	14 m <sup>3</sup> /h, 230V	03725	118150
760 mm	20 m <sup>3</sup> /h, 230V	03726	118200
	20 m <sup>3</sup> /h, 400V	03727	118200
900 mm	25 m <sup>3</sup> /h, 230V	03728	118250
	25 m <sup>3</sup> /h, 400V	03729	118250
	28 m <sup>3</sup> /h, 230V	03730	118250
	28 m <sup>3</sup> /h, 400V	03731	118250

\* flow rate of the pump given at H= 8 m

in mm	450	520	640	760	900
A	315	355	405	460	470
B	440	480	530	600	610
C	700	790	860	1020	1035
D	450	520	640	760	900





**Filter Swim Tec – made in EU, Extra class**

The best polyethylene filter, Extra class, for swimming pools. The filter tank is made from polyethylene. It consists of two parts joined together by solid clamp. These filter are suitable for all types of water, with the exception of salt water. Their advantage is easy access to the interior of the filter, when replacing sand. Simple, but solid construction guarantee work for many years.

**Filter Swim Tec - technical data**

diameter in mm	filtration area in m <sup>2</sup>	sand kg	for the pool up to in m <sup>3</sup>	valve inches
400	0,13	50	35	1½"
500	0,20	100	50	1½"
600	0,28	125	60	1½"

All data can be modified without previous notice.

**Filter Swim Tec with valve**

diameter	400 mm	500 mm	600 mm
code	01505	01525	01545

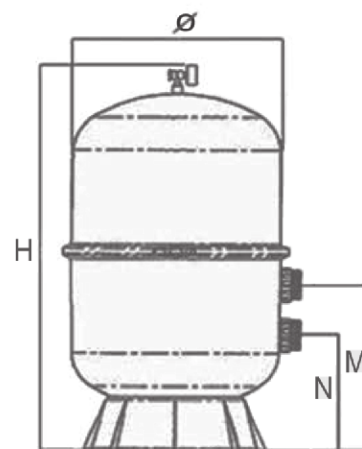
**Filter Swim Tec with pump and valve**

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter. Here are some good suggestions:

diameter	pump*	code	sand
400 mm	6 m <sup>3</sup> /h, 230V	01510	157440
	8 m <sup>3</sup> /h, 230V	01515	157440
500 mm	11 m <sup>3</sup> /h, 230V	01530	157445
600 mm	11 m <sup>3</sup> /h, 230V	01548	157450
	14 m <sup>3</sup> /h, 230V	01550	157450
pallet for filter and pump		212030	

\* flow rate of the pump given at H= 8 m

in mm	400	500	600
H	315	355	405
M	440	480	530
N	700	790	860




**Filter Saturn - Standard class, *TEBAS* product**

The filter tank is made of polyethylene as one "casting". These filters are suitable for all types of swimming pools, with exception of salt water. The simple design and perfect technology production ensures work for many years. Recommended replacement of the sand every 1-2 years. These filter should be mounted basically close to the pool. Supplied always with pallet=base allows stable placing filter on any surface. The filter is ideal for small, garden pools. The 6-way valve allows you to perform all necessary maintenance easy at the tank filter, with simple operation of the valve handle. The top position of the valve and well-developed connection to the tank thanks to a solid clamp ensure comfortable operation and maintenance of the filter.


**Filter Saturn - technical data**

diameter in mm	filtration area in m <sup>2</sup>	sand kg	for the pool up to in m <sup>3</sup>	valve inches
406	0,13	50	35	1 1/2"
485	0,20	100	50	1 1/2"
610	0,28	150	60	1 1/2"

All data can be modified without previous notice.

**Filter Saturn with pallet without pump**

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter.

name	code
filter Saturn 406mm	081002
filter Saturn 485mm	081007
filter Saturn 610mm	081012

**Filter Saturn with pump and pallet**

Delivered in set includes pallet and pump.  
Connection pump-filter in set.

diameter	pump*	code	sand
406 mm	8 m <sup>3</sup> /h	081017	118270
485 mm	10 m <sup>3</sup> /h	081024	118280
610 mm	13 m <sup>3</sup> /h	081029	118285

\*flow rate of the pump given at H= 8 m





**Filter Sandy – made in EU, Standard class**

The filter tank is made of polyethylene as one "casting". In the set is base, on which the pump is mounted and the filter tank. These filters are suitable for all types of swimming pools, with exception of salt water. The simple design ensures work for many years. The filter tank is placed on aesthetic base, so a set of the filter with the pump can be easily set on the floor and work of the unit will run properly. Recommended replacement of the sand every 1-2 years. These filter should be mounted basically close to the pool.

**Filter Sandy - technical data**

diameter in mm	filtration area in m <sup>2</sup>	sand kg	for the pool up to in m <sup>3</sup>	valve inches
300	0,07	25	20	1½"
380	0,11	40	28	1½"
430	0,15	55	36	1½"

All data can be modified without previous notice.

**Filter Sandy with valve**

diameter	300 mm	380 mm	430 mm
code	00470	00506	00485

**Filter Sandy with pump and valve**

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter. Here are some good suggestions:

diameter	pump*	code	sand
300 mm	6 m <sup>3</sup> /h, 230V	00505	118268
380 mm	6 m <sup>3</sup> /h, 230V	00501	118270
430 mm	6 m <sup>3</sup> /h, 230V	00480	118270
	8 m <sup>3</sup> /h, 230V	00481	118270

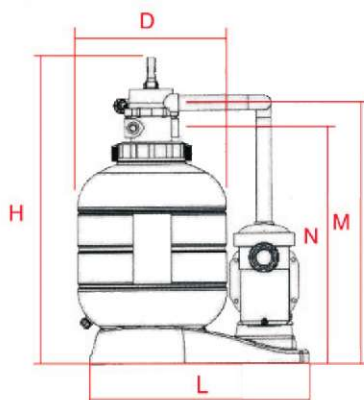
\* flow rate of the pump given at H= 8 m



Sandy 300



Sandy 380 , 430



D	300	380	430
H	905	850	935
L	710	930	930





**Filter San Sebastian Standard SSP – made in EU, Prestige class, collector plate with PVC nozzles, filtration bed 100 cm**

Filter with collector plate with PVC nozzles, Prestige class. The filter tank is made of polyester, reinforced with fiberglass. It is recommended for the pool in halls. The height of the sand is 100 cm, which results in deep filtration. The advantage is the ability to use a layer of hydroanthracite. This layer binds aroma compounds. The difference between the standard filter and the multilayer filter you can literally feel in this case. Recommended replacement of the sand every 1-2 years. Filter is equipped in: collector plate with PVC nozzles, 6-way valve 2" with internal threads, cover, pressure gauge, valve connections, manual purge valve. The filter can be mounted on the pools with salt water. Working pressure is 0,5-1,6 kg/cm<sup>2</sup>. Maksimum pressure is 2,0 kg/cm<sup>2</sup>. Each filter is tested after manufacture with testing pressure 3,0 kg/cm<sup>2</sup>. Prior to installation, tighten the components inside the tank.

**Filter San Sebastian Standard SSP - technical data**

diameter in mm	filtration area in m <sup>2</sup>	sand kg	for the pool up to in m <sup>3</sup>	valve inches	flow in m/h		
					30	40	50
640	0,32	475	70	2"	9,6	12,8	16,0
760	0,45	650	90	2"	13,5	18,0	22,5
900	0,63	850	110	2"	18,9	25,2	31,5

**Filter San Sebastian Standard SSP with valve**

diameter	640 mm	760 mm	900 mm
code	119260	119275	119310

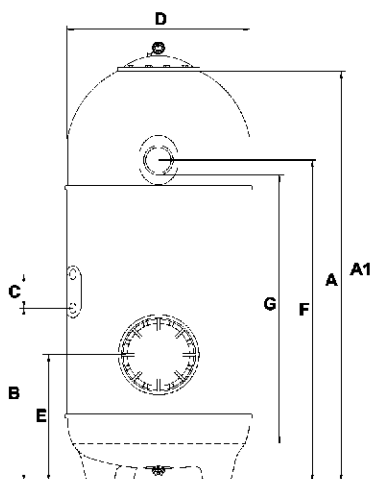
**Filter San Sebastian Standard SSP z pump and valve**

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter. Here are some good suggestions:

diameter	pump*	code	sand	sand and hydroanthracite
640 mm	13 m <sup>3</sup> /h, 230V	119162	119180	119181
	17 m <sup>3</sup> /h, 230V	119166	119180	119181
760 mm	20 m <sup>3</sup> /h, 230V	119281	119184	119185
	20 m <sup>3</sup> /h, 400V	119283	119184	119185
	25 m <sup>3</sup> /h, 230V	119285	119184	119185
900 mm	20 m <sup>3</sup> /h, 400V	119315	119190	119192
	25 m <sup>3</sup> /h, 400V	119320	119190	119192
	30 m <sup>3</sup> /h, 400V	119325	119190	119192

\*flow rate of the pump given at H= 8 m

D	A	A1	B	C	E	F	G
640	1450	1550	600	140	460	1130	1000
760	1490	1600	600	140	510	1180	1000
900	1510	1610	590	140	500	1230	1000





**Filter Caribic Standard SSB – made in EU, Extra class, collector laterals, filtration bed 100 cm**

Filter with collector laterals, Extra class. The filter tank is made of polyester, reinforced with fiberglass. It is recommended for the pool in halls. The height of the sand is 100 cm, which results in deep filtration. The advantage is the ability to use a layer of hydroanthracite. This layer binds aroma compounds. The difference between the standard filter and the multilayer filter you can literally feel in this case. Recommended replacement of the sand every 1-2 years. Filter is equipped in: collector laterals, 6-way valve 2" with internal threads, cover, pressure gauge, valve connections, manual purge valve. The filter can be mounted on the pools with salt water. Working pressure is 0,5-1,6 kg/cm<sup>2</sup>. Maksimum pressure is 2,0 kg/cm<sup>2</sup>. Each filter is tested after manufacture with testing pressure 3,0 kg/cm<sup>2</sup>. Prior to installation, tighten the components inside the tank.

**Filter Caribic Standard SSB - technical data**

diameter in mm	filtration area in m <sup>2</sup>	sand kg	for the pool up to in m <sup>3</sup>	valve inches	flow in m/h		
					30	40	50
640	0,32	475	70	2"	9,6	12,8	16,0
760	0,45	650	90	2"	13,5	18,0	22,5
900	0,63	850	110	2"	18,9	25,2	31,5

**Filter Caribic Standard SSB with valve**

diameter	640 mm	760 mm	900 mm
code	119910	119920	119930

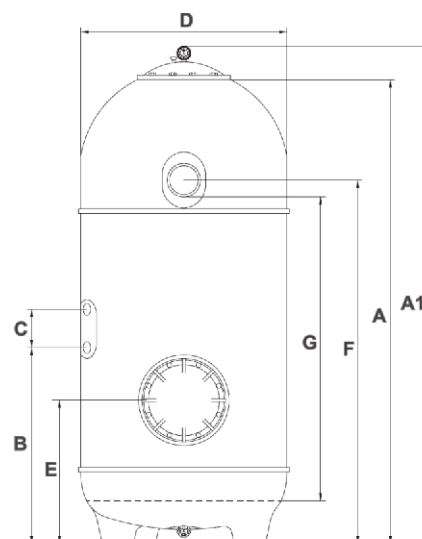
**Filter Caribic Standard SSB with pump and valve**

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter. Here are some good suggestions:

diameter	pump*	code	sand	sand and hydroanthracite
640 mm	13 m <sup>3</sup> /h, 230V	119914	119180	119181
	17 m <sup>3</sup> /h, 230V	119916	119180	119181
760 mm	20 m <sup>3</sup> /h, 230V	119922	119184	119185
	25 m <sup>3</sup> /h, 230V	119924	119184	119185
900 mm	25 m <sup>3</sup> /h, 400V	119932	119190	119192
	28 m <sup>3</sup> /h, 400V	119934	119190	119192

\*flow rate of the pump given at H= 8 m

D	A	A1	B	C	E	F	G
640	1450	1550	600	140	460	1130	1000
760	1490	1600	600	140	510	1180	1000
900	1510	1610	590	140	500	1230	1000





**Filter San Sebastian Standard SPL- made in EU, Public class, collector plate with PVC nozzles, filtration bed 120 cm**

Filter with collector plate with PVC nozzles, Public class. The filter tank is made of polyester, reinforced with fiberglass. It is recommended for the pool in halls. The height of the sand is 120 cm, which results in deep filtration. The advantage is the ability to use a layer of hydroanthracite. This layer binds aroma compounds. The difference between the standard filter and the multilayer filter you can literally feel in this case. Recommended replacement of the sand every 2-3 years. Filter is equipped in: collector plate with PVC nozzles, 6-way valve 2" with internal threads, cover, pressure gauge, valve connections, manual purge valve. The filter can be mounted on the pools with salt water. Working pressure is 0,5-1,6 kg/cm<sup>2</sup>. Maksimum pressure is 2,0 kg/cm<sup>2</sup>. Each filter is tested after manufacture with testing pressure 3,0 kg/cm<sup>2</sup>. Prior to installation, tighten the components inside the tank.

**Filter San Sebastian Standard SPL - technical data**

diameter in mm	filtration area in m <sup>2</sup>	sand kg	for the pool up to in m <sup>3</sup>	valve inches	flow in m <sup>3</sup> /h		
					30	40	50
640	0,32	525	70	2"	9,6	12,8	17,0
760	0,45	725	90	2"	13,5	18,0	22,5
900	0,63	1050	110	2"	18,9	25,2	31,5

All data can be modified without previous notice.

**Filter San Sebastian Standard SPL with valve**

diameter	640 mm	760 mm	900 mm
code	119940	119945	119950

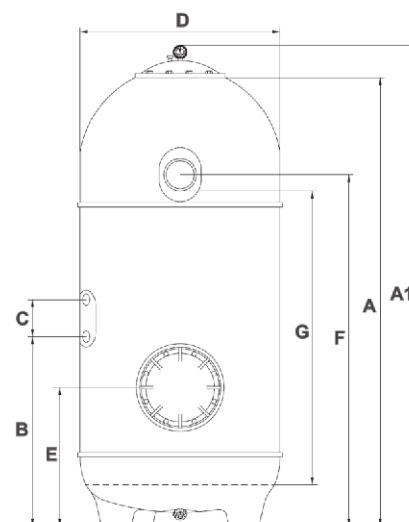
**Filter San Sebastian Standard SPL with pump and valve**

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter. Here are some good suggestions:

diameter	pump*	code	sand	sand and hydroanthracite
640 mm	13 m <sup>3</sup> /h, 230 V	118500	119200	119193
	17 m <sup>3</sup> /h, 230 V	118505	119200	119193
760 mm	15 m <sup>3</sup> /h, 230 V	118510	119202	119195
	15 m <sup>3</sup> /h, 400 V	119002	119202	119195
	20 m <sup>3</sup> /h, 230 V	119006	119202	119195
900 mm	20 m <sup>3</sup> /h, 400 V	119004	119202	119195
	20 m <sup>3</sup> /h, 400 V	119955	119204	119198
	25 m <sup>3</sup> /h, 400 V	119958	119204	119198
	28 m <sup>3</sup> /h, 400 V	119959	119204	119198

\*flow rate of the pump given at H= 8 m

D	A	A1	B	C	E	F	G
640	1740	1800	780	140	550	1455	1200
760	1740	1800	740	140	650	1455	1200
900	1740	1800	740	140	650	1455	1200







**Filter Artic – made in EU, Public class**

This filter is an economic choice, that costs of your pool will be lower. Equipped with collectors laterals, perfect for seasonal swimming pools, running in the summer. The height of sand is 1 m, top cover with diameter 400 mm with the 1" hole for automatic vent-valve. The cover is fixed with 14 screws to the tank. Two handles, built-in the tank, are useful for loading and unloading of the filter. Large bottom drain for easy emptying filter of the water and sand.

**Filter Artic - technical data**

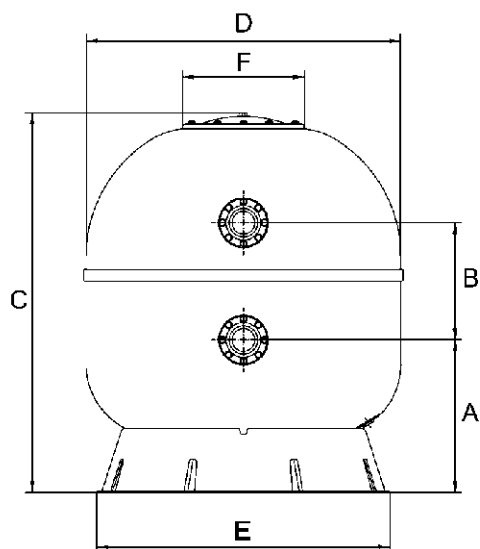
diameter in mm	filtration area in m <sup>2</sup>	sand kg	connections in mm	flow in m/h		
				30	40	50
1050	0,86	875	75	17	25	34
1200	1,13	1475	90	22	33	45
1400	1,54	1900	110	30	46	61
1600	2,01	2800	110	40	60	80
1800	2,54	3400	125	50	76	101
2000	3,14	4175	140	62	94	125

All data can be modified without previous notice.

**Filter Artic - tank with connections**

diameter	1050 mm	1200 mm	1400 mm	1600 mm	1800 mm	2000 mm
code	185020	185025	185030	185035	185040	185045

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter.



D	A	B	C	E	F
1050	675	520	1685	950	540
1200	675	520	1685	950	540
1400	675	520	1685	1300	540
1600	675	520	1685	1300	540
1800	675	720	1900	1610	540
2000	675	720	1900	1610	540




**Filter Altea SSP i SPL – made in EU, Public class, collector plate with PVC nozzles, filtration bed 120 cm**

Filter with collector plate with PVC nozzles, Public class. The ALTEA 1200 is designed for public swimming pools in the hotels and guest houses. It meets all of the requirements, which have to be fulfilled by the filter in the hotel swimming pool. The filter ALTEA is multi-layer, high-performance filter, made of the best resins reinforced with fiberglass

It is resistant to the pool water including salt water. The exterior of the filter is laminated in red metallic.

The diameter of the top cover is 220 mm, made as polypropylene pressure die-cast. The side cover with the diameter 400 mm is made of laminated polyester. The screws and nuts, that hold the cover are made of stainless steel A2.

Two circular viewers for visual inspection the interior of the filter, placed at an angle of 90 degree.

The height of the sand is 1,2 m. With its height of 1,97 cm filter ALTEA is suitable for all rooms.

Model ALTEA APL has collector plate with PVC nozzles. The nozzles are screwed into and their diameter is 0,5 mm.

Model ALTEA ABL has collector laterals. The slotted tubes are screwed into the collector.

It can be mounted the battery of flap valves 90 mm or 6-way 3" manual valve.

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter

**Filter Altea - technical data**

diameter in mm	filtration area in m <sup>2</sup>	sand kg	connections in mm	flow in m/h			
				20	30	40	50
1200	1,13	1950/2125	90	23	34	45	55

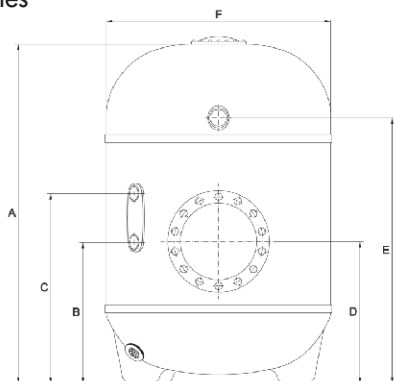
**Filter Altea - tank with connections**

Model	Code
Altea 1200 ABL collector laterals	119962
Altea 1200 APL collector plate with PVC nozzles	119960

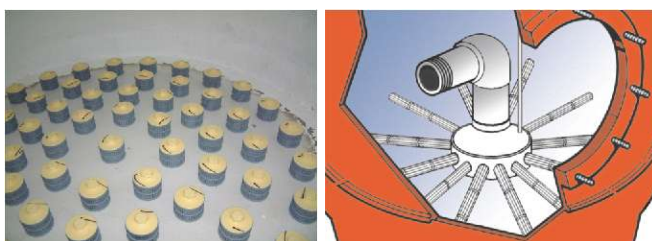
The filter can be combined with any pump with a flow rate dedicated to appropriate diameter.

**Sand and anthracite in the filter Altea**

	3.0-5.0	1,0-2,0	0,4-0,8	anthracite
Altea 1200 ABL collector laterals	-----	350 kg	1775 kg	-----
Altea 1200 APL collector plate with PVC nozzles	-----	175 kg	1775 kg	-----
	175 kg	175 kg	600 kg	580 kg



A	B	C	D	E	F
1970	750	1000	850	1450	1650





**Filter Nordic – made in EU, Public class**

Multilayer filter for the public swimming pools made in accordance with DIN 19605 & 19643. Includes collector plate with PVC nozzles 0,5 mm, top and side manhole, viewer made of methacrylate, flanged connections, water drain, EPDM sealing, internal piping made of PVC and PP.

**Filter Nordic - technical data**

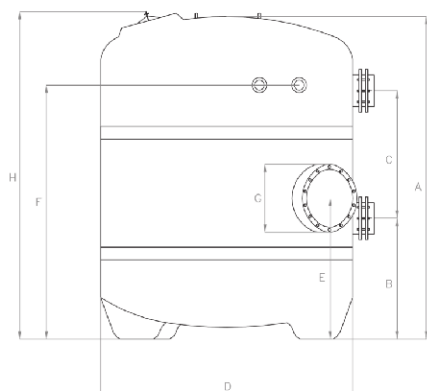
diameter in mm	filtration area in m <sup>2</sup>	connections in mm	flow in m/h			bed in kg	
			30	3-5 mm	1-2 mm	0,4-0,8	anthracite
1050	0,86	110	25	125	125	475	425
1200	1,13	125	33	175	175	625	550
1400	1,54	140	46	225	225	850	750
1600	2,01	160	60	300	300	1125	975
1800	2,54	200	76	375	375	1425	1225
2000	3,14	225	94	475	475	1750	1525

All data can be modified without previous notice.

**Filter Nordic - tank with connections**

Diameter	code
1050 mm	ND10502
1200 mm	ND12002
1400 mm	ND14002
1600 mm	ND16002
1800 mm	ND18002
2000 mm	ND20002

The filter can be combined with any pump with a flow rate dedicated to appropriate diameter.



MODEL ∅	DIMENSIONS (mm.)							
	A	B	C	D	E	F	G	H
1050	2365	760	1015	1050	1120	1820	540	2405
1200	2365	760	1015	1200	1120	1820	540	2405
1400	2365	760	1015	1400	1120	1820	540	2405
1600	2365	760	1015	1600	1120	1820	540	2405
1800	2365	760	1015	1800	1120	1820	540	2405
2000	2365	760	1015	2000	1120	1820	540	2405

**Amount of bed of filter Nordic**

diameter	3-5	1-2	0,4-0,8	anthracite
1050 mm	125	125	475	425
1200 mm	175	175	625	550
1400 mm	225	225	850	750
1600 mm	300	300	1125	975
1800 mm	375	375	1425	1225
2000 mm	475	475	1750	1525


**Filters Public class: FAMA, KOK DIN, Vienna, Brazil – made in EU**

These filters are Filtry designed for the public pools, equipped with collector laterals or collector with PVC nozzles. The height of filtration bed is 1 m or 1,2 m. Detailed data provided on request.



*FAMA: filtration bed 1,2 m, collector laterals or with PVC nozzles, diameters: 1,05 m , 1,2 m, 1,4 m, 1,6 m, 1,8 m, 2,0 m, 2,35 m, 2,5 m, 3,0 m.*



*KOK DIN: filtration bed 1,2 m, collector plate with PVC nozzles, diameters: 610 mm, 765 mm, 920 mm, 1080 mm, 1250 mm.*



*VIENNA: filtration bed 1 m or 1,2 m, collector laterals or with PVC nozzles, diameters: 1,05 m, 1,2 m, 1,4 m, 1,6 m, 1,8 m, 2,0 m, 2,35 m, 2,5 m, 3,0 m.*



*BRAZIL: filtration bed 1 m or 1,2 m, collector laterals, diameters: 1,05 m, 1,2 m, 1,4 m, 1,6 m, 1,8 m, 2,0 m, 2,35 m, 2,5 m.*





**Cartridge filters**

The advantage of these devices is no need to rinse the filter, take up a little space and high performance of stopping the pollution. That is why the water in the pool is very clear. Cartridges of the filter can be cleaned in a washing machine at 60 degrees. More information in the detailed data.

**Filter Speck „Badu -Star“**

Is self-priming filtering device used in bathtubs and private pools. The Badu Star is complete filter unit with the pump performed with the filter housing. The porosity is 50 micron. It is environmentally friendly, because it does not require a connection to the sanitary sewer system. Can be installed max. 3 m above or below water level. Equipped with a pressure gauge and drain plug, so despite of a strange appearance, it is hundred percent water filter.

type	amount	flow rate	code
69/12	12 cartridges	9 m <sup>3</sup> /h, 230 V	180025
913/12		13 m <sup>3</sup> /h, 230 V	180327
69/24	24 cartridges	9 m <sup>3</sup> /h, 230 V	180122
913/24		13 m <sup>3</sup> /h, 230 V	180424
69/36	36 cartridges	9 m <sup>3</sup> /h, 230 V	180236
913/36		13 m <sup>3</sup> /h, 230 V	180536



**Filter Speck „Badu-Quick“ without pump**

Recommended for small pools up to 20 m<sup>3</sup>.  
For each type proper pump should be selected.

model	recommended pump	code
Type 1	max. 5 m <sup>3</sup> /h	160111
Type 2	max. 7 m <sup>3</sup> /h	160113
Type 4	max. 9 m <sup>3</sup> /h	160115





### Accessories for sand filters

The filter needs several accessories. The most important is sand, as a traditional and economical filtering material.

**ATTENTION!!!!** The proper working of the filter depends on proper sand. Our sand is special, dedicated exclusively to the filters, purity according to DIN, delivered in thermally welded bags of 25 kg.

### The quartz sand for filters



granulation	code
0,4 - 0,8 mm	00001
1,0 – 2,0 mm	00002
2,0 - 3,0 mm	00004
3,0 - 5,0 mm	00003

### Column valves

Modern, high-tech valves used instead of manual valves. Casing made from hard PVC, inside elements from steel V4A, PTFE sealing. The valve is controlled by a magnet valve located at the top.

#### Here are its unique features:

1. Functioning reliability - the valve opens under the water pressure and closes under the influence of thrust of the spring. When a power outage, the valve automatically switches to position FILTRATION. Unintended draining of the pool is not possible.
2. During switching the valve is not need to turn off the pump.
3. The connections can be rotated through 90° (+/- 4°, the lack of tension with the installation of the pipe)
4. Low pressure loss - it causes a high speed of backwash, which is very important at almost unpressurized backwash.
5. Available in sizes from 50 to 140 mm.

The 3-way valve is mounted for the function of the filter backwash, when one pump is switching between two water attractions etc.

#### Column valves



connections	spacing	code
50 mm	125 mm	204000
	140 mm	204003
	190 mm	204005
63 mm	140 mm	204010
	170 mm	204012
	190 mm	204013
	230 mm	204014
75 mm	250 mm	204020
90 mm	300 mm	204030
110 mm	360 mm	204040
140 mm	450 mm	204041

#### 3-way valves

diameter	code
50 mm	204070
63 mm	204071
75 mm	204072
90 mm	204073
110 mm	204074
140 mm	204076



### Manual 6-way valves

Using the valve you can control the working of the filter. During the operation the valve is set to filtration. By setting the valve in proper position you can achieve different operator actions on the filter, such as backwash = cleaning the impurities retained by the filter, circulation = movement of the water without passing through the filter, in order to force a faster circulation in the pipeline.



Name of the product	code
Side valve, all outputs with threads 1"	12003
Side valve with connections, threads 1" and 1", glued	12005
Side valve, all outputs with threads 2"	12030
Side valve with connections, threads 2", one glued	07444
Side valve, all outputs with threads 3" with plugs	200845
Side valve, outputs with threads 3" and one glued bottom	200843

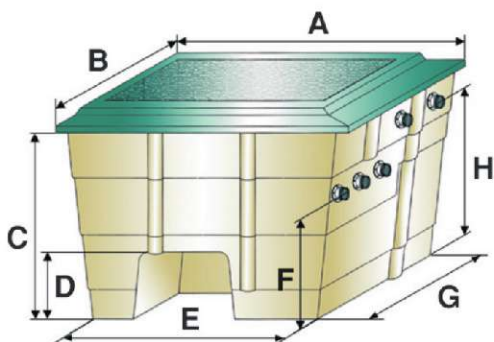


**Accessories for sand filters**

**Filter chest of Kripsol and Jupiter-Poly**

A special chest designed for installation in the ground. In the chest the filter tank and pump are mounted.

name	code
filter chest CS with diam. 300-640 mm	374184
filter chest CJ with diam. 760-900 mm	374185



in mm	A	B	C	D	E	F	G	H
CS	1270	1170	850	295	1000	495	890	675
CJ	1750	1550	1050	450	1480	1150	850	1150

**Batteries of flap valves**

A set containing 5 flap valves, 5 m of PVC pipe, screws, flanges and bushings. Replaces the 6-way valve. Practically is a necessity, when the filter connection is more than 110 mm. Connectors to assemble.

diameter	code
75 mm	09165
90 mm	09166
110 mm	09167
125 mm	09168
140 mm	09170
160 mm	09173
200 mm	09178
225 mm	09180
250 mm	09182



**Controller for valve battery**

Designed to the automatic control of the valves. Allows to control all functions of the battery.  
code: 419400

**Supports for batteries**

Special handles for the valve battery with diameters from 75 mm to 250 mm for each model of the filter. Antivibration handles with screws and two brackets form the set. Brackets, made from galvanized steel, allow vertical regulation of the batteries.

name	code	name	code
supports	05345	supports Ø140 mm	05320
supports Ø75 mm	05300	supports Ø160 mm	05325
supports Ø90 mm	05305	supports Ø200 mm	05330
supports Ø110 mm	05310	supports Ø225 mm	05335
supports Ø125 mm	05315	supports Ø250 mm	05340



### Accessories for sand filters

#### Automatic air vent

It is worth to install automatic vent on the filter. It is a special dual-function valve, which aerating or venting the filter tank automatically.



1



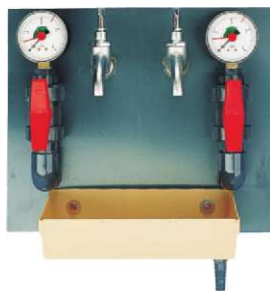
2

name	code
1 Stainless, G <sup>1/2</sup> I.T.	147960
1 as above, but ozone resistant	147965
2 Polypropylene, external thread 1"	09181

### Sampling stations

It is used to collect water samples for testing. Glycolic gauges show the pressure before and behind the filter. With hoses the station is connected to the pipeline.

sampling station  
code 147950



sampling station  
code 147952



### Acrylic flow meter

Mounted on the pipeline by means of clamps.  
The scale of measurement 30-120 m<sup>3</sup>/h.  
code 148032



### Set of pressure gauges

Glycolic, very accurate pressure gauges. The scale up to 4 bar, connected by hose 8/10 mm.  
code 00730



### Flow meter M23

Connected to the pipeline via glued socket with a diameter of 75 mm. Highly accurate measurement. The scale of measurement 8-60 m<sup>3</sup>/h.  
code 148034







**Accessories for sand filters**

**Automatic valves for filters** are electronic units for automatically backwashing of the filter bed. You can set the date, time and duration of the backwashing. Automatic valves provide full comfort of using the filter.

**BADUTRONIK 93 V 3.1** is an electronic device for the fully automated backwashing, works in combination with the control boxes or directly with the pump. It is possible to install the Badutronic 93 V 3.1 on any of already working filter. The precise time and frequency of the backwash process are set via a digital timer. Badutronic 93 V 3.1 consists of a control unit with a motor and 6-way valve. The ability to set backwash time: 0,5 to 11 minutes, clear rinsing time: 8 to 70 seconds. A stable plastic housing with transparent cover, which gives the possibility to control the clock. It is preferable when it is connected both the automatic water level regulator, immediately supplemental water in the pool.

**Badu Easytronic** is pre-set every 7 days. Is easy to setup, you just need to set rinsing time. **Badu PressureTronic** has built-in pressure sensor, thanks to which an additional rinsing is switched when pressure in the filter increases.

Name		code
Badutronic 93	valve 1 ½", 230 V	200870
Badutronic 93	valve 2", 230 V	200875
Badu Easytronic	valve 1 ½", 230 V	200871
Badu Easytronic	valve 2", 230 V	200876
Badu Pressuretronic	1 ½", 230 V	200872
Badu Pressuretronic	2", 230 V	200877



**BADUTRONIK 2002-1** is a valve performing the function of automatic filter rinsing and control the filtering pump up to 1,0 kW. It is possible to install the Badutronic 2002-1 on any of already working filter. Two-channel digital timer allows programming: Channel 1 - backwash time, Channel 2 - filtering time. Automatic backwash can be also performed outside of filtering time. The unit require connection of the automatic water level regulator eg. BNR 55 or BNR 200. Badutronic 2002-1 consists of a control unit with a motor and 6-way valve. It has control functions: automatic filtering via programme selection mode or manual filtering mode controlled by the timer, automatic backwashing via programme selection or manual backwashing via push button, ON-OFF control, filtering, rinsing. The ability to set backwash time: 1 to 11 minutes, clear rinsing time: 10 to 60 seconds, manual mode - automatic mode for filtering pump. Shapely, stable plastic housing with safety endings and transparent cover, which gives the ability to control the clock.

Name		Code
Badutronic 2002-1	valve 1 ½", 230V	200880
Badutronic 2002-1	valve 2", 230V	200885





### Accessories for sand filters

**AquaStar** is a series of perfectly working automatic valves for sand filters. The drive is for mounting on the existing manual valve on the filter: side or top. AquaStar consists of a drive + 6-way valve. AquaStar SAFETYPACK does its work, even if it loses external power supply. Each AquaStar has handle in set for manual control of the valve. It can be connected to the filter control or independently perform its functions. Drives can be mounted to the manual valve of each manufacturer, thanks to the adapters. Working pressure of 3,5 bar. AquaStar is for swimming pools, spa industry, fountains, swimming ponds, aquariums. AquaStar provides you full comfort and safety.

name	code
AquaStar Easy 1000 drive for valve 1½" and 2" with time switch	200900
AquaStar Easy 1000 automatic backwash valve 1½", time switch	200902
as above, but with valve 2 "	200904



name	code
AquaStar Easy 4000 drive for valve 1½" and 2" with time switch and pressure switch	200906
AquaStar Easy 4000 automatic backwash valve 1½", time switch and pressure switch	200908
as above, but with valve 2"	200910



name	code
AquaStar Comfort 3000 drive for valve 3" time switch	200912
AquaStar Comfort 3000 automatic backwash valve 3", time switch	200914



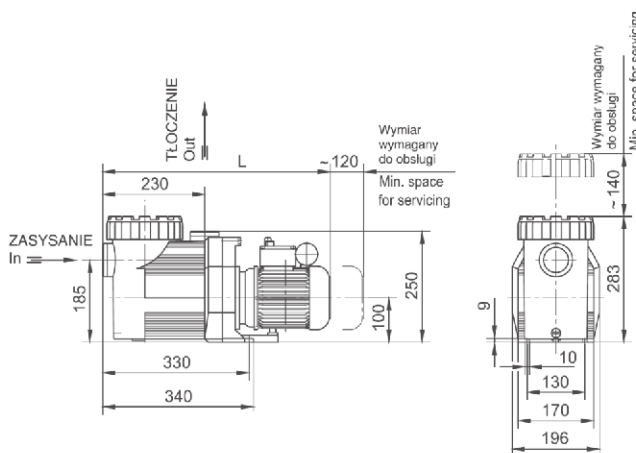
name	code
AquaStar SafetyPack Comfort 3000 drive for valve 1½" and 2", with Safety Pack, time switch	200916
AquaStar SafetyPack 4000 drive for valve 1½" i 2", with Saftey Pack, time switch and pressure switch	200918





All pumps are designed to work with a pool water. Characterized by quiet operation, corrosion resistance, trouble free working, solid cylindrical sealing, which protect the motor against pool water, resistant to temperature up to 60°C. All filters pumps are equipped with strainer (basket). Pumps without strainer are designed to work with water massage devices. Pumps efficiency is given at H=8 m of total dynamic head. We offer only high quality pumps manufactured in Europe, what may make difficult to choose. Therefore, they are divided into classes, that the choice will be easier: Extra class – the best pumps with high reputation = brand, long lifetime, quality and reliability. Normal class – very good pumps differing from the above only in that it is less well known manufacturer. Standard class – basic pumps, which sinning with modesty, however, have a very good combination of quality and reliability.

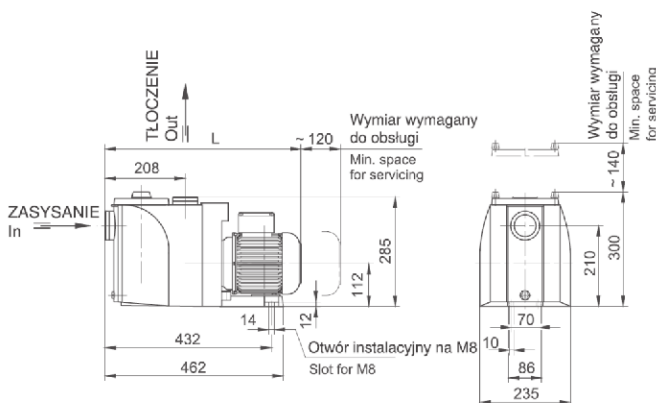
**Badu 90 Series Speck Pumpen Extra class**



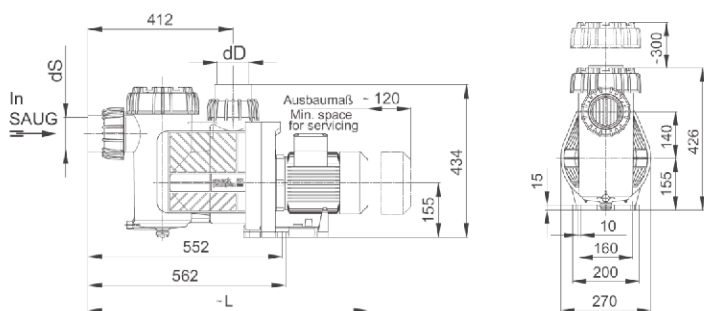
type	efficiency	power kW	code	L mm
90/7	7 m <sup>3</sup> /h, 230 V	0,30	182201	485
	400 V		182203	485
90/11	11 m <sup>3</sup> /h, 230 V	0,45	182211	485
	400 V		182213	485
90/13	13 m <sup>3</sup> /h, 230 V	0,55	182215	507

type	efficiency	power kW	code	L mm
90/13	13 m <sup>3</sup> /h, 400 V	0,55	182216	507
90/15G	15 m <sup>3</sup> /h, 230 V	0,75	182221	505
	400 V		182223	505
90/20G	20 m <sup>3</sup> /h, 230 V	1,00	182231	519
	400 V		182233	505

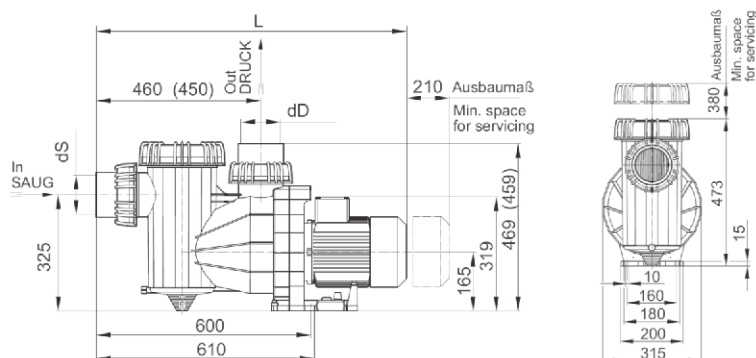
**Badu 40 Series Speck Pumpen Normal class**



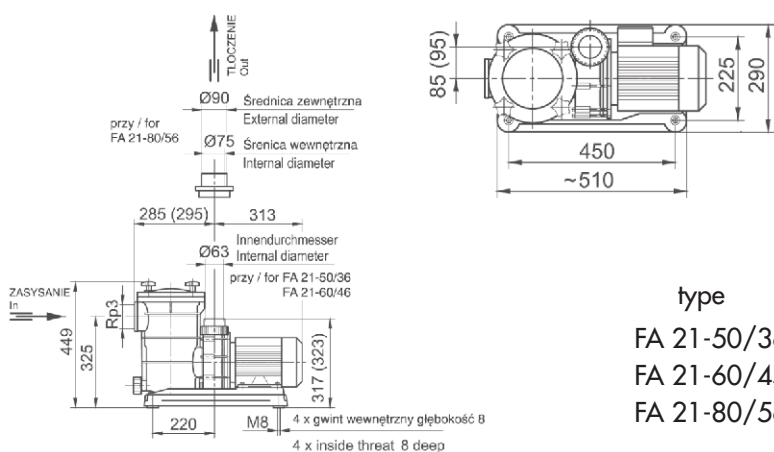
type	efficiency	power kW	code	L mm
40/25G	25 m <sup>3</sup> /h, 230 V	1,30	182072	511
	400 V		182073	511
40/32	32 m <sup>3</sup> /h, 230 V	1,50	182082	539
	400 V		182083	511


**Badu 90 Series Speck Pumpen Extra class**


type	efficiency	power kW	code	L mm	type	efficiency	power kW	code	L mm
90/25	25 m <sup>3</sup> /h, 230 V	1,30	182235	777	90/40	41 m <sup>3</sup> /h, 230 V	2,20	182243	795
	400 V		182237	751		400 V		182245	795
90/30	31 m <sup>3</sup> /h, 230 V	1,50	182239	777	90/48	49 m <sup>3</sup> /h, 230 V	2,60	182247	825
	400 V		182241	751		400 V		182249	795

**Badu Resort Series Speck Pumpen Extra class**


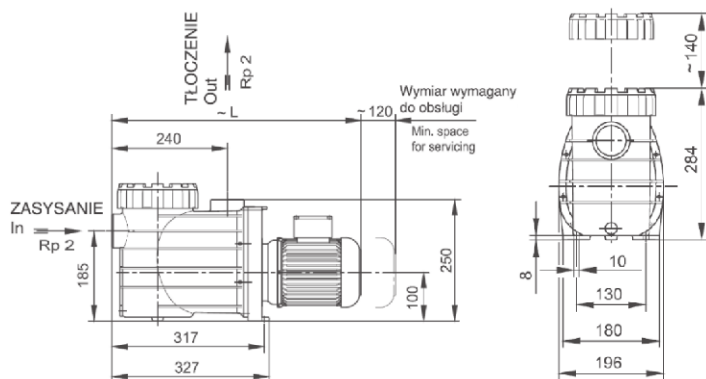
type	efficiency	power kW	code	L mm	type	efficiency	power kW	code	L mm
30	30 m <sup>3</sup> /h, 400 V	1,50	183000	783	60	60 m <sup>3</sup> /h, 400 V	2,60	183025	837
40	40 m <sup>3</sup> /h, 400 V	2,20	183005	827	70	70 m <sup>3</sup> /h, 400 V	3,00	183030	837
45	45 m <sup>3</sup> /h, 400 V	2,60	183010	827	80	80 m <sup>3</sup> /h, 400 V	4,00	183035	867
50	50 m <sup>3</sup> /h, 400 V	3,00	183015	837	110	110 m <sup>3</sup> /h, 400 V	5,50	183040	884
55	55 m <sup>3</sup> /h, 400 V	4,00	183020	867					

**Badu FA 21 Series Speck Pumpen Extra class**


type	efficiency	power kW	code
FA 21-50/36	36 m <sup>3</sup> /h, 400 V	2,20	187138
FA 21-60/45	45 m <sup>3</sup> /h, 400 V	2,60	187148
FA 21-80/56	56 m <sup>3</sup> /h, 400 V	3,00	187172



**Badu Bronze Series Speck Pumpen Extra class**



type	efficiency	power kW	code	L mm	type	efficiency	power kW	code	L mm
7	7 m <sup>3</sup> /h, 230 V	0,30	182101	498	22	22 m <sup>3</sup> /h, 230 V	1,00	182131	532
	400 V		182103	498		400 V		182133	520
11	11 m <sup>3</sup> /h, 230 V	0,45	182111	498	25	25 m <sup>3</sup> /h, 230 V	1,30	182141	532
	400 V		182113	498		400 V		182143	532
14	14 m <sup>3</sup> /h, 230 V	0,55	182121	520	30	30 m <sup>3</sup> /h, 230 V	1,50	182151	558
	400 V		182123	520		400 V		182153	532

**Badu Eco Touch Series Speck Pumpen Extra class**

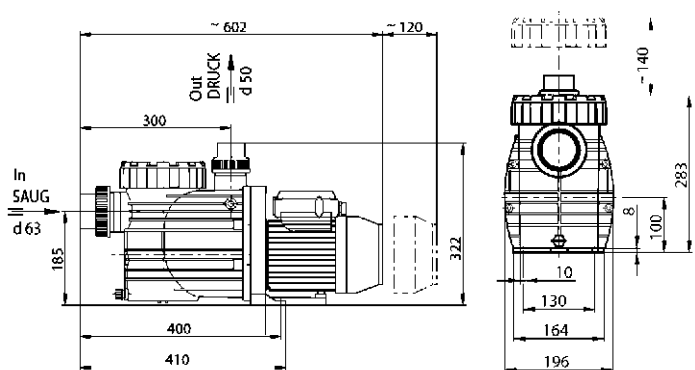
Eco Touch is a pump with variable efficiency according to the needs. It can work in 3 power ranges:

1 - 2.000 (min<sup>-1</sup>) 0,39 kW night work and on Saturday-Sunday, at H= 6 m, 10 m<sup>3</sup>/h

2 - 2.800 (min<sup>-1</sup>) 0,69 kW normal work, H= 6 m, 18 m<sup>3</sup>/h

3 - 2.850 (min<sup>-1</sup>) 1,0 kW rinsing and solar panels water supplying, H= 6 m, 26 m<sup>3</sup>/h

Buttons for setting the pump power are inside the pump.

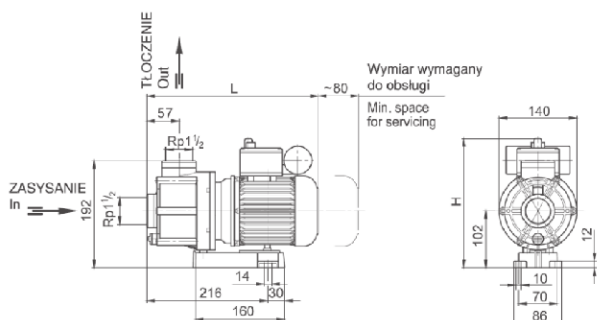


name	code	separate control unit for manual adjustment of the pump work	271.6400.001
Eco Touch	219.0000.038	separate control unit for time adjustment of the pump work	271.6400.002

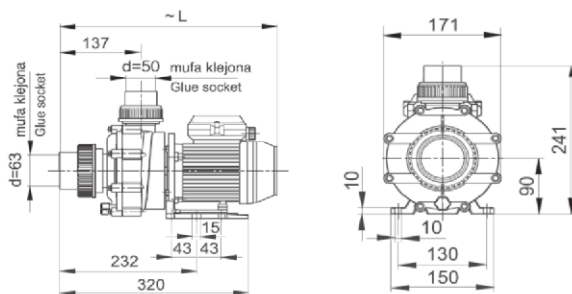
**Badu 73 Series Speck Pumpen Extra class**

type	efficiency	power kW	code
73-1	6 m <sup>3</sup> /h, 230V	0,80	237.3100.038
	at H= 16		
73-2	6 m <sup>3</sup> /h, 230V	1,10	237.3200.138
	at H= 16		




**Badu 42 Series Speck Pumpen Normal class**


type	efficiency	power kW	code	L mm	H mm	type	efficiency	power kW	code	L mm	H mm
42/6	6 m <sup>3</sup> /h, 230 V	0,30	204.2060.038	307	237	42/9	9 m <sup>3</sup> /h, 400 V	0,45	204.2060.037	307	209
	400 V		204.2090.038	307	209	42/12	12 m <sup>3</sup> /h, 230 V	0,65	204.2090.037	327	223
42/9	9 m <sup>3</sup> /h, 230 V	0,45	204.2120.038	307	237		400 V		204.2120.037	327	203

**Badu 46 Series Speck Pumpen Normal class**


type	efficiency	power kW	code	L mm	type	efficiency	power kW	code	L mm
46/5	8 m <sup>3</sup> /h, 230 V	0,30	204.6050.038	385	46/15	18 m <sup>3</sup> /h, 230 V	0,65	204.6150.038	410
46/10	12 m <sup>3</sup> /h, 230 V	0,45	204.6100.038	385	46/22	23 m <sup>3</sup> /h, 230 V	0,80	204.6220.038	410

**Pump series Speck Pumpen for salt water and very aggressive water**

All Speck pumps can be made in AK version for special order, designed for salt water, where the salt content exceeds 0,5 mg/l. A wide range of applications allows use pumps for pumping of thermal waters, thermal brines, in aquariums with sea water or in installations for salty water. The pump responds to the standard version, except that it was made a space separating from the motor. In this way, leaks of pressed factors and crystalizing mineral substances will not be able to get into the motor and bearings. This constructions ensures markedly elevated pump life, compared to the standard version.


**Badu 90 - AK**

**Badu 42 - AK**



**Badu 21-40 Series Speck Pumpen Extra class**



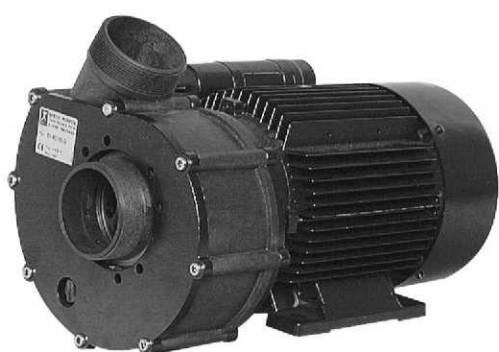
type	efficiency	power kW	code
21-40/53G	17 m <sup>3</sup> /h, 230 V	0,55	234.0530.138
21-40/54G	22 m <sup>3</sup> /h, 230 V	0,75	234.0540.138
21-40/55G	28 m <sup>3</sup> /h, 230 V	1,00	234.0550.138
21-40/58G	32 m <sup>3</sup> /h, 230 V	1,50	234.0580.138
21-40/58G	32 m <sup>3</sup> /h, 400 V	1,50	234.0580.137

**Badu Series 21-50 i 21-50 Speck Pumpen Extra class**

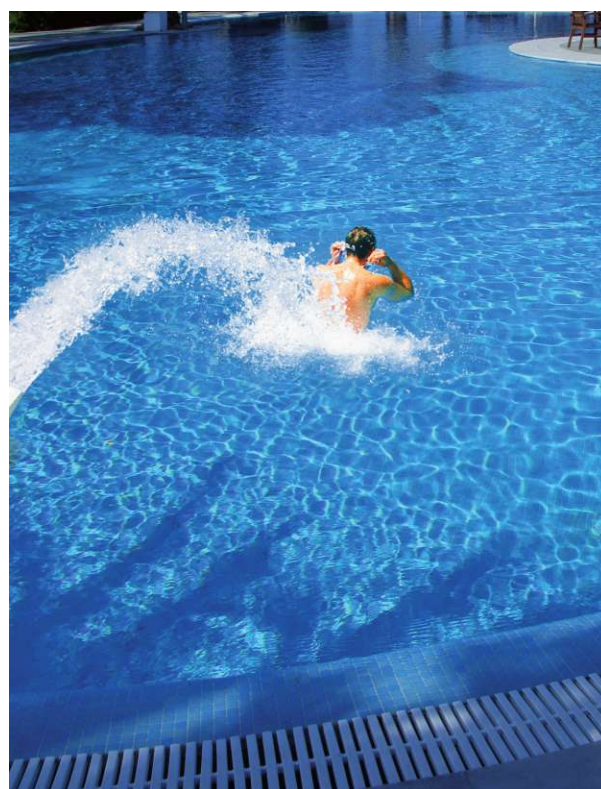


type	efficiency	power kW	code
21-50/42G	28 m <sup>3</sup> /h, 230 V	1,10	235.0420.137
21-50/43G	38 m <sup>3</sup> /h, 230 V	1,60	235.0430.137
21-50/44G	45 m <sup>3</sup> /h, 230 V	2,20	235.0440.137
21-60/43G	38 m <sup>3</sup> /h, 230 V	1,60	236.0430.137
21-60/44G	45 m <sup>3</sup> /h, 400 V	2,20	236.0440.137
21-60/46G	55 m <sup>3</sup> /h, 230 V	3,00	236.0460.137

**Badu 21-80 Series Speck Pumpen Extra class**

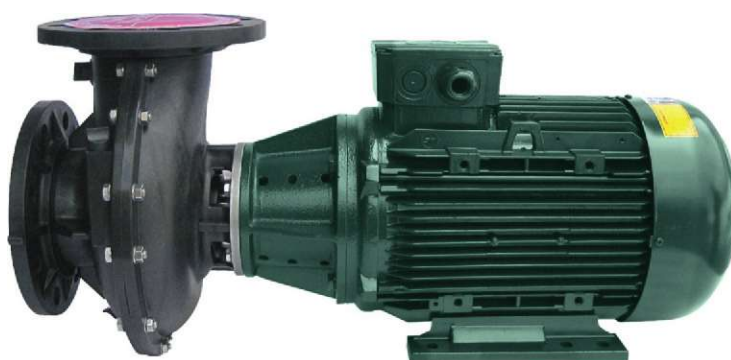
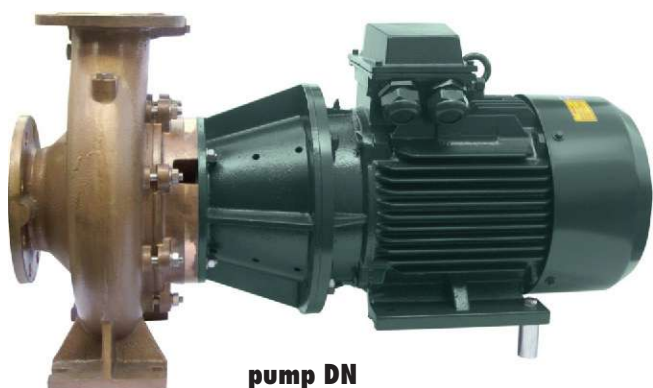


type	efficiency	power kW	code
21-80/32RG	32 m <sup>3</sup> /h, 230 V	1,60	187516
21-80/32RG	55 m <sup>3</sup> /h, 230 V	2,20	187520
21-80/32G	65 m <sup>3</sup> /h, 230 V	2,60	187518
21-80/33G	75 m <sup>3</sup> /h, 230 V	3,00	187526
21-80/34G	90 m <sup>3</sup> /h, 400 V	4,00	187545



**Pumps for public swimming pools**

Rich and wide range of offered PSH pumps does not allow placing all of them in this catalog. But for sure you will find here something for you. The PSH pumps are made on request in such way as to meet the needs of the recipient in every respect. Just provide the required flow and pressure resistance of the water column and fast service will send the offer in a very short time. Offered pumps can have bronze or plastic impellers. Electric motors are compliant with the latest standards EU 640/2009 regarding to the degree of energy efficiency IE2 and on request can be equipped with motors according to IE3. The pumps are characterized by a high hydraulic efficiency of 85%. Stainless steel bearings and carbon-ceramic impeller sealing. The housing are made from polypropylene reinforced with fiberglass, cast iron AISI 316 or bronze. Offered models are with or without prefilter. These pumps are proper choice in every respect.

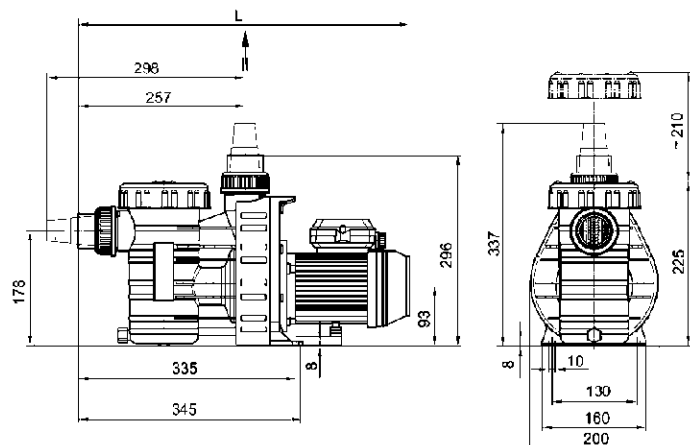
**pump FDN-V****pump D-Gigant-N****pump DN**





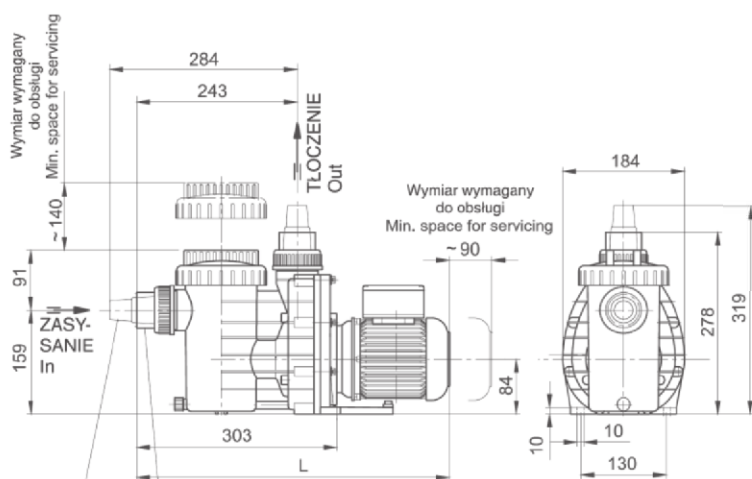
# POOL PUMPS

## Aqua Plus Series Technix Standard class



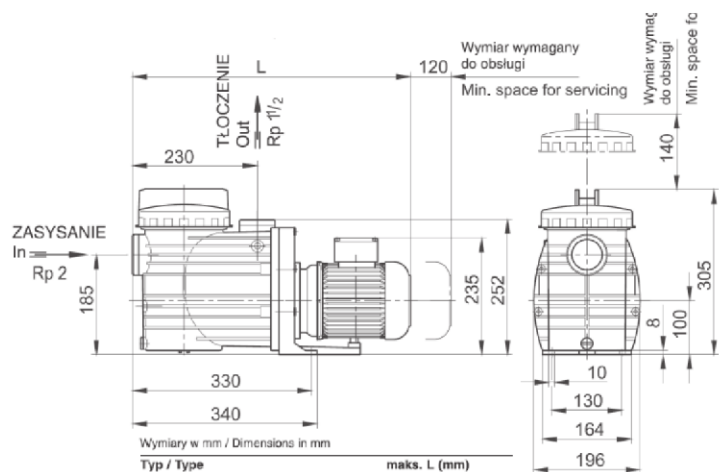
type	efficiency	power kW	code	L mm
6	6 m <sup>3</sup> /h, 230 V	0,25	10055	496
8	8 m <sup>3</sup> /h, 230 V	0,40	10057	511
11	11 m <sup>3</sup> /h, 230 V	0,45	10060	511

## Magic Series Speck Pumpen Standard class



type	efficiency	power kW	code	L mm
4	4 m <sup>3</sup> /h, 230 V	0,18	10030	488
6	6 m <sup>3</sup> /h, 230 V	0,25	10033	488
8	8 m <sup>3</sup> /h, 230 V	0,40	10037	503
11	11 m <sup>3</sup> /h, 230 V	0,45	10040	503

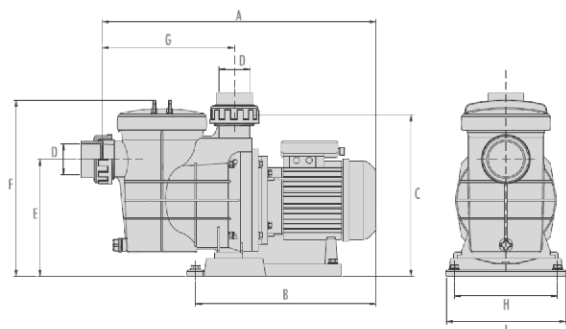
## Bettar/Badu Top Series Speck Pumpen Normal class



type	efficiency	power kW	code	L mm
8	8 m <sup>3</sup> /h, 230 V	0,30	10002	490
12	12 m <sup>3</sup> /h, 230 V	0,45	10022	490
14	14 m <sup>3</sup> /h, 230 V	0,65	10024	515
20	20 m <sup>3</sup> /h, 230 V	1,00	10025	525
25	25 m <sup>3</sup> /h, 230 V	1,30	10026	525


**THESE PUMPS HAVE 2 YEARS of 100 % GUARANTEE**

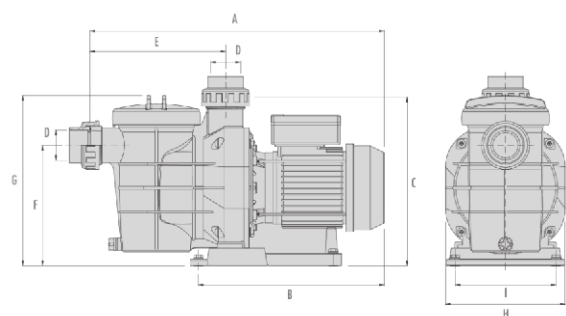
Produced in Europe, characterized by unique quality and durability, which is why, they have 2 years of 100% guarantee for all elements. Bearings, used in the pumps, are made of stainless steel, the housings are reinforced with fiberglass and the impellers are made of noryl. It is worth to have these pumps in your pools, because it is peace of mind for years. Detailed information in the leaflet of the pump.



type	efficiency at H= 6	power kW	code
7	7 m <sup>3</sup> /h, 230 V	0,25	10056
9	9 m <sup>3</sup> /h, 230 V	0,37	10058
11	11 m <sup>3</sup> /h, 230 V	0,75	10061

**Mini Pump Series Iml Standard class**

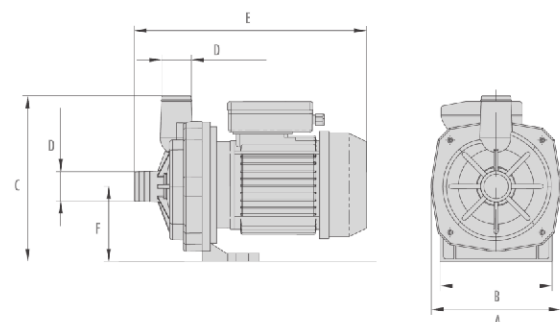

A	B	C	D	E	F	G	H	I
438	292	260	50	180	274	208	168	199



type	efficiency at H= 6	power kW	code
11	11 m <sup>3</sup> /h, 230 V	0,37	10065
13	13 m <sup>3</sup> /h, 230 V	0,55	10066
17	17 m <sup>3</sup> /h, 230 V	0,75	10067
20	20 m <sup>3</sup> /h, 230 V	1,10	10068

**America Series Iml Normal class**


A	B	C	D	E	F	G	H	I
490	311	280	50	225	200	285	199	168



type	efficiency at H= 6	power kW	code
HE25	6 m <sup>3</sup> /h, 230 V	0,20	10100
HE33	8 m <sup>3</sup> /h, 230 V	0,25	10102
HE50	10 m <sup>3</sup> /h, 230 V	0,37	10104

**Hermes Series Iml Standard class**

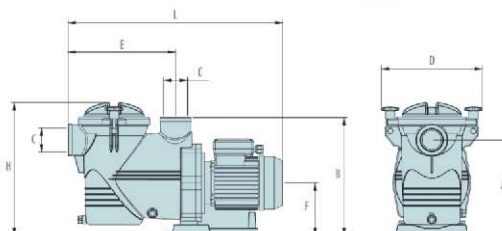

A	B	C	D	E	F
165	150	206	38	285	89



**THESE PUMPS HAVE 4 YEARS of 100 % GUARANTEE**

Produced in Europe, characterized by unique quality and durability, which is why, they have 4 years of 100% guarantee for all elements. Bearings, used in the pumps, are made of stainless steel, the housings are reinforced with fiberglass and the impellers are made of noryl. It is worth to have these pumps in your pools, because it is peace of mind for years. Detailed information in the leaflet of the pump.

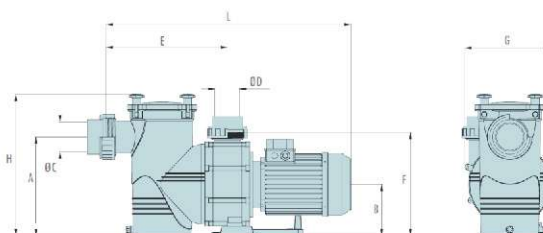
**Discovery Series Iml Normal class**



A	B	C	D	E	F	H	I
250	312	2"	280	282	140	348	625

efficiency	power kW	code
25 m <sup>3</sup> /h 230V	1,50	10070
400V	1,50	10071
28 m <sup>3</sup> /h 230V	2,20	10072
400V	2,20	10073

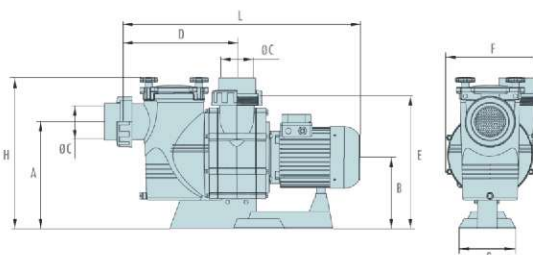
**Big Discovery Series Iml Normal class**



A	B	C	D	E	F	G	H	I
300	160	90	75	368	320	264	431	743

efficiency	power kW	code
45 m <sup>3</sup> /h 400V	2,20	10075
63 m <sup>3</sup> /h 400V	2,90	10076
72 m <sup>3</sup> /h 400V	4,00	10077

**Atlas Series with prefiltrr Iml Extra class – bronze impeller**



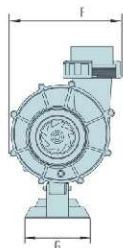
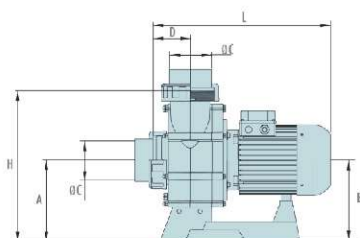
Dimensions for ATO 550 and 750

A	B	C	D	E	F	G	H	I
375	225	110	405	470	330	200	535	820

type	efficiency	power kW	code
ATO400	75 m <sup>3</sup> /h 230/400V	2,90	11000
ATO550	90 m <sup>3</sup> /h 230/400V	4,00	11002
ATO750	120 m <sup>3</sup> /h 230/400V	5,50	11004
ATO750E	120 m <sup>3</sup> /h 400/690V	5,50	11006
ATO1000	135 m <sup>3</sup> /h 230/400V	7,40	11008
ATO1000E	135 m <sup>3</sup> /h 400/690V	7,40	11010
ATO1250	150 m <sup>3</sup> /h 230/400V	9,20	11012
ATO1250E	150 m <sup>3</sup> /h 400/690V	9,20	11014


**THESE PUMPS HAVE 4 YEARS of 100 % GUARANTEE**

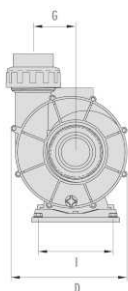
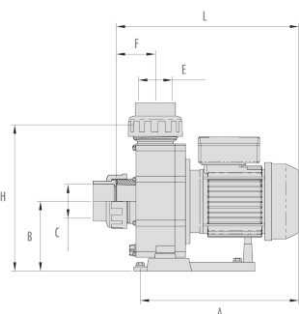
Produced in Europe, characterized by unique quality and durability, which is why they have 4 years of 100% guarantee for all elements. Bearings, used in the pumps, are made of stainless steel, the housings are reinforced with fiberglass and the impellers are made of noryl. It is worth to have these pumps in your pools, because it is peace of mind for years. Detailed information in the leaflet of the pump.

**Atlas Series without prefilter Iml Extra class – bronze impeller**


type	efficiency	power kW	code
ATO550SP	110 m <sup>3</sup> /h, 230/400 V	4,00	11016
ATO750SP	135 m <sup>3</sup> /h, 230/400 V	5,50	11018
ATO750SPE	135 m <sup>3</sup> /h, 400/690 V	5,50	11020
ATO1000SP	153 m <sup>3</sup> /h, 230/400 V	7,40	11022
ATO1000SPE	153 m <sup>3</sup> /h, 400/690 V	7,40	11024
ATO1250SP	170 m <sup>3</sup> /h, 230/400 V	9,20	11026
ATO1250SPE	170 m <sup>3</sup> /h, 400/690 V	9,20	11028

Dimensions for ATO 550SP and 750SP

A	B	C	D	E	F	H	L
255	255	110	105	330	200	475	530

**New BCC Series Iml Extra class**


efficiency	power kW	code
45 m <sup>3</sup> /h, 400 V	2,20	10078
65 m <sup>3</sup> /h, 400 V	2,90	10079
80 m <sup>3</sup> /h, 400 V	4,00	10080

A	B	C	D	E	F	G	H	L
410	156	75	260	75	77	95	319	450

**Jet Series made of bronze Lahme Extra class**


type	efficiency	power kW	code
suction 2"	45 m <sup>3</sup> /h, 400V	2,2	378011
suction 2"	38 m <sup>3</sup> /h, 230V	1,5	378038
suction 2"	63 m <sup>3</sup> /h, 400V	2,6	378046
suction 2½"	63 m <sup>3</sup> /h, 400V	2,6	378048
suction 90mm	100 m <sup>3</sup> /h, 400V	4,0	378050
suction 90mm	115 m <sup>3</sup> /h, 400V	5,5	378051



**Accessories for pumps**

**Pressure sockets for Jet pumps made of bronze**



2" for 1,5 i 2,2 kW  
code 378115



2" for 2,6 kW  
code 378119



2 ½" for 2,6 kW  
code 378120



90 mm for 4,0 kW  
code 378125



nominal diameter 50, 180°  
code 7154250

**Connections for Speck pumps**



G2 ¾" I.T. x 90 E.G.  
for 21-80/...[2 pcs.]  
code 187558



G2" I.T. x 50 I.G.  
for 21-40/...[1 pcs.]  
code 280.5120.050



G2 ¾" I.T. x 63 I.G.  
for 21-50 and 60/...[1 pcs.]  
code 230.0031.000



G2 ¾" I.T. x 110 I.G.  
for 21-80/...[1 pcs.]  
code 292.3172.100



110 I.G. x 110 I.G.  
for Speck pumps [1 pcs.]  
code 290.2072.153



universal opening key for cover of  
Bettar and Badu 90 pumps  
code 292.1157.700



three-way universal key for cover of  
Resort and Badu 90/25-48 pumps  
code 290.2099.800



G2 ¾" I.T. x 110 I.G.  
for Speck pumps [1 pcs.]  
code 230.0027.000

**BADU Suction safety system**

eliminates the hidden risk posed to users by suction points in public swimming pools. The fitting of redundant sensors further increases the reliability of the system. In extreme cases the suction can trap pool users by their swimwear, hair or limbs at openings, which can lead to serious physical injury or even death from drowning. The BADU Suction safety system reliably eliminates this hazard! Can be installed in all existing systems. You must provide required diameter of the pipe.



code 230.0000.801  
code 230.0000.803

**Antivibration flanges**

name	code
connection DN 50	20231
connection DN 65	20232
connection DN 80	20233
connection DN 100	20234
connection DN 125	20235
connection DN 150	20236
connection DN 200	20237
connection DN 250	20238





### Controller 230V with thermostat

Allows control filter pump work and heating. Equipped with an electronic thermostat, clock, selector switch work, temperature sensor, indicator lights. Possibility to connect the filter pump, heat pump, automatic backwash valve, automatic dosing system, overflow tank. Whole built-in the box with dimensions 220 x 119 x 100 mm. Range of thermostat setting is 10-40 °C. The minimum power consumption of the controller = 1,5 VA. Electrical connections: filter pump - to max. 1,0 kW heating pump - to max. 0,4 kW dosing system - to max. 0,4 kW



name	code
controller PC 230-ES, 230 V	15002
as above, but 400 V	15008

### Filter controller Tebas Pool-Consulting with thermostat

The model has great opportunities and a modern look. Range of electronic thermostat setting is 5-40 °C. Quartz display clearly shows performed operations. Signalling work is done by LEDs and control by microprocessor. It has functions to directing the work of: filter pump, heating, automatic backwash valve, solar collectors, dosing systems, controller of overflow tank, ball valve. Electrical connections: filter pump to 1,5 kW, heating pump to 0,5 kW, dosing system to 0,5 kW.



name	code
Tebas Pool Consulting 230 V	14800
Pool Consulting 400 V	14805
solar sensor	14815

### Overflow tank controller

Enables you to connect max. 5 electrodes. It can be mounted on any type of tank. It should be mounted 5 electrodes: GND, pump on, pump off and the next two to on and off the magnetic valve. The controller must be connected to the filter control box, which must have the appropriate terminals.



name	code
overflow tank controller 230 V	281500
electrodes set, 5 pieces	281510
electrode 1 piece	281505





**Controller AS Control**

The model has high potential and modern look. It is complete control box to operate filter pump work, automatic valves, heating and solar collectors. Prepared for pumps 230V or 400V. Range of electronic thermostat setting is 5-40 °C. Quartz display clearly shows performed operations. Signalling work is done by LEDs and control by microprocessor. It has functions to directing the work of: filter pump, heating, automatic backwash valve, solar collectors, dosing systems, controller of overflow tank, automatic valves, ball valve. Electrical connections: filter pump 230V to 1,5 kW, for 400V to 4,0 kW.



name	code
filter controller AS Control	225000
solar sensor	285010

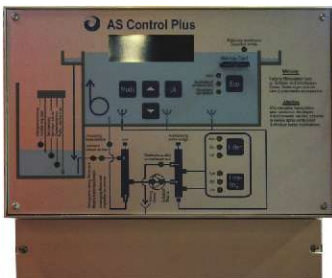
**Controller AS Control Plus**

This is the most technologically advanced microprocessor controller to operate all functions of swimming pool installation in the pool with overflow gutter. The AS Control Plus takes care of optimizing the energy efficiency in the overflow pool. It is now the most exclusive microprocessor control box for the pool. Digital display shows the following functions: air and water temperature, as well as current operating status, control the operation of the filter, backwashing, heating control with frost protection, water level control in the tank (channel of 5 electrodes), overflow tank control, Eco-management (channel of the state of savings), the state in which the pool cover is.

The memory card is included, which saves data for 10 months.

Technical data:

71 terminals, 13 relays, power 14VA, 3-phase protection, max. 8 A per phase, IP65, memory card 512MB, 4 layers display, 1 % of temperature sensor error.



name	code
AS Control Plus without sensors	229110
AS Control Plus with water temperature sensors, air sensors and tank electrodes	229120
pressure sensor for AS Control Plus	229130

**Pump controller Tebas**

These electrical boxes are ready to work immediately. Clock timer of working time and all electrical components are already mounted in the housing. Simply connect the power cables.



for pump with power	code
to 2,2 kW, 230 V (9-14A)	14801
to 2,2 kW, 400 V or to 0,75 kW, 230 V (4-6,3A)	14802
to 4,0 kW, 400 V or to 1,10 kW, 230 V (6-10A)	14803





### Control boxes for pool pumps

These electrical boxes are ready to work immediately. All electrical components, including signal relays of pneumatic or sensor are already mounted in the housing. Simply connect the power cables.

#### Pneumatic controller Tebas

A modern design of box with dimensions 160 x 160 x 140 mm. Completely waterproof housing IP67, made in accordance with PN-EN 60529. Ability to connect pneumatic switch placed in the pool.



for pump with power	code
to 2,2 kW, 230 V (9-14A)	375146
to 2,2 kW, 400 V (4-6,3A)	375147
to 4,0 kW, 400 V (6-10A)	375148

#### H.L. pneumatic controllers

for pump with power	code
to 2,6 kW, 400 V	375150
to 1,1 kW, 400 V	375152
to 0,9 kW, 230 V	375154
to 1,1 kW, 230 V	375156
for 2 x 2,2 kW, 400 V	375158
for 2 x 2,6 kW, 400 V	375164
to 4,0 kW, 400 V	375180
to 5,5 kW, 400 V	375181



#### H.L. pneumatic switch



name	code
set for tile pool, steel	375155
as above, but white	7010190
set for tile pool, steel	375160
as above, but white	7010290
pneumatic switch housing, bronze	8710050
pneumatic switch insert	8712020

#### H.L. sensor switch

name	code
controller for sensor switch to 2,6 kW, 400 V (5,5-8,5 A)	375166
niche of sensor switch	375168
sensor switch insert	375167
flange of sensor switch	375169







We present you the goods, which are applicable only in pools with overflow gutter. Other elements can be found in the rest of the catalog.

**Gutter drain from PE**



Can be installed in the tile pool with overflow gutter. The outflow has protective hood, in which during assembly of tiles, the hole excising is required. Solidly constructed outflow can be installed in the formwork. The output at 45° with EPDM sealing cuff.

size	code
75 mm	282000
90 mm	282005
110 mm	282010

**Gutter drain PVC**



Installation possible in each pool with overflow gutter. Solidly made of ABS, but during installation in the formwork, proceed carefully when filling with concrete. Sieve fixed with 2 screws, glued output 63 mm.

code 20280

**Gutter drain made of bronze**

name	code
Ø 108 mm, G2½" E.T. and G2" I.T.	325074
Ø 66 mm, G1½" E.T.	325076
Ø 92 mm, G2" E.T.	325078
Ø 92 mm, G2" E.T. and G1½" I.T.	325079
drain of gutter covered with liner G2	325060



**Wall culverts of gutter drain**

Special wall culvert for mounting drain gutter made of bronze. Length 300 mm at angle of 45 or 90 degrees, external and internal thread 2". The wall culvert should be mounted in formwork together with the socket.

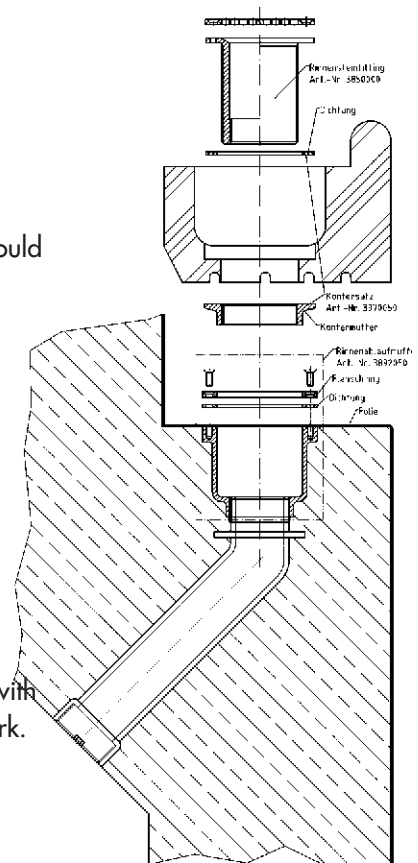


name	code
wall culvert 45 degrees	325058
wall culvert 90 degrees	324318
sleeve for wall culvert 45 degrees	325059

**Gutter drain made of bronze**

Can be installed in the tile pool with overflow gutter. Drain has upper sieve fixed with 2 screws, the output with internal thread 2". Drain can be mounted in the formwork.

name	code
drain with width 60 mm, length 100 mm	2200000
as above, but length 160 mm	2210000



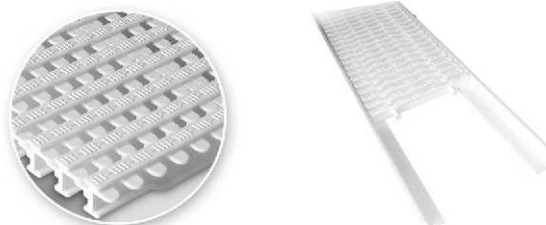


### Overflow gutter grates

White color. Grates width 22 mm. Connected at the center of element through the joint. The upper surface anti-slip. All grates and corners can be supplied in RAL color.

#### Europe model single joint

name		code
grate length 195 mm		11107
245 mm		11108
grate 195 mm in color		11105
grate 245 mm in color		11106
profile for grate, length 2 linear meters		281660



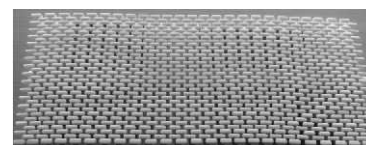
#### Classic model single joint

name		code	color
grate length 145 mm		11110	11114
195 mm		11111	11105
245 mm		11112	11106
double joint 295 mm		11109	11104
profile for grate, length 2 linear meters		281660	



#### Model Soper and Muro single joint

name		code	color
grate Soper width 195mm		11115	11117
245mm		11120	11122
grate Muro width 195mm		11116	11118
245mm		11121	11124
transport of color grate		11119	



#### Overflow gutter grate corner

	angle	90°	45°	90°	45°
name		code	code	color	color
grate corner 145 mm		12382	12390	12392	12394
195 mm		22379	22387	22382	22390
245 mm		22380	22388	22384	22392
295 mm		12381	12389	12396	12398



#### Overflow tanks

Made of plastic with wide mouth. Input of the water from the gutter is 110 mm. You can combined with each other few tanks. Do not deform after years.

Capacity	length	width	height	code*
1100 l	1400 mm	720 mm	1400 mm	281451
1500 l	1540 mm	720 mm	1625 mm	281452
2000 l	2070 mm	720 mm	1690 mm	281453
2500 l	1870 mm	995 mm	1650 mm	281454
3000 l	2230 mm	995 mm	1650 mm	281455
4000 l	2430 mm	995 mm	1950 mm	281456
sealing flange mounted at the input of water from gutters				281486



\* - without control box, electrodes and connections



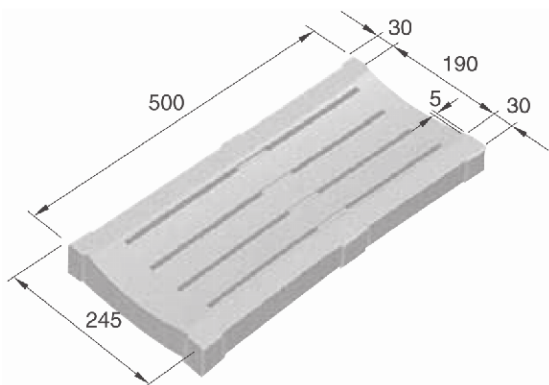
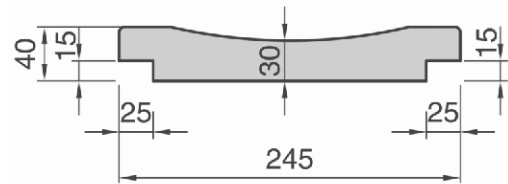
**Overflow tank made of steel panels**

Create any size overflow tank made of steel panels Orion. This is the most beneficial choice in economic terms. Quick installation, easy embedding of elements in the wall, durability, aesthetics. The elements of the system on p.11.

**Stone gutter grate – grille**

Made of a material according to EN 13451, grills give suitable character of the pool rim. The stone gutter grate is not to destroy, that is why will be on your pool rim very long time. Non-slip structure of the surface layer provides security, those who stands next to the pool. Available in colors: sand, white, brick, pink, gray and as the Crystal Series. The grates are also available as corners and curved angles. The stone gutter grate is dedicated for Standard and Alto gutter.

name	code
grille gutter, straight, sand	19880
grille gutter, straight, white	19883
grille gutter, straight, brick, pink, grey	19886
grille gutter, straight, Crystal Series	19889
transport of 1 pallet of stones	19850

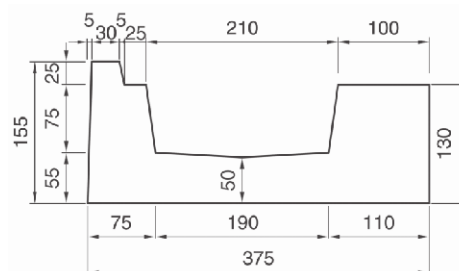
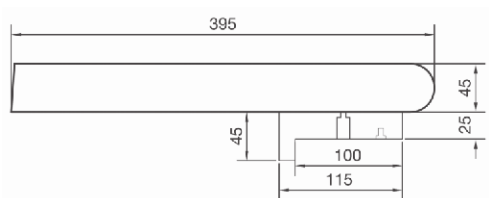




**Gutter stones**

Gutter stones Laguna are highly aesthetic and fulfill two functions: cover the gutter and finish the pool rim. Available in colors: white, sand, brick, pink, grey and as Crystal Series with natural shells, wonderfully sparkling in the sunshine. To the stones a special gutter is dedicated, with ideal dimensions, which can be cover with liner or mosaic. The gutter stones are supplied on request.

name	code
gutter dedicated to gutter stones	19878
gutter stone Laguna, straight, white, dim. 50 x 40 cm	19866
gutter stone Laguna, internal corner straight, white	19867
gutter stone Laguna, external corner, white	19868
gutter stone, curved angle, white	19869
gutter stone Laguna, straight, color, dim. 50 x 40 cm	19870
gutter stone Laguna, straight, Crystal dim. 50 x 40 cm	19874
transport of 1 pallet of stones	19850



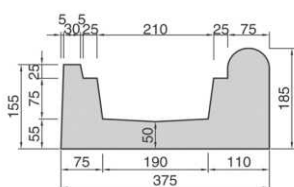
**Ready-made gutters**

Mechanically made with a millimeter precision, conglomerates ready for installation on the pool wall. Prior to installation, it has to be primed with epoxy paint.

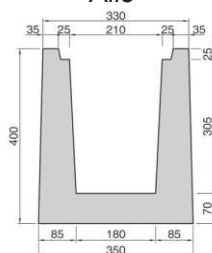
name	code	name	code
gutter Standard	19700	gutter Canalboard	19710
gutter Alto	19705	transport of gutters	19715



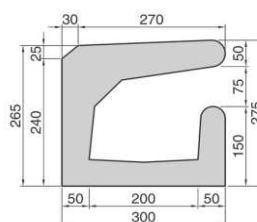
Standard



Alto



Canalboard





### Pool heating - how does it work?

There are people who feel comfortable only when they do the airhole in the ice and take a truly refreshing bath. However, more often we have a desire to swim in warm water. Does the water in the pool has 22 or 28 degree, it is an individual matter of each. So what are the options to achieve this? In the case of the pool, which is used only in the summer time, should be enough to heating by heat pump and direct sunlight. But in our latitude it is not enough! Solar heating should therefore be treated as supporting the main pool heating. In swimming pool installations are usually mounted heat exchanger cooperating with boiler or electric heaters. Pool heating is necessary in the case of hall pools.



### Heat exchangers

In order not to be dependent on the sun, a heat exchanger connected to boiler should be mounted. Flowing out of the boiler hot water enters to heat exchanger coils and heats the water from the pool. The water temperature from the pool is measured by temperature sensor. When water reaches the desired temperature, the sensor provides a signal to thermostat, which cut the flow of hot water from the boiler. When decide to install a heat exchanger, consider the power of the boiler.

### Heat pumps for pools

These electrical devices using heat from the air to heat the pool water. To carry out this process is a special heat exchanger inside the unit. The heat pump draws significantly less power than a typical water heater. Heat pump performance determines COP coefficient - higher COP = better efficiency.

### Electric water heaters

Perfect solution for small pools and tubs. Operation is similar to the heat exchanger, but instead of coils there is a heating element. During operation of the heater, should be noted that the heating element was not damaged.

Contribute to this: high content of calcium in the water, a large amount of disinfectants, wrong electrical and hydraulic connection. Recommended to use electric heater, when can not be used different solution. The operating costs are high.

### Solar collectors

Solar panels, made of plastic, can be mounted on the roof or on the ground. The filter pump pushes water into collector where is heated. If the sun is not shining, the water flow to the collector is stopped by a special valve. It is important to choose proper amount of collector panels according to the size of the pool.





## Electric water heaters

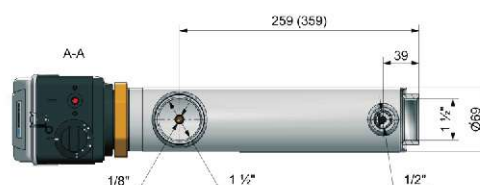
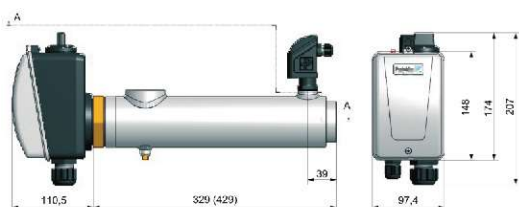
### Electric water heater with thermostat

Made of steel 316L. The heating elements are a special heating rods. The set includes a thermostat to set the desired pool water temperature between 0 and 45 degrees, overheating cutout, low water sensor.

Connections to pool installation G1½" internal. Voltage 400 V. As an option is a flow sensor, which can be mounted in the heater or at the piping for securing the heater before turning on if there is no water flow.

Titanium heater is suitable for work in salt water.

Name	code	titanium
electric heater 6 kW, 400 V, 9A	14026	14027
electric heater 9 kW, 400 V, 14A	14029	14030
electric heater 12 kW, 400 V, 18A	14032	14033
electric heater 15 kW, 400 V, 22A	14035	14036
electric heater 18 kW, 400 V, 27A	14038	14039
flow sensor	14040	

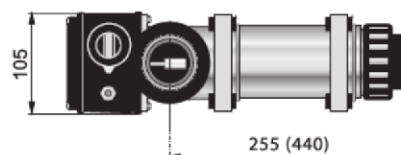
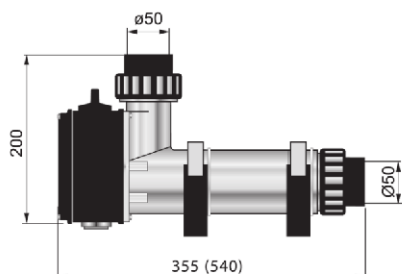


Dimensions for 12-18 kW in brackets.

### Electric water heater TEBAS

The casing is made of polyamide. The heating elements are a special heating rods. The set includes a thermostat to set the desired pool water temperature between 0 and 40 degrees and flow sensor. Connections to pool installation 50 mm.

name	code
electric heater 3 kW, 230 V, 8A	14000
electric heater 6 kW, 400 V, 9A	14002
electric heater 9 kW, 400 V, 14A	14003
electric heater 12 kW, 400 V, 18A	14004
electric heater 15 kW, 400 V, 22A	14005
electric heater 18 kW, 400 V, 27A	14006



Dimensions for 12-18 kW in brackets.

### Unions to connect heaters to pool installation

metal union G1½" E.T. - PVC 50 mm code 60905





**Heat pumps | TEBAS**

As energy costs continue to rise, governments in many countries across the globe are committing to reduce energy usage. As a result, systems that are able to reduce energy usage and consumption are becoming more and more important. Heat pumps represent a highly-efficient and environmentally-friendly technology as most of the energy required to generate heat is taken from the freelyavailable surrounding air, a renewable and inexhaustible source of energy. Therefore, heat pumps have become one of the best and cheapest option for the production of "green energy".

Features of our heat pumps:

- fan blades are aerodynamically modified so more air comes into with the same power absorbed and it remains in the heat pump housing space longer
- auto-defrost function at low temperatures, self-diagnosis function
- maximum heat gains at low temperatures (higher COP at lower temperatures)
- many years of experience in production since 1975, high-quality plastics and materials
- heat pumps have been specially designed to European climatic conditions
- double, titanium (A1 Class) coils of heat exchanger
- active automatic defrosting system
- powerful coated energy collector (air coils)
- bottom heating element to prevent ice formation
- waterproof digital display and control panel
- robust metal housing
- galvanized bottom plate
- complete set of sensors necessary to work: flow, pressure, temperature, water and air sensor.
- high COP - higher energy gain
- lower ebergy costs
- easy connection to water installation



Technical data:

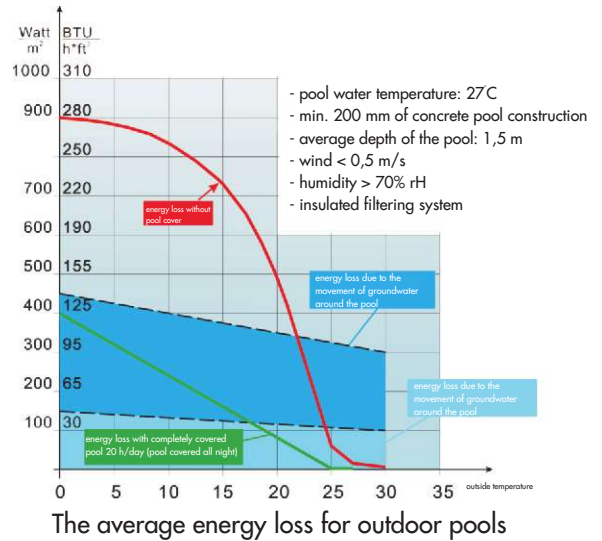
Model	Unit	14605	14608	14610	14612
Heating capacity A26°/W27°	kW	9	11.2	13.1	16
Power Input	kW	1.7	2.1	2.4	2.9
COP A26°/W27°	W/W	5.3	5.3	5.4	5.5
Heating capacity A15°/W27°	kW	6.5	8.5	9.7	11.5
Power Input	kW	1.6	1.9	2.2	2.6
COP A15°/W27°	W/W	4.4	4.4	4.4	4.5
Cooling capacity A32°/W27°	kW	6.1	7.7	8.8	10.5
Power Input	kW	1.75	2.2	2.5	3
EER P32°/W27°	W/W	3.5	3.5	3.5	3.5
Power Supply	V/P/Hz	220/1/50	220/1/50	220/1/50	220/1/50
Fuse current	A	16	20	20	35
Current	A	7.8	9.7	11.2	12.5
Advised pool volume (with pool cover)	m <sup>3</sup>	30-50	40-60	50-70	60-80
Water flow volume	m <sup>3</sup> /h	6	6.5	6.5	7
Water pressure drop	Kpa	12	15	15	16
Compressor Style		Rotary			
Heat exchanger		Titanium			
Water connection	mm	50	50	50	50
Level of noise (10 m)	dB (A)	51	52	53	54
Net Unit size (L x W x H)	mm	940x280x540	1000x305x580	1070x335x700	1070x335x700
Carton size (L x W x H)	mm	1050x380x575	1140x405x640	1200x430x740	1200x430x740
Net/Gross weight	kg	54/58	61/65	76/81	81/86



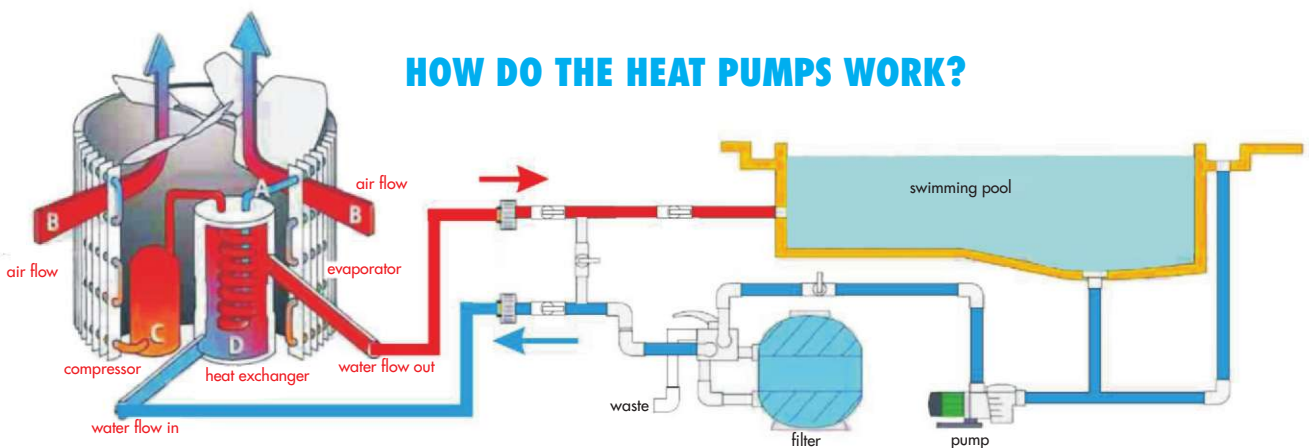
## Heat pump **TEBAS**

The heat pump TEBAS – is a product manufactured under the supervision of the Polish company. This ensures a sufficiently high quality satisfying the user, service and support. The heat pump TEBAS is created for work at swimming pools with a view to all aspects. It provides peace and comfort using, always hot water in the pool. Proper selection of the heat pump should be done taking into account the heat loss from the water surface and the average temperature of the air.

name	code
for pool 35 m <sup>3</sup> , power 6,5-9,0 kW, 230V	14605
for pool 35 m <sup>3</sup> , power 8,5-11,2 kW, 230V	14608
for pool 35 m <sup>3</sup> , power 9,7-13,1 kW, 230V	14610
for pool 35 m <sup>3</sup> , power 11,5-16 kW, 230V	14613



## HOW DO THE HEAT PUMPS WORK?







**Heat exchangers**

Heat exchanger is mounted in the pool installation. Principle of operation is simple and effective. Flowing out from the boiler hot water enters to the heat exchanger through located inside coil. Pool water flows over the coil is heated. The water temperature is measured by a sensor and when it reaches the desired temperature, the water circulation from the boiler is stopped. When decide to install a heat exchanger, consider the power of the boiler. When choosing, should be used a diagram. Operating parameters of each heat exchanger is: chlorine: max. 3 mg/l (ppm), pH: 7,2-7,8, alkalinity: 60-120 mg/l (ppm), calcium hardness: 200-1000 mg/l (ppm).

Theoretical calculation of the power needed to heat the pool:  $P = 1.16 \times \Delta T \times V / t$

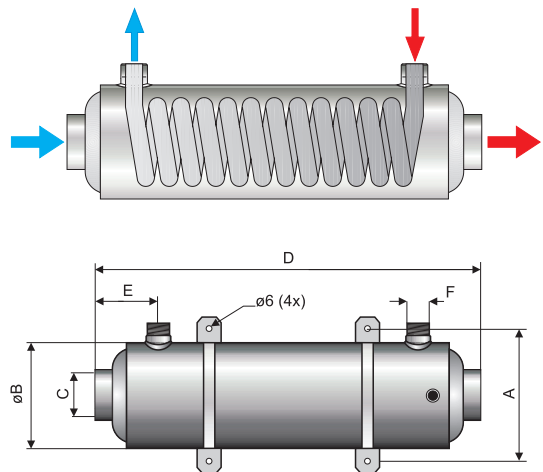
Theoretical calculation of the time required to heat the pool:  $t = 1.16 \times \Delta T \times V / P$

Example of the tome calculation: pool 30m<sup>3</sup>, from 5°C to 25°C with power 6 kW:  $t = 1.16 \times (25-5) \times 30 / 6 = 116$  hours

*P= power in kW; t= time in hours; ΔT = temperature difference; 1.16 = constans value; V= pool volume*

**Heat exchanger made of steel AISI 316**

Power given at 90/70°C.  
Horizontal mounting only.

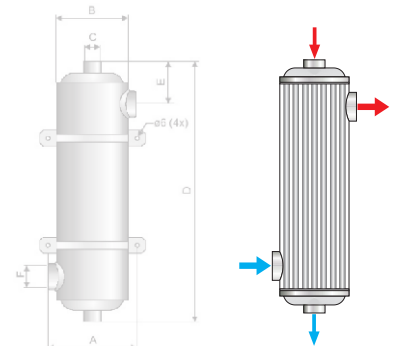


Primary, hot water      Secondary, pool water

Code	power kW	l/min	press. drop	l/min	press. drop	A	B	C	D	E	F
			H (m)		H (m)						
13004	13	25	0,9	200	0,6	139	129	1½"	235	72	¾"
13006	28	25	1,7	300	1,6	139	129	1½"	407	72	¾"
13008	40	60	1,6	300	1,8	139	129	1½"	455	85	¾"
13010	75	60	2,1	300	0,9	139	129	1½"	702	85	¾"

**Low temperature heat exchanger made of steel AISI 316**

Power given at 40/20°C.  
Vertical mouting only.



Primary, hot water      Secondary, pool water

code	power kW	l/min	press. drop	l/min	press. drop	A	B	C	D	E	F
			H (m)		H (m)						
273017	40	50	0,7	360	2,4	139	129	1 ½"	1070	83	2"



### Heat exchanger made of steel V4A

Power given at 90/70°C. Horizontal or vertical mounting.

code	power kW at 90/70°C	Primary, hot water			Secondary, pool water		
		m <sup>3</sup> /h	loss (bar)	connections	m <sup>3</sup> /h	loss (bar)	connections
13007	40	2	0,18	3/4"	10	0,11	1 1/2"
13009	70	3	0,15	1"	12	0,18	1 1/2"
272868	105	5	0,22	1"	15	0,22	2"
272876	140	2x3	0,15	1"	20	0,60	2"
272884	209	2x5	0,20	1"	25	1,00	2"

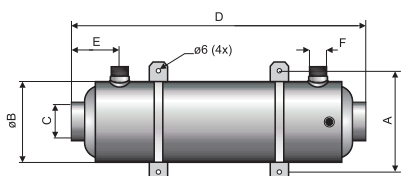


Low temperature heat exchanger, parameters 50/40°C

273015	20	2	0,10	1"	10	0,13	1 1/2"
273023	40	2,2	0,20	1"	10	0,30	1 1/2"

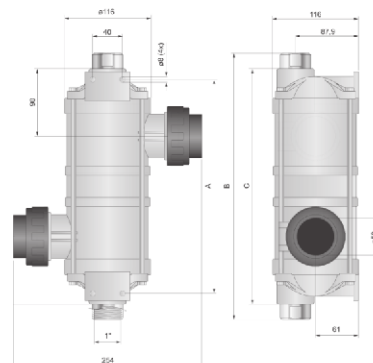
Power given at 90/70°C. Horizontal mounting only. For salt water.

### Titanium heat exchanger



code	power kW	Primary, hot water		Secondary, pool water		A	B	C	D	E	F	G
		l/min	press.drop H (m)	l/min	press.drop H (m)							
12070	28	20	1,3	300	1,6	139	113	1 1/2"	470	95	1"	51
12071	40	40	2,8	350	1,6	139	127	1 1/2"	510	108	1"	51
12072	75	45	7,2	350	1,9	139	127	1 1/2"	754	108	1"	51

### Heat exchanger in thermoplastic housing



Power given at 90/70°C. Horizontal mounting only.

code	power kW	Primary, hot water		Secondary, pool water		A	B	C
		l/min	press. drop H (m)	l/min	press. drop H (m)			
12074	40	34	2,4	300	0,5	359	317	277
12076	75	43	6,0	350	1,0	534	492	452

### Unions to connect heat exchangers to pool installation

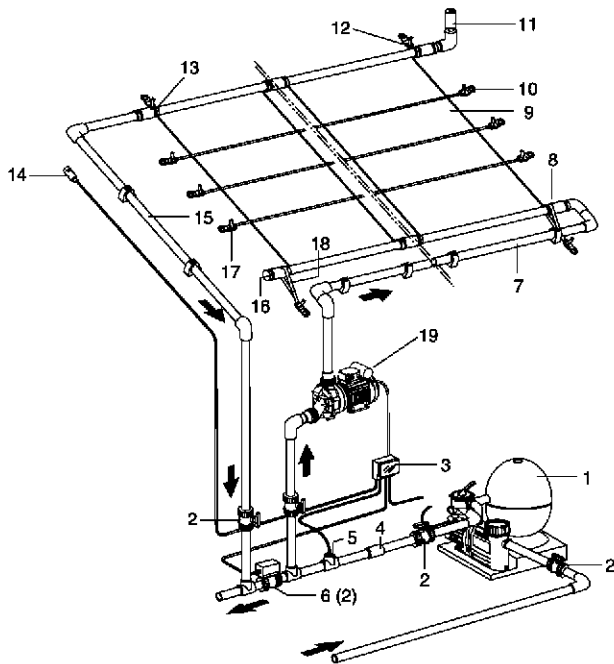
metal union G1 1/2" E.T. - PVC 50 mm code 60905  
 rubber sleeves 2 pcs. with clamps code 273095





## Solar panels for swimming pool

Solar panels are made of UV-, weather- and pool water-resistant polypropylene. Well-suited to provide solar energy to the pool. Please remember that this is free energy. How do the solar panels work? Filtered pool water does not flow directly to the pool, but without significant loss, flows through the collectors, where it is heated. It is amazing noticeable difference in water temperature, which flows into the pool after passing through the collector, if, of course, the sun is shining. The ideal difference between input and output is 3°C. Even on a cloudy day collectors work, using invisible rays of the sun. To install collectors in existing filtering installation need several connectors and 3-4 PVC ball valves. The filter pump will transport water. It is also necessary to connect control box, which will adjust the temperature to your individual needs, control working of solar panels and filter pump.



1. Filter with pump
2. Ball valve
3. Control box
4. Non-return valve
5. T-section for water sensor
6. Actuator or ball valve
7. Pipe to solar panel
8. Inlet solar panel
9. Solar panel
10. Double handles
11. Vent unit
12. Panel connectors
13. Outlet solar panels
14. Solar sensor
15. Return pipe
16. End plug
17. Long polyester tape
18. Short polyester tape
19. Additional pump (optional)

### Example of calculating the amount of collectors

Hints how to compute the panel surface:  
 In Central Europe the panel surface should correspond to the pool surface in size. If you use a cover in order to minimize the loss of heat, the surface of the panels will be reduce to 70% of the pool surface.

Computation example: pool 4 x 8 m (32 m<sup>2</sup> pool area):  
 pool area/panel surface x 70% = 32/3,7 x 70%= 6 collectors of BK 370 type





### Solar panels type BK

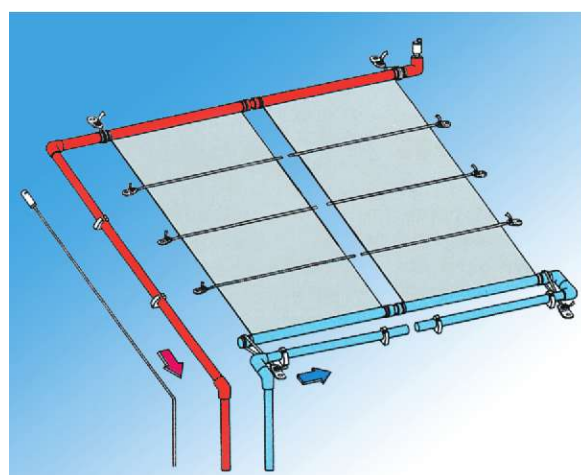
BK collector is used for direct heating of water in the pool. BK collector is a black, UV- and pool water-resistant absorber made of plastic. It is not needed the heat exchanger, therefore efficiency level is higher than glazed collectors. BK solar panels are made from specially selected polypropylene. UV-, weather- and pool water-resistant collectors warm pool by heat of the sun. Because of very little resistance, BK solar panels do not impair the functioning of the existing filtration system. It is amazing noticeable difference in water temperature, which flows into the pool after passing through the collector, if, of course, the sun is shining. The ideal difference between input and output is 3° C. Even on a cloudy day collectors work using invisible rays of the sun. The installation costs return after a few years, because the energy provided by the sun is free! Collectors are permanently mounted on the roof or on the ground by using aluminium frames. After draining may remain in the installation location for winter.

name	code
solar panel BK 370, surf. 3,7 m <sup>2</sup> , width 1310 mm, length 3080 mm	280410
aluminium frame for BK 370	280437
solar panel BK 250, surf. 2,5 m <sup>2</sup> , width 1310 mm, length 2080 mm	280453
aluminium frame for BK 250	280488

### Accessories for solar panels BK

panel connector	280534
1 roll polyester tape 50 m	280607
handle	280615
end plug	280550
elbow for vent	280666
vent	280631
repair kit	281025

Technical data	BK370	BK250
surface (m <sup>2</sup> )	3,7	2,5
weight empty (kg)	9	7
weight filled with water (kg)	19	13
max. working pressure (bar)	1,5	1,5
max. temperature (C)	70	70
min. flow (l/h)	1000	750
input/output (mm)	50	50
flow resistance (m) with 4 pcs.	0,14	0,14
flow resistance (m) with 6 pcs.	0,40	0,40
flow resistance (m) with 8 pcs.	0,90	0,90
flow resistance (m) with 10 pcs.	1,70	1,70



### BK solar panels sets

Consist of collectors and Składają się z kolektorów i components necessary for installation on the roof. The set includes: solar panel, connectors, polyester tape, handles, end plugs, vent unit with elbow. You can use several sets. The maximum size of the pools given with cover placed on the surface of the water in the pool.

name	code	name	code
2xBK250 and elements for pool max. 6,5 m <sup>2</sup>	280455	2xBK370 and elements for pool max. 10 m <sup>2</sup>	280412
3xBK250 and elements for pool max. 10 m <sup>2</sup>	280457	3xBK370 and elements for pool max. 15 m <sup>2</sup>	280414
4xBK250 and elements for pool max. 13 m <sup>2</sup>	280459	4xBK370 and elements for pool max. 20 m <sup>2</sup>	280416



**Pool collector** **TEBAS**

Green energy for your pool! Thanks to our collector, you will use solar heat to save on energy costs. Small in size, but powerful efficiency! Thanks to the square shape, impeccably presents on the pool. Designed for work with any size garden swimming pool. Easy installation - collector has feet and it is placed on a hard surface, below the pool water level. One collector is suitable for pool with a capacity of 8 m<sup>3</sup>. The water has to flow slowly through the collector. **MAXIMUM WORKING PRESSURE IS 0.2 BAR.**

For setting water flow 3-way valve is used. However, this collector is not frost resistant and must be removed for the winter.

In delivered carton you will find:

1 collector, dimensions 70 x 70 cm, connection elements, 3-way valve.

The hose is not included.



name	code
pool collector Tebas	14705



**Pool collector Sun Heater S 421**

Made from UV-resistant polypropylene. The set includes connecting elements. This collector is not frost resistant and must be removed for the winter. Maximum 2 collectors can be fixed together.

In the box are supplied: 2 panels, dimensions 61 x 600 cm = 122 x 600 cm, 4 steel clamps, 4 connectors. The collector surface: 7,4 m<sup>2</sup>. Weight without water: 18 kg.

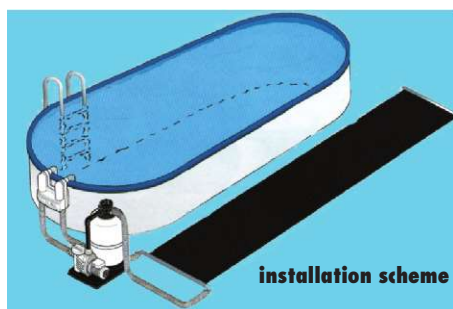
For one set (2 panels, dimensions 61x600 cm) connect pump with a minium capacity 7 m<sup>3</sup>/h.



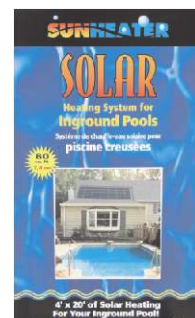
name	code
pool collector Sun Heater S 421	14700

**Pool collector S 220**

Made from polypropylene. The connecting elements are included. For winter collector must be removed. In the carton is 1 panel, dimensions 61x600 cm. Weight: 9,5 kg, surface: 3,7 m<sup>2</sup>. Connect pump with a minium capacity 6 m<sup>3</sup>/h.



name	code
pool collector S 220	14701





### Solar panels automatic control

For properly work of collectors in pool systems the automatic control of filter operation should be mounted. The control allows the setting of the desired temperature and above of all turns on and off the flow of the water through collector. The control is used in collectors mounted permanently, which are not removed for the winter.

### Controller Tebas Pool-Consulting with thermostat

The model has high potential and modern look. After connecting solar sensor Tebas Pool-Consulting controls solar panels work and runs the flow through the collectors using a motorized ball valve. Quartz display clearly shows performed operations. Signalling work is done by LEDs and control by microprocessor.

Electrical connections: filter pump to 1,5 kW, boiler to 0,5 kW, dosing system to 0,5 kW.

name	code
Tebas Pool Consulting 230 V	14800
Pool Consulting 400 V	14805
solar sensor	14815



### Motorized ball valves

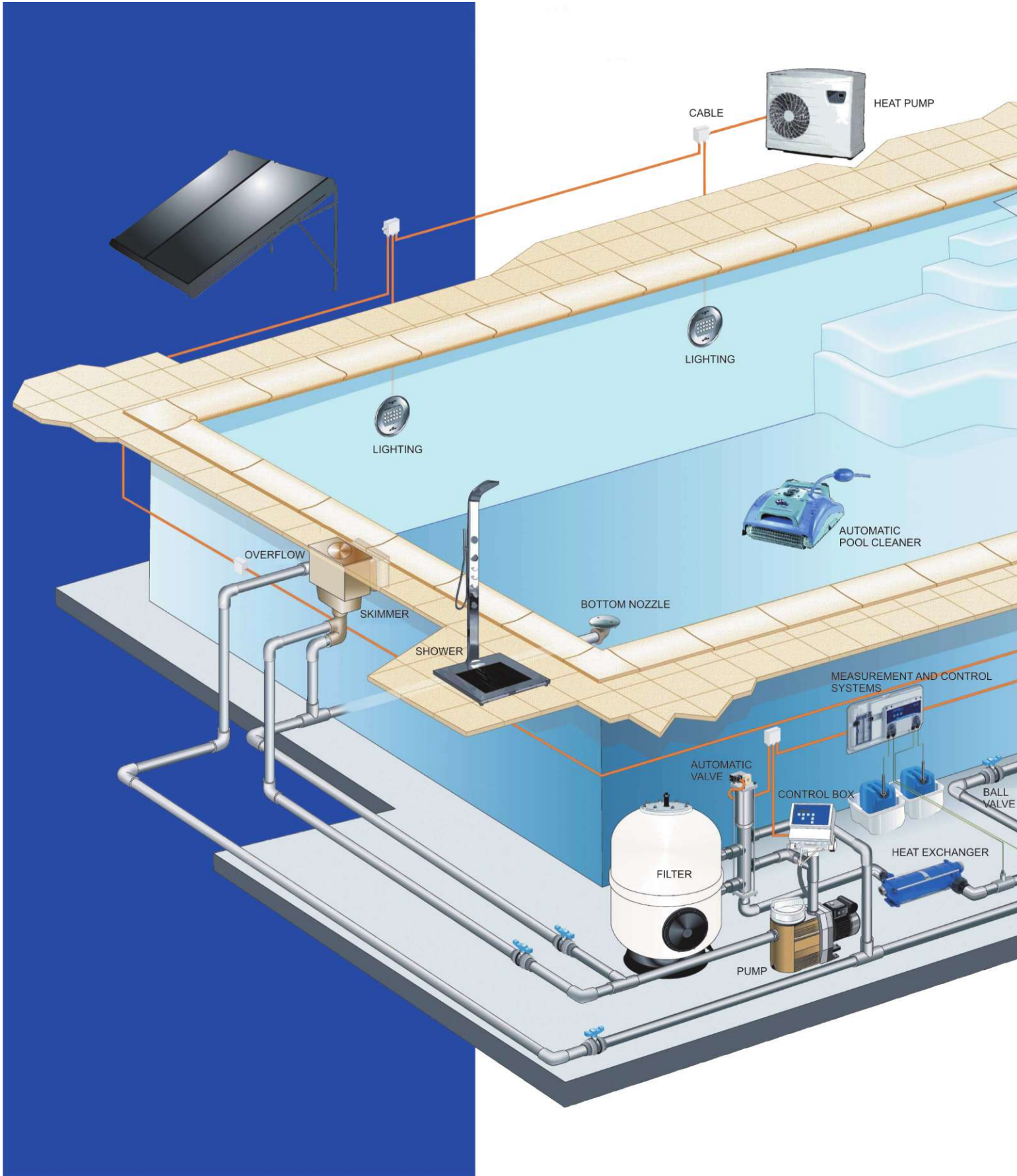
Motorized ball valve turns on and off the water flow. It is connected to the control box from which goes a signal operates a valve working.

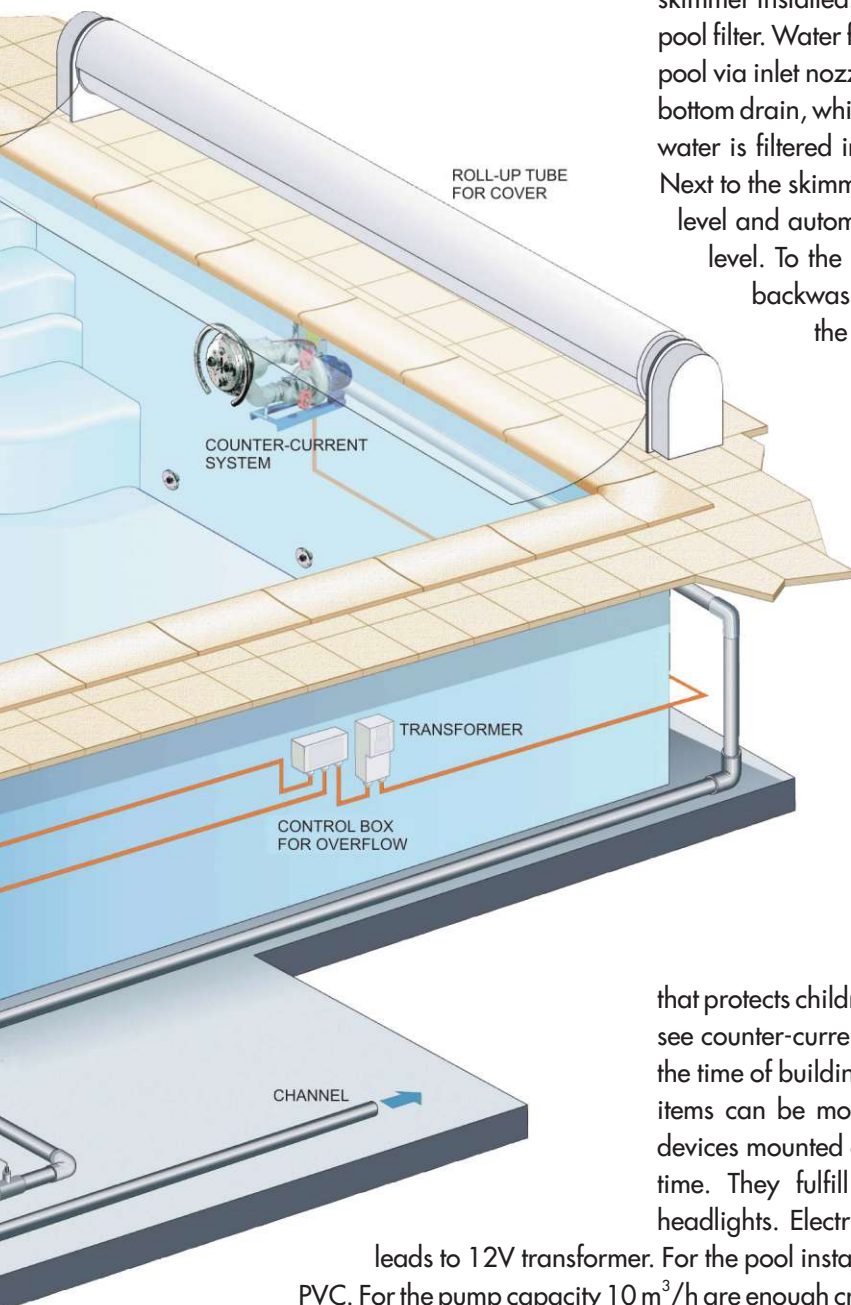
name	code
motorized ball valve 24 V, diameter 50 mm	732355
diameter 63 mm	732356
controller Easy with temperature sensors	15042
motorized ball valve 3-way 50 mm with temperature sensors	15044





**Pool with skimmer**




**Pool with skimmer**


The picture shows the pool with a skimmer. It has to give you an image in what and how the pool can be equipped. This is a basic version of contemporary equipment of the modern pool. On the left side you can see skimmer installed. The filter pump sucks water and pressed it through the pool filter. Water flows through pipes of hard PVC and flows back into the pool via inlet nozzles (on the right in the figure). On the left side is shown bottom drain, which is connected with the pump and filter. In this case, the water is filtered in 2/3 from the surface and in 1/3 from the bottoms. Next to the skimmer, the water level control is mounted. It controls water level and automatically refill a certain amount of water to the correct level. To the filter automatic valve is mounted, which performs the backwashing process at a given time or at a certain pressure on the filter. Automatic dosing system regulates pH value and

cares about disinfection of the pool water. It can also dose coagulant, which crystallizes water and an anti-algae substances. Important element is device for heating water. From boiler hot water is pumped to a heat exchanger, where heat is given to the pool water. The heat pump and collectors are devices supporting pool heating, although at high air temperatures take over the whole function of heat water in the pool. It is worth to have them in the pool, because of ecological and economic reasons. The whole devices work is controlled by filter control box, where all of the devices cables are connected. The control box has temperature sensor, timer, various relays, which on and off the power supply of the devices. Important thing is also the pool cover, which effectively reduce heat loss and helps to heat pool by sunlight. In the picture is cover of hard PVC

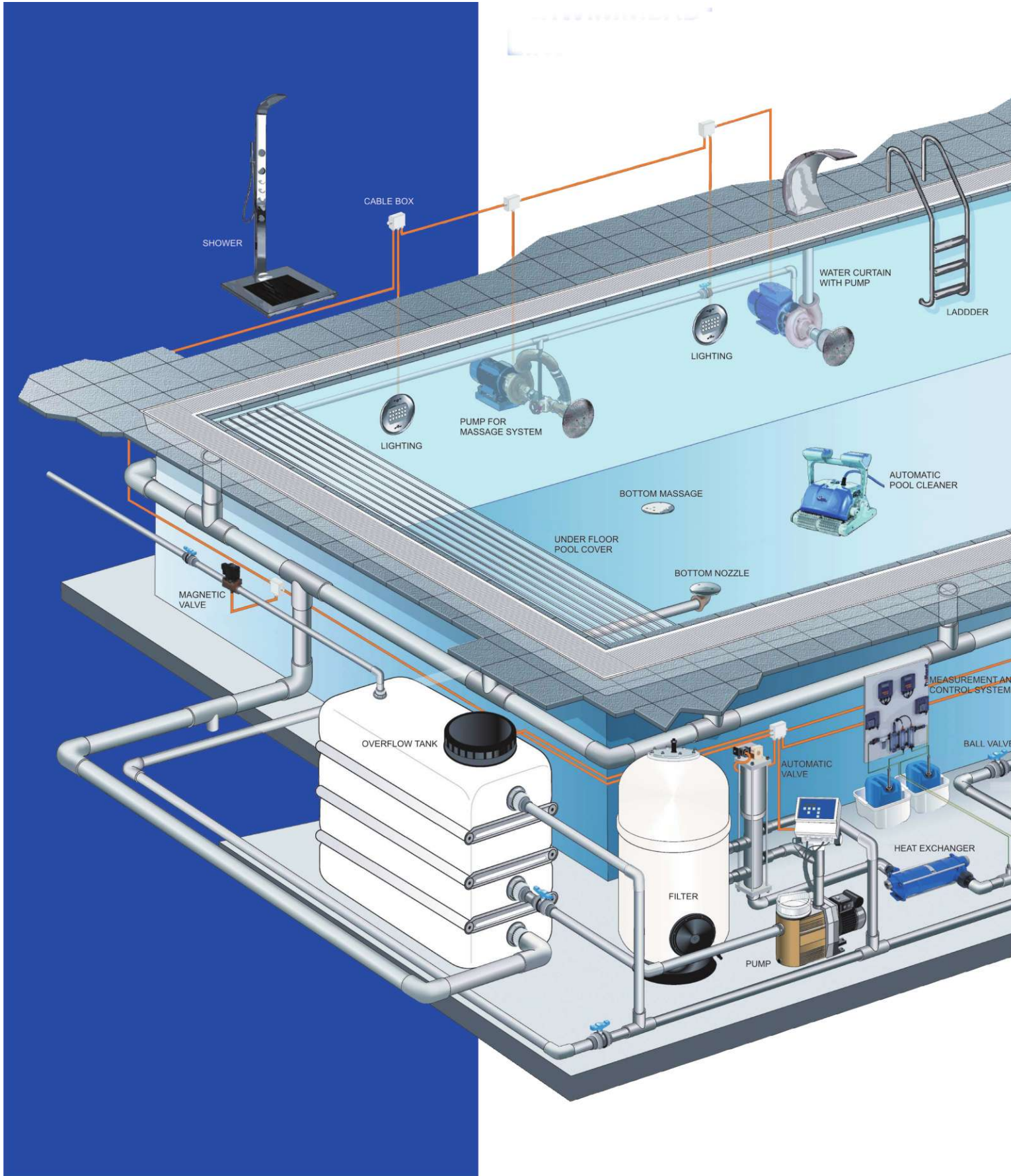
that protects children from falling into the water. On the right side you can see counter-current system. It is permanently placed in the pool wall. At the time of building the pool it is worth to install the wall-pack and other items can be mounted even in a few years. There are also massage devices mounted on the edge of the pool, which can be installed at any time. They fulfill the same function. The drawing shows also two headlights. Electric cables from the lamps through the connection box

leads to 12V transformer. For the pool installations should be used pipes and fittings of hard, gray PVC. For the pump capacity 10 m<sup>3</sup>/h are enough cross section of 50 mm, for 20 m<sup>3</sup>/h cross section 63 mm, for 32 m<sup>3</sup>/h cross section 75 mm. On the pipes ball valves are mounted. The lack of adequate amount of valves can cause problems in the case of repair. On the bottom you can see the working pool robot. It cleans pool bottom and walls. Some models have the ability to manually control by the remote. Automatic pool cleaner saves your time in a simple way: when it works and cleans your pool, you deal with other more interesting things.



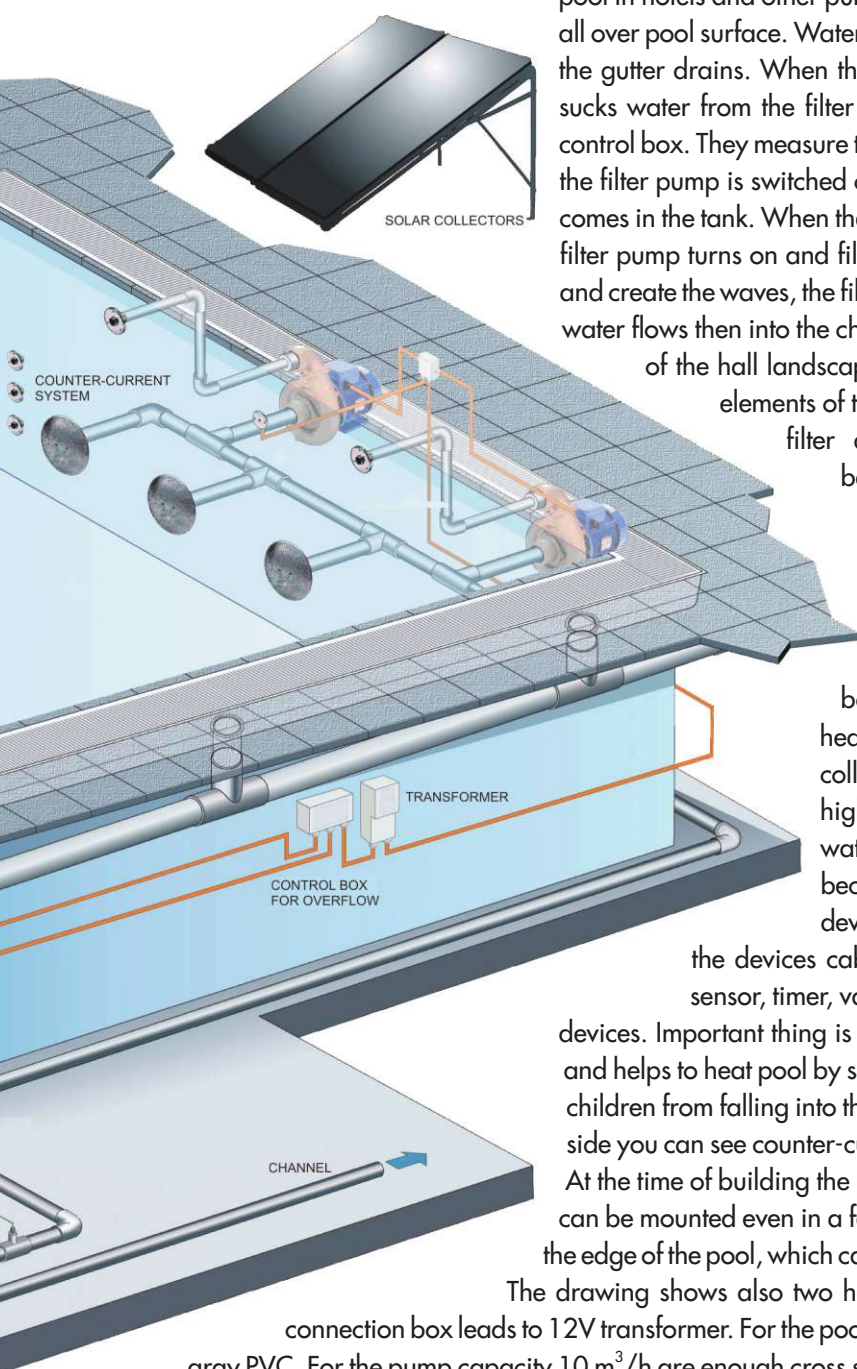


**Pool with overflow gutter**





### Pool with overflow gutter



The picture shows the pool with a overflow gutter. This is the most common type of pool in hotels and other public places. The water evenly enters into the gutter from all over pool surface. Water flows through a collecting pipe to the overflow tank by the gutter drains. When the water reaches a certain level in the tank, the pump sucks water from the filter tank. Everything is controlled by five electrodes and control box. They measure the actual water level in the tank. If the water is too little, the filter pump is switched off and the magnetic valve opens allowing fresh water comes in the tank. When the water reaches a certain level, the valve closes and the filter pump turns on and filtered water again. When a lot of people use the pool and create the waves, the filter pump is unable to pumped all of the water. Excess of water flows then into the channel. The pool with overflow gutter is a ideal element of the hall landscape or garden. In this pool there is not skimmer. Other elements of the pool are the same as in a pool with skimmer. To the filter automatic valve is mounted, which performs the backwashing process at a given time or at a certain pressure on the filter. Automatic dosing system regulates pH value and cares aboutl disinfection of the pool water. It can also dosed coagulant, which crystallizes water and an anti-algae substances. Important element is device for heating water. From boiler hot water is pumped to a heat exchanger, where heat is given to the pool water. The heat pump and collectors are devices supporting pool heating, although at high air temperatures take over the whole function of heat water in the pool. It is worth to have them in the pool, because of ecological and economic reasons. The whole devices work is controlled by filter control box, where all of the devices cables are connected. The control box has temperature sensor, timer, various relays, which on and off the power supply of the devices. Important thing is also the pool cover, which effectively reduce heat loss and helps to heat pool by sunlight. In the picture is cover of hard PVC that protects children from falling into the water. It slides out from under the water. On the right side you can see counter-current system. It is permanently placed in the pool wall. At the time of building the pool it is worth to install the wall- pack and other items can be mounted even in a few years. There are also massage devices mounted on the edge of the pool, which can be installed at any time. They fulfill the same function.

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## Elements of the pool installation – introduction

It is important to properly select the components for your swimming pool. For simplicity we grouped them in series called Editions. All elements in given edition fit together in terms of color, material and quality. There are following groups: Bronze Edition, Stainless Edition, White de Luxe Edition, White-Steel Edition, White-Steel de Luxe Edition, Black Edition, Chrome Edition. No matter which group you choose, contain in elements fit together. You should not do coloristic mess in your own pool. Assembly of components must be performed by a professional company, because it will be done properly. How to find a specialist? It is not difficult. The real specialist has something to be proud of and can show you his realizations. Your satisfaction will then be greater when your pool will be made by professionals with experience, not by one who will learn how to build pool. Our drawings will give you only a general image. Please observe the following points: all parts should be closely linked to the wall, during installation take into account the thickness of the plaster or tiles, after assembly of elements the plaster must be smoothly obliterated. With concrete pool, where formwork is used, be careful to avoid damaging the elements during pouring with concrete. If the pool is surefire, mounted parts should protrude the thickness of the plaster and all visible threads must be protected against from entering concrete or plaster.



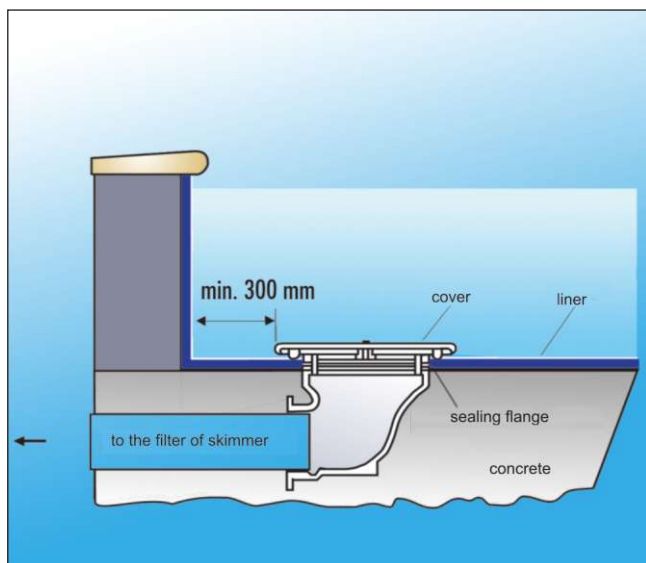
For pool width 4 m one skimmer is enough, above this width should be mounted at least two pieces. Bottom drain not only serves to empty the pool, but it affects on the better water cycle. Pay attention to the flow of these elements during the installation of the skimmer and inlet nozzles. If the filter pump has capacity 10 m<sup>3</sup>/h and the skimmer has flow eg. 6 m<sup>3</sup>/h, the pump will have problems with sucking the water (manifested by air bubbles under the pump cover) and will retrieve only 6 m<sup>3</sup>/h. The same is with nozzles. The small amount of nozzles causes pressure increase on the filter and insufficient amount of filtered water entering into the pool. Therefore it is better to mount one more inlet nozzle. Underwater headlights are important. It is a mistake to opt out from the lighting. Pool in the hall can not be illuminated from the top, mind this water mirror that reflects light mostly in the form of waves on the walls. With outdoor pool the lighting is even more needed. Hardly anyone enter willingly into the dark water. Can not see if something does not lie on the bottom. When sitting on the terrace, underwater lighting creates a visually pleasing atmosphere. Lightens not only the water, but also a garden.

### Number of elements for assembly

Pool size (in meters)	3 x 5	4 x 6	4 x 7	4 x 8	4 x 9	4,5 x 9	5 x 10	6 x 12
Amount of water at 1,35 m of water	20 m <sup>3</sup>	32 m <sup>3</sup>	38 m <sup>3</sup>	43 m <sup>3</sup>	49 m <sup>3</sup>	55 m <sup>3</sup>	68 m <sup>3</sup>	98 m <sup>3</sup>
Bottom drain	1	1	1	1	1	1	1	1
Skimmer	1	1	1	1	1	2	2	3
Inlet nozzles	2	3	3	4	4	4	4	6
Wall culverts	2	3	3	4	4	4	4	6
Lamps	1	2	2	2	2	2	3	4
Filter diameter approx. (in millimeters)	400	400	450	500	600	640	640	760
Pump capacity (m <sup>3</sup> /h)	6	8	8	11	11	14	14	20
Pump working time in hours/day approx.	10	12	14	12	14	12	14	15
Power consumption kW/h per day	1,72	2,60	3,44	5,20	5,85	6,50	8,50	11,1

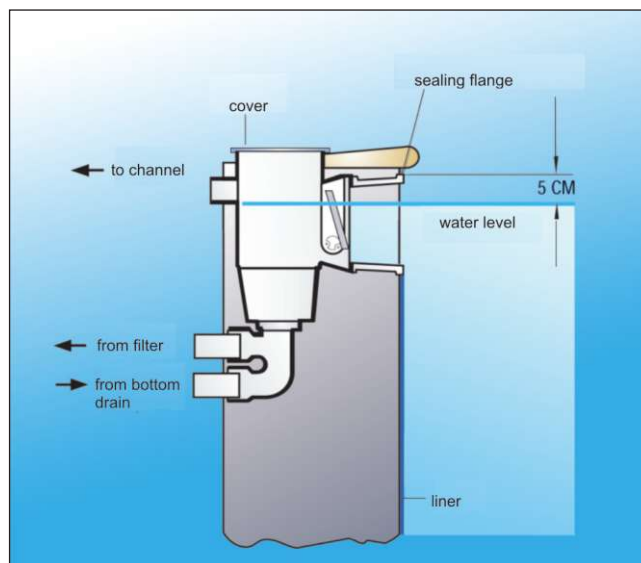


## Elements of the pool installation – introduction



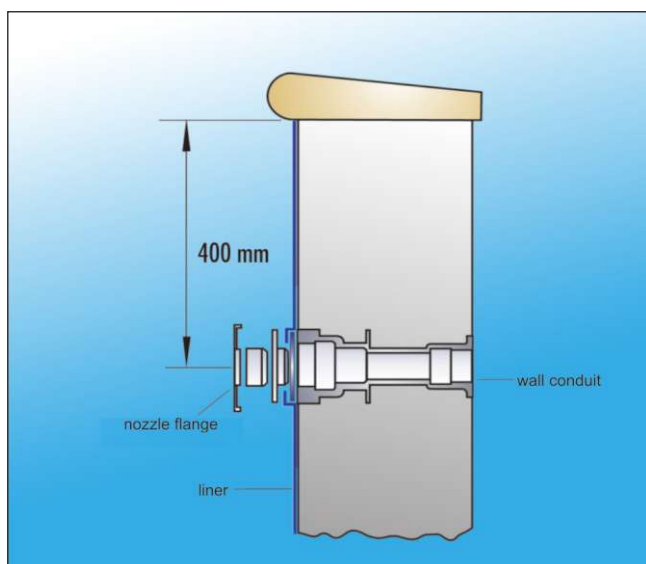
### Bottom drain

All bottom drains are supplied with thread 2".  
 Prior to pouring the floor, you must mount bottom drain with pipe 63 mm in the steel truss. The end of the pipe must protrude beyond the wall and must be clogged. The hole in the drain should be clogged with eg. paper.  
 Thanks to this, drain is clean inside.



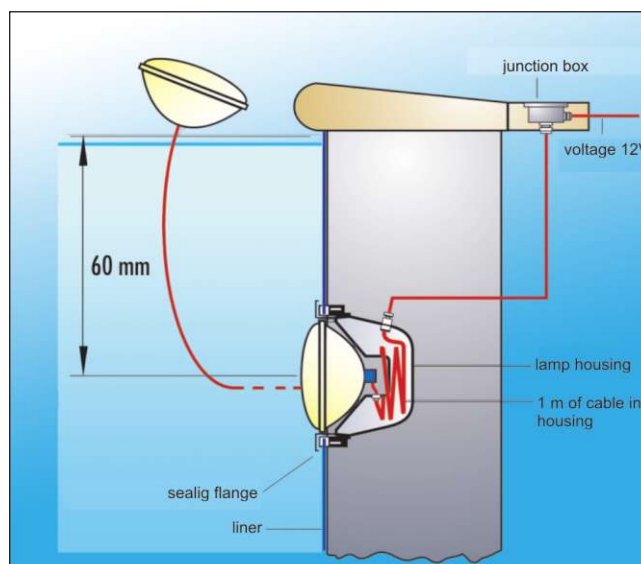
### Skimmer

When installing the skimmer, be sure it was installed vertically. In skimmers it is possibility to mount water level controller.  
 Then, it is required to connect fresh water conduit already during building the pool.  
 Also should be considered draining of water excess from skimmer to the channel.



### Inlet nozzles - wall culvert

Inlet nozzles screw-in at the end, after lining with liner or tiles. Some models of nozzles require mounting in the wall the nozzle element with thread together with wall culverts. Wall culverts are mounted in the holes left in the wall or fastened in the formworks.  
 Be careful of stable mounting in the forworks.



### Underwater lighting

It should be installed according to the drawing.  
 Around headlight wrap about 1 m cable and leave it in a lamp housing. If you will need to change a bulb, lamp insert can then be easily remove and replace the bulb, without the need to draining the water.



**Elements of the installation BRONZE EDITION**

BRONZE EDITION is the most unique and exclusive series of elements to the pool. Made extremely precise, as pressure castings of bronze alloy, characterized by great durability and sturdiness. All elements are also available in version for salt water of any salinity. Elements can also be ordered in any RAL color.

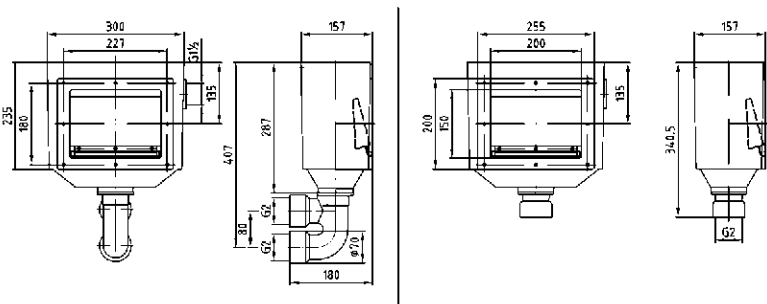
**Skimmer, extra-shallow design, made of bronze**

Skimmer with a mounting depth of only 160 mm. Whole hides in the pool wall.



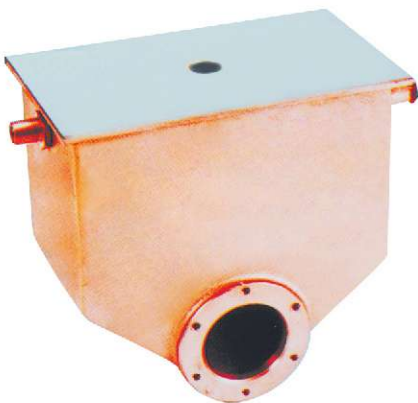
name  
 skimmer, output G2" I.T.  
 skimmer, output 2 x G2" I.T.

code  
 301930  
 301925



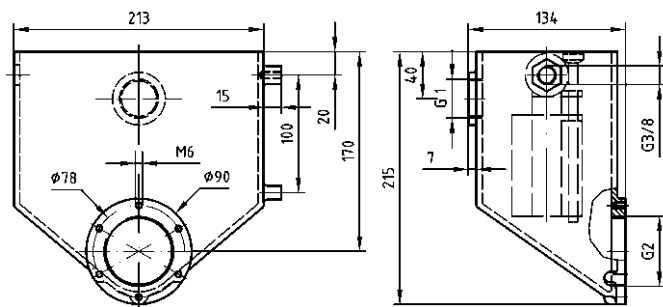
**Mechanical water level controller, narrow**

It is mounted as a separate element. The water inlet to the regulator is done by the shell (not included).



name  
 mechanical water level controller, narrow, 140 mm

code  
 302140



**Accessories:**



name	code
tile frame for narrow skimmer	301916
tile frame for narrow water regulator	301918
flange set with frame for skimmer, liner pool	302228
flange set with frame for skimmer, tile pool	302236
flange with inlet shell, liner pool	324663
shell, G2" E.T., for tile pool	324498



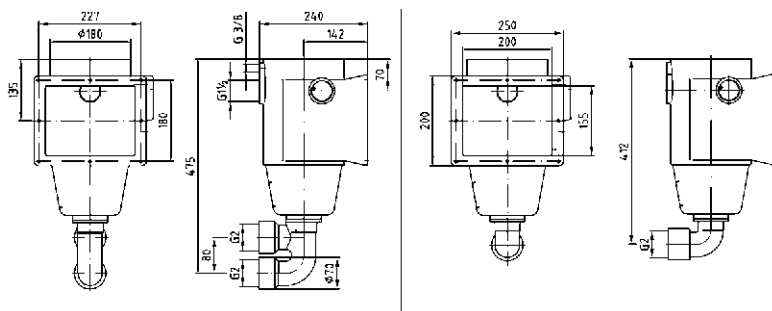


### Elements of the installation BRONZE EDITION

#### Skimmer Standard from bronze

Standard skimmer Bronze Edition with mount depth 240 mm. It has connections of flow to a channel, mechanical or electronic water level control.

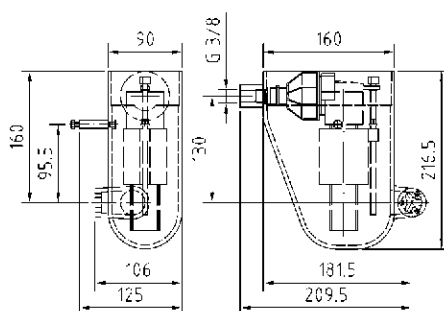
name	code
skimmer Standard, output G2" I.T.	301914
as above, output G2" I.T. and connection of bottom drain	301906



#### Mechanical water level regulator

Connected to the skimmer Standard and mounted together in the pool wall. In housing there is a mechanical float, which opens valve and pours the water into the skimmer.

name	code
mechanical water level regulator of skimmer Standard	302147



#### Electronic water level regulator

Connected to the skimmer Standard. The electronic sensor is placed in a special chamber of the skimmer. It runs electrovalve, which pours water into the pool.

name	code
electronic water level regulator of skimmer Standard	302775





**Elements of the installation BRONZE EDITION**

**Accessories to skimmer Standard**

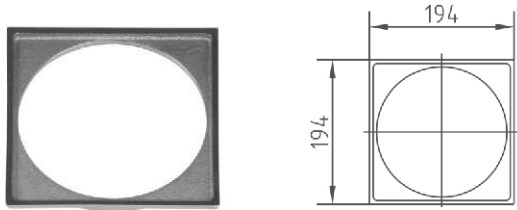


plate frame of skimmer code 302910

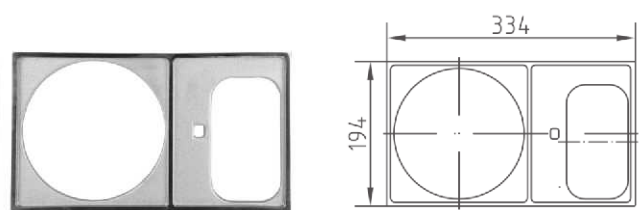
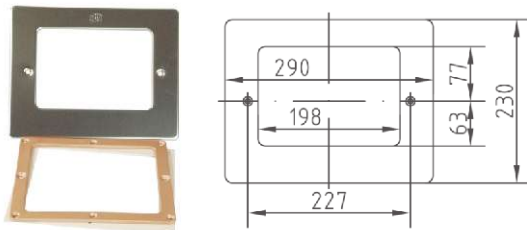
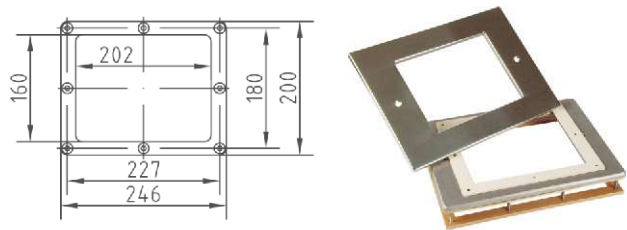


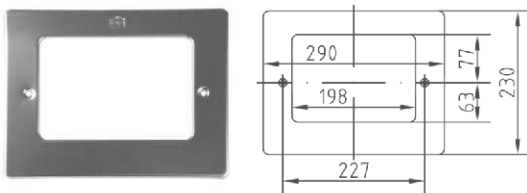
plate frame of skimmer and regulator code 302937



front frame for liner pool code 302228



front frame for garden pool code 302233



front frame for tiles pool code 302236



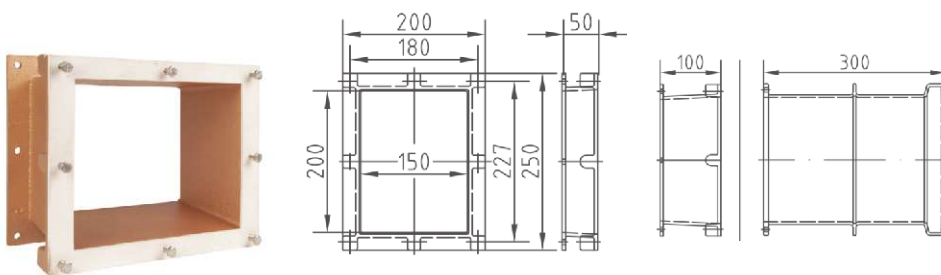
hose connection  
stopper from bronze,  
G1 1/2" E.T.



code 302300  
code 302856

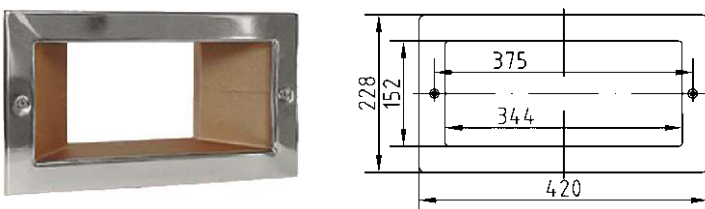
**Skimmer extension**

Mounted with shallow and standard skimmer. It extends the skimmer neck, if required by the thickness of the wall. Extensions can be connected together. Includes screws and gaskets for permanent and tight connection with skimmer. Elements can be embedded in concrete without worrying. Screws and gaskets are indestructible.



name	length	code
	50 mm	302410
	100mm	302414
	300mm	302511

**Skimmer widening** for shallow and standard skimmer. Allows quick collecting water from a larger area of the pool. Includes screws and gaskets for connecting with skimmer.

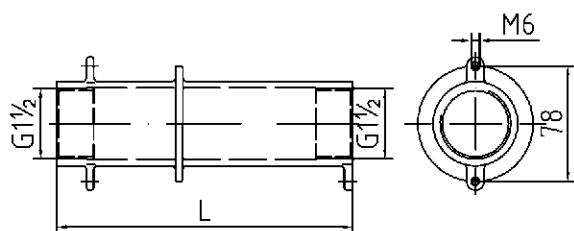


name	code
skimmer widening	302515
front frame	302520
sealing flange for liner	302525


**Elements of the installation for tiles pools BRONZE EDITION**

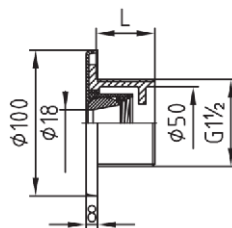
**Wall culvert** is a solid pressure casting of bronze alloy. Assembly in the formwork through of located on it handles. Wall culvert for elements with thread 2" should be selected from the elements for liner pools.

name	code
2xG1½" I.T., length 240 mm	324930
2xG1½" I.T., length 300 mm	324957
2xG2" I.T., length 100 mm	324940



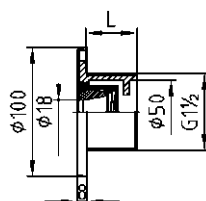
**Inlet nozzle** made from the best steel A4. Perfect workmanship and flat cover of 6 mm, gives it an elegant design. After assembling, the nozzle slightly sticks out from the wall. The inlet eye 18 mm is adjustable.

name	code
G1½" E.T., length 40 mm	324353
G1½" E.T., length 70 mm	324361
G2" E.T., length 40 mm	324418
G2" E.T., length 70 mm	324434



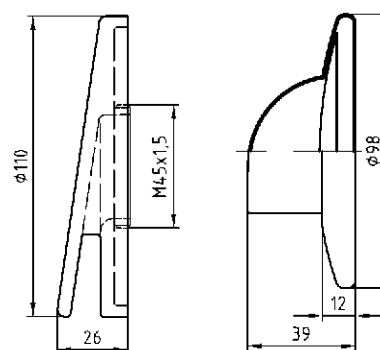
**Nozzle with adjustable flow amount**, allows to dispersed direction of the water.

name	code
G1½" E.T., length 40 mm	324500
G2" E.T., length 40 mm	324510
G2" E.T., length 70 mm	324515



**Shell** performs several functions: water abstraction for measurement automatic dosing system, as a directional inlet nozzle of water from the filter in the narrow chambers or in the stairs etc. Chrome cover or from polished steel A4.

name	code
G1½" E.T., length 30 mm, chrome	324491
G2" E.T., length 40 mm, chrome	324505
G1½" E.T., length 40 mm, steel	324496
G1½" E.T., length 70 mm, steel	324495
G2" E.T., length 40 mm, steel	324498
G2" E.T., length 70 mm steel	324499







**Elements of the installation for tiles pools BRONZE EDITION**

**Bottom nozzle** made from bronze, cover of the highest quality steel A4. Adjustable amount of water flow depending on the water pressure, in the range of 1 to 4 m<sup>3</sup>/h. Cover diameter 130 mm.



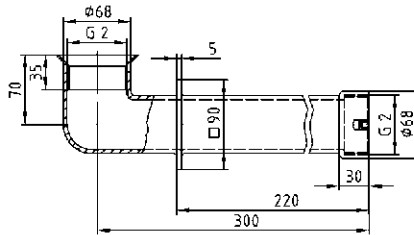
name	code
vertical, G1½" E.T.	324300
angular, G1½" E.T.	324307
vertical, G2" E.T.	324330

**Reducing sockets** of bottom nozzle, which are glued in the casing pipe DN100, which is used when installing piping in the pool bottom, before pouring the floor. More on assembly drawings.



name	code
PVC reducing socket 99/63 mm	324320
PVC union 99 mm x G1½" I.T.	324321
PVC union 99 mm x G1½" E.T.	324322
PVC union 99 mm x G2" I.T.	324323

**Wall culvert of bottom nozzle** made from bronze, 90 degrees, length 300 mm, internal thread 2", code 324318.

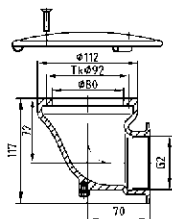


**Hose connections**

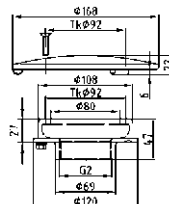


name	code
40 mm x G2" E.T, steel	324523
70 mm x G2" E.T., steel	324525
40 mm x G2" E.T., chrome	3910000
hose union 38 mm	324560
connection stopper	324555

**Horizontal bottom drain** with steel cover from A4, output at an angle of 90 degrees, internal thread 2", code 324914.



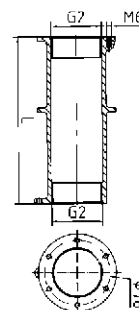
**Vertical bottom drain** with steel cover from A4, straight output, internal thread 2", code 324736.




**Elements of the installation for liner pools BRONZE EDITION**

**Wall culvert** is a solid pressure casting of bronze alloy. Installation in the formwork is possible. Specially shaped front of the wall culvert with threaded holes is used to screw-in the flange gasket after liner assembly.

name	code
G2" I.T. x 1½", length 100 mm	324610
G2" I.T. x 1½", length 240 mm	324612
G2" I.T. x 1½", length 340 mm	324620
G2" I.T. x 2", length 200 mm	324605
G2" I.T. x 2", length 240 mm	324600
G2" I.T. x 2", length 300 mm	324615



**Inlet nozzle** made from the best steel A4. Perfect workmanship and flat cover of 6 mm, gives it an elegant design. After assembling, the nozzle slightly sticks out from the wall. The inlet eye 18 mm is adjustable.

name	code
nozzle flange from steel	324655
G1½" E.T., length 40 mm	324450
G2" E.T., length 40 mm	324469
end plug of bronze nozzle	324698



**Shell** performs several functions: water abstraction for measurement automatic dosing system, as a directional inlet nozzle of water from the filter in the narrow chambers or in the stairs etc. Chrome cover or from polished steel A4.

name	code
flange with seal, steel	324663
G1½" E.T., length 40 mm, steel	324492
G2" E.T., length 40 mm, steel	324493
G2" E.T., length 40 mm, chrome	324505
flange with gasekt	324540



**Bottom nozzle** made from bronze, cover of the highest quality steel A4. Adjustable amount of water flow depending on the water pressure, in the range of 1 to 4 m<sup>3</sup>/h.

name	code
flange with gasket	324302
vertical G1½" E.T.	324300
angular G1½" E.T.	324307
vertical G2" E.T.	324330





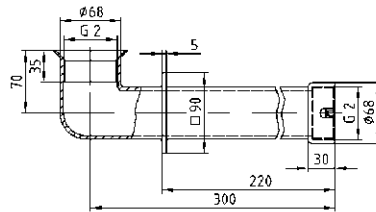
**Elements of the installation for liner pools BRONZE EDITION**

**Reducing sockets** of bottom nozzle, which are glued in the casing pipe DN100, which is used when installing piping in the pool bottom, before pouring the floor. More on assembly drawings.

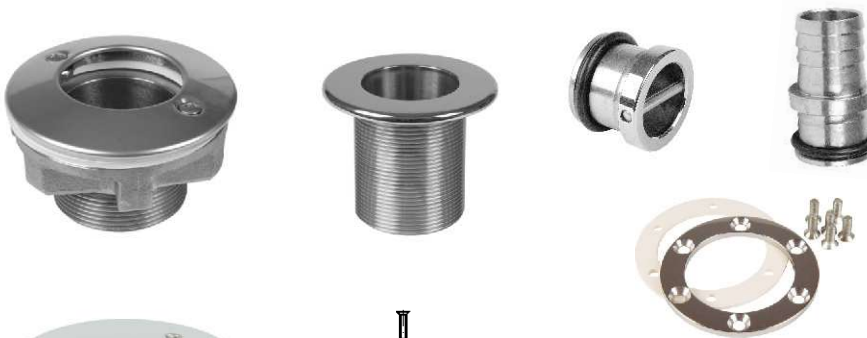


name	code
PVC reducing socket 99/63 mm	324320
PVC union 99 mm x G1½" I.T.	324321
PVC union 99 mm x G1½" E.T.	324322
PVC union 99 mm x G2" I.T.	324323

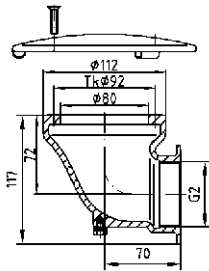
**Wall culvert of bottom nozzle** made from bronze, 90 degrees, length 300 mm, internal thread 2", code 324318.



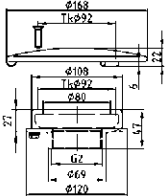
**Hose connections**



name	code
40 mm x G2" E.T., steel	324531
40 mm x G2" E.T., chrome	3910000
flange	324540
hose union 38 mm	324560
connection stopper	324555



**Horizontal bottom drain** with steel cover from A4, output at an angle of 90 degrees, internal thread 2", code 324914.



**Vertical bottom drain** with steel cover from A4, straight output, internal thread 2", code 324736.

**Bronze nuts for nozzles** used in liner pools with the wall of the sheet or plastic. Set consists of two gaskets. Nuts are mounted with nozzles, which are used in tiles pools.

name	code
nut G1½" I.T.	324574
nut G2" I.T.	324582
nut G2½" I.T.	324584




**Elements of the installation WHITE-STEEL de LUXE EDITION**

It is time for steel revolution in your pool! Bet on quality!

Elements of the pool installation WHITE-STEEL de LUXE EDITION gives you the highest quality from the elements made of plastic. Made from a mixture of plastics, specially developed in the manufacturer laboratory. Covers from stainless steel AISI 316/V4 have an attractive design and are made according to the restrictive production standards and are resistant to the harmful effects of chlorine. The elements are designed to liner and tiles pools. In the bodies metallic internal threads are embedded.



name	code
1. skimmer deLUXE, output 50 mm I.G. and G2" E.T., recommended flow 8 m <sup>3</sup> /h	21500
2. extension of skimmer de LUXE 25 cm	21512
3. skimmer wide deLUXE, output 50 mm I.G. and G2" E.T., recommended flow 8 m <sup>3</sup> /h	21502
4. bottom drain deLUXE, max. flow 15 m <sup>3</sup> /h, output G2" I.T.	21504
5. outlet nozzle deLUXE, recommended flow 5 m <sup>3</sup> /h, for mounting in wall culvert de LUXE	21506
6. wall culvert deLUXE	21508
7. inlet nozzle de LUXE for garden and liner pools, recommended flow 5 m <sup>3</sup> /h	21510
8. height extension of skimmer de LUXE of 45 mm	21514



**Elements of the installation STAINLESS EDITION**

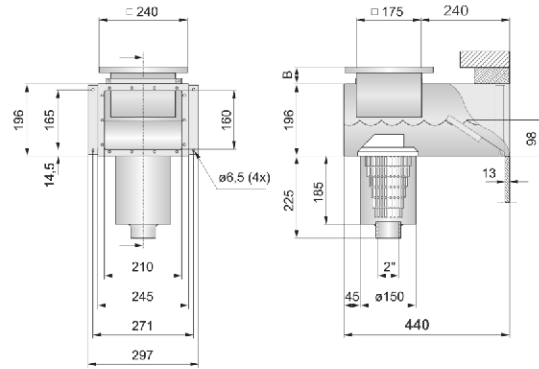
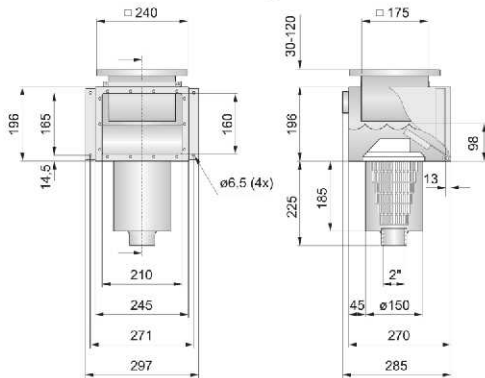
Unbeatable and sophisticated pool elements of a series STAINLESS EDITION are made of high quality, Swedish steel AISI 316. You do not need any additives, as they are offered as a complete, ready to install elements with front frame, top cover and gasket. Individual models differ from each other of mount depth in the wall. Height of the cover is adjustable from 3 to 12 cm.

**Skimmer Stainless Edition MINI**

name	code
skimmer MINI from steel, for liner as above, but with connection for water level regulator	112971
skimmer MINI from steel, for tile as above, but with connection for water level regulator	112978
skimmer MINI from steel, for tile as above, but with connection for water level regulator	112972
skimmer MINI from steel, for tile as above, but with connection for water level regulator	112979

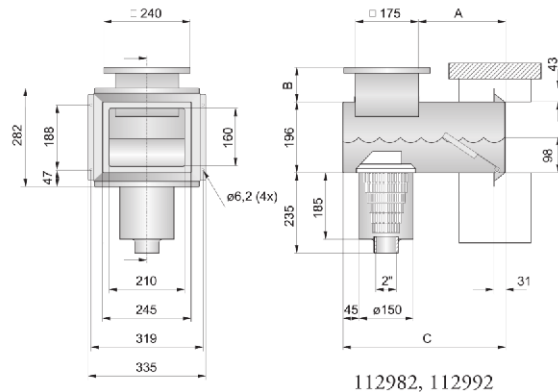
**Skimmer Stainless Edition MIDI**

name	code
skimmer MIDI from steel, for liner as above, but with connection for water level regulator	112981
skimmer MIDI from steel, for tile as above, but with connection for water level regulator	112988
skimmer MIDI from steel, for tile as above, but with connection for water level regulator	112982
skimmer MIDI from steel, for tile as above, but with connection for water level regulator	112989



**Skimmer Stainless Edition MAXI**

name	code
skimmer MAXI from steel, for liner as above, but with connection for water level regulator	112991
skimmer MAXI from steel, for tile as above, but with connection for water level regulator	112998
skimmer MAXI from steel, for tile as above, but with connection for water level regulator	112992
skimmer MAXI from steel, for tile as above, but with connection for water level regulator	112999



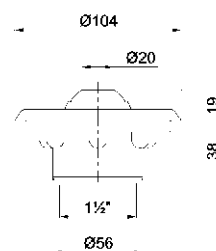
Set preventing the destruction of skimmers in the liner pool wall code 112900


**Elements of the installation STAINLESS EDITION**
**Wall culvert Stainless Edition**

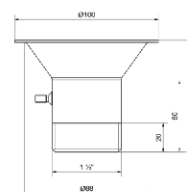
name	code
L. 290 mm, front I.T.-back G1½" E.T.	12670
L. 255 mm, front-back G1½" I.T.	12640
L. 600 mm, front I.T.-back G1½" E.T.	12675
L. 600 mm, front-back G2" E.T	126751


**Inlet nozzles Stainless Edition**

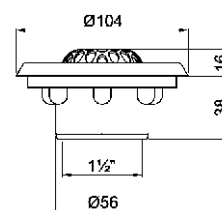
name	code
inlet nozzle from steel G1½" I.T., for liner	125990
inlet nozzle from steel G1½" E.T., for tile	126090


**Bottom nozzle Stainless Edition**

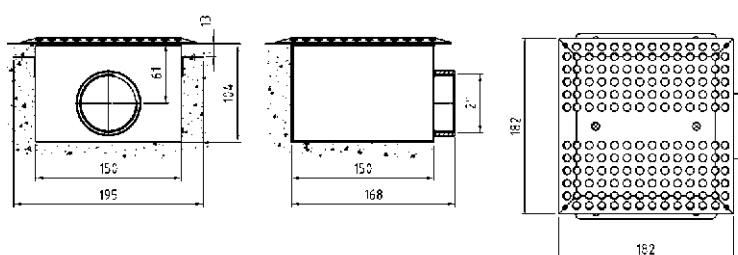
name	code
G1½" E.T., for tile	12550
G2" E.T., for tile	12560


**Suction nozzle Stainless Edition**

name	code
with sieve, G1½" I.T., for liner	12652
with sieve, G1½" E.T., for tile	12650
hose connection G1½" I.T.	12673


**Bottom drain Stainless Edition**

name	code
G2" I.T., for tile	125935
G2" I.T., for liner	125930





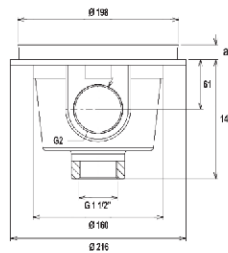
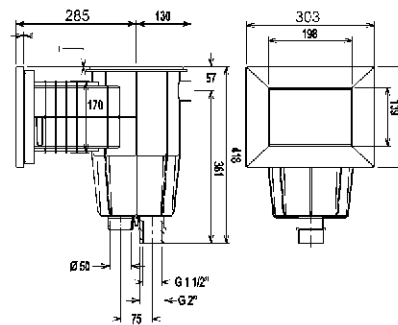
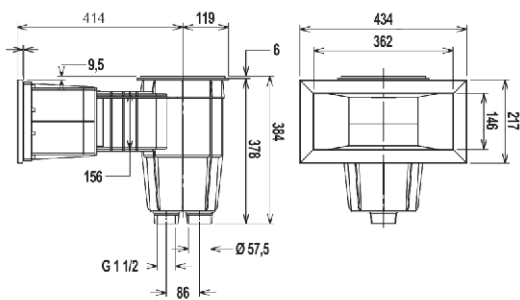
**Elements of the installation WHITE-STEEL EDITION**

Series to the pool WHITE-STEEL EDITION gives a unique effect in the pool. White plastic parts with finishes of the highest quality stainless steel AISI 316. Precise workmanship quality is unquestionable advantage. Ideal alternative for items made entirely of steel or white plastic. All elements of the same color. Interior of the skimmer and flap are also covered with steel.

**Skimmer WHITE-STEEL EDITION** max. 8 m<sup>3</sup>/h, output G2" E.T. and 50 mm I.G., flow connection. Suitable for installation in liner, polyester and tiles pool.

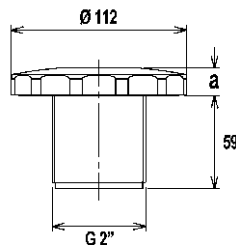


name	code
skimmer Standard	21400
skimmer wide	21403



**Bottom drain WHITE-STEEL EDITION**

name	code
max. 13 m <sup>3</sup> /h, output G2" I.T.	21407



**Inlet nozzle WHITE-STEEL EDITION**

name	code
flow 5 m <sup>3</sup> /h, G2" E.T.	21410

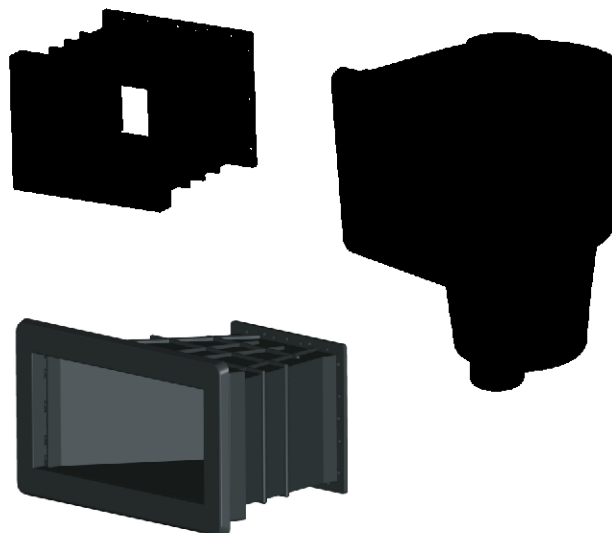


**Hose connection WHITE-STEEL EDITION**

name	code
flow 5 m <sup>3</sup> /h, G2" E.T.	21413


**Elements of the installation BLACK EDITION**

Great design of your pool can give black parts from plastic from series Black Edition. Made from a mixture of plastics, specially developed in the manufacturer laboratory. Are made according to the restrictive production standards and are resistant to the harmful effects of chlorine.



name	code
black skimmer, output 50 mm I.G. and G2" E.T., recommended flow 8 m <sup>3</sup> /h	21520
extension of black skimmer 25 cm	21522
extension and widening 25 cm for black skimmer	21524
black bottom drain, max. flow 15 m <sup>3</sup> /h, output G2" I.T.	21526
black outlet nozzle, 5 m <sup>3</sup> /h, for mounting in wall culvert	21528
wall culvert (only white)	21530
black outlet nozzle, recommended flow 5 m <sup>3</sup> /h	21532
black lamp, white light 300 W, 12V	21534
black lamp, white LED light 15 W, 12V	21534led
black lamp, color LED light 15 W, 12V	21534 led rgb





## Elements of the installation WHITE EDITION

Completely snow-white elements from high quality plastic from series White Edition. Produced in Europe with exceptional attention to quality and accuracy of workmanship.

**Skimmer Euro** with optimal flow of 8 m<sup>3</sup>/h. One skimmer collects water to the filter from approx. area of 25 m<sup>2</sup>, and wide skimmer from area of 35 m<sup>2</sup>. Extended skimmer has neck of 23 cm. Suitable for any type of pool.



name	code
skimmer Euro	20410
skimmer wide Euro	20420
skimmer extended	20445

**Nozzle Euro** universal and snow-white. A special outlet from the nozzle allows to obtain several flows: 3, 5, 7 m<sup>3</sup>/h. A complete nozzle with external thread G2".



name	code
for liner pool	24210
for polyester pool	24208
for tiles pool	24205

**Wall culvert Euro** made from ABS, length 30 cm, internal thread G2", at the back I.G. 50 and external thread G2

code 24200
code 24200a



**Bottom nozzle** with adjustable flow amount. Maximum flow 12 m<sup>3</sup>/h. Made from plastic in white color. A complete nozzle with external thread G2".



name	code
for liner pool	24250
for tile pool	24255

**Hose connection Euro** mounted in the wall for connecting manual vacuum cleaner of the pool. Required in pools with overflow gutter, as well as in pools with several skimmers. Made from plastic in white color with external thread G2".



name	code
for liner pool	24240
for tile pool	24243

**Bottom drain Euro** made from ABS in white color. Suitable for any type of pool. Maximum flow 13 m<sup>3</sup>/h, thread G2" I.T.



name	code
bottom drain Euro, H. 15 cm	24300
bottom drain Euro type A, H. 20 cm	24300a
bottom drain Euro Mini, H. 10 cm	24302


**Elements of the installation WHITE de LUX EDITION**

Bet on the quality of the pool elements WHITE de LUX EDITION. Made from a mixture of plastics, specially developed in the manufacturer laboratory. The elements are made according to the restrictive production standards and are resistant to the harmful effects of chlorine. The elements are designed to liner and tiles pools. In the bodies metallic internal threads are embedded.



name	code
1. skimmer White de LUX, output 50 mm I.G. and G2" E.T., recommended flow 8 m <sup>3</sup> /h	21540
2. extension of skimmer de LUXE 25 cm	21512
3. extension and widening 25 cm for skimmer White de LUX	21542
4. bottom drain White de LUX, max. flow 15m <sup>3</sup> /h, output G2" I.T.	21544
5. outlet nozzle White de LUX, recommended flow 5 m <sup>3</sup> /h, for mounting in wall culvert de LUX	21546
6. wall culvert de LUX	21508
7. outlet nozzle White de LUX for garden and liner pools, recommended flow 5 m <sup>3</sup> /h	21548
8. height extension of skimmer de LUX of 45 mm	21514



## Elements of the installation CHROME EDITION

Unique series Chrome Edition, the white elements for pools with finishes of covers in silver color. Undoubtedly the highest quality of workmanship is an alternative to steel elements. Silver color is identical for all parts. The parts are not painted, but coated with color using plasma technique. Thanks to unique promoters of adhesion, the layer is durable. But do not think, that it is everlasting layer. The elements may be destroyed and need to be replaced. Suitable for any type of pool.



**Skimmer Euro Chrome Edition** with optimal flow 8 m<sup>3</sup>/h.  
One skimmer collects water to the filter from area of approx. 25 m<sup>2</sup>.

name	code
skimmer Chrome Edition	24305



**Inlet nozzle Euro Chrome Edition** entirely in silver color. Nozzle flow is 5 m<sup>3</sup>/h.  
A complete nozzle with external thread G2".

name	code
nozzle Chrome Edition	24315
wall culvert Euro	24200



**Bottom drain Euro Chrome Edition** made from ABS with cover in silver color.  
Maximum flow 13 m<sup>3</sup>/h, internal thread G2".

name	code
bottom drain Chrome Edition, height 15 cm	24310



**Lamp Euro Chrome Edition** with frame in silver color. Set with niche, gaskets and bulb.

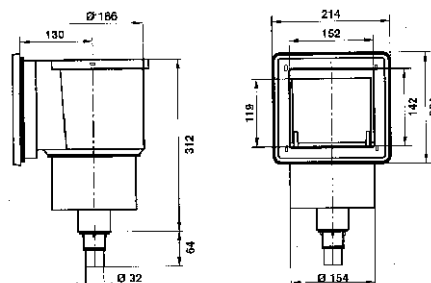
name	code
lamp Chrome Edition 300 W, 12 V	24320
lamp LED Chrome Edition 15 W, 12 V, white	24320led
lamp LED Chrome Edition 15 W, 12 V, color	24320led rgb





**Miniskimmer** made from plastic. Suitable for garden pools with walls from sheet or plastic. Should not be installed in a concrete wall. Flow 5 m<sup>3</sup>/h. out put from the miniskimmer internal thred G1½". Available in 3 versions, also with water level regulator, mounted in skimmer.

name	code
miniskimmer	20300
masking frame	20306



name	code
miniskimmer wide	20303
masking frame	20307



name	code
miniskimmer wide w.	20304
water level regulator	20307
masking frame	20307



**Skimmer suspended** is an universal skimmer for assembly in already existing pool. The set includes basket, vacuum connection, inlet nozzle, dysza wlotu, connection hoses. The skimmer tubes are not glued, so it can be easily adjusted to the pool wall.

name	code
skimmer suspended	05502





**Water level regulators**

Water level regulators automatically complement and keep specified level of the water. Thanks to the regulator, comfort of using the pool clearly increases. We distinguish electronic and mechanical water level regulators. When mounting electromagnetic valve, additional filter should be installed, which will catch impurities in the water mains.

**Electronic water level regulator Swim-tec**

is a simple and reliable device, mounted in a skimmer.



name	code
regulator without valve	309060
with valve 1/2", 230 V	309065

**Electronic water level regulator**

set with flow sensor, control box, without valve, code 309124.



**Electronic regulator BNR 200S** A sensor of regulator is mounted in the skimmer. In set: control box, floating water level probe 12 V, elements for mounting and additionally electrovalve allowing water flows. Five meter sensor cable can be extended up to 100 m. Start delay approx. 15/20 seconds.



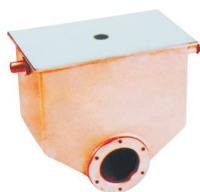
name	code
BNR 200S with valve 1/2", 230 V	309120
as above, but without valve	309122

**Electronic regulator BNR 55** A sensor of regulator is mounted in the skimmer. In set: control box, water measurement probe 7 V, element for mounting and additionally electrovalve allowing water flows. Five meter sensor cable can be extended up to 100 m. Start delay between 1-4 minutes.



name	code
BNR 55 with valve 1/2", 230 V	309028
BNR 55 with valve 1/2", 24 V	309020
without valve, 230 V	309117
without valve, 230 V	309022

**Mechanical regulator** with built-in floating valve. Mounted in the pool wall separately. Connection for the water 3/8". Water inlet into the regulator through shell or nozzle (not included).



name	code
regulator from plastic	20440
regulator from bronze	302140



**Electrovalves**

name	code
electrovalve 1/2", 230 V	309141
electrovalve 3/4", 230 V	309142
electrovalve 1/2", 24 V	309140

**Mechanical regulator**

for mounting in the skimmer V 20. Connection for the water 1/2". code 20825





### Water lighting in the pool

Pool increases the value of your home and garden. Pool provides detente through sports activity in the water, is a refreshing, healthy and relaxing. One of the most important things from additional equipment are underwater lights. It is not worth to give them up. The pool in a hall you can not illuminate from the top, mind this water mirror, which reflects th light on the walls. In the open pools headlights are even more necessary. The dark water surface is not pleasant.



Number of mounted light sources depends on the surface of the pool, its destination and needed size of the light stream. The distance of lighting determines the curve of the light beam, which, for each type of bulb, is different. Lighting fulfills its role, only if appropriate transformers are used. Proper transformer decides about the quality of the lighting and the life of the bulb. The voltage drop of 1 V results a drastic reduction in the amount of light, for example lamp 300 W at 12 V has 6000 lm, and at 11 V has 4300 lm. With LED lamps 12 V, voltage drop causes violently redution of the bulb lifetime. It is important to use proper transformer, which will always generate a constant voltage. Our transformers are the most appropriate, because they have possibility of adjusting voltage in the range 12-14 V. Before turning on lamps, you need to check voltage using the electric meter. With LED lamps with different voltage than 12 V, you need to use only factory power supplies, which guarantee constant voltage and required intensity. There are several types of lighting: traditional, halogen, LED. Before choosing lighting, it is worth considering, taking into account several factors. It is worth go with the times and choose LED lamps, which are the most favorable choice in total. They have the highest efficiency, ie the ratio of the emitted light power to consumed electricity, which amounts for LED approx. 25%, for halogen 7%, for traditional bulb approx. 3%. LED lighting has the highest luminous efficacy, which is the ratio of emitted luminous flux to consumed electrical energy, expressed in the unit lm/W (lumens/Watt). For LED one color it is approx. 100 lm/W, for standard bulb: 10-15 lm/W, for halogen: 15-20 lm/W, for glow-tube: approx. 60 lm/W. The choice of LED lighting is an investment, which returns in a very low operating costs, consisting of: low current consumption, lack of maintenance, lack of frequent purchases of new bulbs.

According to current standards, to achieve good underwater lighting, allowing the camera to film under water, the following values should be taken:

Standard bulb: approx. 20-25 W/m<sup>2</sup> of water surface, 400-500 lm/m<sup>2</sup>

LED: approx. 1-5 W/m<sup>2</sup> of water surface, 100-500 lm/m<sup>2</sup>

LED RGB: approx. 2-7 W/m<sup>2</sup> of water surface, 100-500 lm/m<sup>2</sup>.

For private swimming pools shall be adopted in less value. With lamp is given a power [W] and stream [lm].

The formula for the calculation of the required numbers of lamps:

water surface in m<sup>2</sup> x number of lumens per 1 m<sup>2</sup>/stream of the lamp in lumens.

Example: pool with surface of 96 m<sup>2</sup>, number of lumens per 1 m<sup>2</sup>= 300 lm/m<sup>2</sup>, stream of the lamp- 7200 lumens.

96 x 300/7200= 4 lamps.

For placement lamps in the pool is helpful light curve of the lamp.

**Cable cross specified by qualified electrician.**

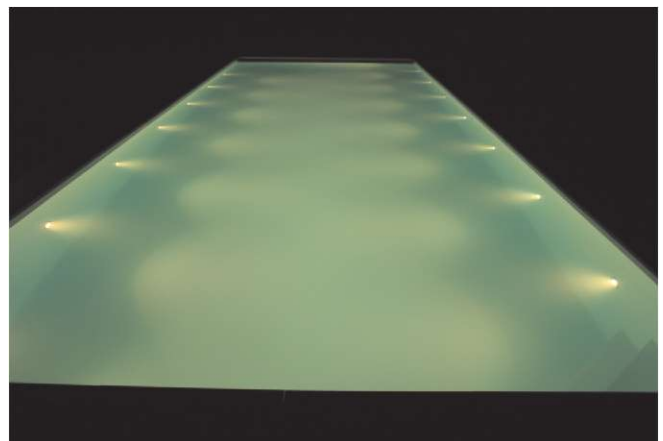
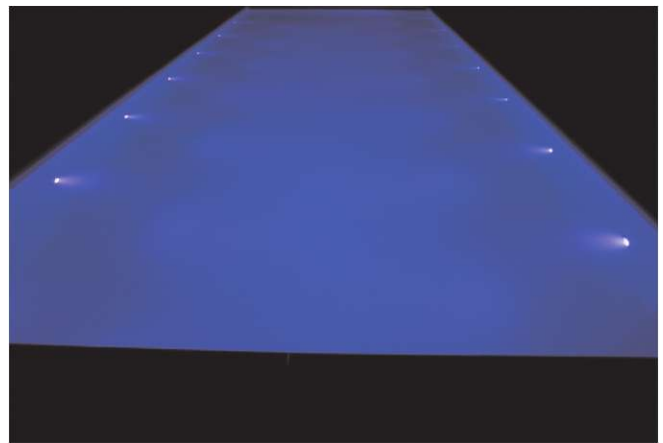
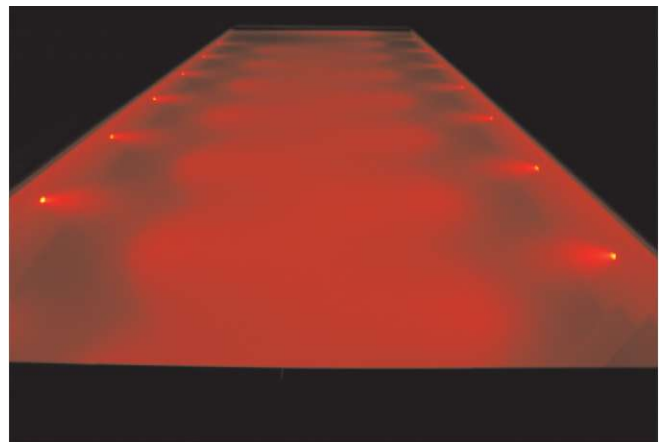


## Illumination the pool with LED lamps

This is a completely new way for lighting the pool. The LEDs lighten water in an amazing way. A special advantage of this lighting is a very long lifetime of bulbs, low current consumption, lack of maintenance activities, no thermal problems associated with heating up the bulbs. Depending on the size of the pool and desired effect is calculated the appropriate quantity of the lamps. RGB lamps are changing colors. Deciding on LED lighting, remember that running costs are very low and quickly compensate for investment costs. LED lamps have a high efficiency of 25%. Efficiency is the ratio of the emitted light power to electrical energy used. LED lamps are characterized by high luminous efficacy approx. 100 lm/W (standard bulb has 15 lm/W). Luminous efficacy is the ratio of emitted luminous flux to electrical energy consumed. LED lamps have also long lifetime up to 50000 working hours. LED lamps are available in several variations in terms of color temperature and angle of propagation of light.

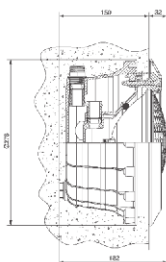


*The photo shows difference between LED lighting and lighting with standard bulbs 300 W.*



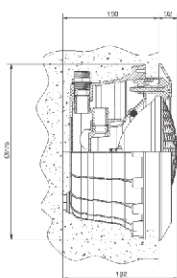

**Pool lighting**

**Lamp Euro White Edition** made from plastic, set with niche and gaskets. Frame from plastic. Ramka z tworzywa.



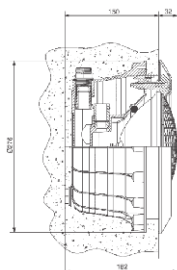
name	code
lamp 12 V, 300 W, 6000 lm	24400
lamp 12 V, 15 W, LED white 1000 lm	24400 led
lamp 12 V, 15 W, LED color 720 lm	24400 led rgb
lamp 12 V, 20 W, LED white 2400 lm	24400 led maxi
lamp 12 V, 10 W, LED color 2400 lm	24400 led rgb maxi

**Lamp Euro White-Steel Edition** made from plastic, set with niche and gaskets. Steel frame = overlay.



name	code
lamp 12 V, 300 W, 6000 lm	24405
lamp 12 V, 15 W, LED white 1000 lm	24405 led
lamp 12 V, 15 W, LED color 720 lm	24405 led rgb
lamp 12 V, 20 W, LED white 2400 lm	24405 led maxi
lamp 12 V, 10 W, LED color 2400 lm	24405 led rgb maxi

**Lamp Euro Chrome Edition** made from plastic, set with niche and gaskets. Silver frame from plastic.

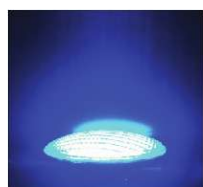


name	code
lamp 12 V, 300 W, 6000 lm	24320
lamp 12 V, 15 W, LED white 1000 lm	24320 led
lamp 12 V, 15 W, LED color 720 lm	24320 led rgb
lamp 12 V, 20 W, LED white 2400 lm	24320 led maxi
lamp 12 V, 10 W, LED color 2400 lm	24320 led rgb maxi

**Lamp Black Edition** made from plastic, set with niche and gaskets. Frame from plastic.



name	code
lamp 12 V, 300 W, 6000 lm	21534
lamp 12 V, 15 W, LED white 1000 lm	21534 led
lamp 12 V, 15 W, LED color 720 lm	21534 led rgb
lamp 12 V, 20 W, LED white 2400 lm	21534 led maxi



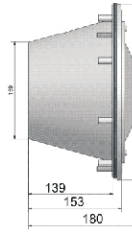




**Pool lighting**

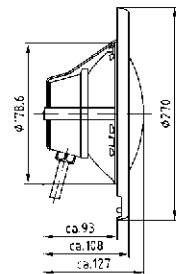
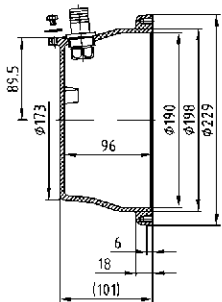
**Lamp Stainless Edition** made from stainless steel AISI-316, set with niche and gasket embossed from 1 piece of sheet metal, not welded, which gives 100% of tightness.

name	code
for liner pool	
lamp 12 V, 300 W, 6000 lm	314370
lamp 12 V, 15 W, LED white 1000 lm	314370 led
lamp 12 V, 15 W, LED color 720 lm	314370 led rgb
lamp 12 V, 10 W, LED color 720 lm	314370 led rgb maxi
for tile pool	
lamp 12 V, 300 W, 6000 lm	314369



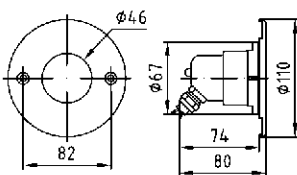
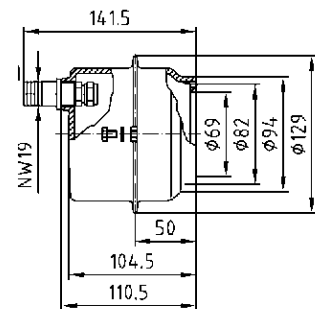
**Lamp Bronze Edition** niche made from bronze, frame from steel. For liner pools also a flange with gaskets is needed.

name	code
bronze niche	314196
lamp insert 12 V, 300 W, 6000 lm	314115
lamp insert 12 V, 15 W, LED white 1000 lm	314115 led
lamp insert 12 V, 15 W, LED color 720 lm	314115 led rgb
lamp insert 12 V, 10 W, LED color 720 lm	314115 led rgb maxi
flange with gaskets	314110



**Halogen lamp Bronze Edition 50 W** niche made from bronze, frame from steel. For liner pools also a flange with gaskets is needed. Ideal for stairs and small pools.

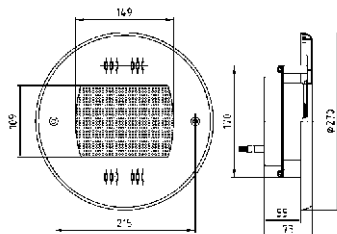
name	code
bronze niche	314255
lamp insert 12 V, 50 W, 1100 lm	314257
flange with gaskets	314256





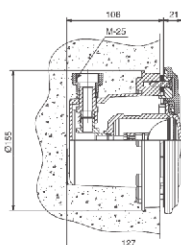
### Pool lighting

**Underwater loudspeaker** made from the best stainless steel. The sound only audible under water. To hear music under water, one loudspeaker is enough for 35 m<sup>2</sup> pool surface. Operating frequency range is 100 Hz to 10 kHz.



name	code
bronze niche	314196
loudspeaker 30 W, 8 Ohm	314300
flange with gaskets	314110

**Halogen lamp White i White-Steel Edition 50 W** set with niche and gaskets. Ideal for stairs and small pools. Frame from plastic or steel, as a overlay.



name	code
halogen 12 V ,50 W white frame	17987
halogen 12 V ,50 W steel frame	17989
halogen MINI 12 V ,15 W LED white	17990
halogen MINI 12 V ,15 W LED color	17991



**Transformers for lamps** provides the ideal voltage for the lamps 12V, which is 12,6V. Using others can void warranty. The modulator is needed for color LED lamps. The modulator includes a transformer, so is not needed extra one.

name	code
transformer	
100 W, 12 V	24700
200 W, 12 V	24701
300 W, 12 V ES	24702
300 W, 12-14 V	24703
600 W, 12-14 V	24707
modulator for lamps ledrgb and MINI	27818
remote for above	27820
modulator for lamps ledrgbmaxi with remote	27822





## Accessories for pool lamps

**Junction box from plastic** for connecting lamp cables to transformer cables. Made from special material, resistance to pool water. Cover with rubber gasket. Special niche is mounted in the bottom next to the pool. Provides free access to the cable connections.



code 24410



code 314218

**Niche from bronze** for connecting lamp cables to transformer cables. Polished, stainless steel and tight cover. Special niche is mounted in the bottom next to the pool. Provides free access to the cable connections.

**Controller for LED lamps** using this device you can turn on the LED lamps via remote control.

name	code
1 channel controller of LED lamps max. 120 W	24865
4 channel controller of LED lamps max. 240 W	24867

**Spare bulbs** for replacing of worn. LED bulbs are mounted in place of the bulbs 300 W.

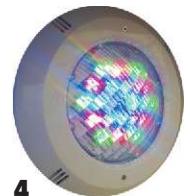
name	code
1. bulb 12 V, 300 W	24850
2. LED 12 V, 15 W, white	24880
3. LEDrgb 12 V, 15 W, color	24882
4. LEDrgbmaxi 12 V, 10 W, color	24886
LEDmaxi 12 V, 20 W, white	24881
LED 12 V, 18 W, with remote, color	24885



1



2



4

### 3. LED RGB





**POWER LED 24 VOLT perfection in every element**

NEW GENERATION POWER LED 24 VOLT LAMPS are used for professional pool lighting. Industrial LED diodes are used in them, which are resistant to shock and there is no implosion risk. The characteristic quality features fulfill the requirements of the Low Voltage norms EN 61347-2-3 and norm EN 61047, norms on electromagnetic compatibility EN 61547, EN 55015, EN 61000-3-2, EN 61000-3-3, norms for laser light classification EN 62471 (for 24V and EN 60825 for 12 V). You do not meet it in other lamps. In RGB versions the LED technology is based on additive color mixing. To the power supply constant current is necessary, with exactly administered intensity. Only the original power supplies provide POWER LED lamps needed voltage and current. Using different may void the warranty. Standard facility in the cable length of 5 m, but are available as well with a cable of 10m. Selection of the cable from the lamp to the power supply above 10 m is made on the basis of a special diagram for POWER LED lamps. To ensure high durability you need to keep the following limits for the chemicals in the pool water: disinfectant to 1,0 mg/l, chlorides to 500 mg/l, pH 6,5-9,5. For items to salt water maximum concentration of NaCl is 6%. The POWER LED lamps are combined with each other in the power line. In one system of the lamps, you need exactly one overriding unit = ballast. Other lamps will be connected as a subordinate units to the AC adapter. Control can be done by external button, radio remote control or by module DMX 512 (via a computer).

Accessories for POWER LED 24 VOLT lamps:

name	code
power supply 24V for 2 white lamps 30er or 21er, 4 lamps 15er, 6 lamps 9er, 8 lamps 3er	40600050
power supply 24V, for 2 color lamps 30er or 21er, 4 lamps 15er, 6 lamps 9er, 8 lamps 3er	40600150
sub-distributor 24V for connection over 4 lamps	40600250



Accessories for POWER LED 12 VOLT lamps:

name	code
power supply 12V for 2 lamps 24x3 W or 4 lamps 12x3 W white	314434
ballast 12V for 2 lamps 24x3 W RGB or 4 lamps 12x3W RGB	314435
ballast 12V for 4 lamps 4x3 W RGB	314514
power supply 12V for 8 lamps 4x3 W white	314512
power supply 12V for 4 lamps 4x3 W white	314510



Accessories for 24 and 12 VOLT lamps

remote control receiver	314438
remote for changing colors	314439
dimmer/changer of lamp colors	314440
DMX module of LED lamp	314452
bronze niche for POWER LED lamps	314196
bronze niche for Mini lamps	314255
bronze niche for Midi lamps	4266050





**POWER LED 24 VOLT perfection in every element**

Lifetime: 50.000 hours, Color temperature: 6000 K, 4500 K, 3000 K, Protection class: III IP 68  
 Amerge/voltage: 700 mA 24 V/DC SELV, Laser classification: EN 62471 photobiological security

**30er POWER LED 24 V DC 2.0 Ø 270 mm, steel V4A**

Power: 80 W	Luminous flux: 13900 lm	
name		code
30er Power LED 24V, 6000K, round		40000020
30er Power LED 24V, 6000K, round RGB		40000220
30er Power LED 24V, 6000K, square		40700020
30er Power LED 24V, 6000K, square RGB		40700220



**21er POWER LED 24 V DC 2.0 Ø 270 mm, steel V4A**

Power: 56 W	Luminous flux: 9950 lm	
name		code
21er Power LED 24V, 6000K, round		40100020
21er Power LED 24V, 6000K, round RGB		40100220
21er Power LED 24V, 6000K, square		40800020
21er Power LED 24V, 6000K, square RGB		40800220



**15er POWER LED 24 V DC 2.0 Ø 270 mm, steel V4A**

Power: 40 W	Luminous flux: 7100 lm	
15er Power Led 24V, 6000K, round, white	code	40201020
RGB	code	40201220



**15er POWER LED 24 V DC 2.0 Ø 146 mm - Midi**

Power: 40 W	Luminous flux: 7100 lm	
nazwa	code	code
15er Power Led 24V, 6000K, round, white	40200020	RGB 40200220
15er Power Led 24V, 6000K, square, white	40900020	RGB 40900220



**9er POWER LED 24 V DC 2.0 Ø 146 mm - Midi**

Power: 25 W	Luminous flux: 4250 lm	
name	code	code
9er Power LED 24V, 6000K, round, white	40300020	RGB 40300220
15er Power LED 24V, 6000K, square, white	41000020	RGB 41000220



**3er POWER LED 24 V DC 2.0 Ø 110 mm - Mini**

Power: 9 W	Luminous flux: 1420 lm	
name	code	
3er Power LED 24V, 6000K, round, white	40400020	
RGB	40400220	
3er Power LED 24V, 6000K, square, white	41100020	
RGB	41100220	



Available also flat versions 30er and 15er.

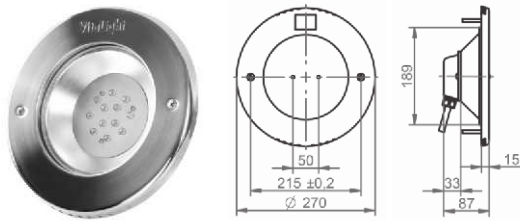


**Pool lighting with POWER LED lamps**



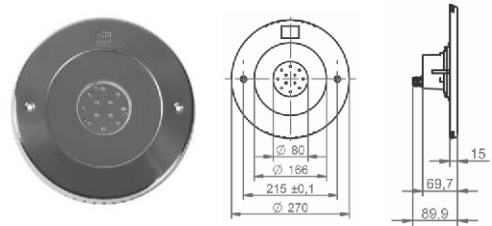
**POWER LED lamp 12x3 W new model**

name	code
12V, power 12x3W= 36 W, white, cable 2 x1,5 mm <sup>2</sup> , length 5 m, daylight with temp. 6000 K, 3600 lm	4147020
as above, but color temp. 3000K	4145020
as above, but RGB = color, cable 4x1 mm <sup>2</sup>	4149020



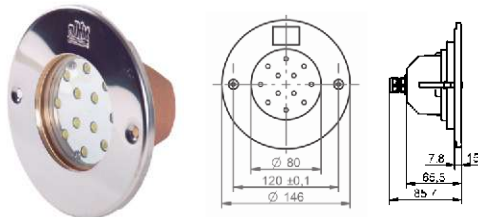
**POWER LED lamp 12x3 W**

name	code
12V, power 12x3W= 36 W, white, cable 2x1,5 mm <sup>2</sup> , length 5 m, daylight with temp. 6000 K, 3600 lm	314401
as above, but RGB = color, cable 4x1 mm <sup>2</sup>	314411



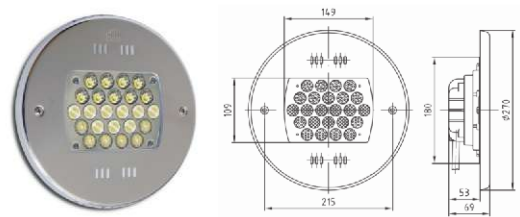
**POWER LED lamp 12x3 W MIDI**

name	code
12V, power 12x3W= 36 W, white, cable 2x1,5mm <sup>2</sup> , length 5 m, daylight with temp. 6000 K, 3600 lm	4269520
as above, but color temp. 3000 K	4269820
as above, but RGB = color, cable 4x1mm <sup>2</sup>	4269720



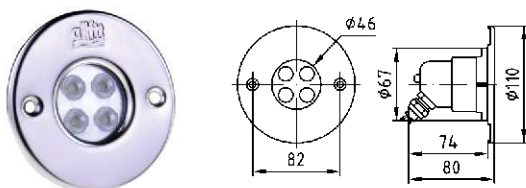
**POWER LED lamp 24x3 W**

name	code
12 V, power 24x3W= 72 W, white, cable 2x1,5 mm <sup>2</sup> , length 5 m, daylight with temp. 6000 K, 7200 lm	314449
as above, but color temp. 3000 K	4380420
as above, but RGB = color, cable 4x1 mm <sup>2</sup>	314450



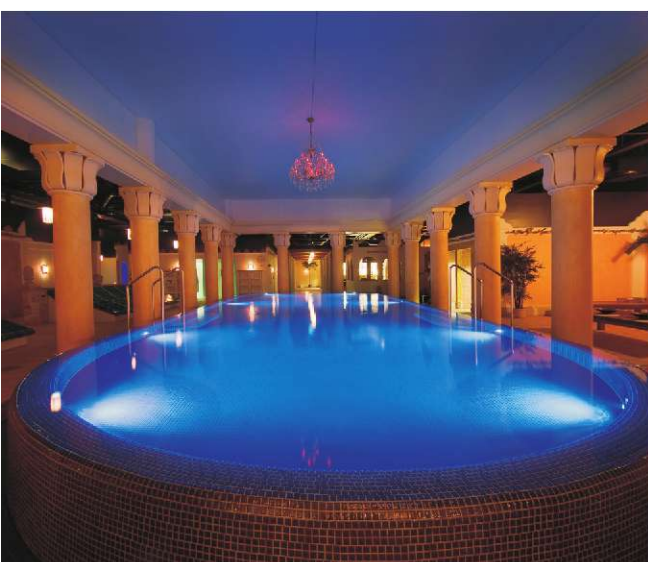
**POWER LED lamp 4x3 W Mini**

name	code
12 V, power 4x3W= 12 W, white, cable 2x 0,75 mm <sup>2</sup> , length 5 m, daylight with temp. 6000 K, 1200 lm	314475
as above, but color temp. 3000 K	4322220
as above, but RGB = color, cable 4x0,75 mm <sup>2</sup>	314478



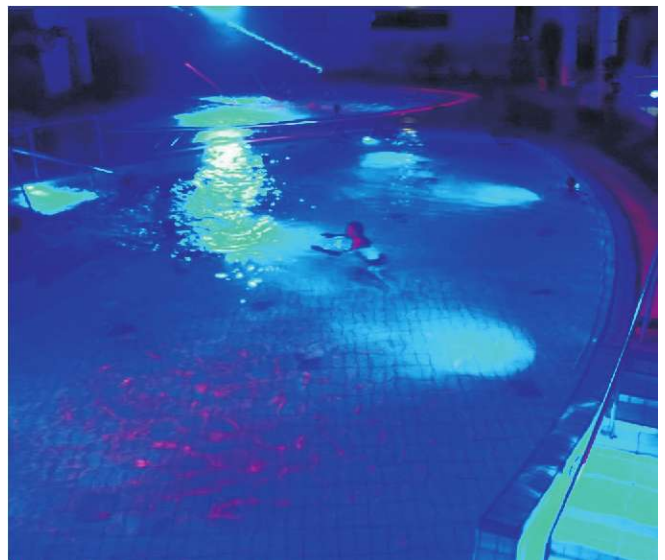
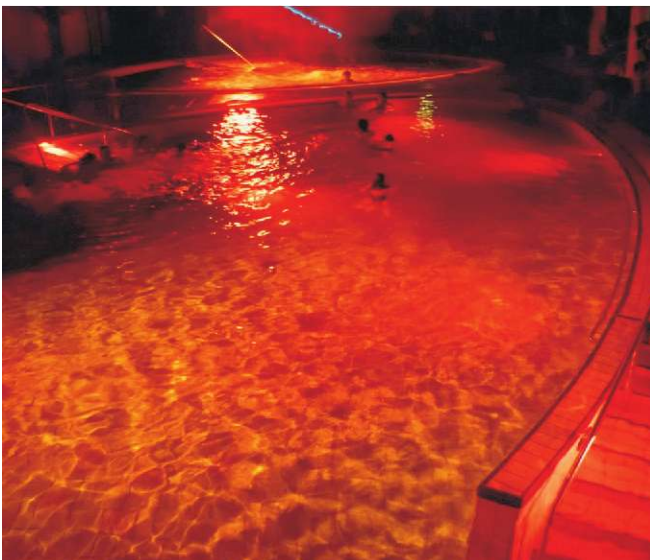


Examples of pool lighting with POWER LED lamps





**Examples of pool lighting with POWER LED lamps**

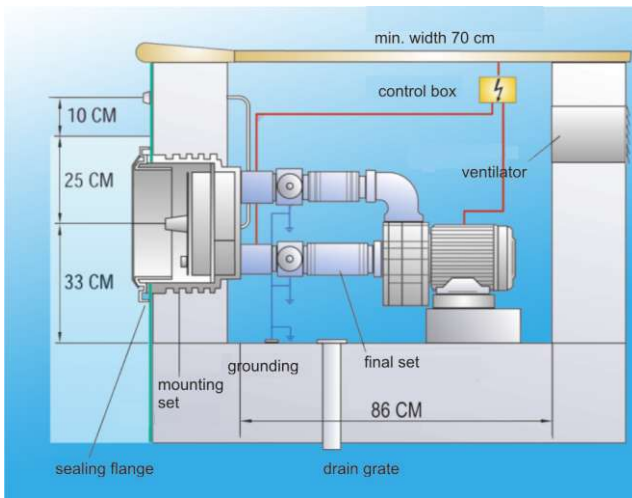






## Water massage devices

Provide a great attraction, giving you a relaxing and therapeutic water massage (after consultation with a physician), bath with waves and air bubbles, swimming against the water stream (used for swimming lessons). Each device, permanently mounted in the pool wall, consist of mounting set and final set with pump. In the liner pools a sealing flange is needed. Massage pump is connected through a suction duct with built-in wall nozzle chamber. In the chamber, through a channel, water under high pressure is forced back through the outlet nozzles. Turn on and off from the water via a switch. The force of the water current is regulated at the nozzle and bath with air bubbles is turned on via regulator. Massage pump is mounted just behind the pool wall to its power will not be reduced. You can move the pump further, but you should change the diameter of the suction and pressure side pipes to prevent a decline in efficiency. The pump and control should be placed in a dry area, where they are not exposed to contact with water. The diagram below shows the dimensions and equipment in a pool pit.



You can choose from wide range of equipment for water massage. Offered devices are permanently mounted in the wall or suspended on the edge. The advantage of these latter is a simple assembly, which can be performed on already existing pool without draining the water. Devices permanently mounted in the pool wall have to be installed during the construction phase. The mounting kit is installed in the wall and after lining the walls with eg. PVC liner, the final set is installed. Most massage devices have the switch integrated with the front panel. It enables starting the massage pump from the water. The switches are also offered for mounting in the pool wall separately. Devices can be also activated by the pool service. We distinguish massages made of plastic and steel and bronze.

About the difference do not need to say much. Sturdy, metal massages not only work better, but are as gold jewelry in the swimming pool. Of course, plastic jewelry also has its own charm and followers. Durability devices from plastic depends on th quality of material used for the production of PVC, type and content of chemicals in the water. Massages from metal are indestructible and efficient. They are unique decoration of the pool. Like all elements in the pool need earthed, to were neutral chemically and physically.

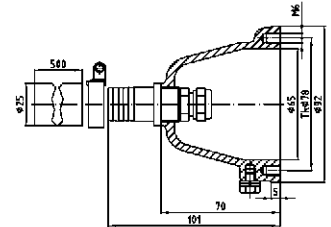
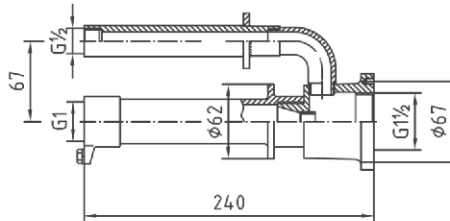
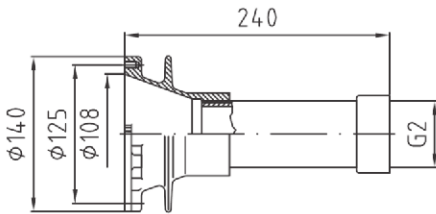
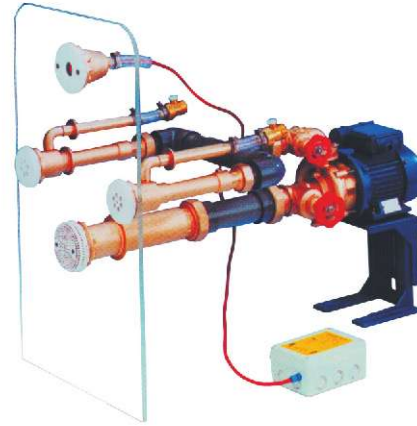



**Massage STANDARD**

Made from bronze, hydromassage for mounting in the pool wall. Set with pump from bronze, nozzles from steel V4A, suction nozzle with sieve, pneumatic switch and control box.

name	code
mounting set, 2-nozzles	374480
final set, pump 18 m <sup>3</sup> /h, 0,5 kW, 230 V	374490
sealing flange	374485
mounting set, 4-nozzles	374491
final set, pump 40 m <sup>3</sup> /h, 1,5 kW, 230 V	374493
sealing flange	374492
mounting set, 6-nozzles	374494
final set, pump 40 m <sup>3</sup> /h, 1,5 kW, 230 V	374496
sealing flange	374495

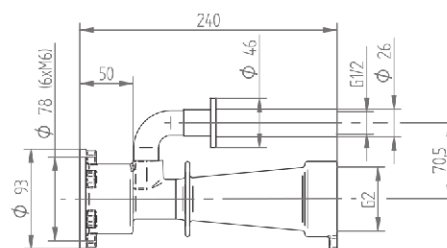
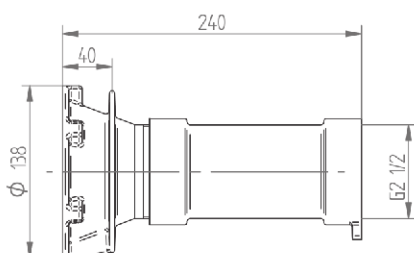
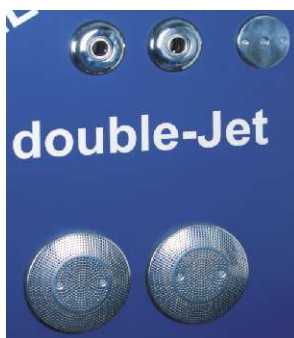
code
374480
374490
374485
374491
374493
374492
374494
374496
374495



**Massage Double -Jet** is a strong, two-nozzle massage, with pump efficiency 63 m<sup>3</sup>/h, power 2,6 kW fed by 400 V. Two powerful suction elements force the water to the two small outlet nozzles. Sensor switch activates the massage (included in the set).

name	code
mounting set	374630
final set	374635

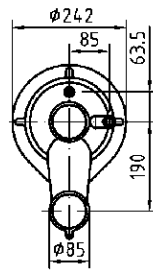
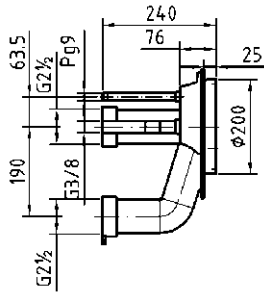
code
374630
374635





**Tajfun Jet**

The absolute king of the hydromassages for the pools. The best workmanship, the highest class, longevity, lack of service over the years. Massage device is made from bronze and steel. Can be mounted in any type of swimming pool. Device with mounted-in sensor switch, regulator of water and air outlet. The pump power of 2,6 kW, 400 V, efficiency 63 m<sup>3</sup>/h, speed of water stream, 1 meter in front of the nozzle, is 2 m/sec. Supplied with all components needed to assemble. Few extras must be ordered separately.



name	code
preassembly set 24 cm	374200
preassembly set 15 cm	374205
final set	374220
sealing flange	374210
steel handle	374225
massage hose	374230
pump base	378658
straight extension	374240
angular extension, 90°	374243
angular extension, 45°	374238

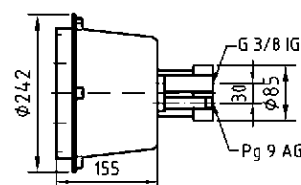
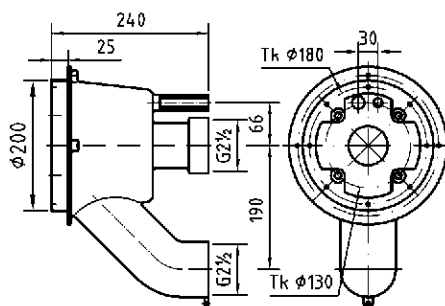




### Tajfun Duo Jet

The absolute emperor of the hydromassages for the pools. The best workmanship, the highest class, longevity, lack of service over the years. Massage device is made from bronze and steel. Can be mounted in any type of swimming pool. Device with mounted-in sensor switch, regulator of water and air outlet. The pump power of 2,6 kW, 400 V, efficiency 63 m<sup>3</sup>/h, speed of water stream, 1 meter in front of the nozzle, is 2 m/sec. Supplied with all components needed to assemble. Few extras must be ordered separately.

name	code
preassembly set 24 cm	374710
final set	374722
sealing flange	374210
steel handle	374225
massage hose with end plug	374730
pump base	378658
straight extension	374240
angular extension, 90°	374243
angular extension, 45°	374238





**Jet Swim 2000**

Incredibly strong massage with efficiency 96 m<sup>3</sup>/h, whose pump 4 kW, 400 V works into high gear from the first seconds after switching on. The device with mounted-in switch, regulator of water and air outlet. Mounting set must to be ordered together with the front of massage.



name	code
mounting set for tile pool	380032
mounting set for liner pool	380034
massage front	380036
bronze pump	380038
control box	380040

**Steel bottom massage**

Device of water and air massage made of bronze and steel. Pump 2,2 kW, 400 V, efficiency 45 m<sup>3</sup>/h obtained on the one nozzle mounted in the pool bottom. The set with a bronze pump, massage nozzle, suction nozzle, air valve.



**Jet Swim 1200**

Jet Swim 1200 is a unique, high quality, durability and strong massage with a capacity of 70 m<sup>3</sup>/h, whose pump from plastic or bronze 2,2 kW, 400V works into high gear from the first seconds after switching on. The device with regulation: water flow, water jet force and air flow. The mounting set must to be ordered together with the front of massage. Made from bronze and polished steel.



name	code
mounting set, tile	380022
mounting set, liner	380044
massage front	380046
pump from plastic	10078
pump from bronze	380048
PN control box	375147

name	code
mounting set	375036
final set	375038
flange with gaskets	375010
Control from the water must be ordered separately.	



### Combi Whirl

Mighty power of water and air massage with an efficiency up to 115 m<sup>3</sup>/h. Each nozzle forms a separate massage position. Obliquely placed in the wall, confer the possibility of massage of different parts of your body. Made from bronze and steel for assembly in the pool wall. The set with a massage pump 400 V, massage nozzles, suction nozzles, air valves.

name	code
mounting set, 1-nozzle	375000
final set, 45 m <sup>3</sup> /h, 2,2 kW	375020
sealing flange	375010

final set, 2-nozzle	375002
final set 63 m <sup>3</sup> /h, 2,6 kW	375022
sealing flange	375012

mounting set, 3-nozzles	375004
final set, 100 m <sup>3</sup> /h, 4,0 kW	375024
sealing flange	375014

mounting set, 4-nozzles	375006
final set, 100 m <sup>3</sup> /h, 4,0 kW	375026
final set, 115 m <sup>3</sup> /h, 5,5 kW	375028
sealing flange	375016

Control from the water must be ordered separately.



### Pneumatic control

name	code
PN controller Tebas to 2,2 kW, 230 V (9-14 A)	375146
to 2,2 kW, 400 V (4-6,3 A)	375147
to 4,0 kW, 400 V (6-10 A)	375148
PN controller H.L. to 0,9 kW, 230 V	375154
to 1,1 kW, 230 V	375156
to 2,6 kW, 400 V	375150
to 1,1 kW, 400 V	375152
to 2 x 2,2 kW, 400 V	375158
to 2 x 2,6 kW, 400 V	375164
to 4,0 kW, 400 V	375180
to 5,5 kW, 400 V	375181

### Pneumatic switches

name	code
set for tile pool, steel	375155
as above, white	7010190
set for liner pool, steel	375160
as above, white	7010290
pneumatic switch housing from bronze	8710050
insert of PN switch, steel	8712020
pneumatic switch from switch	375149
3-function pneumatic switch (on-air control-off) for min. 2 nozzles	375175

### Sensor switch H.L.

name	code
sensor controller to 0,9 kW, 230 V	7337650
to 1,1 kW, 400 V	7336850
to 2,0 kW, 400 V	7336650
to 2,2 kW, 230 V	7336750
to 2,2 kW, 400 V	7336540
to 2,6 kW, 400 V	375166
to 4,0 kW, 400 V	7336350
to 5,5 kW, 400 V	7336450
sensor switch niche	375168
insert of sensor switch	375167
sealing flange	375169





## WATER MASSAGE DEVICES

### Hurricane - made in EU

Water massage device made of ABS plastic. The front is made in an attractive unique form. In the front panel is a PN button for activating pump operation, regulation of air inflow for bath with bubbles, nozzle with adjustable water flow. These functions are operated from the pool. The device is suitable for all types of pools. Flange with gaskets is always supplied in the set. The set contains: a pump 400 V, front, pneumatic controller. Pipes must be ordered separately as required. Efficiency given at H= 3 m.



name	code
mounting set	40040
Hurricane, 70 m <sup>3</sup> /h, pump 2,2 kW	40050
Hurricane, 80 m <sup>3</sup> /h, pump 2,9 kW	40055
Hurricane, 95 m <sup>3</sup> /h, pump 4,0 kW	40060
fitting set for 70 m <sup>3</sup> /h	40047
fitting set for 80 and 95 m <sup>3</sup> /h	40057
massage hose	40062

### Tender - made in EU

Original water massage device made of ABS plastic. This is not Asian copy offered by some companies. The front is made in an attractive unique form. In the front panel is a PN button for activating pump operation, regulation of air inflow for bath with bubbles, nozzle with adjustable water flow. These functions are operated from the pool. The device is suitable for all types of pools. Flange with gaskets is always supplied in the set. The set contains: a pump 400 V, front, pneumatic controller. Pipes must be ordered separately as required. Efficiency given at H= 3 m.



name	code
Tender, 70 m <sup>3</sup> /h, pump 2,2 kW	40070
Tender, 80 m <sup>3</sup> /h, pump 2,9 kW	40072
Tender, 95 m <sup>3</sup> /h, pump 4,0 kW	40074
fitting set for 70 m <sup>3</sup> /h	40047
fitting set for 80 and 95 m <sup>3</sup> /h	40057

### Badu Jet Smart - made in SPECK

Device from ABS with a high-performance pump 45 m<sup>3</sup>/h. By means of the nozzle, the strength of the water outflow is regulated. In the front panel is a PN button for activating pump operation and regulation of air inflow for bath with bubbles, nozzle with adjustable water flow. These functions are operated from the pool. The device is suitable for all types of pools. Contains all the elements for the smooth operation of the device: pump, PN control box, front. The valves and pipes must be ordered separately.



name	code
mounting set	370715
Smart 45 m <sup>3</sup> /h, 400 V	370822
Smart 40 m <sup>3</sup> /h, 230 V	370827



### Badu Jet Super-Sport - made in Speck

Device for water massage with pump 75 m<sup>3</sup>/h, 400 V, power 3,0 kW. Made of plastic with unusual chemical composition. Thanks to this was reached high durability, which results in the decades of trouble-free working. Very wide water jets is generated by two nozzles. The device is activated from the pool via PN button. Regulation of water inflow for bath with the bubbles can be freely adjusted from the pool. The device is suitable for all types of pools.

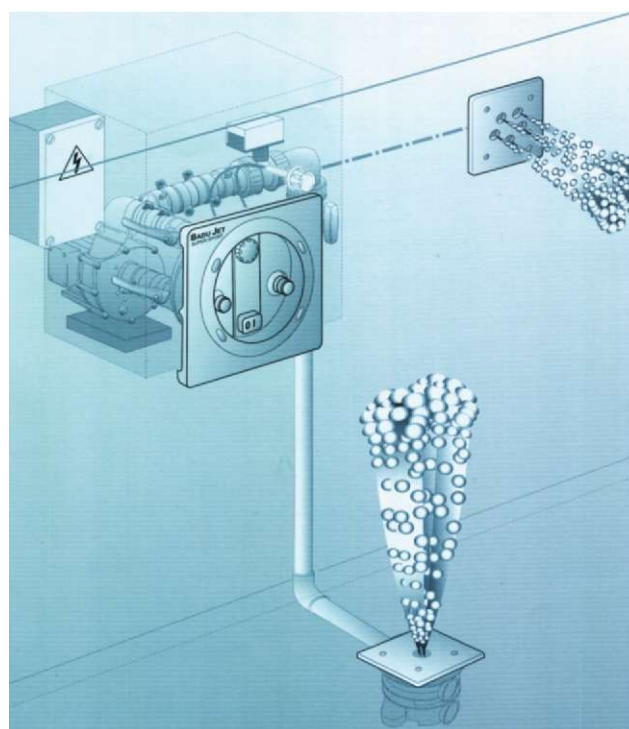


name	code
mounting set	370215
final set	370312
massage hose	370525
nozzle stopper 40 mm	370560
pump base	370567

### Badu Jet Super Sport with massage station - made in Speck

This device will give you superb effect of water and air massage. The power, which can not be experienced with the other devices. Device with additionally mounted nozzle massage. Special nozzle construction enables full use of the pump power, giving a wonderful effect. The device is suitable for all types of pools. Mounting set is embedded before finishing the pool interior. The final set contains all necessary elements (without piping) for the smooth operation of the device: pump, control box, magnetic valve, PN switch, covers.

name	code
mounting set of massage station, nozzle for mounting in the bottom or in the wall	371025
mounting set of massage station, nozzle for mounting in the wall	371035
final set	371045

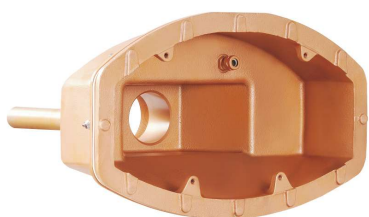




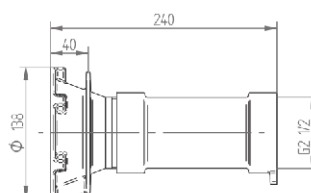
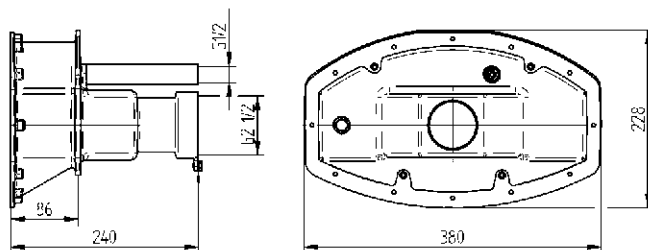


**Cyclon Duo, Cyclon**

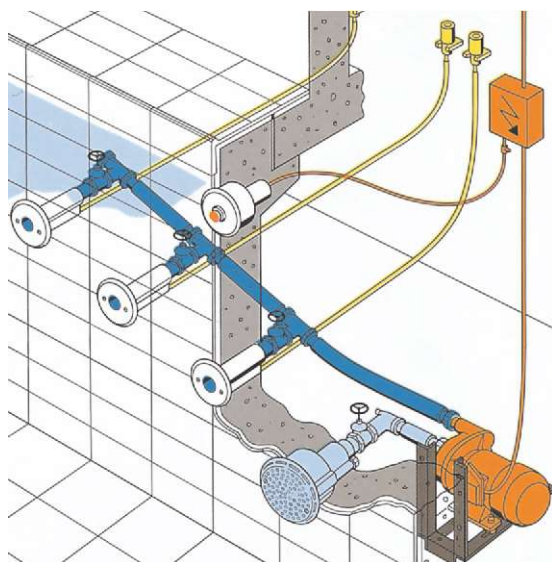
It is completely new generation of massage device intended primarily for hotel pools. Both nozzles provide a unique massage, characterized by a wide field of operation and adjustable, from the front panel, outflow power from 36 to 60 m<sup>3</sup>/h. Sensor switch enables activating from the pool. In the front panel there is also regulation of power of air inflow. Wide spacing of suction nozzles provides adequate amount of the water and does not cause the effect of the sucking into the covers. The final set contains all the elements needed for installation among others pump from bronze 400 V with power 2,6 kW, 5,5 A.



name	code
mounting set of Cyclon Duo	374170
mounting set of Cyclon	374172
final set of Cyclon Duo	374175
final set of Cyclon	374177
sealing flange	374173



**UWE Jet Libra** specialist in topical massage. Arranged three, four or five nozzles at different heights, thanks to which you can massage a various parts of the body from the feet up to neck. The high pressure of stream that is achieved thanks to a small cross-section of nozzle, works in a soft and pleasant way on the body. Efficiency of the device 40-65 m<sup>3</sup>/h, voltage 400 V, power 3,5 kW.



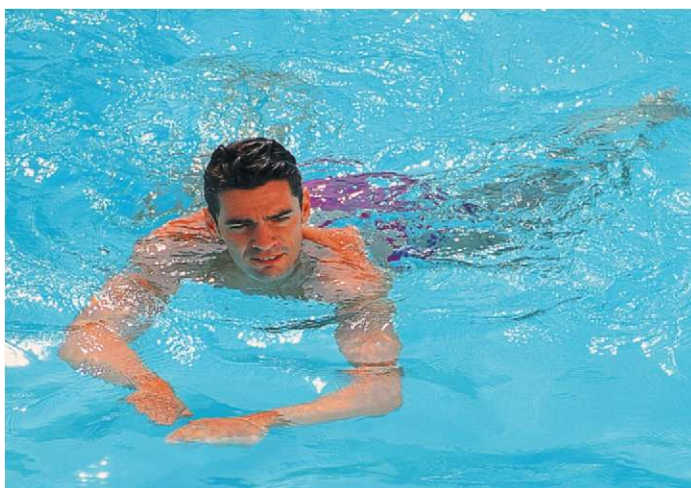
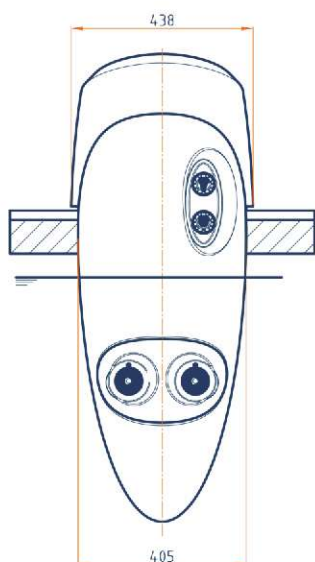
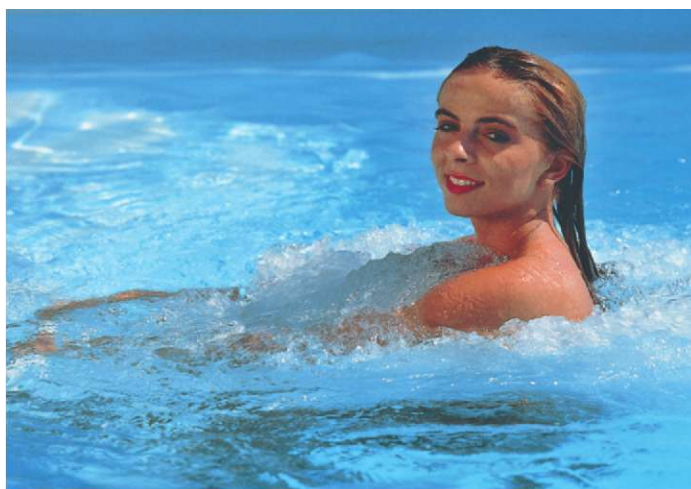
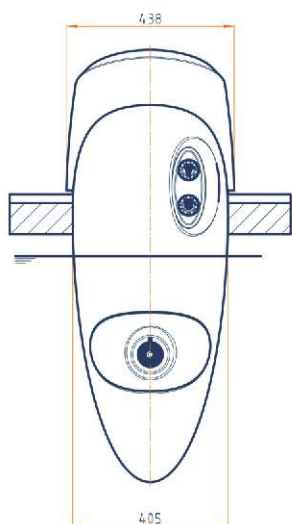
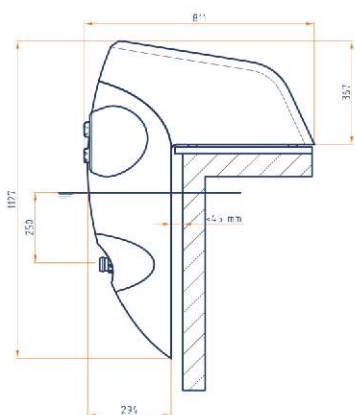
name	code
mounting set from ABS 3 nozzles	371705
4 nozzles	371706
5 nozzles	371707
sealing flange 3 nozzles	371710
4 nozzles	371711
5 nozzles	371712
final set, steel caps 3 nozzles	371715
4 nozzles	371716
5 nozzles	371717
pump wall base	373307
flexible pipes 3 nozzles	371720
4 nozzles	371721
5 nozzles	371722
niche of PN switch	371750
sealing flange of PN switch	371755
PN switch, steel, with control box	371763





**Badu Jet - suspended massages**

Are ideal for later installation in all of the swimming pools. The pleasure and the attractiveness of the bath increases in proportion to the time spent with the Badu Jet. Are powered by 230 or 400 V. Turning on and regulation of air inflow is activated from the pool. The nozzles have regulated outflow strength and are readjusted. Devices are also offered in a version with SPOT lamp. Inconspicuous-looking Badu Jet at the picture, in fact are powerful machines, which are not easy to overcome.





**Badu Jet - suspended massages - made in Speck**

Sporty and elegant look of the new generation Badu Jet, created by professional designers. Technology advanced material used in the production from a practical point of view provides a perfect look for years. High quality material offers excellent resistance and housing soundness. A special coating, giving white, shiny finish, improves resistance to scratches, UV radiation and chemicals. The units are factory equipped with white or color LED lighting. Regulation of the water outflow takes place on the nozzles, which can be rotated in all directions. In the machine are built-in the power switch and the LED lighting switch. The Badu Jet is undoubtedly attraction for each using the pool, especially for children. The Perla and Riva have 1 nozzle. The Stella is the strongest 2 nozzles massage.

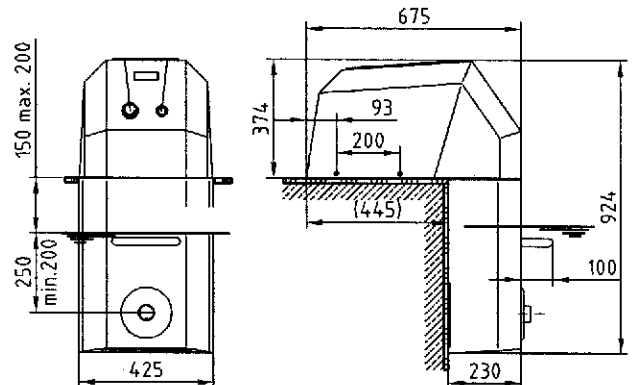


name		code
Perla 40 m <sup>3</sup> /h, 400 V, LED	white	370836
	color	370837
Perla 40 m <sup>3</sup> /h, 230 V, LED	white	370844
	color	370845
Stella 75 m <sup>3</sup> /h, 400 V, LED	white	370852
	color	370853
Riva 58 m <sup>3</sup> /h, 400 V, LED	white	370917
	color	370918
Riva 58 m <sup>3</sup> /h, 230 V, LED	white	370924
	color	370926
lid - wooden imitation		370855

**Startblock - suspended massages** strong devices, suspended on the pool edge. Available in version with 1 or 2 nozzles from stainless steel. Pump 2,6 kW, 400 V with efficiency 60 m<sup>3</sup>/h. The switch and air regulator integrated with the machine.



name	code
Startblock, 1-nozzle, 60 m <sup>3</sup> /h	7805090
Startblock, 2-nozzles, 60 m <sup>3</sup> /h	7808090





### Air-bubble seat

Air massage device constructed in the shape of the bench. Activated from the pool, gives a great massage effect and bath with air bubbles. Once activated air system gives a feeling of lightness and relaxation. The cover is made of polished stainless steel of the highest quality A4 and provides additional decoration of your pool. Special construction of piston pump allows to achieve adequate efficiency with a small power. Do not forget to do air loop during the installation min. 30 cm above the water. Mounting depth is 40-55cm below the water level.

### Air-bubble seat for 1 person

The final set with the air pump with piston 0,5 kW, 230 V. Piston pump can be placed for some distance from the pool and it does not deteriorate the effect of massage seat.

name	code
mounting set, width 500 mm	376200
mounting set, width 250 mm	376100
final set, width 500 mm	375210
final set, width 250 mm	375212
cover of seat, width 500 mm, with gasket	8795020
cover of seat, width 250 mm, with gasket	8795120

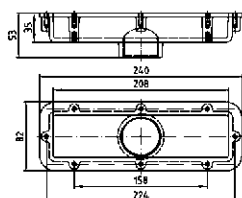
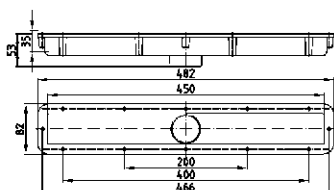


### Air-bubble seat for 2 persons

The final set with the air pump with piston 0,9 kW, 230 V. Piston pump can be placed for some distance from the pool and it does not deteriorate the effect of massage seat.

name	code
mounting set, width 500 mm	376205
mounting set, width 250 mm	376105
final set, width 500 mm	375215
final set, width 250 mm	375217

The control from the water must be ordered separately.





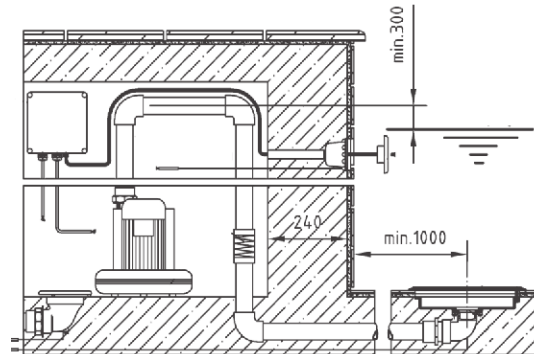
# WATER MASSAGE DEVICES

## Bottom air-bubble system

The air is pumped into the cover with a plurality of holes, through which it comes out in the form of bubbles into the water, giving a great effect. The pipeline must have air loop, protruding above the water. The final set consist of PN button, controller, pump 1,1 kW, 230 V, 135 m<sup>3</sup>/h, return valve and cover.



name	code
mounting set, horizontal output 2"	378700
vertical output 2"	378702
with lighting	378751
final set wit air pump	378710
final set with lighting	378753
sealing flange	378705
cover of massage	378760
cover of massage with lamp 50 W	378762
cover of massage with lamp LED 4x3 W RGB	378764



**Air massage couch** Just lay comfortably in and turn on the unit to feel the gentle, relaxing and intense touch of air, covering the whole body. Result: evenly massage of whole body. Pleasantly relaxing, foaming, soft and strong massage that makes bath leaves an unforgettable impression. The blower forces air into the channels of the device and by the appropriate amount of nozzles, air bubbles come into the water, making your body weighs almost nothing.



name	code	code	code	code
mounting set, 1-person, tile pool	375070	2-persons, tile pool	375072	3-persons, tile pool
final set, 1-person, tile pool	375090	2-persons, tile pool	375092	3-persons, tile pool

The control from the water must be ordered separately.

steel covers (2 pcs.) of couch, tile pool	8755020	steel covers (2 pcs.) of couch, liner pool	8755120
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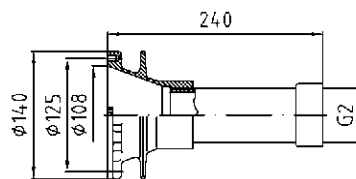
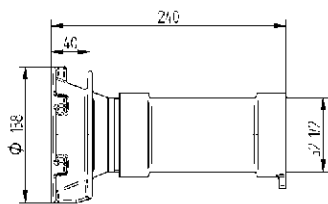


### Elements of hydromassages

With the following elements you can individually create a water massage, corresponding to your own needs and expectations. To the elements you need to select massage pump and control.

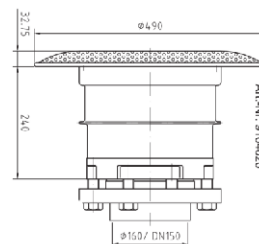
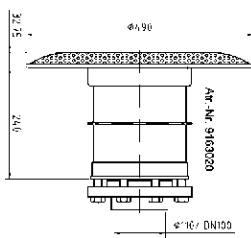
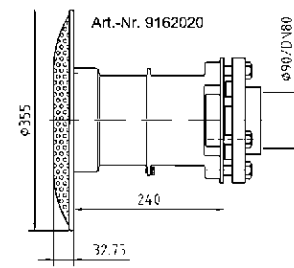
#### Suction nozzle from bronze

name	code
nozzle DN 65, G2½" I.T., L. 240 mm	8641050
nozzle DN 65, G2" I.T., L. 240 mm	8661050
suction nozzle cover	8671520
sealing flange	375102



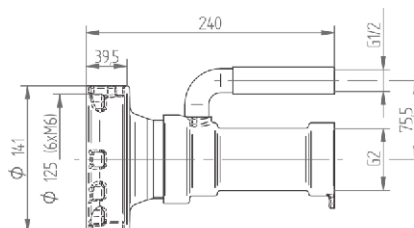
#### Suction nozzle from nozzle

name	code
nozzle DN 80 with sieve	9162020
sealing flange of nozzle DN 80	9162550
nozzle DN 100 with sieve	9163020
sealing flange of nozzle DN 100	9163550
nozzle DN 150 with sieve	9164020
sealing flange of nozzle DN 150	9164550



#### Pressure-side nozzle from bronze

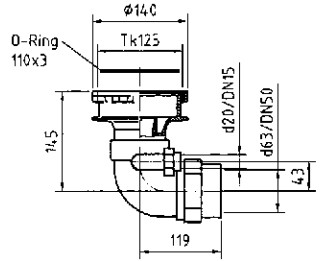
name	code
pressure-side nozzle G2" I.T.	8662250
cover of pressure-side nozzle	8673820
sealing flange	375102





**Elements of hydromassages**

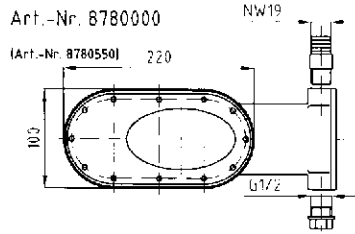
With the following elements you can individually create a water massage, corresponding to your own needs and expectations. To the elements you need to select massage pump and control.



Art.-Nr. 8663450

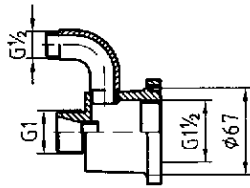
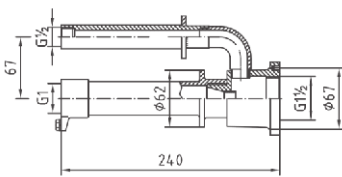
**Angular nozzle from bronze**

name	code
angular nozzle 63 mm I.G.	8663450
nozzle cover	8673820
sealing flange	375102



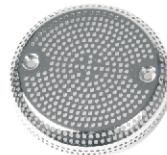
**Slanted nozzle from bronze**

name	code
nozzle of artificial river, with cover	8780000
sealing flange	8782000
nozzle elbow 90°	8782250
nozzle elbow 60°	8782350



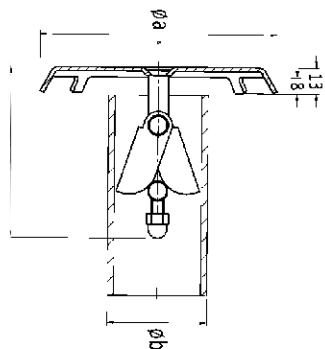
**Pressure-side nozzle from bronze**

name	code
pressure-side nozzle, G1" I.T. and 1 1/2"	8669850
pressure side-nozzle, G1" I.T. and 1 1/2", short	8669050
cover of pressure-side nozzle	8697520
flange of pressure-side nozzle cover	8436500
massage nozzle G1 1/2" E.T.	8669420
massage nozzle G1 1/2" E.T. with 1 eyelet	8669220



**Cover of nozzle from steel**

name	code
universal cover, max. 25 m <sup>3</sup> /h a = 165 mm    b = 50-63 mm	87198033
universal cover, max. 40 m <sup>3</sup> /h a = 240 mm    b = 63-75 mm	87198034



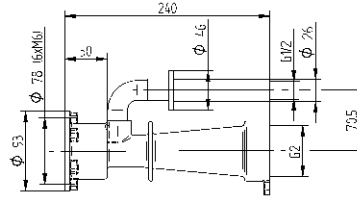


### Elements of hydromassage

With the following elements you can individually create a water massage, corresponding to your own needs and expectations. To the elements you need to select massage pump and control.

#### Pressure-side nozzle from bronze

name	code
pressure-side nozzle G1½" I.T.	7690450
nozzle cover with gasket	7690020



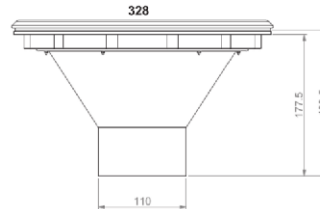
#### Suction nozzle from plastic

name	code
nozzle G2½" E.T., liner pool, max. 45 m³/h	11795
nozzle G2½" E.T., tile pool	11796



#### Suction nozzle from plastic

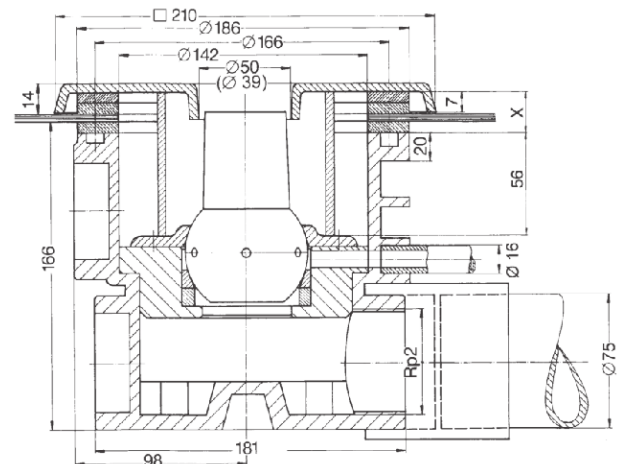
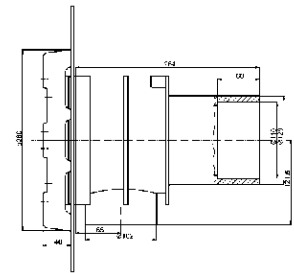
name	code
nozzle 90 mm I.G., liner pool, max. 26 m³/h	11795a
nozzle 90 mm I.G., tile pool	11796a
nozzle 90 mm I.G., liner pool, steel cover	08316
nozzle 90 mm I.G., tile pool, steel cover	08317



#### Badu nozzle from plastic

Wall/bottom nozzles for mounting in all types of pools. Designed for topical massage of whole body. Can be combined in the massage kits.

name	code
suction nozzle 110 mm, max. 55 m³/h	371050
nozzle 40 mm, G2" I.T., max. 55 m³/h	371055
nozzle 28 mm, G2" I.T., max. 35 m³/h	371060
nozzle 5x19 mm, G2" I.T., max. 55 m³/h	371060







**Elements of hydromassages**

With the following elements you can individually create a water massage, corresponding to your own needs and expectations. To the elements you need to select massage pump and control.



**Pressure-side nozzle from plastic**

name	code
nozzle 50 mm I.G., max. 15 m <sup>3</sup> /h, tile	32370
nozzle 50 mm I.G., max. 15 m <sup>3</sup> /h, liner	32371

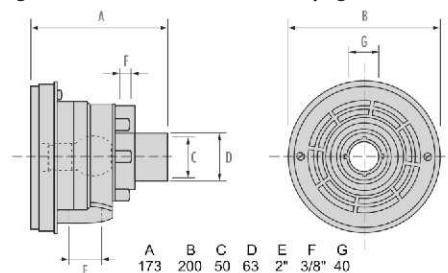


**Pressure-side nozzle from plastic** mounted in the pool wall, delivered with PN switch and air valve. Nozzle diameter is 40 mm.

name	code
massage nozzle 50 mm I.G.	16862

**Pressure-side and suction nozzle from plastic** is a nozzle 2 in 1, it means that in one nozzle is connected suction pipe (internal thread G2") and pressure pipe 50 mm (internally glued) or 63 mm (externally glued).

name	code
pressure-side & suction massage nozzle	16864



**Round front of Tajfun**

Element made from steel, mounted in the mounting set. Set with 1 nozzle, steel cover (without handle), PN switch, air valve, air and water flow regulation.

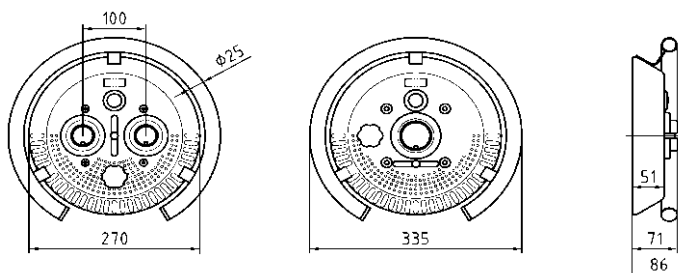
name	code
front PN of Tajfun	7307020
steel handle	374225



**Round front of Tajfun Duo**

Element made from steel, mounted in the mounting set. Set with 2 nozzles, steel cover (without handle), PN switch, air valve, air and water flow regulation.

name	code
front PN of Tajfun DUO	7309920
steel handle	374225





### Elements of hydromassages

With the following elements you can individually create a water massage, corresponding to your own needs and expectations. To the elements you need to select massage pump and control.

#### Round front of Tajfun

Element made from steel, mounted in the mounting set. Set with 1 nozzle, steel cover (without handle), sensor switch, air and water flow regulation.

name	code
front of Tajfun, sensor switch	77307020
steel handle	374225



#### Round front of Tajfun Duo

Element made from steel, mounted in the mounting set. Set with 2 nozzles, steel cover (without handle), sensor switch, air and water flow regulation.

name	code
front of Tajfun DUO, sensor switch	77309920
steel handle	374225



#### Front of Hurricane

Mounted in the mounting set. Set with nozzle with adjustable flow amount, built-in pneumatic switch.

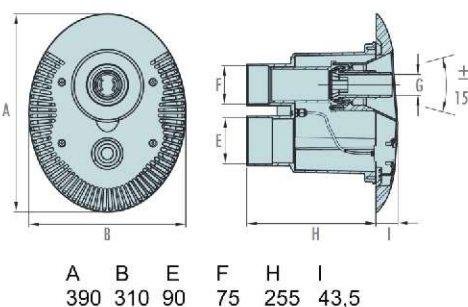
name	code
front of Hurricane	40064
mounting set	40040



#### Front of Tender

Delivered with mounting set. Set with nozzle with adjustable flow amount, built-in pneumatic switch.

name	code
front of Tender	40066



#### Covers of bottom air-bubble system

name	code
mounting set, horizontal output 2"	378700
vertical output 2"	378702
with lighting	378751
sealing flange	378705
massage cover	378760
massage cover with lamp 50 W	378762
massage cover, lamp LED 4x3 W RGB	378764





**Elements of hydromassages**

These electrical boxes are ready to work immediately. All electrical elements, including pneumatic or sensor signal relay are already mounted in the housing. Connect only the power cables.

**Pneumatic controllers Tebas**

Modern design of the box with dimensions 160x160x140 mm. Housing completely waterproof IP67, according to standard PN-EN 60529. Ability to connect pneumatic switch placed in the pool.



for pump with power	code
to 2,2 kW, 230 V (9-14 A)	375146
to 2,2 kW, 400 V (4-6,3 A)	375147
to 4,0 kW, 400 V (6-10 A)	375148

**Pneumatic controllers H.L.**



for pump with power	code	for pump with power	code
to 2,6 kW, 400 V	375150	to 2 x 2,2 kW, 400 V	375158
to 1,1 kW, 400 V	375152	to 2 x 2,6 kW 400 V	375164
to 0,9 kW, 230 V	375154	to 4,0 kW, 400 V	375180
to 1,1 kW, 230 V	375156	to 5,5 kW, 400 V	375181

**Pneumatic switch H.L.**



name	code
set for tile pool, steel	375155
as above, white	7010190
set for liner pool, steel	375160
as above, white	7010290
pneumatic switch housing from bronze	8710050
insert of pneumatic switch	8712020

**Sensor switch H.L.**



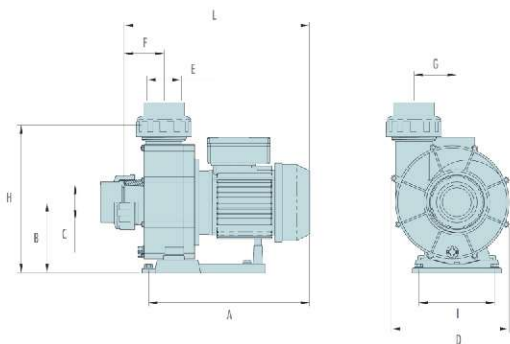
name	code
sensor controller for 2,6 kW, 400 V (5,5-8,5 A)	375166
sensor switch niche	375168
insert of sensor switch	375167
sealing flange of sensor switch	375169



### Pumps for elements of hydromassages

We present only the most popular pumps for water massages. Others can be found in the section swimming pools pumps. For water massage can also install pump fitted with a prefilter.

#### New BCC Series ImI Extra class

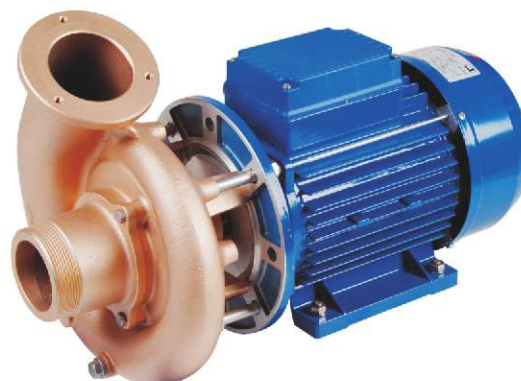


efficiency	power kW	code
45 m <sup>3</sup> /h, 400 V	2,20	10078
65 m <sup>3</sup> /h, 400 V	2,90	10079
80 m <sup>3</sup> /h, 400 V	4,00	10080

A	B	C	D	E	F	G	H	L
410	156	75	260	75	77	95	319	450

#### Jet Series from bronze Lahme Extra class

type	efficiency	power kW	code
suction 2"	45 m <sup>3</sup> /h, 400 V	2,2	378011
suction 2"	38 m <sup>3</sup> /h, 230 V	1,5	378038
suction 2"	63 m <sup>3</sup> /h, 400 V	2,6	378046
suction 2"	63 m <sup>3</sup> /h, 400 V	2,6	378048
suction 90 mm	100 m <sup>3</sup> /h, 400 V	4,0	378050
suction 90 mm	115 m <sup>3</sup> /h, 400 V	5,5	378051



#### Pressure sockets for pumps Jet from bronze

name	code
2" to 1,5 and 2,2 kW	378115
2" to 2,6 kW	378119
2½" to 2,6 kW	378120
90 mm to 4,0 kW	378125

#### Air pump

name	code
pump ES 100, 230 V, 0,75 kW, G1½" I.T.	008502
pump ES 130, 400 V, 1,3 kW, G2" I.T.	008510
pump ES 142, 400 V, 1,75 kW, G2" I.T.	008520
sound silencer G1½" E.T.	008504
sound silencer G2" E.T.	008506



We also offer air pumps with power from 0,4 kW to 13 kW, single-stage and two-stage. Details of these devices on request.



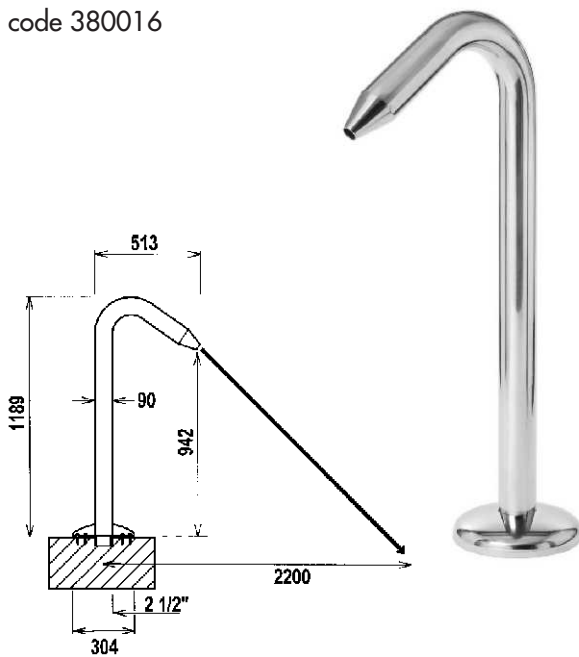
## Stream showers

Showers, also known as water curtains, give a stream of water, which is a massage and also the visual attraction of your swimming pool. All steel components require special maintenance in order to prevent the destruction of the steel. They must be compulsory earthed. Are given the recommended average flow, which can be reduced or increased depending on the desired effect. Factory made provides proper working!!! Do not let yourself to be persuaded to an amateur production, because its effect can be pathetic.

**Water curtain, focused nozzle,** height 1189 mm, flow 25 m<sup>3</sup>/h, connection 2½", steel AISI316, pipe diameter 90 mm.

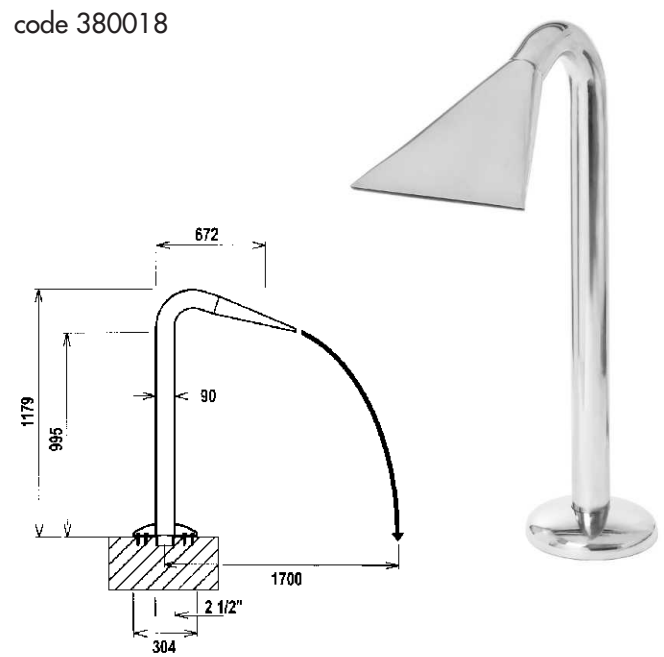
To the water curtain should be selected a pump, control and suction nozzle.

code 380016



**Water curtain Capri, wide nozzle,** height 1179 mm, flow 30 m<sup>3</sup>/h, connection 2½", steel AISI316, pipe diameter 90 mm. To the water curtain should be selected a pump, control and suction nozzle.

code 380018

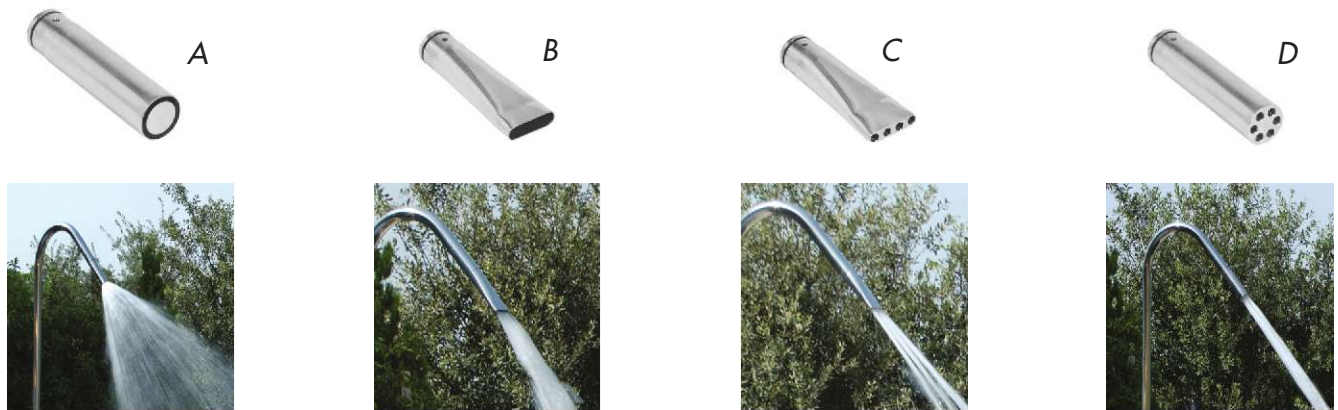
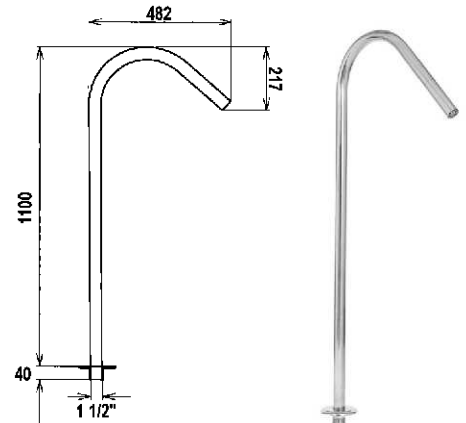




**Stream showers**

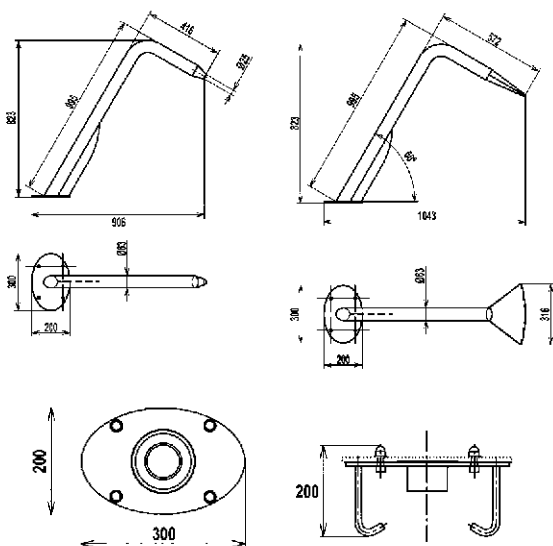
**Water curtain Tahiti**, height 1100 mm, flow 11 m<sup>3</sup>/h, connection G1½" E.T., steel 316, pipe diameter 43 mm. To the water curtain should be selected a pump, control and suction nozzle. The nozzles can be freely changed to obtain each time a different shape of the water stream.

name	code
water curtain without nozzle	380010
nozzle A for water curtain	380011
nozzle B for water curtain	380012
nozzle C for water curtain	380013
nozzle D for water curtain	380014



**Water curtain Fidji**, height 823 mm, flow 12 m<sup>3</sup>/h, connection 2", steel AISI316, pipe diameter 63 mm. To the water curtain should be selected a pump, control and suction nozzle.

name	code
mounting set	380064
Fidji, focused nozzle, polished	380056
mat	380058
Fidji, wide nozzle, polished	380060
mat	380062

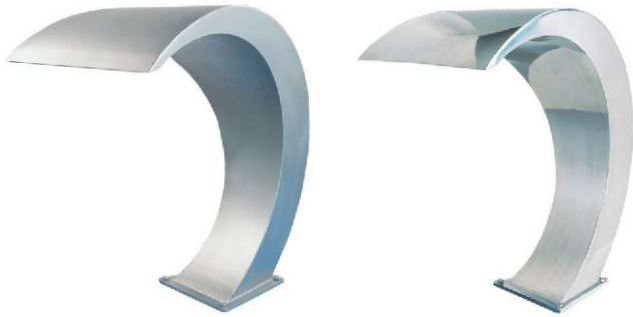




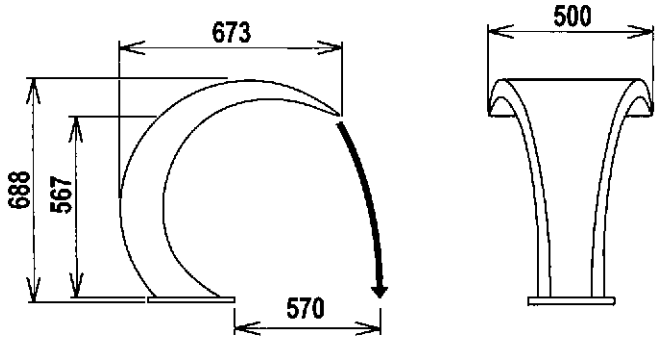
# WATER MASSAGE DEVICES

## Stream showers

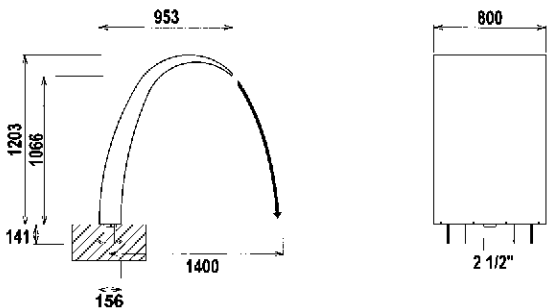
**Water curtain Bali**, height 688 mm, width 500 mm, flow 45 m<sup>3</sup>/h, steel 316, mat or polished. To the water curtain should be selected a pump, control and suction nozzle.



name	code
mounting set	380004
water curtain Bali mat	380000
polished	380002



**Shower Victoria** exclusive water curtain, standing majestically above the pool. The highest quality and utility. Height 1200 mm, width 800 mm, flow 55 m<sup>3</sup>/h, connection G2½", internal thread. Made from steel AISI316. The shower is offered with the mounting set.



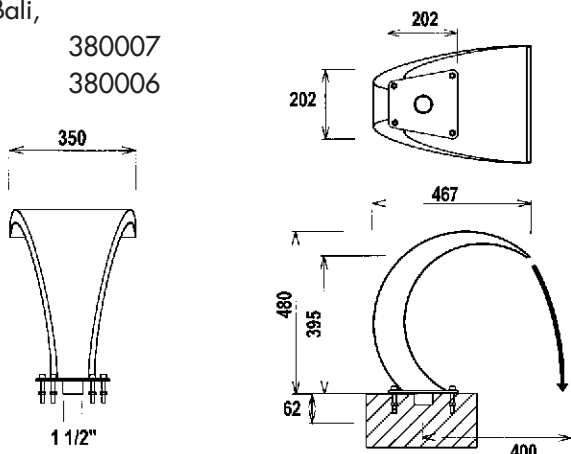
name	code
shower VICTORIA	380050



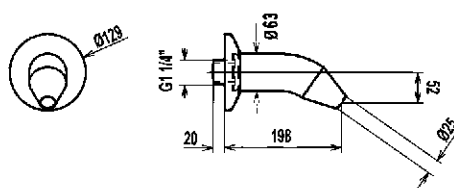
**Stream showers**

**Water curtain MiniBali** height 488 mm, width 350 mm, flow 28 m<sup>3</sup>/h, mat, steel 316 or 304. To the water curtain should be selected a pump, control and suction nozzle. A separate mounting set is not needed.

name	code
water curtain MiniBali,	
steel 316	380007
steel 304	380006

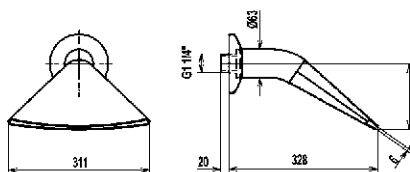


**Water curtain Hembra** mounted in the wall above the water. Spectacular and focused stream gives an intensive water massage. Pipe 63 mm, external thread G1 1/4", length 198 mm, outflow 25 mm, flow 12 m<sup>3</sup>/h. To the water curtain should be selected a pump, control and suction nozzle.



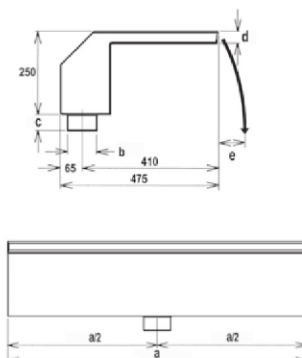
code 380066

**Water curtain Rosca** usually mounted in the wall above the water. Strong and wide stream gives an intensive water massage. Pipe diameter 63 mm, external thread G1 1/4", length 198 mm, outflow 6 mm, flow 20 m<sup>3</sup>/h. To the water curtain should be selected a pump, control and suction nozzle.



code 380068

**Waterfall MAUI** discreet, flowing out from the wall water stream creates a fantastic view of the waterfall. Mounted in the pool wall, steel 316. To the water curtain should be selected a pump, control and suction nozzle.





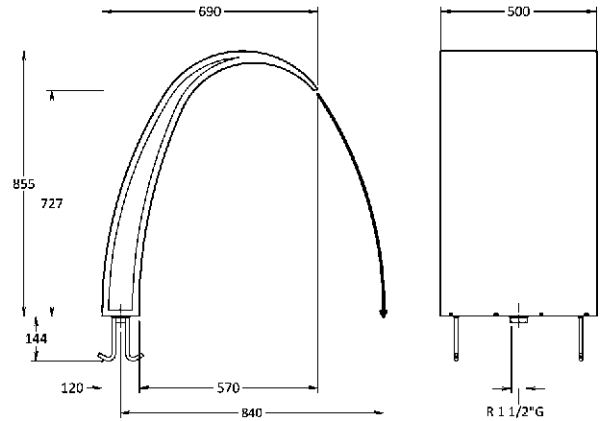


## Stream showers

**Water curtain Iguazu**, height 855 mm, width 500 mm, flow 45 m<sup>3</sup>/h, steel 316, G1½" I.T., made in 3 versions: polished, engraved or in the color of the ocean. To the water curtain should be selected a pump, control and suction nozzle. **Engraved model is absolutely the most advanced technology of production.** Before purchasing look at the demo unit, because the photos do not reflect the character and appearance of this water curtain. The mounting set included.



name	code
Iguazu Arctic, engraved	87186069
Iguazu Brillo, polished	87186067
Iguazu, blue ocean	87186068
concealing cover of screws	87186066





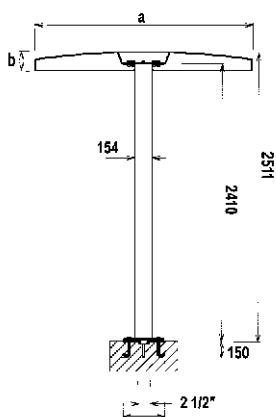
**Stream shower**

**Stream shower Umbrella**

Umbrella is a unique and unusual attraction of your pool. Especially loved by children. The column is made from stainless steel. Height 2511 mm, pipe diameter 154 mm, steel cover diameter 1900 mm, plastic cover diameter 1700 mm. Together with the column, the mounting set is supplied. Connection 2". To the stream shower should be selected a pump, control and suction nozzle.

name	code
shower column with mounting set	22754
cover from steel, diameter a= 1900 mm	22752
cover from polyester, diameter a= 1700 mm	22753

Recommended pump for UMBRELLA = 50 m<sup>3</sup>/h

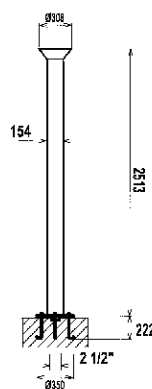


**Stream shower Water Poppet**

Made from stainless steel. Height 2513 mm, pipe diameter 154 mm. Together with the column, the mounting set is supplied. Connection 2½". To the stream shower should be selected a pump, control and suction nozzle.

Recommended pump for WATER POPPET= 35 m<sup>3</sup>/h.

name	code
Water Poppet	19966





**Stream showers**

They are a unique attraction of the swimming pool. Unusual forms decorate your pool, whilst also are very useful devices for massage. Powerful bronze pump 400 V guarantees strong water stream, widely coming out from the water curtain. Manufactured by Hugo Lahme, from the best stainless steel suitable for pools. Are available ready-to-install sets with pump, also only water curtains.

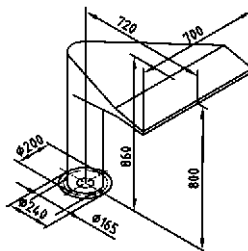


**Mounting set**

name	code
mounting set	375100
sealing flange	375102

**Stream shower CLASSICO**

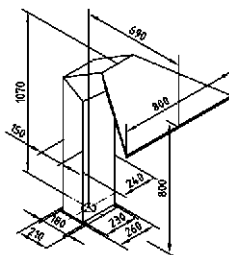
Height 80 cm or 75 cm in Midi version, width of water curtain 70 cm or 50 cm in Midi version, set with pump from bronze 2,6 kW. Control from the water must be selected separately.



name	code
Classico	375112
Classico Midi	375132
water curtain Classico	8731920
water curtain Classico Midi	8731620

**Stream shower STANDARD**

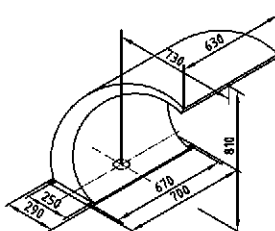
Height 107 cm or 90 cm in Midi version, width of water curtain 80 cm or 50 cm in Midi version, set with pump from bronze 2,6 kW. Control from the water must be selected separately.



name	code
Standard	375114
Standard Midi	375134
water curtain Standard	8732920
water curtain Standard Midi	8732620

**Stream shower RONDO**

Height 81 cm or 63 cm in Midi version, width of water curtain 63 cm or 50 cm in Midi version, set with pump from bronze 2,6 kW. Control from the water must be selected separately.



name	code
Rondo	375118
Rondo Midi	375138
water curtain Rondo	8734920
water curtain Rondo Midi	8734620



### Stream shower

#### Shower CANON STRAIGHT

Often called "water whip" and rightly so. Power of the water flowing out can not be compared with anything else. Canon gives very strong stream of water. Its height is 125 cm (105 cm in MIDI version) and pipe diameter is 90 mm. Can choose from three types shower with an appropriate shape of the stream. Regardless of the type, which you choose, always you will have to deal with a strong, incomparable to anything stream of water. Are made from the best type of steel V4A, characterized by a very high durability and elegance.

name	code
mounting set	375100
sealing flange	375102
final set, pump from bronze 400 V:	
1,1 kW, round ending	375140
2,2 kW, wide ending	375142
2,6 kW, bell-shaped ending	375144
water curtain, round ending	8741920
water curtain, wide ending	8742920
water curtain, bell-shaped ending	8743920



Shower CANON is also available in MIDI version.

#### Shower CANON SLANTED

Water whip in a special slanted shape. Height of 85 cm and pipe diameter of 90 mm. In combination with efficient bronze pump, Canon gives a strong stream of water. Regardless of the type, which you choose, always you will have to deal with a strong, visually attractive massage. Are made from the best type of steel V4A.

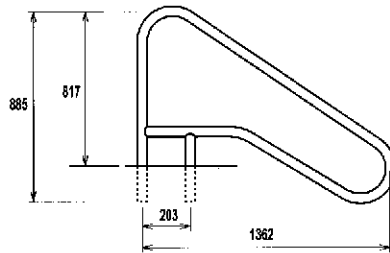
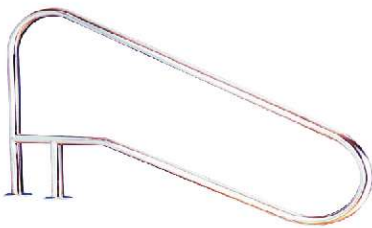
name	code
mounting set	375100
sealing flange	375102
final set, pump from bronze 1,1 kW, 400 V:	
round ending	8800020
wide ending	8801020
round multi-nozzle ending	8802020
round, wide ending	8803020





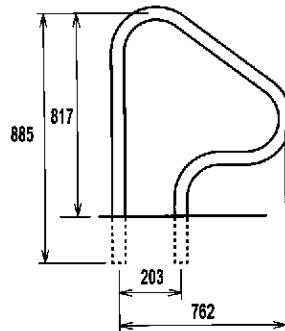
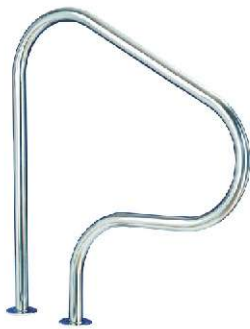
**Pool handrails**

May seem that offered here handrails are a piece of plain, curved pipe, which can be made by everybody. Nothnig could be further from the truth! Is it worth to risk?! All of our handrails are designed by engineers to be functional, safe and tailored to people using them. Has been chosen also a suitable material for production. Used a stainless acidproof steel 316 is austenitic steel chromium-nickel-molybdenum suitable for swimming pools, resistant to high temperatures and with exceptional resistance to corrosion. It is widely used at sea and in the environments, where is exposed to chemicals, salts, acids and high temperatures. Types of steel 316 is a lot, but you can be sure that in our products has been used steel with a suitable composition and the percentage of ingredients.



**Handrail FX-2**

name	code
FX-2 mounted in the ground	87168027
FX-2 mounted on the ground	87468021

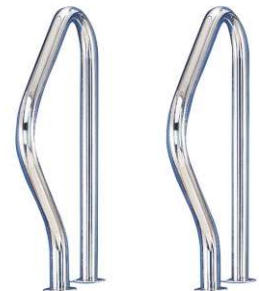
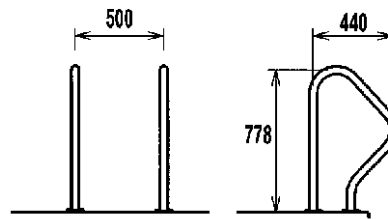


**Handrail FX-3**

name	code
FX-3 mounted in the ground	87164018
FX-3 mounted on the ground	87464010

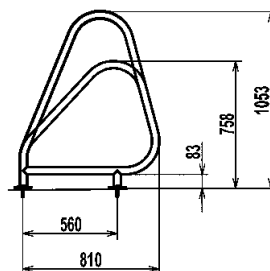
**Handrail FX-7 set of 2 pieces**

name	code
FX-7 mounted on the ground	87100319



**Handrail FX-9 set of 2 pieces**

name	code
FX-9 mounted on the ground	87164012





**Pool handrails**



**Handrail FX-11**

name	A	code
FX-11	500	87180055
	1000	87180105
	1500	87180154
	2000	87180204
	3000	87180303



**Mounting set for handrail FX-11**

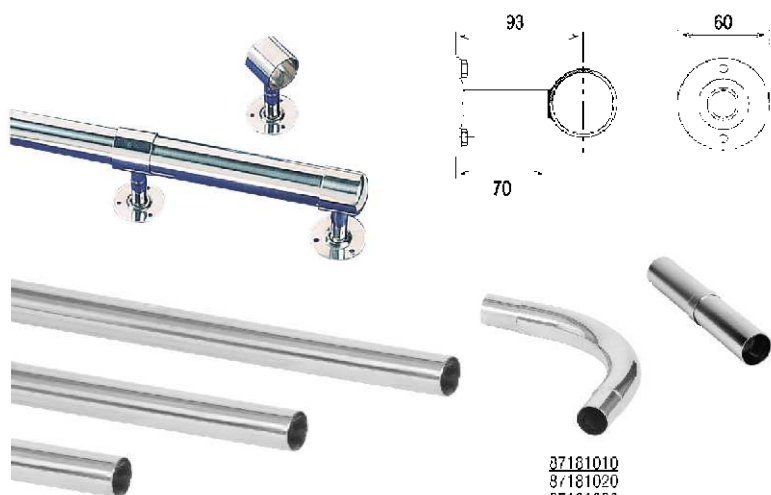
Used in liner swimming pools. Installed before putting on the liner. Improves fixing of handrail in the pool wall. **Code 87100021**



**Handrail FX-12** steel V2A, pipe 40 mm

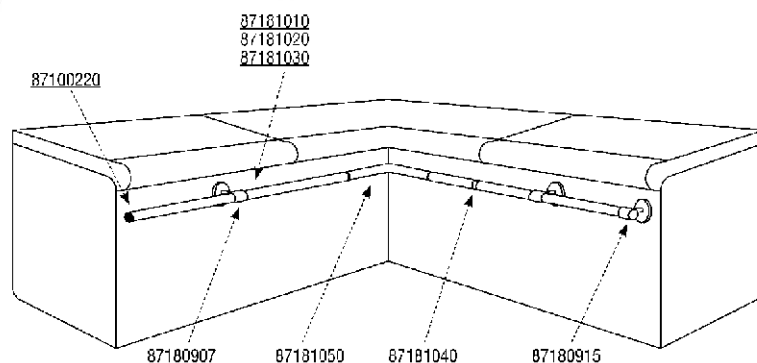
name	code
FX-12 length 100 cm	31131
FX-12 length 200 cm	31132
FX-12 length 300 cm	31133

**Handrail FX-14** submitted of the elements. Elements of the system: handrail pipes, connectors, plugs, wall mounting brackets. The elements are made from polished steel AISI-316, pipe 43 mm.



**Elements of the system FX-14**

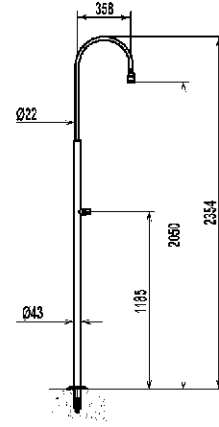
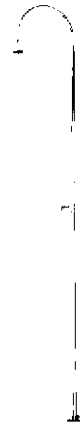
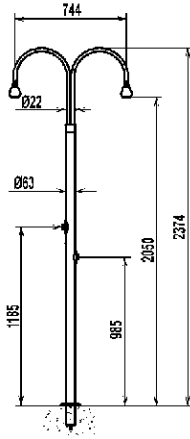
name	code
pipe FX-14 length 100 cm	87181010
pipe FX-14 length 200 cm	87181020
pipe FX-14 length 300 cm	87181030
connector straight	87181040
connector angular 90 degree	87181050
pipe plug FX-14	87100220
wall mounting bracket	87180907
wall mounting bracket, final	87180915
mounting set for liner pool	87100022





**Showers**

We offer exclusive showers, specially desinged for installation in the swimming pools. You can choose several functional and elegant models, depending on individual preferences and needs.



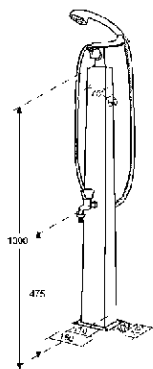
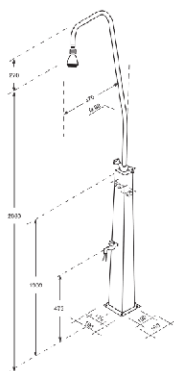
**Shower DOUBLE** mounting set included, weight 8 kg.  
 name code  
 Double 87170072  
 as above, but with automatic shut-off 87170073

**Shower STANDARD** mounting set included, weight 5 kg.  
 name code  
 Standard 87170049  
 as above, but with automatic shut-off 87170064

**Shower Classico, tall, steel V4A**

Exclusive, high quality shower. The upper pipe 32 mm equipped in adjustable ending.

name code  
 Classico, cold water and tap 30100  
 Classico, cold and hot water and tap 30112



**Shower Classico, short, steel V4A**

Exclusive, high quality shower. In the upper part is mounted battery and shower handset with hose.

name code  
 Classico, cold water and tap 30115  
 Classico, cold and hot water and tap 30117

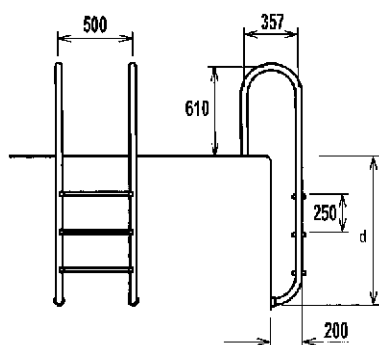


## Ladders

All our ladders are made of high quality, suitable for swimming pools steel.

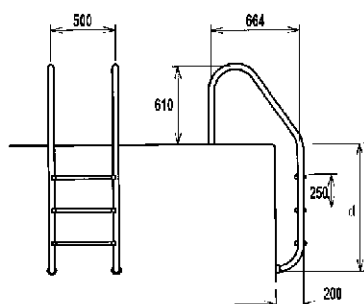
Computer-controlled polishing technique using suitable abrasive material does not cause deterioration of steel structures during the production, which is often in the case unbranded products. During polishing process steel is treated with machining medium. The polishing process of our ladders takes into account the desired intensity of the particles emission from the steel surface and also takes into account the thermo-emission and microcurrents friction. Our ladders are the factory products of Spanish manufacturers (Kripsol and FxPool companies), which have the greatest experience in the production and processing of steel in Europe. During production is taken into account many important factors affecting the quality of the offered product. All ladders have steps with non-slip pads, the pipe diameter is 43mm. Offered in two types of stainless steel - 304 and 316 with increased resistance to salt for example. In accordance with the provisions, ladders and all other steel components in a pool should be earthed by stringing these elements in one circuit.

This prevents the so-called corrosion of stainless steel based on attracting the metal particles present in water and the air.



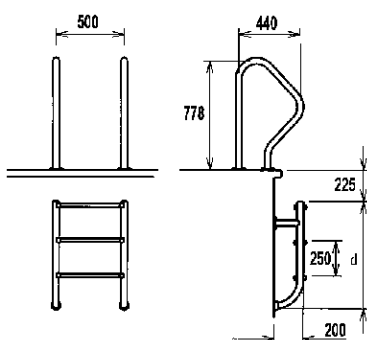
### Lina

steps	steel 304 code	steel 316 code	d in mm
2	30002	87131124	696
3	30003	87131132	946
4	30004	87131140	1196
5	30005	87131157	1446



### Maria

steps	steel 304 code	steel 316 code	d in mm
2	30016	87111928	696
3	30017	87111936	946
4	30018	87111944	1196
5	30019	87111951	1446



### Lina, divided

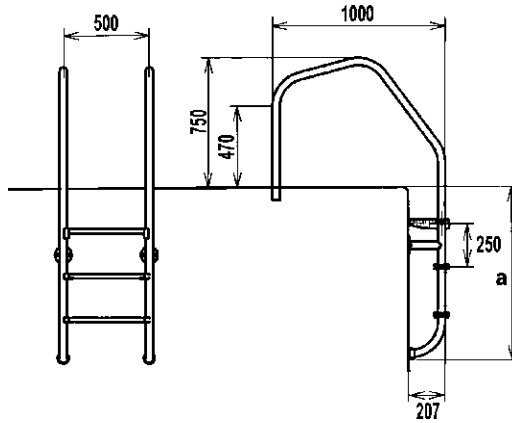
steps	steel 304 code	d in mm
2	30012	515
3	30013	765
4	30014	1015
5	30015	1265





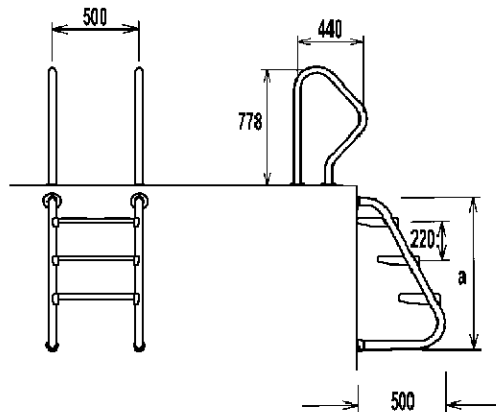
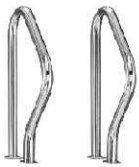
**Ladders**

Ladders are made of high quality, suitable for swimming pools steel. Our ladders are the factory products of Spanish manufacturers (Kripsol and FxPool companies), which have the greatest experience in the production and processing of steel in Europe. All ladders have steps with non-slip pads, the pipe diameter is 43mm. Offered in two types of stainless steel - 304 and 316 with increased resistance to salt for example. Ladders and all other steel components in a pool should be earthed by stringing these elements in one circuit. This prevents the so-called corrosion of stainless steel based on attracting the metal particles present in water and the air.



**Munich**

steps	steel 316 code	a in mm
2	30025	696
3	30026	946
4	30027	1196
5	30028	1146



**Ladder divided, slanted**

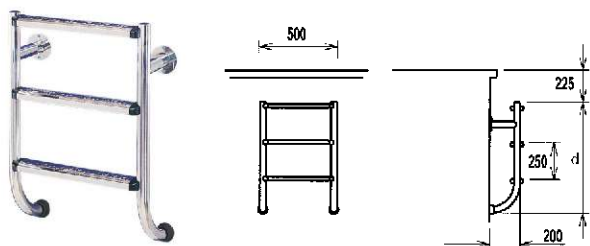
with safety steps

steps	steel 316 code	a in mm
3	87161021	865
4	87161022	1085





**Ladders**



**Lower part of slanted ladder**

steps	steel 316 code	a in mm
2	87174322	515
3	87174330	765
4	87174348	1015
5	87174355	1265

**Accessories for ladders**

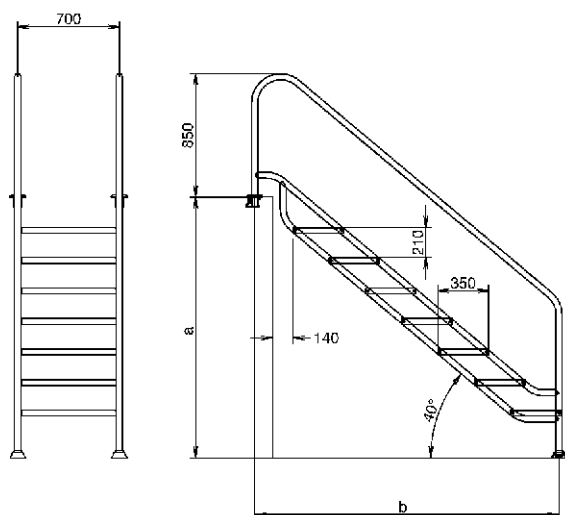
	code
steel flanges	
set of 2 pieces	30022
tilted fastening with flange	30011
without flange	30010
safety step	07603



**Steel stairs for pool**

Sophisticated and elegant stairs made of stainless steel 316. Comfortable steps with dimensions 657x350 mm, made especially as a non-slip. Adjustable height, depending on the pool depth.

steps	steel 316 code	a	b in mm
5	87152020	1100-1340	1600
6	87152021	1350-1590	1850
7	87152022	1600-1800	2100





**Pool shutter covers**

Shutter cover is the most exclusive, the most effective and the most enduring cover to the pool. Profiles used for shutter cover are manufactured exclusively for the purpose of swimming pools. Suitable hitch shape and chemical composition of the profiles provide comfort of use and resistance to pool water. The cover is needed to the pool in hall and in the garden, especially for canopies is mounted. It stops the evaporation of the water, thereby reducing heat loss and energy saving is guaranteed up to 90%. This is done thanks to ventricular building, where located air is an excellent insulation. Profiles, connected together form a rigid cover on the water surface and provide protection against falling into the water. Profiles are tightly closed with plugs mounted on the ends. The shutter cover does not require any guide rails. It is the cover floating on the water. For all shutter covers should be used a winding reel. Manual folding is practically impossible, because of the large weight of the cover.

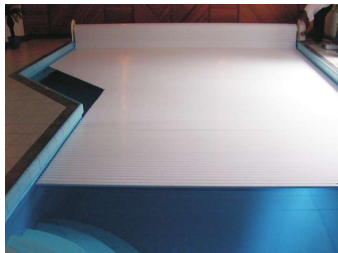
**Pool shutter cover Junior**

The shutter cover with thickness of 11 mm and width of 52 mm, color: white or light grey.

Not suitable for winding reels mounted under the water.



name	code
shutter cover Junior 1 m <sup>2</sup>	027600



**Pool shutter cover Senior and Solar**

The shutter cover with thickness of 14 mm and width 55 mm, color: white, light grey, beige, blue and green. Mounted on the underwater or surface winding reel.



name	code
shutter cover Senior white or light grey 1 m <sup>2</sup>	027900
as above, but blue, beige or green 1 m <sup>2</sup>	027901
shutter cover Solar, transparent 1 m <sup>2</sup>	027905



**Accessories for shutter covers Junior i Senior**

name	code	name	code
swining hinges at the gutter, for 1 lin. m.	027985	guide rollers for RNU type installation	027903
cutting for the ladder	027610	round cutting above r= 0,5 m	027607
round cutting to r= 0,5 m	027605	cutting Senior to the Roman stairs to r= 3 m	027615
cutting the Junior to the Roman stairs to r= 3 m	027614	across cutting for 1 lin. m.	027620
cutting the Solar to the Roman stairs to r= 3 m	027617	transport of the shutter cover	027702
grasping element by the stairs	027625		



## Pool shutter covers

### Surface winding reel „Solo“

Subtle and pleasant electric winding reel Solo is mounted on the edge of the pool. Dedicated to the shutter cover Junior and Senior, but also to the Seniorita. It is composed of: motor 24 V, 2 side stands, pipe from steel, transformer, electronic system of work programming of the shutter cover, manual switch mounted in the stand or bulk. The motor is located next to the winding reel. Control must be placed in a warm, dry place.

name	code
pool up to 4,0 x 8,0 m	027640
5,0 x 12,0 m	027645
6,0 x 15,0 m	027648
7,0 x 15,0 m	027650



**Surface winding reel Quadro** it is electric winding reel, mounted on the edge of the pool, with construction for casing of wood or plastic. Dedicated to the shutter cover Junior and Senior, but also to the Seniorita. It is composed of: motor 24 V, 2 side stands, pipe from steel, construction for casing, transformer, electronic system of work programming of the shutter cover, manual switch mounted in the stand or bulk. The motor is located next to the winding reel. Control must be placed in a warm, dry place.

name	code
pool up to 4,0 x 8,0 m	027920
5,0 x 12,0 m	027925
6,0 x 15,0 m	027930
7,0 x 15,0 m	027932



### Wooden casing of winding reel Quadro

Made of a special wood Sipo-Mahagoni. The casing is delivered always with the winding reel.

name	code
upper casing 1 lin. m.	027685
front casing 1 lin. m.	027690
rear casing 1 lin. m.	027695



**Surface winding reel Rondo** it is electric winding reel, mounted on the edge of the pool, with a special, round construction for casing from plastic in color of the shutter cover. Dedicated to the shutter cover Junior and Senior, but also to the Seniorita. It is composed of: motor 24 V, 2 side stands, pipe from steel, construction for casing, transformer, electronic system of work programming of the shutter cover, manual switch mounted in the stand or bulk. The motor is located next to the winding reel.

Control must be placed in a warm, dry place.

name	code
pool up to 4,0 x 8,0 m	027940
5,0 x 12,0 m	027942
round casing 1 lin. m.	027945

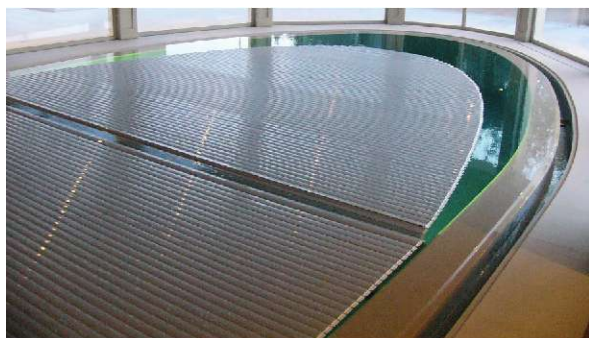




Pool shutter covers

**Underwater winding reel**

Dedicated to the shutter cover Junior and Senior, but also to the Seniorita. It is composed of: motor 24 V, pipe from steel, manual switch, transformer, wall culvert, electronic system of work programming of the shutter cover. "Easy" version is installed without interfering in the pool wall. There are several types of winding reels, depending on the mounting location. The winding reel is adapted to the pool size.

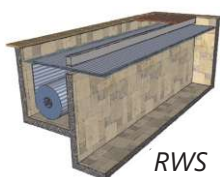


name	code
pool up to 4,0 x 8,0 m	027960
"Easy" version	027961
5,0 x 12,0 m	027965
"Easy" version	027966
6,0 x 15,0 m	027970
"Easy" version	027971
7,0 x 15,0 m	027975
"Easy" version	027976

**Accessories for surface and underwater winding reel**

name	code
shutter cover remote control switch	027675
shutter cover key switch	027670
manual driving mechanism	028130
automatic driving mechanism	028132
lid for reel type SIB and AUK 1 lin. m.	027980
lid for reel type IBL 1 lin. m.	027982
lid for reel type RNO and RNU 1 lin.m.	027984
automatic hatch of reel type AUK and SIB	
max. pool size 4 x 8 m	027986
max. pool size 5 x 12 m	027988
max. pool size 6 x 15 m	027990
support beam type RWS to width 4 m	028000
to width 5 m	028002
to width 6 m	028004
to width 7 m	028006
wooden lid	
to width 60 cm of reel niche type RWS	028010
to width 80 cm of reel niche type RWS	028012

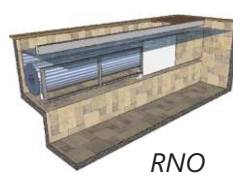
**Types of placement underwater winding reels**



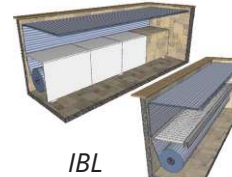
RWS



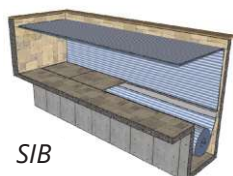
RNU



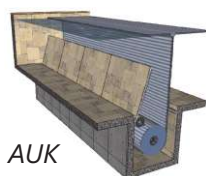
RNO



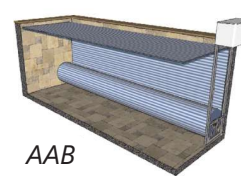
IBL



SIB



AUK



AAB

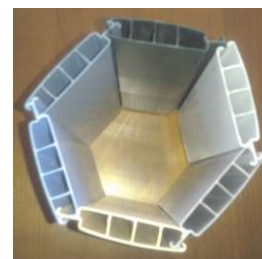


**Pool shutter covers**

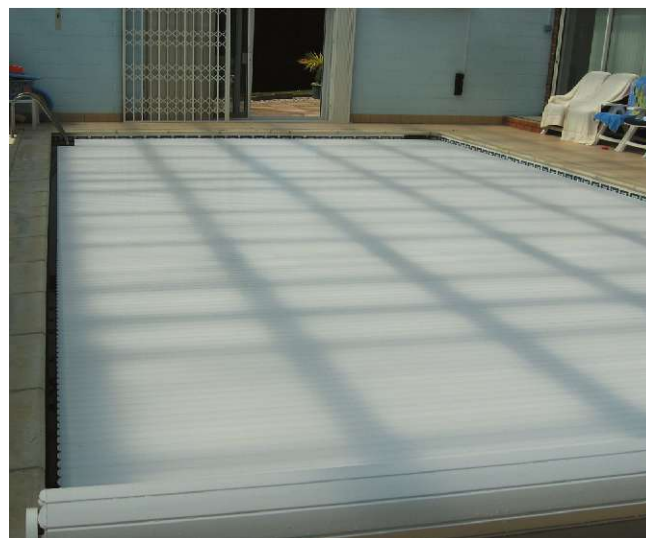
**Pool shutter cover Seniorita** is the most reliable choice of the pool cover. Double sealing of the profiles end caps provide many years of use. The cover is needed to the pool in hall and in the garden, especially when roofing is mounted. Suitable hitch shape and chemical composition of the profiles provide comfort of use and resistance to pool water. It stops the evaporation of the water, thereby reducing heat loss and energy saving is guaranteed up to 90%. Profiles, connected together form a rigid cover on the water surface and provide protection against falling into the water for the children up to 5 years old. Profiles are tightly closed with plugs mounted on the ends and the shutter cover does not require any guide rails. For all shutter covers should be used an electric winding reel.

**Pool shutter cover Seniorita** made of profiles with thickness of 14 mm and width of 60 mm, color: white or colors according templet. The shutter cover is made on request for any pool shape. Mounting on the underwater winding reel or on the edge of the pool. The special shape of the profile prevents breakage of the shutter cover. How to calculate the size of the shutter cover for the pool with stairs? Stairs length is added to the length of the pool and multiply with the pool width. Shutter cover Seniorita is narrower of 4 cm than pool width. This allows for the proper functioning of the shutter cover.

name	code
shutter cover Seniorita, white	027900teb
shutter cover Seniorita, color	027905teb
cutting for stairs	027615teb
transport	027702teb
package	027701teb
hinges at the gutter per 1 lin.m.	027703teb



**Examples of realizations**





**Pool shutter covers**

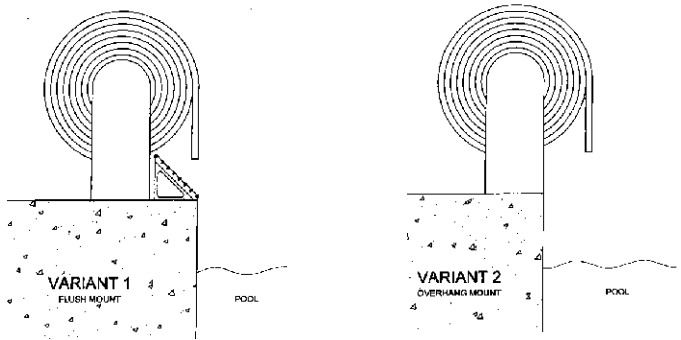
**Surface winding reel „Malaga“**

Electric winding reel Malaga is mounted on the pool edge. Dedicated to the shutter cover Seniorita, but also to the Junior and Senior. It is composed of: motor 24 V mounted inside the steel pipe, 2 side stands, transformer, manual key switch, electronic system of work programming of the shutter cover. Control must be placed in a warm, dry place.



name	code
pool up to 4,0 x 10,0 m	027640teb
5,0 x 10,0 m	027645teb
6,0 x 12,0 m	027648teb
remote of reel Malaga	027652teb
bracket of reel Malaga	027654teb

Ways of mounting pool winding reel Malaga:



**Underwater winding reel Almeria**

Electric, underwater winding reel, placed under the water in any place in the pool with maximum depth of 1,5 m. Robust design ensures durability, eventual dismantling can be done without draining the water from the pool. Dedicated to the shutter cover Seniorita, but also to the Junior and Senior. It is composed of: motor 24V mounted inside the steel pipe with 20 m cable, manual switch, transformer, electronic system of work programming of the shutter cover. The winding reel is chosen to the pool size. It is mounted without intervention in the pool wall, the power cable is outputted outside the pool under a protective trimming.



name	code
Almeria pool up to 4,0 x 10 m	027960teb
5,0 x 12 m	027965teb
6,0 x 15 m	027970teb
7,0 x 15 m	027975teb
8,0 x 15 m	027982teb
9,0 x 25 m	027984teb
remote of reel Almeria	027990teb





**Pool shutter cover**

**Accessories for winding reel Almeria:** to winding reel Almeria can be ordered brackets and wooden lid. The amount is always calculated individually to the size of the pool. Example: pool width 2,87 m and length 6,30 m will need 5 brackets (3 with rollers and 2 without rollers).



name	code
bracket with rollers	027994 teb
bracket without rollers	027995 teb
wooden lid	027996 teb

**Pool shutter cover - set:** includes winding reel with motor, profiles Seniorita, control, manual switch. For maximum pool size 6 m x 25 m. Larger sizes on request. Due to the large number of pools in different sizes, we give a few examples. The exact price should be calculated from a separate price list.

Complete pool shutter cover Seniorita, white, with surface winding reel for rectangle pool:

for pool	code
3,0 x 6,0 m	027800teb
3,5 x 7,0 m	027802teb
4,0 x 8,0 m	027804teb
4,5 x 9,0 m	027806teb
5,0 x 10 m	027808teb



Complete pool shutter cover Seniorita, white, with underwater winding reel for rectangle pool. Maximum mounting depth to 0,6 m.



for pool	code
3,0 x 6,0 m	027810teb
3,5 x 7,0 m	027812teb
4,0 x 8,0 m	027814teb
4,5 x 9,0 m	027816teb
5,0 x 10 m	027818teb

Additional paid for complete shutter:

color profiles per 1m <sup>2</sup>	027820teb
cutting for stairs	027615teb
transport package	027702teb
hinges at the gutter per 1 lin.m.	027703teb







**Solar bubble covers**

Solar bubble cover is made of blue, rigid foil LDPE with thickness of 400 microns. On the surface has a numerous air cells (bubbles), which prevent heat loss and facilitate heating of the water. In the unheated pool, the bubble cover allows to raise the temperature by about 6 degrees. The cover significantly reduces the water evaporation, which is important for indoor pools. Also contributes to lower water contamination in case of the outdoor pools. The bubble cover is welded for a specified size, in the rectangular shape, which can be easily cut to the pool dimensions.



dimensions	code	dimensions	code
3 x 7 m	00037	5 x 8 m	00055
3,5 x 7 m	00040	5 x 9 m	00056
3,5 x 8 m	00042	5 x 10 m	00057
3,5 x 9 m	00043	5 x 11 m	00060
4 x 6 m	00046	5 x 12 m	00058
4 x 7 m	00047	6 x 10 m	00061
4 x 8 m	00048	6 x 12 m	00062
4 x 9 m	00049	6 x 11 m.	00063
4 x 10 m	00050	any length in width	
4,5 x 8 m	00052	of 4, 5, 6 m	00090
4,5 x 9 m	00053		

**Manual winding reels**

Make it easy to roll up and roll out the solar bubble cover. The durability of the winding reels depending on the material of which they are made and the way of the using them. The winding reels have strips for fixing the solar bubble cover. All winding reels have aluminium, winding pipes, matched to the width of the pools.

**Winding reel Olympic**

Manual winding reel in the white color. Stands made of ABS, aluminium, telescopic pipes. Pipes can be easily moved and stands can be dismantled. Version up to 5 m has 3 aluminium pipes, each of 2 m long. That is why, the transport cost is low and it is easy to transport them.



name	code
Olympic width up to 5 m	00101
Olympic width up to 6 m	00100

**Winding reel ECO, movable**

Manual winding reel from stainless steel. The set with 3 aluminium, telescopic pipes, each of 2 m long. That is why, the transport cost is low and it is easy to transport them. It can be easily moved.



name	code
ECO for pool max. 5x10 m	00110

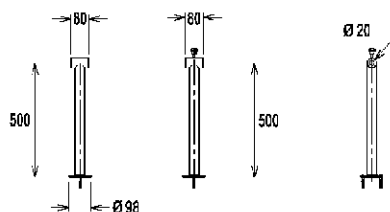


### Manual winding reel

#### Winding reel, fixed

Manual winding reel from polished stainless steel. The set with 3 aluminium, telescopic pipes, each of 2 m long. Permanently mounted to the ground. Height of 50 cm. Version up to 5 m has 3 aluminium pipe, each of 2 m long. That is why, the transport cost is low and it is easy to transport them.

name	code
for pool max. 5x10 m	00120
for pool max. 6x10 m	00130



#### Winding reel, movable

Manual winding reel from polished stainless steel. The set with aluminium, telescopic pipes. It can be easily moved. It has constant height of 50 cm. Version up to 5 m has 3 aluminium pipe, each of 2 m long. That is why, the transport cost is low and it is easy to transport them.

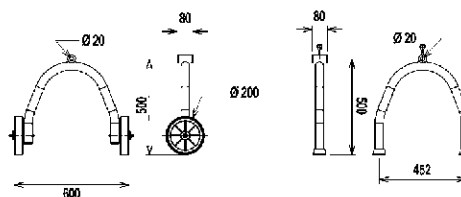
name	code
for pool max. 5x10 m	00125
for pool max. 6x10 m	00135



#### Winding reel Maxi

Manual winding reel from polished stainless steel. The set with aluminium, telescopic pipes, allowing for use on the large pools eg 7 x 18 m. It has constant height of 50 cm.

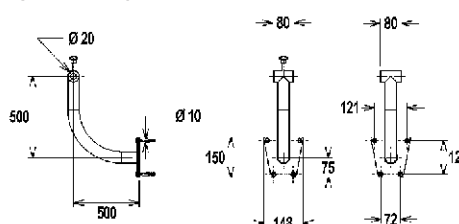
name	code
winding reel, fixed, for width 7 m	00121
winding reel, on wheels, for width 7 m	00128



#### Winding reel, mounted in the wall

Manual winding reel from polished stainless steel, mounted in the wall. The set with aluminium, telescopic pipes. Version up to 5 m has 3 aluminium pipe, each of 2 m long. That is why, the transport cost is low and it is easy to transport them.

name	code
for pool max. 5x10 m	00127
for pool max. 6x10 m	00137





**Safety cover**

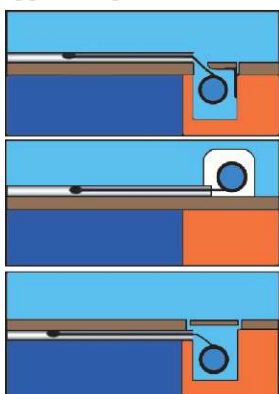
Safety cover is mounted on the pool to protect playing children or animals against against accidental falling into the pool and to reduce evaporation from the water surface, helping to reduce heat loss. With pool size of 4 x 8 m, safety cover has size of 4,4 x 8,4 and how the cover surface is calculated. The snow can not lie on the safety cover. The cover withstands temperatures up to minus 20 Celsius degrees.

Available colors: blue, grey, sand and green.

name	code
blue color	00170
cutting for ladder	00175
transport	00176



**Types of placement the mechanisms**



A wide range of colors and unlimited size and shape even more encourage to choose this cover.



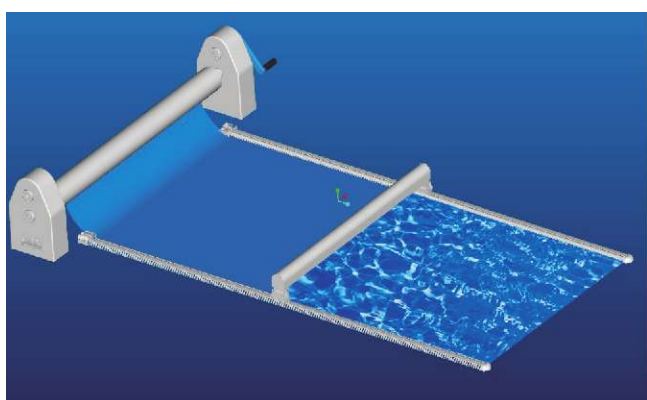


### Safety cover

Automatic safety covers have hydraulic mechanism, are equipped with two engines, which can be easily adjusted in terms of power and speed. Does not require supply of electricity to the pool, what is prohibited in many countries. The mechanism is not sensitive to water. The speed of opening/closing the cover is 3 sec./m. The hydraulic mechanism is available in different versions, adjusted to the cover size.



Manual safety covers provide you the same level of safety as automatic covers. Opening mechanism is actuated by a handle of the winding reel. Opening of the cover takes an average from 1 to 3 minutes. Manual safety cover is easy to install.



Manual and automatic covers are available in a surface and underwater version, to which you can choose different casing or lids:

- polyester lid or casing in aluminium frame
- lid, which can be covered with tiles or stones
- wooden lid or casing of oak



### Pool cleaning and water treatment

What other additives to the pool do you require? It depends on the comfort you want to obtain and on your budget. Your pool is ready. The filter cleans the water and now it has a color, just like you imagined. The water is heated by sun, heat exchanger or solar collector. But still need a few things that water further shined in the sun and the pool bottom and walls remained clean.

**Regular care is necessary to pool fulfilled its functions properly.**



#### Manual bottom vacuum cleaners

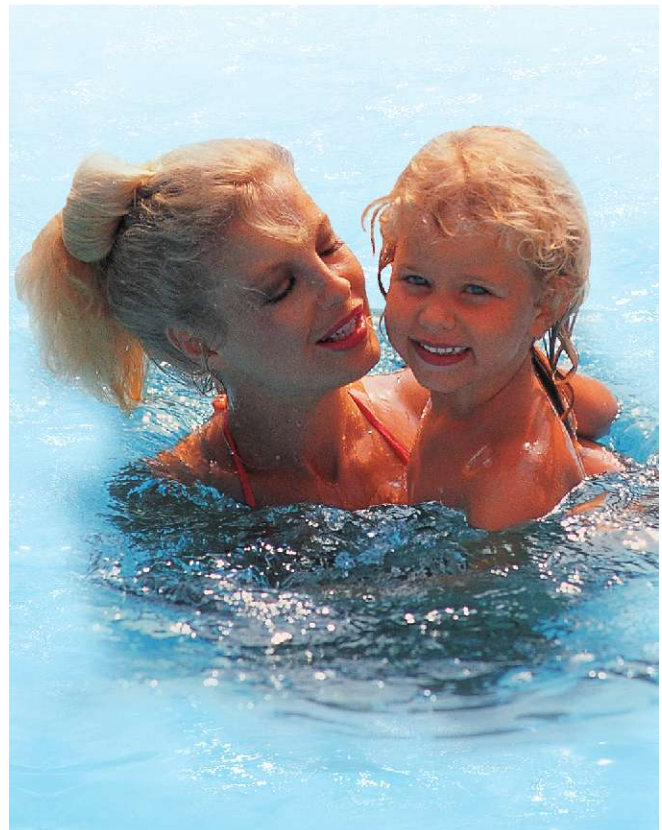
The filter is not able to prevent to on the pool bottom do not fall sand grains, leaves, toys etc. With the help of manual bottom vacuum cleaners, you can make that pool bottom will be clean again. Suction hose is fixed to the vacuum cleaner and the other end is fixed to the skimmer. When the filter is working, follows water suction by the vacuum cleaner. Using the telescopic rod a vacuum cleaner slowly rides on the bottom and walls of the pool collecting debris. The vacuum cleaners occur in many forms and prices.

#### Semi-automatic bottom vacuum cleaners

These devices allow for cleaning the pool bottom without the human intervention. But we can not leave them during operation without any control. They are connected to the suction hose, whose end is plugged into the skimmer. Working filter sucks the water through the vacuum cleaner, which itself, without telescopic rod moves on the bottom, picking up pollutants being in the filter. During operation of these vacuum cleaners, the filter pressure should be monitored.

#### Automatic bottom vacuum cleaner

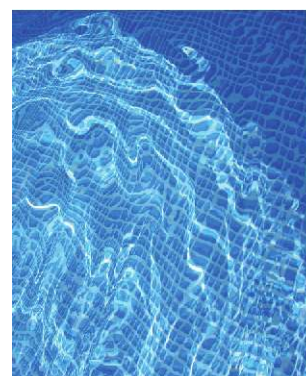
A fully automatic pool cleaning devices. Most of them also cleans the wall, but it is not the rule. Each of them has an automatic work program and some can also be manually controlled by the remote control. Have their own drive and filtering bag, allowing for work independent of the pool filter. Another advantage is that they cause an additional circulation of the water in the pool. Automatic vacuum cleaners are the most comfortable of all types. Do not require any handling and control during the work.





### Water treatment

Water need to be disinfected to keep it clean. Absolutely you need a water tester. With it, by comparing the colors, the value of chlorine (or oxygen) and pH is determined. The pH value is very important and must be approx. 7,2. If the value is incorrect, you should use an agent raising or lowering the pH. There are many models of manual and electronic testers. They are better or worse. When choosing the manual tester, it should be noted that it has two chambers to measure, separately for chlorine (or oxygen) and pH. The best electronic testers are photometric devices. After examininig the water by tester you can proceed to treatment. Disinfecting agents work at the appropriate level of pH. The water need to be disinfected. Even the best filtering device will not free the water from bacteria. There are chlorine and oxygen preparations. Chlorine, which we offer you is not the worst soultion. These compounds are safe and effective. Of course must not eat them! There are various methods of water disinfection: chlorination, UV lamps, active oxygen, ozonization. It is preferred to combine two methods together. The choice depends on you. The preparations can be dosed manually or with automatic equipment. Manual dosing of the agents in a solid form takes place through the skimmer, floating dispenser or through the tank founded in the installation. Liquid agents are dosed into the skimmer or directly into the water, best above the inlet nozzles. Automatic devices steer, measure and control state of the water. The pH value is checked and if it deviates from the desired value, automatic dosing is activated. For the private swimming pool in the halls is recommended to use active oxygen for disinfection. In the outdoor or hall pools, intensively used, is recommended to use liquid chlorine. In the public, hotels, leisure centers are used, specially designed to work in them, automatic dosing systems, which measure the chlorine in mg/l. Besides adjustment of pH, in the public automatic dosing systems the value of Redox is measured.



### Water treatment in the liner pool

Impurities, present in the water, cling to the liner. A lime forms a hard crust and its color depends on the presence of metal ions, the water hardness, the pH value. To avoid lime sediments, please: use chlorine agents without lime (do not use calcium hypochlorite), set the pH at the appropriate level, add a hardness stabilizer to the water. Ideal and universal cleaner is a cleaning gel, which removes any kind of contamination. It can be used under and over the water. The old lime sediments can be removed as follows: lower the water level, moisten the sediment with acidic cleaning agent and after 15 minutes remove the sediment with a clean cloth and rinse with clean water. Oily sediments on the pool liner, on the height of the water line, may take the colors of brown, yellow and even black. The pool liner on the height of the water line should be cleaned regulary with a sponge with a cleaning gel. In the case of stubborn dirt shall apply degreasing agents such as trichloroethylene or gasoline for chemical wash. When cleaning, do not use strong agents, which can dissolve acrylic coating of the liner surface. Rotting leaves, dead insects etc. should be regularly removed from the pool, because they can discolor the pool liner. Metals in the form of rust, manganese etc. discolor the pool water. This leads to settling the of metals on the pool walls and the bottom. The metals in the water can be removed with briefly increase the value of pH to 9. By adding a flocculant, after increasing of the pH, can bind the metals in the flocculant and separate from the water through the filters. After this operation, the filter should be cleaned and restore proper value of the pH.



**Pool accessories**



Bottom vacuum cleaner „Universal“  
code 54000



Bottom vacuum cleaner „Universal“  
code 54003



Bottom vacuum cleaner „Standard“  
code 54011



Vacuum cleaner 8-wheeled  
code 54005



Round vacuum cleaner  
code 403115



Triangular vacuum cleaner  
code 54017



Transparent vacuum cleaner  
code 54018



Vacuum cleaner Mini Venturi  
code 54029



Vacuum cleaner Maxi Venturi  
code 54028



Aluminium telescope		
length	code	
2 elements 1,9-3,6 m	54050	
3 elements 2,5-4,8 m	54051	
2 elements 2,5-4,8 m	54052	





**Pool accessories**



Surface mesh with grip 150 cm  
code 54027



Bottom mesh from plastic  
code 54026



Surface mesh, aluminium frame  
code 54020



Surface mesh from plastic  
code 54023



Floating dispenser for tab. 20 g  
code 53201



Heavy brush, aluminium grip  
code 403150



Brush, length 45 cm, light weight  
code 403113



Bottom mesh,  
aluminium frame  
code 54025



Thermometer, set  
code 53542



Straight thermometer 25cm  
code 53503



Round thermometer  
code 53500, made in EU  
code 53501, made in PRC



Floating dispenser for tab. 200 g  
code 53200



Suction hose 38 mm  
length code  
8 m 54061  
10 m 54065  
12 m 54067  
15 m 54069



Suction hose 38 mm  
roll 100 mb  
code 54030



Solar hose 38 mm  
roll 50 lin. m.  
code 54032



Repair kit  
for the liner  
code 16070



Water deckchair  
code 53850







Pool accessories Ocean de LUXE [www.peraqua.eu](http://www.peraqua.eu)

If you are tired of the annual exchange of brushes, meshes etc, order Ocean de LUXE accessories. The only accessories, which have 3 years manufacturer's warranty and are of the highest quality, does not destroy after a year of use.



Surface mesh from plastic PPGF  
code 170122



Bottom mesh from PPGF  
code 170126



Brush 43 cm from PPGF  
code 170259



Brush 46 cm from PPGF  
code 77425



Corner brush  
code 170133



Vacuum cleaner  
code 170486



Triangular vacuum cleaner  
code 170243



Vacuum cleaner width 45 cm  
code 75588



Floating dispenser  
code 170048



Vacuum cleaner 8-wheeled  
code 170188





### Pool accessories

#### Chlorine and pH tester

Two-chamber tester to specify value of the pH and free chlorine in the water. The tablets dissolve rapidly and have a long durability.

code 53100



#### Active oxygen and pH tester

Two-chamber tester to specify value of pH and active oxygen in the water. The tablets dissolve rapidly and have a long durability.

code 53120



#### Tablets for tester

Fast dissolving tablets, used only in manual testers. Packed in aluminium foil of 10 pieces.

name	amount	code
chlorine DPD 1	100 pcs.	413316
	500 pcs.	413315
pH Phenol Red	100 pcs.	413413
	500 pcs.	413415
oxygen and pH		53122
oxygen DPD 4	100 pcs.	413320
	500 pcs.	413325



#### Photometer PC Checkit

Recommended for public pools. Photometric measurement. Complete set, microprocessor-controlled in the technology of SMD with a large quartz display. Measuring cycle: every 3 seconds, panel: LCD, optic: optical sensors and LEDs in a protective housing, voltage: battery 9 V. Measuring range: chlorine (free, combined, total): 0,05 6 mg/l, pH value: 6,5-8,4 pH, cyanuric acid: 1-80 mg/l.

code 413635



#### Tablets for photometers

Fast dissolving tablets, used only in photometers. Packed in a foil of 10 pieces.

name	amount	code
chlorine DPD 1	100 pcs.	413313
	500 pcs.	413314
pH Phenol Red	100 pcs.	413410
	500 pcs.	413411





## Chemical agents for water treatment

The pool increases the value of your house and garden. The pool provides detente through sports activity in the water, is refreshing, healthy and relaxing. Requirement of undisturbed pleasure of the bath in the swimming pool is a hygiene and appearance of the water and elements of the pool equipment. Lack of adequate care of water and pool can lead to water turbidity and discolor of the pool liner. Bad water quality can lead to irritation of the skin and eyes and thereby to allergic diseases. Only the optimal car of the water and professional pool service will allow properly maintain the area around the pool and the pool itself. For anyone who would like to know a little more about the chemistry of the water in the pool, use and activity of chemical agents for water treatment, we have prepared explanation, which will allow to understand the losses, which are the result of insufficient care of the pool and bad

### What is the pH value?

The pH value (hydrogen exponent) is the number expressing hydrogen ion concentration in the water. The water (H<sub>2</sub>O or HOH) splits into negative hydroxyl anions (OH<sup>-</sup>) and positive hydrogen ions (H<sup>+</sup>), H<sub>2</sub>O = (H<sup>+</sup>) + (OH<sup>-</sup>). The concentration product of H<sup>+</sup> i OH<sup>-</sup> is always the same: (H<sup>+</sup>) x (OH<sup>-</sup>) = 10<sup>-14</sup>. When both concentration correspond to yourself (neutral water), we get: (H<sup>+</sup>) = (OH<sup>-</sup>) = 10<sup>-7</sup> or pH = 7 (the pH value is the negative logarithm of hydrogen ion concentration). If we add hydrogen ions receiver to the neutral water, the particle of the water will react. Example (H<sup>+</sup>) = 10<sup>-9</sup> and (OH<sup>-</sup>) = 10<sup>-5</sup> (pH = 9). The Product of (H<sup>+</sup>) x (OH<sup>-</sup>) is again 10<sup>-14</sup>. The water is now an alkaline (pH > 7). Otherwise, if we add hydrogen ions (or hydroxyl ions receiver), we get: (H<sup>+</sup>) = 10<sup>-3</sup> i (OH<sup>-</sup>) = 10<sup>-11</sup> (pH = 3). Also here, the product of (H<sup>+</sup>) x (OH<sup>-</sup>) is again 10<sup>-14</sup>. Now the water is acidic (pH < 7).

### Regulators of pH value

The water in the pool must have a pH between 7,0 - 7,6. Activity of all other chemicals depends on the proper ph value. To maintain the pH at the correct level, we use:

#### pH minus and Plus

The pH Minus is a granules for lowering the pH value in the water. The pH Plus is used to increase the value of pH. The product creates a negative environment for microorganisms, causing their destruction and inhibition of growth. The appropriate pH (7,2 -7,6) determines the good activity of other agents.

name	code
pH Minus, can 1,5 kg	406201
pH Minus, pail 7,5 kg	406208
pH Minus, pail 15 kg	406210
pH Plus, pail 3 kg	406305





### Chemical agents for water treatment

**Disinfection of the pool water** aims to stopping microbiological activity and destruction of microorganisms. Disinfection is, however, not sterilization, because some of these organisms can survive in inactive state eg by creating spores, which do not grow and not multiply, but exist. As soon as the ambient conditions will become favorable, the spores re-adopt its active state and can rapidly multiply. Therefore, you need to be alert and very careful to the pool water does not give favorable conditions for these organisms. The products are used in concentration, which is toxic to microorganisms, not to humans. Normal conditions for good disinfection is: 0,5 to 1,0 mg/l of chlorine, pH between 7,2-7,6. In our offer you will find only the best chlorine preparations in the form of di- and trichloroisocyanuric. Have a high content of chlorine. Besides, are sold in a solid form, making them easy to use. Slowly dissolving tablets are perfectly suitable for long-term pool disinfection and do not require human intervention. The tablets and granules should not be thrown directly into the pool. Predominantly in the skimmers there is a suitable place for such products. Di- and trichloroisocyanurates have in its composition a stabilizer, allowing to maintain the appropriate value of the chlorine for a long time.

#### Chlorine agents Quick chlorine - granules

The most popular, rapidly dissolvable, organic chlorine in granules. Intended for water disinfection. At 10 m<sup>3</sup> of water is sufficient 35 grams.

name	code
Granules, can 1 kg	406601
Granules, pail 3 kg	406603
Granules, pail 5 kg	406608

#### Maxi chlorine - tablets

The most popular, multifunctional, slowly dissolvable chlorine in tablets of 200g, intended for water disinfection. Keep a constant level of the chlorine in the water. 1 tablet at 35 m<sup>3</sup> of water. In its composition has also the algicide agents and the substances fining the water.

name	code
Maxi chlorine, can 1 kg	406701
Maxi chlorine, pail 3 kg	406703
Maxi chlorine, pail 5 kg	406708



chlorinator

code 415100





**Chemical agents for water treatment**

**Quick chlorine – tablets**

Rapidly dissolvable, organic chlorine in tablets of 20 g, for water disinfection. At 10 m<sup>3</sup> of water is sufficient 5 pcs.

name	code 1 kg	code 3 kg	code 5 kg
quick-chlorine tablets	406501	406503	406508

**Mini-maxi chlorine – tablets**

Slowly dissolvable chlorine in tablets of 20 g, for water disinfection. Thanks to slow dissolution, maintains a constant level of the chlorine in the water. In its composition has also the algicide agents and the substances fining the water.

name	code 1 kg	code 3 kg	code 5 kg
Mini Maxi	406801	406803	406808

**Chlorine-free agents**

Active oxygen is too unstable to guarantee a constant water disinfection. Hydrogen peroxide and potassium persulfate are the most known form of sources of active oxygen. The oxygen level should be replenished, when shall amount to 35 mg/l. Shock disinfection is performed at least one time per month using oxygen or chlorine in the concentrate. Active oxygen has a tendency to lower the pH value, which have to maintain on the level of 7,2 and 7,6. The content of active oxygen can be measured with tablets DPD 4.

**Active oxygen**

Tablets based on active oxygen. Intended for water disinfection. Reduce the content of chloramines.

name	code
active oxygen, tablets 20 g, pail 3 kg	410669
active oxygen, tablets 200 g, pail 3 kg	410671
active oxygen, concentrate, bottle 1l	410667

**Preparations removing water turbidity**

Flocking agents are used to maintain water clarity. After disinfection, the flocculant is added, which connects the particles floating in the water in the larger particles. Then, they settle on the filter sand bed of the without any problems. Using flocculants, the metals present in the water can be removed. Should briefly raise the pH value to 9, add the flocculant, which binds the metals and separate them from the water through the filters. After this operation, the filter should be cleaned and restore proper value of the pH.

**Flockfix**

Bags with granules for the prophylactic flocking. Put in the skimmer or pump basket.

name	code
carton 1 kg	407650

**Super Flock**

Used for intervetion removing of water turbidity. Used in order to obtain clarified, turbid-free water.

name	code
Flock bottle 1 kg	407601
Flock canister 5 kg	407605





## Chemical agents for water treatment

### Algicides agents

The algae need for growth the hot water, sunlight, carbon dioxide and nutrients such as nitrates from chloramines (combined chlorine), phosphates from the water, which supply the pool or introduced by bathers. In the pools with good water circulation, good filtration, optimal flocking and pH, phosphates can be partially removed, thereby taking away algae the food. In the pool water are three types of algae. The brown algae occur least often. They form colonies on the pool bottom in the form of tawny or golden powder. This type of algae is the most resistant to chlorine, can survive and grow in the water contains from 0,3 to 0,5 mg/l of free chlorine. The next group of algae are called black algae (or blue-green), which settle on the pool walls. Their colonies are small stains, consisting of many layers of algae, growing ahead. By chlorination, can be destroyed the outer layer of the algae, but these beneath are still growing in size and that is why it is said that they are quite resistant to chlorine. The third group of algae, the most often occurring in the swimming pools, are a green algae. This kind of algae swim on the pool water surface (then are not visible), about their presence in the pool water indicate slippery walls, and then they begin to settle in the sunny places, and where is poor circulation and water movement. During this time, rapidly increasing the demand in the pool water to chlorine. In the case of too slow reaction of the dosing equipment, occurs efflorescence of algae in all of the pool water, which makes green, opaque, and the pool is unhygienic unæsthetic. The green algae can be removed from the pool water through shocking chlorination, approx. 3 mg/l of active chlorine, the brown algae through pool vacuuming, the black algae only through brushing the stains. To prevent the occurrence of the algae regularly use algicides agents (increasing the dose with the increase of the water and air temperature), keep the value of the chlorine and pH at right level.

### Alba Super

The best, non-foaming algicide and bactericidal preparation. Also used at the formation of large amount of algae. Keeps the water in excellent condition, even at high air temperatures. It works immediately after application.

name	code 1 kg	code 3 kg	code 5 kg
Alba Super	406401	406402	406405

### Algenex Super

Algicide preparation. However, like other preparations on the market persists of quality to Alba Super and at high temperature > 30 degrees of C can not cope. Intended for prophylactic use. Should be used regularly.

name	code 1 kg	code 3 kg	code 5 kg
Algenex	406430	406440	406450



### Winter fluid

The agent used for the winter. Prevents the water becomes green in the case of warming in the winter.

name	code
Winter fluid bottle 1 kg	407801
Winter fluid kanister 5 kg	407802



**Chemical agents for water treatment**

**Liquid agents for automatic dosing**

name	code	name	code
Liquid chlorine 35 kg	410560	pH Minus, liquid 40 kg	410530
Active oxygen 30 kg	410665	Super Flock, liquid 30 kg	410520
pH Plus, liquid 35 kg	410540	Active oxygen, shock treatment	410667

**Cleaning agents**

**Cleaning gel**

Universal gel for cleaning the swimming pools. Intended for the liner and tile pools. Also cleans under the water. The consistency of the gel causes that it does not flow down from the sponge during cleaning.

name	code
cleaning gel 1 kg	406101

**Poolfinisch**

Efficient cleaning agent for steel elements.  
code 51900

**Flisan**

Alkaline agent against fats.

name	code 10 kg	code 30 kg
Flisan	410705	410707

**Randklar**

Agent for cleaning liner and plastics, cleans fats, oils and rust film.

name	code 10 kg	code 30 kg
Randklar	410675	410677

**Keraclin F**

Acidic cleaning agent for pools and their surroundings. Prevents to formation of limestone, mineral and fatty stains.

name	code 10 kg	code 30 kg
Keraclin F	410695	410697

**Edelstahl VA**

Agent for cleaning and maintenance pool troughs made of stainless steel and metal parts from a special alloy steels

name	code
Edelstahl VA 10 kg	410712

**Compactal**

Acidic cleaning agent for outdoor pools. Dissolves a lime and sediments. Removes brown discoloration, resulting from the action of iron and other metals.

name	code 10 kg	code 30 kg
Compactal	410685	410687

**Special agents**

These are special-purpose products.

Stabilizer prevents to precipitation of calcium and iron.

Chlorine STOP reduces the level of the chlorine in the water.

Defoamer agent prevents to formation of the foam.

name	code
Water hardness stabilizer 3 kg	410715
Water hardness stabilizer 10 kg	410717
Chlorine STOP 5 kg	406630
Defoamer agent 1 kg	410720





## Automatic dosing systems

### Measuring and dosing unit Eurodos

Reliable device regulating the amount of disinfectant and the pH value in your pool. The Eurodos measures and controls the work of dosing pumps and brings the values to the desired level. The work is done automatically by microprocessor. Easy installation, maintenance and programming. The whole mounted on the board. The set consists of: control box, 2 peristaltic dosing pumps 2 l/h or membrane pumps with adjustable performance to 5 l/h, connection elements, electrodes, pressurisable measurement chamber, hoses.

### Eurodos with peristaltic pumps

Undoubted advantages are quiet work and the ease of run the pumps.

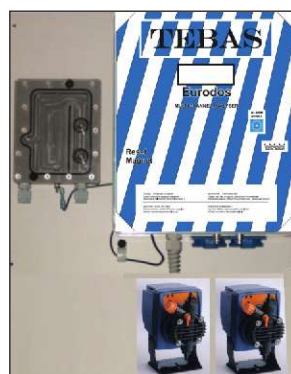
name	code
Eurodos pH/active oxygen	1306000
Eurodos pH/chlorine (Redox)	1236000
flow sensor (optional)	14040



### Eurodos with membrane pumps

Undoubted advantages are adjustable performance and lack of service of pumps for a long time.

name	code
Eurodos pH/active oxygen	1306001
Eurodos pH/chlorine (Redox)	1236001
flow sensor (optional)	14040



### Salt electrolyzer TEBAS



Compact device disinfecting swimming pool through the production of chlorine from salt (NaCl), which is characterized by quality, reliability and completeness! Easy to set up and assembly thanks to the connections on hose 32/38m.

The whole on a comfortable basis with dimensions 47 x 36 cm.

Salt electrolyzer TEBAS is equipped with a titanium electrodes, working time clock and the LED indicator of the salt level, water flow sensor, self-cleaning function, ABS housing resistant to UV, power cable 230V 4.5 meters, alarm of low and high salt level. Working range 2700-3400 ppm, working temperature from 10 to 60 Celsius degrees, change of work polarity every two hours.

The device must be installed in a dry place.

name	code
salt electrolyzer TEBAS 15g Cl/h for private pool max.70 m <sup>3</sup> . Power supply 230V	78775

### Measuring and dosing unit Tebas-Economic

Simple measuring and dosing device, regulating pH and Redox. Delivered with two peristaltic pumps with performance of 1,5 l/h, electrodes and connections elements.

name	code
Tebas-Economic pH/Redox	1236003







**Automatic dosing systems**

**Measuring and dosing unit Autodos**

Modern design and advanced technology creates a highly intelligent device Autodos. It was designed to regulation conditions prevailing in the pool water. Devices, measuring free chlorine are intended for public pools. Applied high technology allows for the best quality of work, reliability and maintenance-free operation. The system is equipped with 2 independent channels to monitor the chlorine or Redox and pH. The Autodos regulates the level of pH (through dosing the acid or alkaine) and chlorine. The regulation of the chlorine takes place by the lowering the level of total chlorine and increasing the content of free chlorine. You can mount the model with control the device by your PC. The device is delivered as a complete system without dosing pumps.



name	code
<b>Autodos M2</b> pH & free chlorine with electrode PB200	416540
<b>Autodos M2</b> pH & free chlorine with electrode CLE3	416542
<b>Autodos M2</b> pH/Redox	416550
<b>Autodos M3</b> pH/Redox & free chlorine with electrode PB200	416560
<b>Autodos M3</b> pH/Redox & free chlorine with electrode CLE3	416562

**Elements needed to control the device by your PC**

<b>Data logger</b> 32kB EPROM	41625
<b>Communication module</b> communication with PC via RS232	41620

**MiniMaster**

This is technologically advanced automatic dosing system for private pools. The MiniMaster offers continual monitoring and automatic dosing, ensuring maximum safety in your pool! The MiniMaster is based on the same technology as well-known Autodos. With the MiniMaster installed in your pool, you will never have to worry about the quality of the water - the MiniMaster automatically will take care of it! Functions and advantages: constant measurement of the pH and the concentration of free chlorine, two digital controllers based on LED technology, easy installation and maintenance, built-in prefilter, electronic flowmeter, easy access to the calibration, separate modules for each of the measuring electrode, automatic dosing of chemical agents. The device is delivered as a complete system without dosing pumps.



name	code
Minimaster	416620





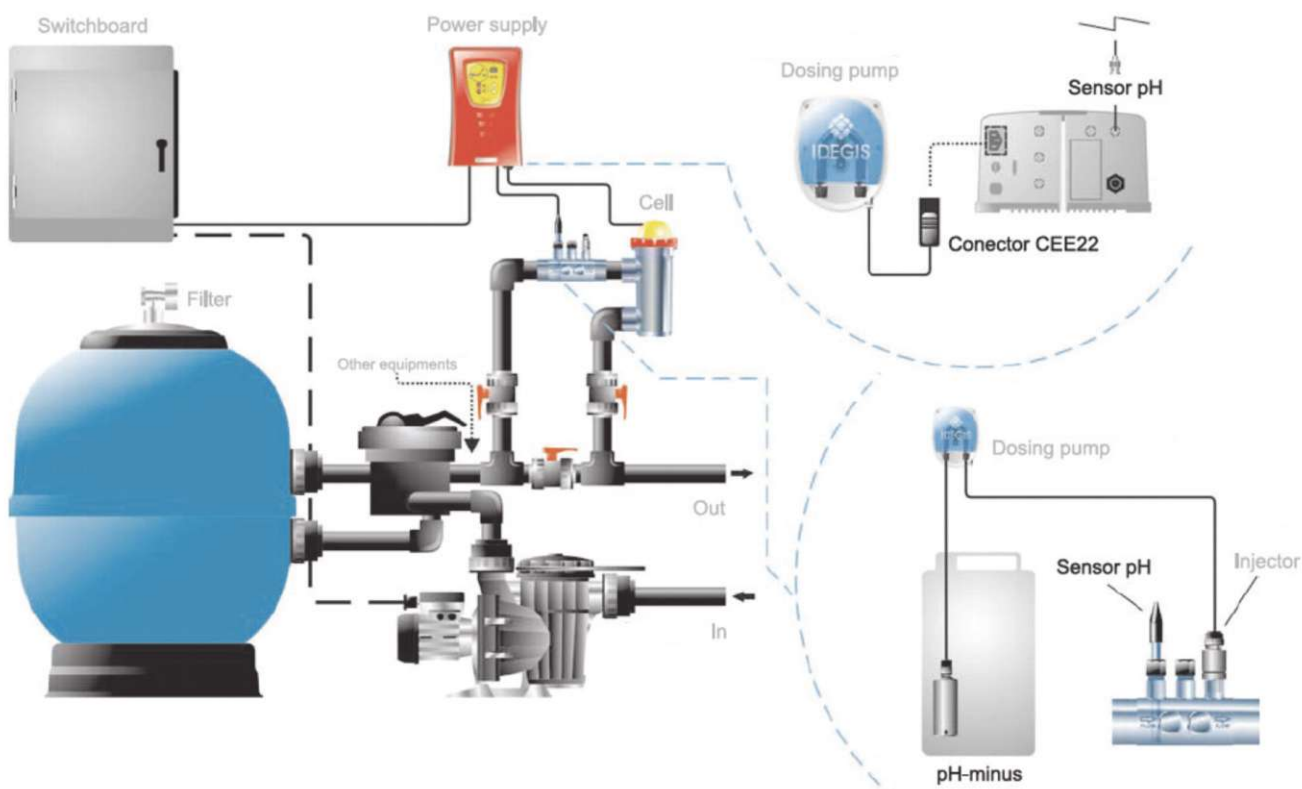
**Automatic dosing systems**

**Salt electrolyzer with pH regulation**

Perfect device for private swimming pools! Automatic pH level regulation is the biggest advantage of salt electrolyzer Tecno, but not the only one. While maintaining the optimum pH level, improves oxidation and disinfection effectiveness. Prevents corrosion and surface precipitates. Electrolyzer Tecno is a fully professional device equipped with flow alarm, efficiency scale (%), buttons to increase and decrease efficiency, salinity alarm (high/low), indicators of self-cleaning (direct/reverse polarity), button of pH calibration, button of pH setpoint programming, alarm indicator of low pH (<6.5), alarm indicator of high pH (>8.5), display (water pH and setpoint). PH measurement and dosing pump 4l/h included, power supply 230V. Choose electrolyzer to your swimming pool size.



name	code
salt electrolyzer TECNO-PH 7G with pH regulation 7g of chlorine/h for private pool max. 25 m <sup>3</sup>	78767
salt electrolyzer TECNO-PH 12G with pH regulation 12g of chlorine/h for private pool max. 50 m <sup>3</sup>	78768
salt electrolyzer TECNO-PH 21G with pH regulation 21g of chlorine/h for private pool max. 80 m <sup>3</sup>	78769
salt electrolyzer TECNO-PH 30G with pH regulation 30g of chlorine/h for private pool max. 120 m <sup>3</sup>	78770
salt electrolyzer TECNO-PH 40G with pH regulation 40g of chlorine/h for private pool max. 160 m <sup>3</sup>	78771





## Lamps UV-C

Designed for disinfection of the water with UV rays in the process of photooxidation reaction. The lamp is mounted in the pool installation after the filter. The water should have a turbidity not higher than 15 mg/dm<sup>3</sup>, in order to the disinfection process run efficiently. The excessive turbidity limits the effectiveness of radiation and there is the necessity for frequent cleaning of lamps surface. Therefore it should be used flocking agents. The process of germicidal, performed with UV lamp should be assisted with chlorine dosing and regulation of pH value to obtain proper effect of improving water quality and prolong the operation time of the process. With proper increasing the amount of the UV lamps, chlorine dosing can be completely eliminated. The advantages of using UV lamps: very low purchase cost and operating costs, reduce the amount of chlorine dosed up to 80%, effective destruction of bacteria, no problems with eyes irritation and allergic reactions during the bathing.



name	code
lamp UV-C BUDGET 75 W, 230 V, for pool max. 75 m <sup>3</sup> , max. flow 30 m <sup>3</sup> /h, power consumption 25 W	416575



lamp UV-C BUDGET 150 W, 230 V, for pool max. 150 m <sup>3</sup> , max. flow 60 m <sup>3</sup> /h, power consumption 25 W	416578
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lamp UV-C TECH 75 W, 230 V, for pool max. 75 m <sup>3</sup> , max. flow 30 m <sup>3</sup> /h, power consumption 25 W	416576
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lamp UV-C TECH 150 W, 230 V, for pool max. 150 m <sup>3</sup> , max. flow 60 m <sup>3</sup> /h, power consumption 25 W	416579
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## Membrane dosing pump

Electronically controlled, reliable membrane dosing pump of wide use. It serves as a pump for dosing the flocking agent, chlorine, active oxygen, pH regulating agent. Efficiency adjusted up to 5 l/h. The set includes all the elements for connection.



name	code
membrane dosing pump	25358
as above, but with automatic self-venting	25355

## Peristaltic dosing pump

Inconspicuous, but powerful peristaltic dosing pump with efficiency of 2 l/h. Connects to the hose 6 x 4 mm. Characterized by quiet work. The hose should be replaced every 1 year. **code 25360**

**Suction lance** placed in the canister with the chemical agent. Thanks to it, the dosing pumps are not air-locked and do not gather dirt from the canister bottom. **code 416694**





### Semi-automatic vacuum cleaners

This vacuum cleaner perfectly clean the pool. Is connected to the skimmer via hose of 10 meters long. Is activated through the power of working pump of the pool filter. Suitable for any kind of pool. Working width is 27 cm. Cleans pool bottom, as well as walls, if you will provide the optimal flow on the filter pump.

name	code
2FUN two-wheeled	71998
4FUN four-wheeled	73709
4FUN four-wheeled with filter	74041



Dolphin HYBRID connect to skimmera, reliable - code 55096



### Vacuum cleaner James

Semi-automatic vacuum cleaner for pool cleaning. It has its own filter bag and pump with efficiency of 8 m<sup>3</sup>/h, 230 V with a cable of 10 m. During operation, do not use the pool. Pool filter should be turned off. Intended for private pools. Telescope is mounted to the vacuum cleaner, by means of which the pool cleaning is performed.

name	code
vacuum cleaner James	54130
telescope 1,9-3,6 m	54050
telescope 2,5-4,8 m	54051
spare sack 70 micron	54310





**Automatic vacuum cleaners Dolphin**

Dolphin is a technologically advanced and comfortable to use, reliable helper to keep the pool clean. Moves by itself, working at low voltage 30 V. In the morning throw it into the water and after the work pull it out. The pool is completely scrubbed, thanks to the filtering inserts, stopping the dirt. All Dolphins have a trolley and power supply in set. Some models can be controlled manually with the remote control. It is important to choose the right model for owned pool. The vacuum cleaner Dolphin can work in the water at the temperature up to 34 Celsius degrees and a salt content up to 0,5 mg/l.

**Types and destiny of brushes** – the type of coating the inner pool wall decides about the choice of brushes:

PVC brush – for liner, concrete and polyester pools

Combi brush – for pools with rough tile or slippery liner Alkorplan 3000 (mosaics)

Wonder brush – for pools with slippery tile, glass mosaic and steel

**Supreme M3**

Recommended for pools up to 10 meters in length. Cleans pool walls and corners. Designed to provide you hours of entertainment spent in clean and hygienic pool. The M3 provides you: saving of water and energy, will help to prevent the growth of algae and bacteria, reduces the number of necessary cleaning equipment.

Parameters of Dolphin Supreme M3: cycle time 3 hours, cable length 17 m, class IP 54, input power 230 V AC, output power 30 V DC.

Dolphin Supreme M3 - features and benefits:

- brushes, scrubs and filters - bag collects dirt and dust
- effective cleaning, optimal scanning of the pool
- autonomous device - requires no installations
- small, light and handy - easy of maintenance, service and repairs
- low voltage – low power consumption - avoid obstacles
- automatically shut down after work
- motor protection mechanism in case of overload or lack of water
- suitable for indoor pools – 24 months warranty



Dolphin SUPREME M3 with Combi brush and trolley **code 55060**

**Dolphin Explorer New Standard**

Never stops work for you. The New Standard is well working robot, robust, reliable, and inexpensive Dolphin family member, famous from its sturdy construction, the ability to climb the pool walls and thorough cleaning. It is a unique robot trained to keep your pool in perfect purity. Equipped with a special program for self, optimal pool scanning.

Parameters of Dolphin New Standard: cycle time 2,5 hours, cable length 18 meters, recommended for pools up to 12 meters in length, filter porosity 50 microns, pump efficiency 17m<sup>3</sup>/h, motor voltage 30V DC, protection class IP 54, input power 230 V AC, output power 30V DC. The cleaning process is environmentally friendly and requires use less chemistry. Access to the filter through top housing.

name	code
New Standard with PVC brush and trolley	55072
New Standard with Combi brush and trolley	55073
New Standard with Wonder brush and trolley	55074





**Automatic vacuum cleaners Dolphin**

**Supreme**

Dolphin Supreme M4 and M5 is an important step in pool cleaning robotics. Created in base of many years of experience. The Supreme M4 and M5, thanks to the unique innovative features take all the hard work out of pool cleaning, while providing reliable cleaning results every time. Intensive cleaning contributes to the elimination of bacteria and algae. Cleans bottom, walls and water line. The Supreme M5 is equipped with remote control for manually controlling and programming operation parameters. Parameters of Dolphin Supreme: M4 cycle time 2,5 h, M5 cycle time 1,5 h, 2,5 h or 3,5 h, cable length 20 meters, for pools up to 12 meters in length, pump efficiency 17 m<sup>3</sup>/h, motor voltage - 24 V DC, class IP 54, input power 230 V AC, output 30 V DC.

Features and benefits of Dolphin Supreme M4 and M5:

equipped with 3 cleaning brushes and 3 filters, M5 is equipped with remote control, advanced technology of scanning pool range, enables optimal cleaning in a short work cycle, equipped with additional brush, causing the double more effective cleaning, patented top opening of filter cover, allows for easy upkeep clean filters and convenient access, patented cleaning system Multi Filtration System (MFS): Ultra fine, Ultra fine disposable and Spring cleaning, one-way water valves prevent the escape of debris and ensure rapid water drainage, adjustable floats allow efficient scanning in different pool sizes, automatic motor protection mechanism, low voltage motor provides minimal energy consumption, automatic shut off at end of each cycle.

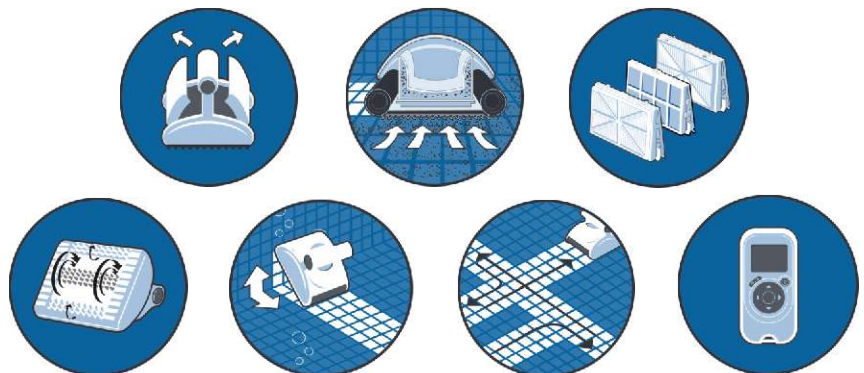


**Supreme M4**

name	code
Dolphin Supreme M4, PVC brush	55020
Dolphin Supreme M4, Combi brush	55022
Dolphin Supreme M4, Wonder brush	55024

**Supreme M5**

name	code
Dolphin Supreme M5, PVC brush	55040
Dolphin Supreme M5, Combi brush	55042
Dolphin Supreme M5, Wonder brush	55044





## Automatic vacuum cleaners Dolphin

**Dynamic Plus**

The power of cleaning intelligence. The Dolphin Dynamic Plus is the perfect cleaning robot for any residential pool. It has a remote control with joystick to help you choose a fitting cleaning programme, from wall climbing to ultra clean. The user-friendly remote control also makes it easy to set the cycle time or to manoeuvre the robot into the hard-to-reach corners. The Dolphin Dynamic Plus offers a convenient clogged filter bag indicator, cable swivel and a robust construction providing durability and safety. The Dolphin Dynamic Plus truly redefines intelligence in pool cleaning technology.

Parameters of Dolphin Dynamic Plus: cycle time 2, 3 or 4 hours, cable length 20 meters, for private pool up to 12 meters in length, filter bag porosity 50 microns, pump efficiency 16 m<sup>3</sup>/h, motor voltage - 24 V DC, class IP 54, input power 230 V AC, output power 30 V DC.

name	code
Dolphin Dynamic Plus, PVC brush	393010
Dolphin Dynamic Plus, Combi brush	393011
Dolphin Dynamic Plus, Wonder brush	393012

**PRO X2**

Driven to perfection Dolphin Dynamic Pro X is very durable, very intelligent robot for mid-size public pools. Constructed according to the latest technology, has reinforced parts, self-learning programme, dual motor and clogged filter bag indicator. Patented cable swivel prevents cable tangling. Wireless remote control for manual programming and control the operation. Wide selection of cleaning programs and parameters: cycle time, pool length, wall climbing, type of cleaning. Brushes, vacuums and filters the pool bottom, walls and water line in less than 8 hours. Large filter bag collects debris, sand and dust. Parameters of Dolphin Dynamic Pro X2: cycle time 4 h, 6 h or 8 h, cable length 30 meters, for public pool up to 25 meters in length, pump efficiency 16 m<sup>3</sup>/h, motor voltage - 24V DC, class IP 54, input power 230 V AC, output power 30 V DC.

name	code
Dolphin Dynamic Pro X2, PVC brush	393013
Dolphin Dynamic Pro X2, Wonder brush	393014

**Dolphin Bio**

This is an innovative solution for cleaning natural pools and ponds, combining advanced production technology and unique features in order to the Dolphin be able to fulfill the challenge of cleaning natural pool. The Dolphin Bio is suitable for pools up to 15 meters in length. Effective cleaning, removing leaves and other debris using internal filtration or external suction, and scrubbing the walls, bottom and shoreline. Dolphin Bio does a heavy work for you - without intervention and harming the flora of your pool. Unique triple-active brush, using two Bio brushes and an additional double-speed brush, efficiently scrubs dirt, algae and bacteria, even from extremely slippery surface. Using remote control, you can select one of the three filtration modes and suction through the pump.

name	code
Dolphin BIO PVC	55080



### Technical data

#### Material

Fittings are made of high quality PVC and are suitable for drinking water. Raw material used for their production complies with all EU standards.

PVC-U/hard PVC: polyvinylchloride

Gaskets: EPDM

Standards: DIN 8063-ISO 727

NFT 54-028-KIW A 54

color: dark gray RAL 7011

#### Working pressure

The safety factor at + 20 °C to PN 16 is 50 years.

At operating temperatures + 20 °C, the pressure is:

diameter (mm)	pressure (bar)
10-160	10-16
200-250	10
280-400	10 or 6

Maximum operating temperature: max. 60 °C.

#### Shortcuts

- I.G.** internally glued
- E.G.** externally glued
- I.T.** internal thread
- E.T.** external thread







**Elbow 90°**

**I.G.-E.T.**

	<b>code</b>
50 mm x 1½"	710155
63 mm x 2"	710163

**Elbow 90°**

**I.G.-I.G.**

	<b>code</b>
20 mm	650020
25 mm	650025
32 mm	650032
40 mm	650040
50 mm	650050
63 mm	650063
75 mm	650075
90 mm	650090
110 mm	650110
140 mm	650140
160 mm	650160
225 mm	650225
250 mm	650227
315 mm	650228



**Elbow 90°**

**I.G.-E.G.**

	<b>code</b>
50 mm	650550
63 mm	650563

**Elbow 45°**

**I.G.-I.G.**

	<b>code</b>
20 mm	651020
25 mm	651025
32 mm	651032
40 mm	651040
50 mm	651050
63 mm	651063
75 mm	651075
90 mm	651090
110 mm	651110
140 mm	651140
160 mm	651160
225 mm	651225
250 mm	651227
315 mm	651228



**Elbow 45°**

**I.G.-E.G.**

	<b>code</b>
50 mm	652050
63 mm	652063



**Elbow 90°**

**I.G.-I.T.**

	<b>code</b>
20 mm x ½"	710020
25 mm x ¾"	710025
32 mm x 1"	710032
40 mm x 1¼"	710040
50 mm x 1½"	710050
63 mm x 2"	710063
75 mm x 2½"	710075

**Bend 90°**

**I.G.-I.G.**

	<b>code</b>
20 mm	653020
25 mm	653025
32 mm	653032
40 mm	653040
50 mm	653050
63 mm	653063
75 mm	653075
90 mm	653090
110 mm	653110



**Muff**

**I.G.-I.G.**

	<b>code</b>
20 mm	654020
25 mm	654025
32 mm	654032
40 mm	654040
50 mm	654050
63 mm	654063
75 mm	654075
90 mm	654090
110 mm	654110
140 mm	654140
160 mm	654160
225 mm	654225
250 mm	654226
315 mm	654228



**Muff**

**I.G.-I.T.**

	<b>code</b>
20 mm x ½"	711020
25 mm x ¾"	711025
32 mm x 1"	711032
40 mm x 1¼"	711040
50 mm x 1½"	711050
63 mm x 2"	711063
75 mm x 2½"	711075
90 mm x 3"	711090
110 mm x 4"	711095




**Tee 90°**

I.G.-I.G.	code
20 mm	658020
25 mm	658025
32 mm	658032
40 mm	658040
50 mm	658050
63 mm	658063
75 mm	658075
90 mm	658090
110 mm	658110
140 mm	658140
160 mm	658160
225 mm	658225
250 mm	658227
315 mm	658228


**Cross**

4 x I.G	code
25 mm	683025
32 mm	683032
40 mm	683040
50 mm	683050
63 mm	683063


**Hose union**

code	
50-38 mm	699438


**Hose union**

code	
38 mm x 1½"	730840



50 mm x 1½"	730842
transparent	


**Tee**

2 x I.G.-I.T.	code
20 mm x ½"	710420
25 mm x ¾"	710425
32 mm x 1"	710432
40 mm x 1¼"	710440
50 mm x 1½"	710450
63 mm x 2"	710463
50 mm x ½"	710460
50 mm x ¾"	710465
63 mm x ½"	710470
63 mm x ¾"	710475


**Socket**

I.G.-I.G.	code
20 mm	655020
25 mm	655025
32 mm	655032
40 mm	655040
50 mm	655050
63 mm	655063
75 mm	655075
90 mm	655090
110 mm	655099


**Socket with gasket**

I.G.-E.T.	code
50 mm x 1½"	711185
63 mm x 2"	711186


**Reducing coupling**

E.T.-I.T.	code
20 mm x ¼"	711615
20 mm x ⅜"	711620
25 mm x ½"	711625
32 mm x ¾"	711632
40 mm x 1"	711640


**Socket**

I.G.-E.T.	code
20 mm x ½"	711141
25 mm x ¾"	711144
32 mm x 1"	711147
40 mm x 1¼"	711151
50 mm x 1½"	711152
63 mm x 2"	711163


**Socket for overflow tank**

code	
63 mm	656163
75 mm	656164
90 mm	656165
110 mm	656166


**Union metal-PVC**

I.G.-E.T.	code
50 mm x 1½"	60905
63 mm x 2"	60906



I.G.-I.T.	code
50 mm x 1½"	60805
63 mm x 2"	60806





**Reducing socket, short**

E.G.-I.G.	code
25-20 mm	692010
32-25 mm	692015
40-20 mm	692016
40-25 mm	692017
40-32 mm	692020
50-20 mm	692023
50-25 mm	692024
50-32 mm	692025
50-40 mm	692030
63-40 mm	692035
63-50 mm	692040
75-50 mm	692043
75-63 mm	692045
90-63 mm	692049
90-75 mm	692050
110-63 mm	692053
110-75 mm	692054
110-90 mm	692055
125-110 mm	692056
140-90 mm	692064
140-110 mm	692065
140-125 mm	692066
160-140 mm	692075
200-160 mm	692076
225-110 mm	692077
225-140 mm	692078
225-160 mm	692080
225-200 mm	692081
250-225 mm	692083



**Nippel**

I.G.-E.T.	code
20 mm x 1/2"	715720
25 mm x 3/4"	715721
32 mm x 1"	715731
40 mm x 1 1/4"	715741
50 mm x 1 1/4"	715751
50 mm x 1 1/2"	715752
50 mm x 2"	715755
63 mm x 1 1/2"	715761
63 mm x 2"	715765
63 mm x 2 1/2"	715767
75 mm x 2"	715775
75 mm x 2 1/2"	715777
75 mm x 3"	715778
90 mm x 3"	715781
110 mm x 4"	715785



**Transitional nippel**

E.G.-E.T.	code
20 mm x 1/2"	715020
25 mm x 3/4"	715025
32 mm x 1"	715032
40 mm x 1"	715041
40 mm x 1 1/4"	715042
50 mm x 1 1/2"	715052
63 mm x 1 1/2"	715062
63 mm x 2"	715065



**End cap**

I.G.	code
20 mm	686020
25 mm	686025
32 mm	686032
40 mm	686040
50 mm	686050
63 mm	686063
75 mm	686075
90 mm	686090
110 mm	686110

**End cap**

E.T.	code
3/8"	730016
1/2"	730020
3/4"	730025
1"	730032
1 1/2"	730050
2"	730063



**Nut**

E.T.	code
3/8"	730216
1/2"	730220
3/4"	730225
1"	730232
1 1/4"	730240
1 1/2"	730250
2"	730263



**Rubber stopper**

diameter	code
1 1/2"	62586
2"	62588



**Reducing band**

pipe x I.T.	code
50 mm x 1/2"	656350
63 mm x 1/2"	656363
75 mm x 1/2"	656375




**Ball valve**

I.G.-I.G.	code
20 mm	732020
25 mm	732025
32 mm	732032
40 mm	732040
50 mm	732050
63 mm	732063
75 mm	732075
90 mm	732090
110 mm	732110


**Non-return valve**

I.G.-I.G.	code
20 mm	732520
25 mm	732525
32 mm	732532
40 mm	732540
50 mm	732550
63 mm	732563
75 mm	732575
90 mm	732590


**Transparent union**

I.G.-I.G.	code
50 mm	730910
63 mm	730920
75 mm	730925
90 mm	730930
110 mm	730935
140 mm	730940
160 mm	730945


**Motor valve**

I.G.-I.G.	code
50 mm, 230 V	732315
63 mm, 230 V	732316
50 mm, 24 V	732355
63 mm, 24 V	732356


**Three-way valve, glued**

3 x I.G.	code
50 mm	732260


**Round bushing code**

63 mm	717063
75 mm	717075
90 mm	717090
110 mm	717110
125 mm	717125
140 mm	717140
160 mm	717160
225 mm	717225
250 mm	717227


**Flange code**

63 mm	718063
75 mm	718075
90 mm	718090
110 mm	718110
125 mm	718125
140 mm	718140
160 mm	718160
225 mm	718225
250 mm	718227


**Flat gasket code**

63 mm	720063
75 mm	720075
90 mm	720090
110 mm	720110
140 mm	720140
160 mm	720160
225 mm	720225
250 mm	720227


**Flap valve code**

75 mm	732205
90 mm	732210
110 mm	732215
140 mm	732220
160 mm	732225
225 mm	732230
250 mm	732235


**Non-return flap code**

63 mm	732669
75 mm	732670
90 mm	732671
110 mm	732672
140 mm	732673
160 mm	732674
225 mm	732676
250 mm	732678





**PVC pipe grip**

	code
50 mm	745050
63 mm	745063
75 mm	745075
90 mm	745090
110 mm	745110
140 mm	745140
160 mm	745160



**Glue for PVC pipes Tangit**

	code
125 g	750005
250 g	750010
500 g	750020
1000 g	750025



**Glue for PVC pipes**

	code
125 g	618010
1000 g	618060

**Dissolvent for pipes**

	code
125 ml	750115
1 liter	750120
1 liter	070040



**PVC pipe, glued**

	code
20 mm	740020
25 mm	740025
32 mm	740032
40 mm	740040
50 mm	740050
63 mm	740063
75 mm	740075
90 mm	740090
110 mm	740110
140 mm	740140
160 mm	740160

**Flexible pipes**



	code
50 mm	741050
63 mm	741063
75 mm	741075
90 mm	741090
glue	741095

**Special unions for flexible pipes**



**Clamp union**

	code
50 mm E.G.	61550
63 mm E.G.	61551
50 mm I.G.	61555
63 mm I.G.	61556

**Clamp union with thread**



	code
50 mm x E.T. 1½", with gasket	61560
50 mm x E.T. 2", with gasket	61561
63 mm x E.T. 2", with gasket	61562
50 mm x I.T. 1½"	61590
63 mm x I.T. 2"	61591

**Clamp elbow**



	code
50 mm I.G.	61565
63 mm I.G.	61566

**Clamp elbow**



	code
2 x 50 mm I.G.	61570
2 x 63 mm I.G.	61571

**Clamp tee**



	code
2 x 50 mm I.G.	61575
2 x 63 mm I.G.	61576

**Clamp tee**



	code
3 x flex. pipe 50 mm	61580
3 x flex. pipe 63 mm	61581



# TEBAS PRODUCTS

Tebas is a brand of products for swimming pools, which are produced at an angle of connection the quality and price.

### Filter Saturn with pallet without pump

name	code
filter Saturn 406 mm	081002
filter Saturn 485 mm	081007
filter Saturn 610 mm	081012



### Filter Saturn with pump and pallet

name	code
406 mm, 8 m <sup>3</sup> /h	081017
485 mm, 10 m <sup>3</sup> /h	081024
610 mm, 13 m <sup>3</sup> /h	081029



### Automatic dosing system Tebas-Eurodos

name	code
pH/active oxygen	1306000
pH/Redox-chlorine	1236000
pH/active oxygen	1306001
pH/Redox-chlorine	1236001



### Automatic dosing system Tebas-Economic

name	code
pH/Redox-chlorine	1236003



### Pneumatic control boxes Tebas

for pump with power	code
to 2,2kW, 230 V	375146
to 2,2kW, 400 V	375147
to 4,0kW, 400 V	375148



### Pump controller Tebas

for pump with power	code
to 2,2 kW, 230 V	14801
to 2,2 kW, 400 V	14802
to 4,0 kW, 400 V	14803



### Filter controller Tebas Pool-Consulting

name	code
Tebas Pool Consulting 230 V	14800



### LED bulbs

name	code
LED 12V, 15 W, white	24880
LED 12V, 15 W, color	24882
Maxi 12V, 20 W, white	24881



### Salt electrolyzer TEBAS

name	code
salt electrolyzer TEBAS 15g Cl/h for pool max. 70 m <sup>3</sup>	78775



code
24405
24405led
24405ledrgb



code
24320
24320led
24320ledrgb



### Heat pump TEBAS

name	code
heat pump 230 V, 8,5 kW	14605
heat pump 230 V, 10,5 kW	14608
heat pump 230 V, 13,0 kW	14610
heat pump 230 V, 16,0 kW	14613



### Lamp Euro 12 V

name	code
lamp 300 W,	24400
lamp 15 W, LED white	24400led
lamp 15 W, LED color	24400ledrgb



# ALIMAN<sup>®</sup>

POLSKIE ZADASZENIA BASENOWE



**SECURITY** - Pool roofing provides a barrier to children and pets. Thanks to our construction the pool becomes safe, "closed" in your patio, adding security against life-threatening hazard when unattended.



**SEASON EXTENSION** - Pool roofing enables pool-side leisure regardless of weather conditions. Our constructions are covered with polycarbonate, a material with ideal insulating qualities and absorption of solar energy.



**CLEANLINESS** - You no longer need to endlessly clean your pool. Your pool is not supposed to make work, it is supposed to be for recreation, to spend more time having fun in water, to rest provide an atmosphere for relaxed conversation with your friends. With the roofing, you will find out exactly what it means to relax and what rest at pool-side means. Your pool will cease to be an additional, problematic object, a chore for cleaning, instead becoming a new element in your lifestyle. The pool roof successfully protects your pool against falling leaves, blown soil and dust, as well as debris from nearby fields and wasteland.



**ENERGY EFFICIENCY** - Pool roofing is a natural solar collector. Our constructions are covered with polycarbonate, a material of high solar absorption ratio, i.e. yielding significant solar energy - the passive heating of water in the pool through solar rays as a result; the roofing material provides a combined advantage of warming the water while insulating against loss of heat during the night or during a cold weather. On sunny days, thanks to the covering, water temperature of even an unheated pool can be raised.

## BASIC CONSTRUCTION INCLUDES

- reinforced aluminium framing structure
- roofing material a solid polycarbonate, thickness of 10 mm, with UV surface filter
- one retractable door, installed according to specification
- semi-automatic, retractable roof system and segments installed
- system of wind damage protection





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