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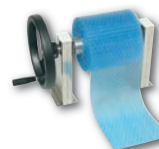
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Pahlén - a partner to count on

Pahlén started in 1967 and is today Scandinavia's largest manufacturer of swimming pool equipment for every type of pool, from small private to large public pools.

Pahlén is a Swedish company with tradition. It is family owned and operated and has developed and manufactured components for swimming pools for more than 39 years.

The range offered includes pumps, filters, lighting, heating and dosing equipment and the materials used are acid proof stainless steel and bronze.

Pahlén has a smooth organisation, with the ability to decide and act quickly. The resources are large and in spite of constant growth Pahlén is an uncomplicated company.



Photo: Conny Sturesson

Export to more than 55 countries!

You will find the Pahlén products in installations worldwide and 70% of the production is being exported to more than 55 countries.

Our quality products have given us a good name throughout the world.



The most important things about a pool are the ones you can't see.

A reliable and steady water flow is essential. High-quality skimmers and inlet jets of acid-resistant stainless steel and bronze.



You can extend your pool use season by heating the water. Pahlén heating products of stainless acid-resistant steel are available for every type of pool.



Pool ladders must be stable. The one shown is in polished stainless steel with three steps. Fixed or hinged versions of ladders are available.



An evening swim or an evening atmosphere around the pool. A lighting package comprising a lamp unit and junction box of acid resistant stainless steel together with a transformer, cable and accessories.



Pool water must be crystal clear. The sand filter and its pump are the heart of a pool and must be of the highest quality. This pump and backwash valve are made of bronze. The tank is GRP.

Swimming for exercise has never been more fun or more effective than with a Pahlén Jet Swim in the pool. Complete Jet Swim packages in acid-resistant stainless steel with a bronze pump are available for both indoor and outdoor pools.



Water attraction parks



Sannarpsbadet in Halmstad, Sweden

www.sannarpsbadet.halmstad.com

Swedish agent: Lagunpool Poolkonsult

A public pool installation including adventure and therapy pools, swimming and diving pools and a spa pool. The Pahlén equipment includes sand filters, bronze pumps, Autodos dosing equipment and dosing pumps.



Skara Sommarland, Sweden

www.sommarland.se

The largest adventure and amusement installation in the Nordic countries. Equipped with Pahlén sand filters, bronze pumps, Autodos and dosing pumps, pool covers and electric heaters.





Luxury liners from Finland

Agent: HOH Separtec Oy

For all the “Voyager” luxury liners Pahlén has supplied the equipment for swimming pools and spa pools, i.e. sand filters, bronze pumps, dosing equipment Autodos, Jet Swim and electric heaters.



Indoor pools



Private pools in Moscow, Russia

Agent: General Ecology

Russia, Ukraine, Kazakhstan, Uzbekistan and Armenia are some of the new growing markets for private as well as public swimming pools.





Private pools in Moscow, Russia
Agent: General Ecology

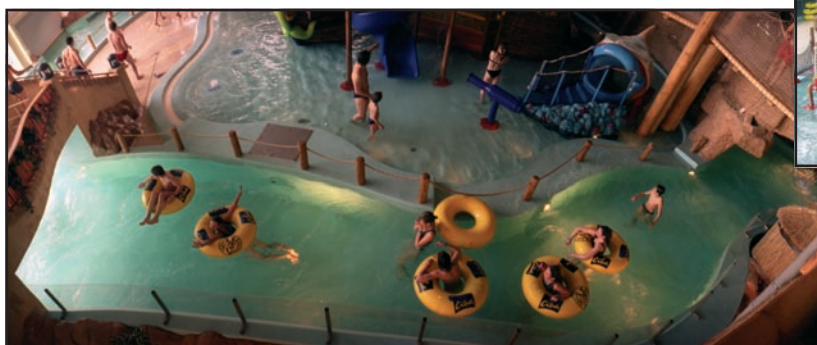
Akvaparks

Akvaparks, Riga, Latvia

Agent: SIA Selektā.

The water attraction park Akvaparks in Jurmala outside Riga, with a total area of 10.000 m², opened in January 2004.

Completely equipped with Pahlén sand filters, pumps, heat exchangers, lighting and dosing equipment.





Akvaparks, Riga, Latvia
Agent: SIA Selektā.



Private pools



Private pools in Belgium
Agent: Antheunis Zwembaden NV

Private pools in Belgium

Agent: Antheunis Zwembaden NV



Sand filters

Pools with varying bathing loads place heavy demands on water clarity. With larger installations such as adventure pools and outdoor pools it is important that the filtration is correctly specified and of the correct type.

Pahlén manufacture a variety of sand filters for private and public pools from GRP, a strong and corrosion proof material. Pahlén have many years experience in pool filtration as well as supplying industrial filters for other areas of operation.



Sand filters



Type 520, 640,
760, 900 p. 13



Type 400, 500,
600, 750 p. 14



Type 300 p. 14

Bobbin wound polyester sand filters

Sand filter multibed



Bobbin Ø 1200-2500 p. 15

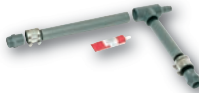


Multibed 640, 760, 900 p. 17

Filter and filter accessories



Filter sand p. 18



Connecting pipe
p. 18



Filter cartridges p. 18

Sand filter type 520, 640, 760, 900

The filters are manufactured from GRP, a strong corrosion free material. The backwash valve is made of bronze or ABS plastic with connections to the pump, pool and drain.

These filters effectively collect all impurities from the pool and are themselves easily cleaned when necessary by a simple operation. This is accomplished by turning the handle on the backwash valve. The water flow through the sand is then reversed and the dirty water is sent to the drain outlet.



Filter medium: Screened sand 0,6-0,8 mm
A drain plug is fitted to the tank.
Excluding filter sand.

Item no.	
Bronze valve	
110 011 11	Sand filter 520 with 1 ½" backwash valve of bronze
110 021 11	Sand filter 640 with 1 ½" backwash valve of bronze
110 022 11	Sand filter 760 with 1 ½" backwash valve of bronze
Plastic valve	
110 011 21	Sand filter 520 with 1 ½" backwash valve of ABS plastic
110 021 21	Sand filter 640 with 1 ½" backwash valve of ABS plastic
110 022 21	Sand filter 760 with 2" backwash valve of ABS plastic
110 023 21	Sand filter 900 with 2" backwash valve of ABS plastic

Technical data									
Item no.	Type	Filter area m²	Sand bed depth (mm)	Max operating pressure bar	Filter medium kg	Net weight kg	Total weight sand + water kg	Dimensions H (mm) W	
Bronze valve									
110 011 11	520	0,22	430	2	100	25	183	1010	530
110 021 11	640	0,33	470	2	150	31	263	1010	650
110 022 11	760	0,45	680	2	225	38	408	1215	770
Plastic valve									
110 011 21	520	0,22	430	2	100	17	175	1060	530
110 021 21	640	0,33	470	2	150	23	254	1060	650
110 022 21	760	0,45	680	2	225	33	403	1240	770
110 023 21	900	0,64	690	2	325	43	575	1260	900

Sand filter type 400, 500, 600, 750

Sand filters with a tank of polyethylene plastic, equipped with a 6 way ABS plastic backwash valve with connections to the pump, pool and drain. These filters effectively collect all impurities from the pool and are themselves easily cleaned when necessary by a simple operation.



Filter medium: Screened sand 0,6-0,8 mm. A drain plug is fitted to the tank. Excluding filter sand.

Technical data

Item no.	Type	Filter area m ²	Suitable pump size	Weight excl. sand	Sand kg	Pipe connection valve	Dimensions H (mm) W		
212010	400	0,13	0,37 kW	13	50	1 ½"	915	410	
212011	500	0,20	0,55 kW	16	90	1 ½"	965	535	
212012	600	0,30	0,75 kW	20	140	1 ½"	1070	635	
212013	750	0,45	1,10 kW	41	225	2"	1150	765	

Sand filter type 300



Sand filter type 300 is supplied with base plate and connection hose to the pump.



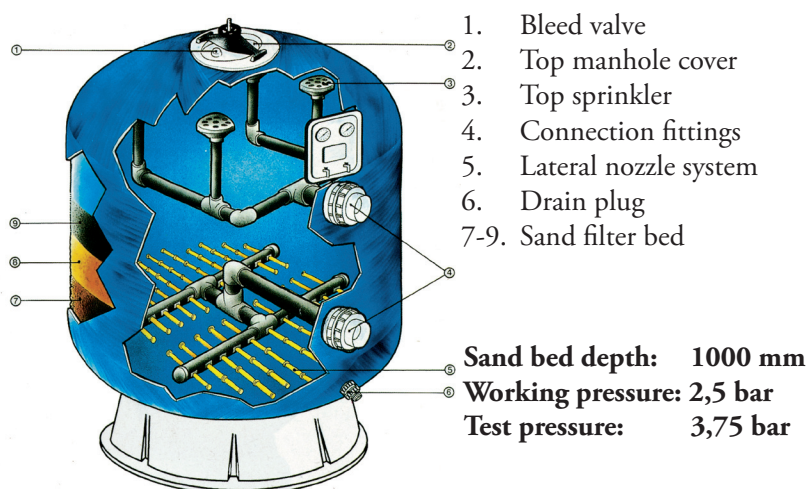
Sand filter 300 (item no. 212014), pump Micro 33 (item no. 115820), plastic electric heater 1,5-3,0 kW (item no. 141650-52), connecting pipe (item no. 516403) and sand (item no. 12220) make a compact and adaptable unit for smaller swimming pool sand hot tubs.

Technical data

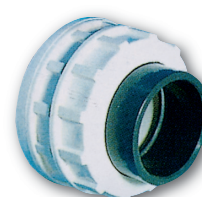
Item no.	Type	Filter area m ²	Suitable pump size	Weight excl. sand	Sand kg	Pipe connection valve	Dimensions H L W		
212014	300	0,07	0,25 kW	7	20	1 ½"	745	365	635

Bobbin polyester sand filter

Bobbin wound pressure sand filter for public installations. Manufactured from fibre glass reinforced polyester plastic and with an internal gel coating. The filters are equipped with a large top mounted manhole, a lateral nozzle system, air bleed system and pressure gauge panel. Filters with connections up to Ø140 mm are equipped with connection couplings, Ø160-225 mm with connection flanges.



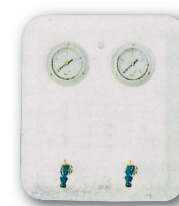
Connection flange



Connection coupling



Top manhole cover



Pressure gauge

Filter with lateral nozzle system 2,5 bar

Filter speed 15 m³/h/m²

Item no.	Ø mm	Connection mm	Flow m³/h	Area m²	Sand kg
21600	1400	75	23	1,54	1900
21602	1600	90	30	2,01	2600
21604	1800	90	38	2,54	3500
21606	2000	110	47	3,14	4500
21608	2350	125	65	4,34	6000
21610	2500	140	74	4,91	6900

Filter speed 20 m³/h/m²

21614	1400	75	31	1,54	1900
21616	1600	90	40	2,01	2600
21618	1800	90	51	2,54	3500
21620	2000	110	63	3,14	4500
21622	2350	125	87	4,34	6000
21624	2500	140	98	4,91	6900

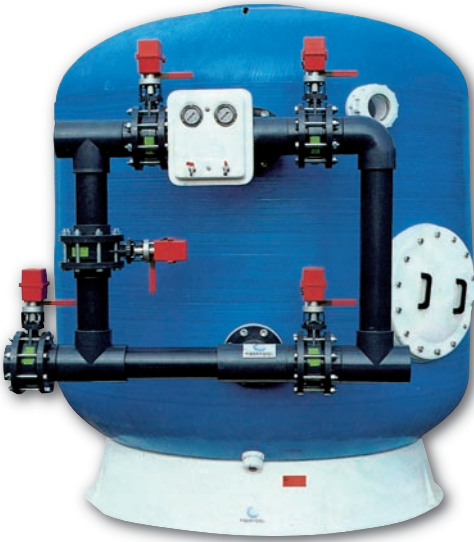
Filter speed 30 m³/h/m²

21626	1400	90	46	1,54	1900
21628	1600	110	60	2,01	2600
21630	1800	110	76	2,54	3500
21632	2000	125	94	3,14	4500
21634	2350	140	130	4,34	6000
21636	2500	160	147	4,91	6900

Filter speed 40 m³/h/m²

21638	1400	110	62	1,54	1900
21640	1600	110	80	2,01	2600
21642	1800	125	102	2,54	3500
21644	2000	140	126	3,14	4500
21646	2350	160	174	4,34	6000
21648	2500	200	196	4,91	6900

Vertical Bobbin wound polyester sand filter



217951



217952



217953

Accessories for Bobbin sand filter

Item no.

- 217951 Sight glass Ø 110 mm
- 217952 Side manhole cover, oval 420x340 mm
- 217953 Side manhole cover, round
- 217955 Ozone control

Sand bed depth: 1200 mm, working pressure: 2,5 bar, test pressure: 3,75 bar

All Bobbin filters can be supplied with a complete face pipe work and valve package.



Fixed nozzle bed

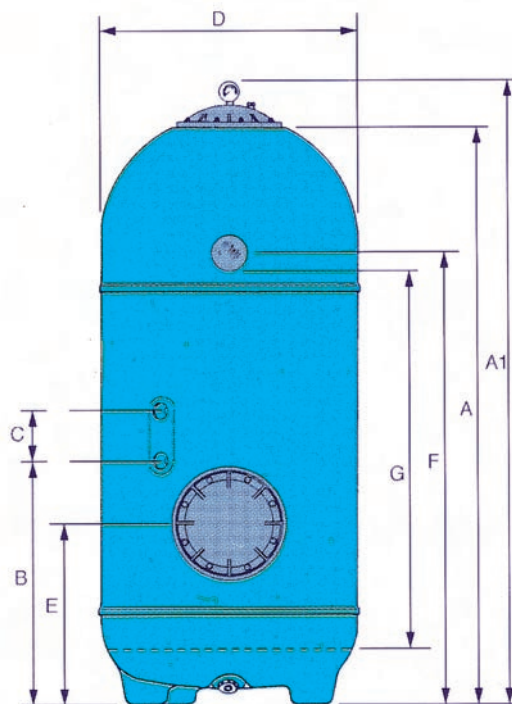
Filter with fixed nozzle system 2,5 bar					
Filter speed 20 m³/h/m²					
Item no.	Ø mm	Connection mm	Flow m³/h	Area m²	Sand kg
21750	1200	75	23	1,13	1950
21752	1400	90	31	1,54	2550
21754	1600	110	40	2,01	3300
21756	1800	125	51	2,54	4200
21758	2000	125	63	3,14	5100
21760	2350	140	87	4,34	6680
21762	2500	160	98	4,91	7600
Filter speed 30 m³/h/m²					
21764	1200	75	34	1,13	1950
21766	1400	90	46	1,54	2550
21768	1600	110	60	2,01	3300
21770	1800	125	76	2,54	4200
21772	2000	125	94	3,14	5100
21774	2350	140	130	4,34	6680
21776	2500	160	147	4,91	7600
Filter speed 50 m³/h/m²					
21778	1200	110	57	1,13	1950
21780	1400	125	77	1,54	2550
21782	1600	125	101	2,01	3300
21784	1800	160	127	2,54	4200
21786	2000	160	157	3,14	5100
21788	2350	200	217	4,34	6680
21790	2500	225	246	4,91	7600

Multibed glass fibre polyester reinforced sand filter

These filters can be supplied with either a fixed or lateral nozzle system, large side manhole, sight glass, pressure gauge, air bleeding and a 6-way backwash valve.

Working pressure: 2,5 bar

Test pressure: 4,0 bar



Dimensions in mm

Filter with 1000 mm sand bed

D	A	A1	B	C	E	F	G
640	1140	1550	600	140	460	1130	1000
760	1490	1600	600	140	510	1180	1000
900	1510	1610	590	140	500	1230	1000

Filter with 1200 mm sand bed

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 with lateral nozzle system

Item no.	Ø mm	Connection	Area m ²	Sand bed height mm	Sand kg
21900	640	2"	0,32	1000	475
21901	760	2"	0,45	1000	650
21902	900	2"	0,64	1000	925
21903	640	2"	0,32	1200	575
21904	760	2"	0,45	1200	800
21905	900	2"	0,64	1200	1125

Filter with fixed nozzle system

21910	640	2"	0,32	1000	425
21911	760	2"	0,45	1000	620
21912	900	2"	0,64	1000	875
21913	640	2"	0,32	1200	525
21914	760	2"	0,45	1200	725
21915	900	2"	0,64	1200	1050



Lateral nozzle system



Fixed nozzle system

Filter accessories

Filter sand

Specially prepared sand, washed and screened for sand filters.



Item no.	Particle size	Weight /sack (kg)
12220	0,6-0,8	25

Other particle sizes can be supplied upon request.

PVC connecting pipe

Connecting pipe between pump and filter for type 400, 500, 520, 600 and 640. Including couplings to pump and filter.



Item no.	
516401	PVC connecting pipe Ø 50 mm with 1/2" thermostat connection.
516402	PVC connecting pipe Ø 50 mm with 90° angle.
516403	PVC connecting pipe Ø 50 mm for sand filter 300 with pump and plastic electric heater.
516405	Connecting hose, flexible PVC Ø 50 mm.

Filter cartridges



Cartridges for filter types BE, HIF and EK

Item no.	Microns	Length (mm)	OD (mm)	ID (mm)	Max temp °C
21237	0,35	247	70	28	60
21238	1	247	70	28	60
21242	5	247	70	28	60
212420	10	247	70	28	60
21240	20	247	70	28	60
21243	50	247	70	28	60
21244	100	247	70	28	60
21239	Activated charcoal for drinking water	247	70	28	60

For swimming pools use 20 microns.



Other cartridges

Item no.	Filter type	Length (mm)	YD (mm)	ID (mm)	Max temp °C
21245	Filter cartridge type 250, 20 micron	250	175	77	60
21246	Filter cartridge type 500, 20 micron	500	175	77	60
31227	Cartridge type ST105, for vacuum cleaner trolley with singel cartridge	483	197	85	60

Pumps Pre-filters

The pump is an important part of a pool installation. It has to continuously circulate the water and should be dimensioned with regard to the pool size and the bathing frequency. Pahlén manufacture bronze filter pumps in sizes ranging from 0,37 - 7,5 kW.

These pumps are specially designed for economical operation and a long operational life. High quality standard motors ensure stable and silent operation.

Pahlén can supply larger pumps in sizes up to 18,75 kW and plastic pumps.



Bronze pumps



0,37-1,5kW p. 21



1,5-4,0kW p. 22



5,5kW p. 23



7,5kW p. 24

Bronze pumps without pre-filters



0,37-1,1kW p. 25



1,5-4,0kW p. 26



5,5kW p. 23



7,5kW p. 24

Pre-filters

Reducers

Plastic pumps



Pre-filter p. 27



Reducers p. 27



0,37-1,5kW p. 28



0,25kW p. 28



0,60-1,5kW p. 29

Large centrifugal pumps



FD 1,5-9,4kW p. 30



FD-H 1,5-11,3kW p. 31



FD-V 3,0-18,75kW p. 32

Bronze pump P01 0,37-1,5kW 2900 rpm

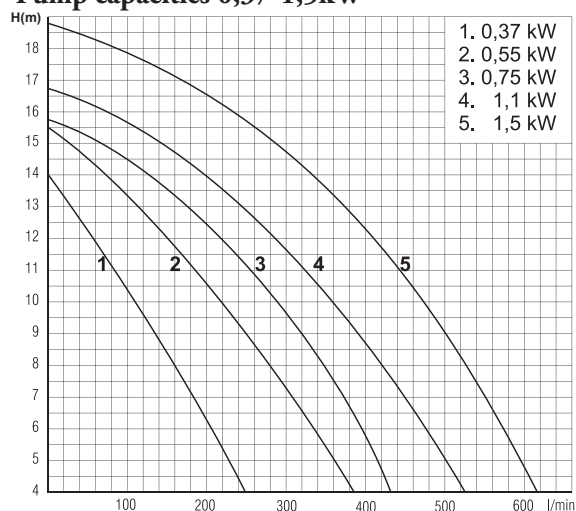
The Pahlén production of centrifugal pumps is especially designed for swimming pools and meet the demands for high capacity, silent operation and long and trouble-free service. The pumps are of high quality and manufactured of bronze alloy, which, after 39 years experience, has proved to be an excellent choice of material for swimming pools.

Both pump and motor are built into one unit, which also contains a pre-filter which effectively collects leaves, insects etc. Access to the filter basket is via an easily removable cover, held in place by two large wing screws. If service is ever required it is very easy to separate the pump and pump housing and this requires no interference with pipes and connections. The high class motors used provide stable and quiet operation.

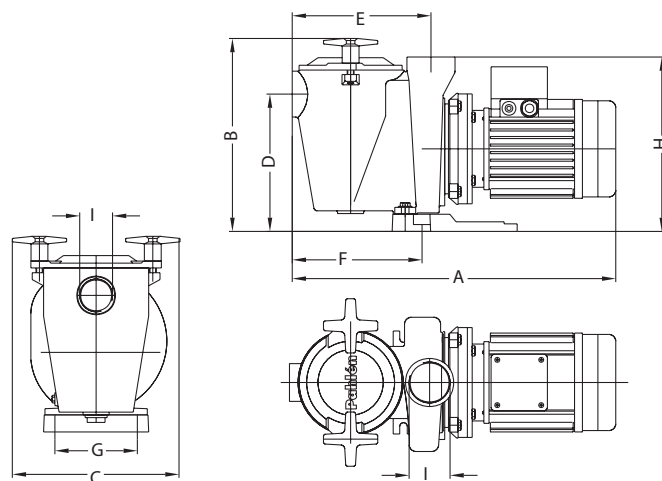


120105

Pump capacities 0,37-1,5kW



Technical data				Ampere	
Item no.	kW	Phase	Volt	400V	230V
120100	0,37	3	230/400	1,0	1,6
120105	0,55	3	230/400	1,4	2,3
120110	0,75	3	230/400	1,7	2,8
120115	1,1	3	230/400	2,4	4,0
120120	1,5	3	230/400	3,0	4,9
120200	0,37	1	230		2,4
120205	0,55	1	230		3,7
120210	0,75	1	230		5,0
120215	1,1	1	230		6,7
120220	1,5	1	230		9,2



Dimensions										
Item no.	kW	A	B	C	D	E	F	G	H	I
120100, 120200	0,37	470	285	245	210	202	160	126,5	255	2"
120105, 120205	0,55	470	285	245	210	202	160	126,5	255	2"
120110, 120210	0,75	510	285	245	210	202	160	126,5	255	2"
120115, 120215	1,1	510	285	245	210	202	160	126,5	255	2"
120120, 120220	1,5	510	285	245	210	202	160	126,5	255	2"

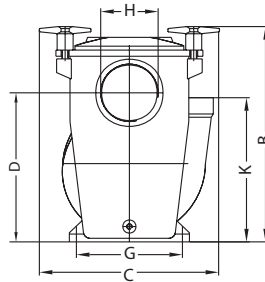
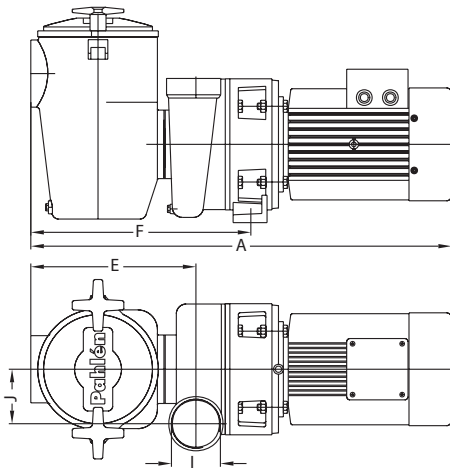
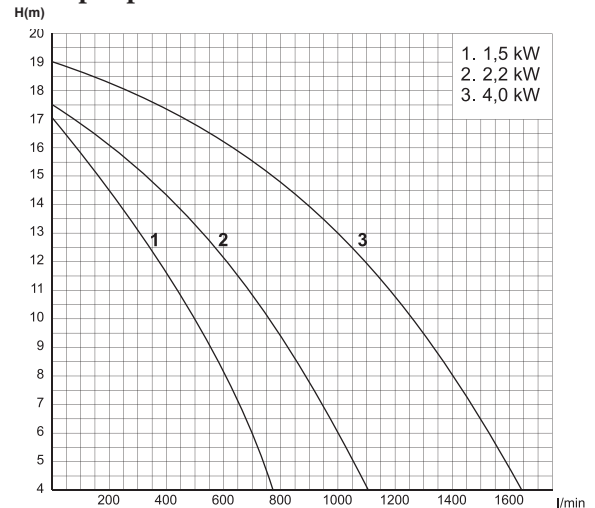
Bronze pump P2000 1,5-4,0kW 2900 rpm

To ensure the correct circulation and filtration of pool water it is important to choose a correctly dimensioned pump. Pahlén manufacture pumps to satisfy the majority of pool installations. These pumps are manufactured completely from corrosion free bronze and are equipped with a large pre-filter to collect impurities such as leaves, insects etc. This filter has an easily removable filter basket. The pump has a bronze impeller mounted on a shaft of acid proof stainless steel and is easily accessible for service without dismantling or loosening pipes and connections.



112201

Pump capacities 1,5-4,0kW

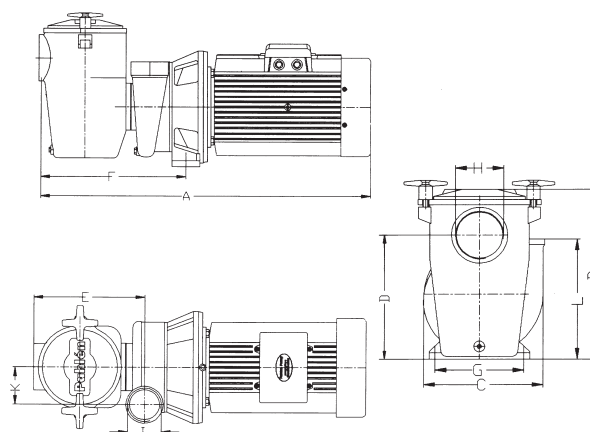


Technical data				Ampere		Pipe connection	
Item no.	kW	Phase	Volt	400V	230V	Suction	Pressure
112201	1,5	3	230/400	3,0	4,9	3"	2½"
112211	2,2	3	230/400	4,3	7,1	3"	2½"
112221	4,0	3	400/690	7,9		3"	2½"
112281	1,5	1	230		9,2	3"	2½"

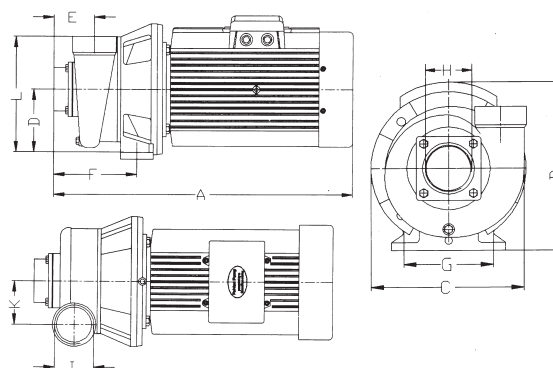
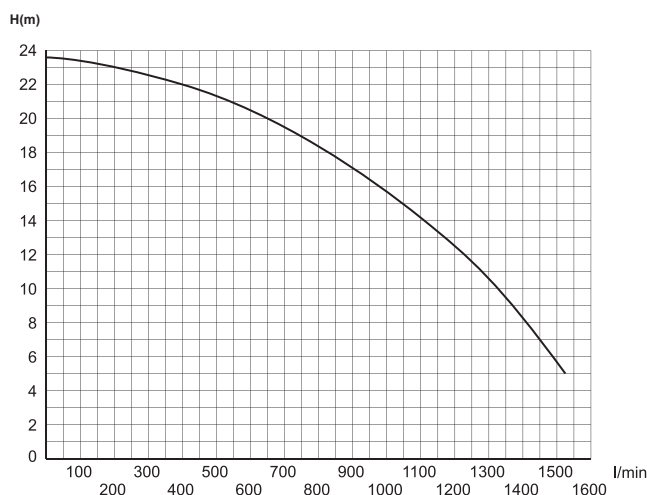
Dimensions												
Item no.	kW	A	B	C	D	E	F	G	H	I	J	K
112201	1,5	620	335	275	225	250	330	130	3"	2½"	82	220
112211	2,2	620	335	275	225	250	330	130	3"	2½"	82	220
112221	4,0	710	335	275	225	250	330	130	3"	2½"	82	220
112281	1,5	620	335	275	225	250	330	130	3"	2½"	82	220

Bronze pump P85 5,5kW 2900 rpm

To ensure the best and most economical filtration of pool water it is important to choose a pump of the correct capacity. Pahlén bronze pumps are especially developed for swimming pools to meet the demands for high capacity, silent operation and long and trouble-free service. All pumps are equipped with a large filter and a filter basket, which is easily accessible for cleaning. The pump and filter house is manufactured in a corrosion free bronze alloy. Even the pump impeller is made of bronze and is mounted on an acid proof stainless steel shaft.



Pump capacities 5,5kW

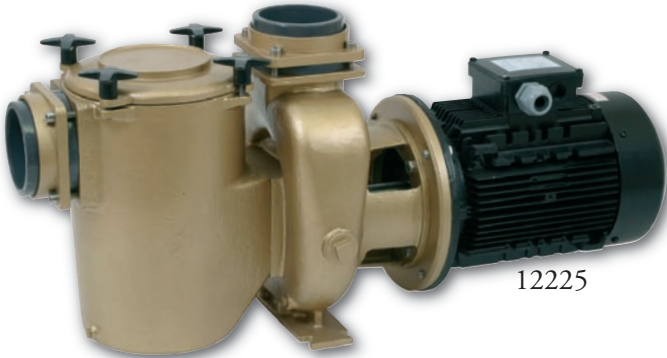


Technical data				Ampere	Pipe connection	
Item no.	kW	Phase	Volt	400V	Suction	Pressure
11223	5,5	3	400/690	11	3"	2½"
11523	5,5	3	400/690	11	2½"	2½"

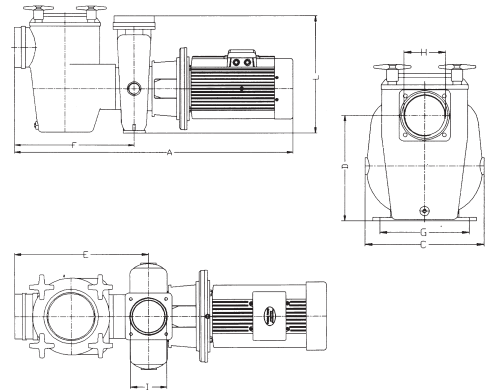
Dimensions													
Item no.	Type	kW	A	B	C	D	E	F	G	H	I	K	L
11223	Filter pump	5,5	815	330	275	250	240	315	140	3"	2½"	82	235
11523	Pump excl. pre-filter	5,5	640	275	275	137	77	155	140	2½"	2½"	82	235

Bronze pump 7,5kW 2900 rpm

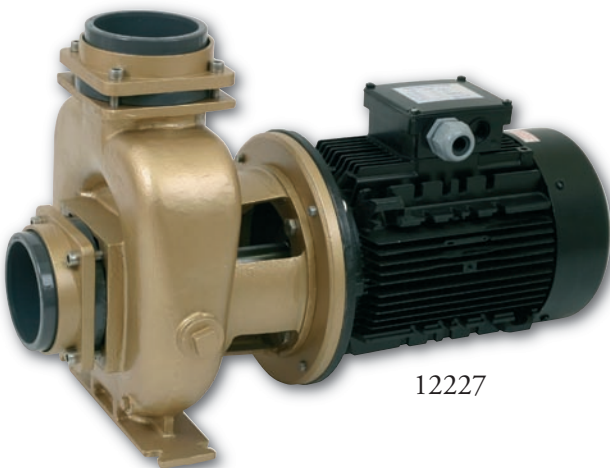
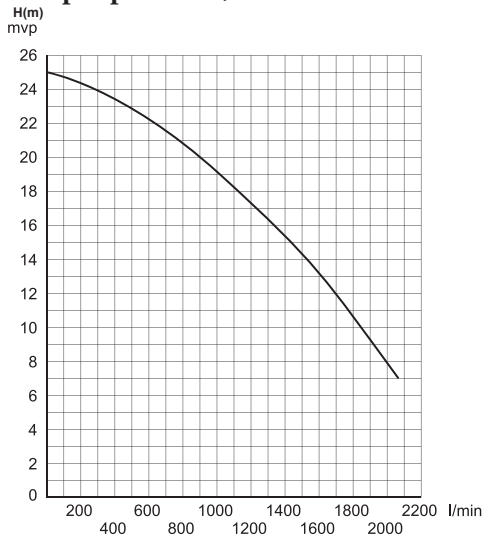
A centrifugal pump designed for larger pool installations to meet the demands for high capacity, silent operation and long and trouble-free service. The pump is equipped with a large pre-filter to collect impurities such as leaves, insects etc. Four large wing screws allow easy access to the filter basket for cleaning purposes. The filter basket is made of stainless steel. The pump and filter house is manufactured in a corrosion free bronze alloy. Even the pump impeller is made of bronze and is mounted on an acid proof stainless steel shaft.



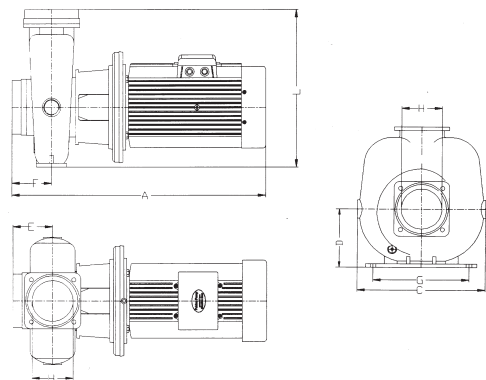
12225



Pump capacities 7,5 kW



12227

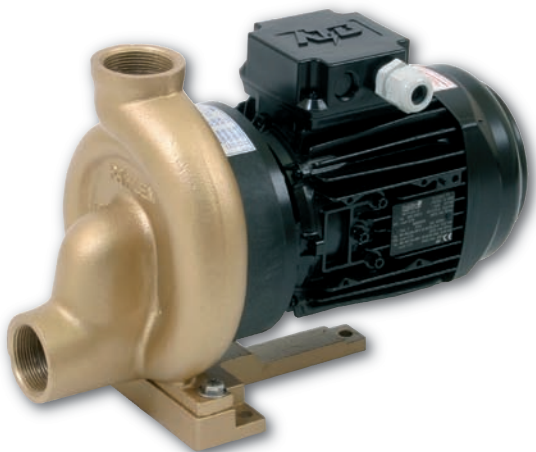


Technical data				Ampere	Pipe connection	
Item no.	kW	Phase	Volt	400V	Suction	Pressure
12225	7,5	3	400/690	14	110	110
12227	7,5	3	400/690	14	110	110

Dimensions												
Item no.	Type	kW	A	B	C	D	E	F	G	H	I	L
12225	Filter pump	7,5	995	410	360	300	390	390	260	110	110	430
12227	Pump excl. pre-filter	7,5	720		360	160	115	115	260	110	110	430

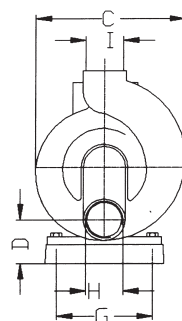
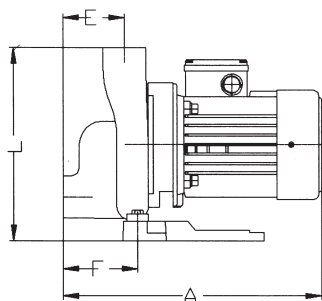
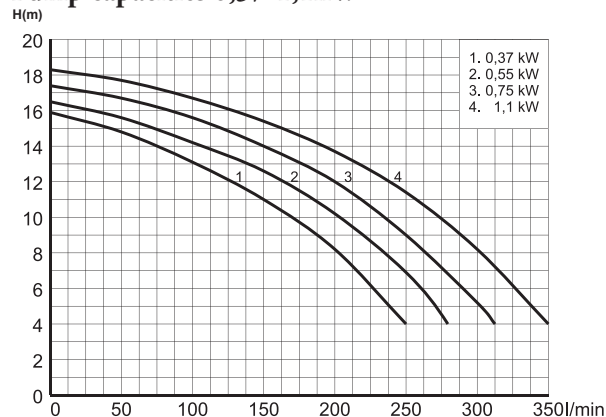
Bronze pump excl. pre-filter 0,37-1,1kW 2900 rpm

Centrifugal pumps of high quality bronze alloy and especially designed for swimming pools to meet the demands for high capacity, silent operation and long and trouble-free service. Both pump and motor are built into one unit. If service is ever required it is very easy to separate the pump and pump house and this requires no interference with pipes and connections.



11416

Pump capacities 0,37-1,1kW



Technical data				Ampere		Pipe connection	
Item no.	kW	Phase	Volt	400V	230V	Suction	Pressure
11416	0,37	3	230/400	0,96	1,66	1½"	1½"
11417	0,55	3	230/400	1,44	2,50	1½"	1½"
11418	0,75	3	230/400	1,86	3,20	1½"	1½"
11419	1,1	3	230/400	2,95	4,60	1½"	1½"
11424	0,37	1	230		2,65	1½"	1½"
11425	0,55	1	230		4,00	1½"	1½"
11426	0,75	1	230		5,50	1½"	1½"
11427	1,1	1	230		6,30	1½"	1½"

Dimensions											
Item no.	kW	A	C	D	E	F	G	H	I	L	
11416	0,37	365	190	56	78	100	125	1½"	1½"	250	
11417	0,55	365	190	56	78	100	125	1½"	1½"	250	
11418	0,75	400	190	56	78	100	125	1½"	1½"	250	
11419	1,1	400	190	56	78	100	125	1½"	1½"	250	
11424	0,37	365	190	56	78	100	125	1½"	1½"	250	
11425	0,55	365	190	56	78	100	125	1½"	1½"	250	
11426	0,75	400	190	56	78	100	125	1½"	1½"	250	
11427	1,1	400	190	56	78	100	125	1½"	1½"	250	

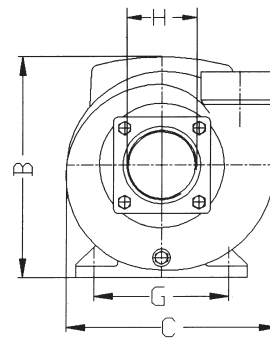
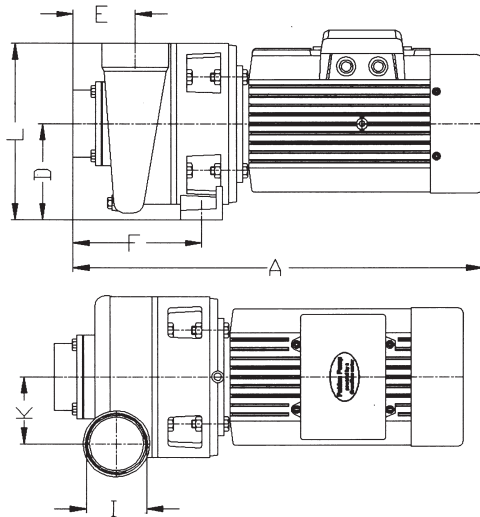
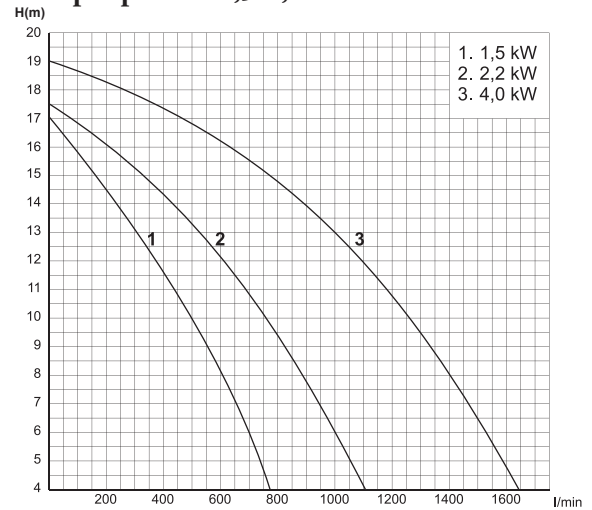
Bronze pump excl. pre-filter 1,5-4,0kW 2900 rpm

Centrifugal pumps of high quality bronze alloy and especially designed for swimming pools to meet the demands for high capacity, silent operation and long and trouble-free service. Both pump and motor are built into one unit. If service is ever required it is very easy to separate the pump and pump house and this requires no interference with pipes and connections.



115201

Pump capacities 1,5-4,0kW



Technical data				Ampere		Pipe connection	
Item no.	kW	Phase	Volt	400V	230V	Suction	Pressure
115201	1,5	3	230/400	3,40	5,90	2½"	2½"
115211	2,2	3	230/400	4,75	8,25	2½"	2½"
115221	4,0	3	400/690	7,90		2½"	2½"
115281	1,5	1	230		9,90	2½"	2½"

Dimensions												
Item no.	kW	A	B	C	D	E	F	G	H	I	K	L
115201	1,5	445	245	230	122	77	155	130	2½"	2½"	82	220
115211	2,2	445	245	230	122	77	155	130	2½"	2½"	82	220
115221	4,0	540	285	230	122	77	155	130	2½"	2½"	82	220
115281	1,5	445	245	230	122	77	155	130	2½"	2½"	82	220

Pre-filters and reducers



Pre-filter of bronze

Pahlén pre-filter of bronze with a strainer basket. The filter is mounted in-line in both new and existing installations.

Connection								
Item no.	Type	Inlet	Outlet	Weight kg	Height mm	Width mm	Length mm	Volume m ³
11700	P81	3"	2½"	12,3	340	225	225	0,006
11702	1296	110	110	29,6	440	225	440	0,014

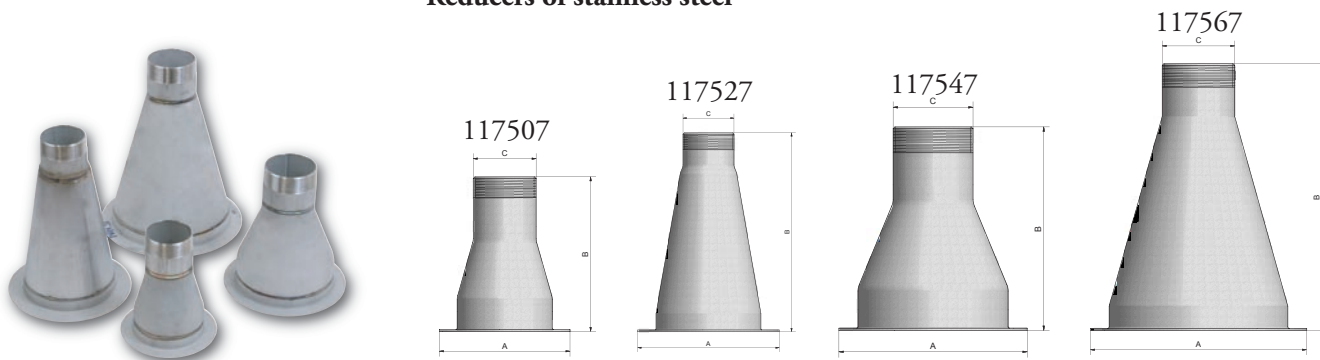


Pre-filter of cast iron

Pahlén in-line pre-filter of cast iron GG25 with a strainer basket of stainless steel AISI 316. Simple to install in both new and existing pool installations.

Connection (DN)								
Item no.	Type	Inlet	Outlet	Weight kg	Height mm	Width mm	Length mm	Volume m ³
11710	H65/65	65	65	19,5	320	275	300	0,026
11711	H80/80	80	80	20,5	320	275	300	0,026
11712	H100/80	100	80	21	320	275	300	0,026
11713	H100/100	100	100	21,5	320	275	300	0,026
11714	H125/100	125	100	35	370	265	345	0,032
11715	H125/125	125	125	36	370	265	345	0,032
11716	H150/125	150	125	36	610	330	445	0,08
11717	H150/150	150	150	37	610	330	445	0,08

Reducers of stainless steel



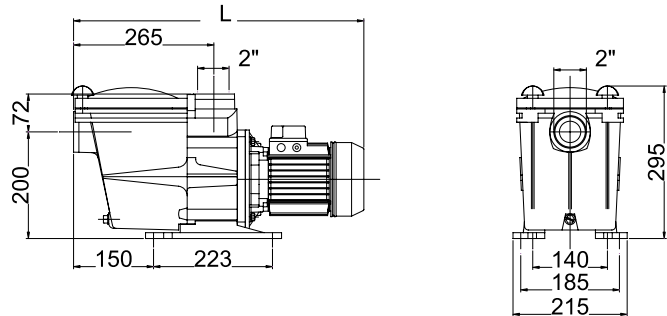
Dimensions				
Item no.	Type	A	B	C
117507	110/2½"	158	187	2½"
117527	160/2½"	211	297	2½"
117547	160/3"	211	228	3"
117567	200/3"	267	330	3"

Plastic pump 0,25-1,5kW 2850 rpm

Pahlén can also supply easily serviced pool pumps manufactured of noryl plastic built in one unit with pump and motor. There is a strainer basket for collecting larger particles. This basket has a transparent lid which allows easy inspection and access to the basket. Servicing is simple without dismantling of either pipes or connections.

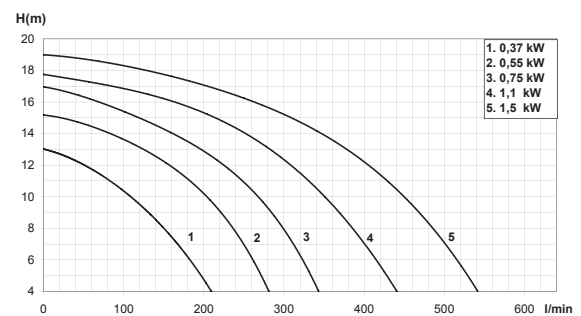


115700

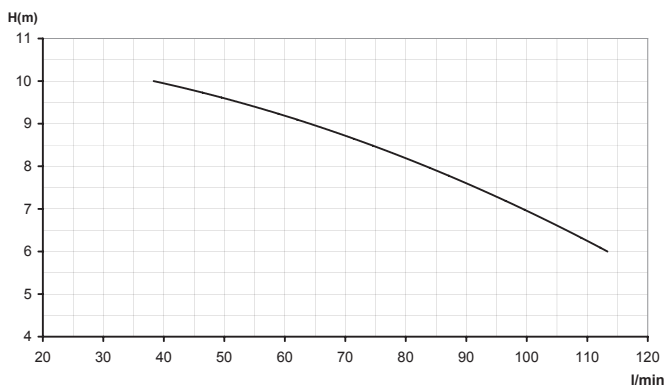


Technical data				Ampere			
Item no.	Type	kW	Phase	Volt	400V	230V	L
115700	ND-14T	0,55	3	230/400	1,6	2,8	544
115710	ND-19T	0,75	3	230/400	1,8	3,2	544
115720	ND-24T	1,1	3	230/400	3,2	5,6	566
115730	ND-28T	1,5	3	230/400	3,7	6,5	566
115740	ND-9M	0,37	1	230		3,5	544
115750	ND-14M	0,55	1	230		4,2	544
115760	ND-19M	0,75	1	230		5,4	544

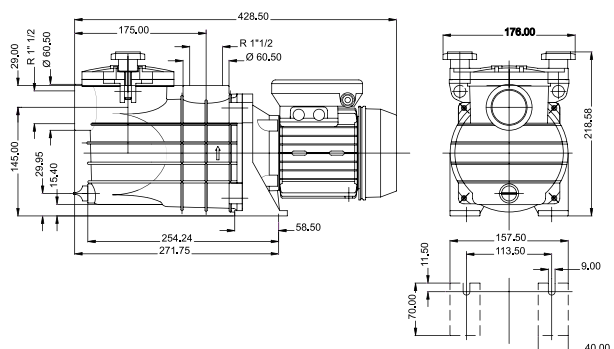
Pump capacities 0,37-1,5kW



Pump capacities 0,25kW



115820



Technical data					
Item no.	Type	kW	Phase	Volt	Ampere
115820	Micro 33	0,25	1	230	2,2

Plastic pump 0,60-1,5kW 2750 rpm

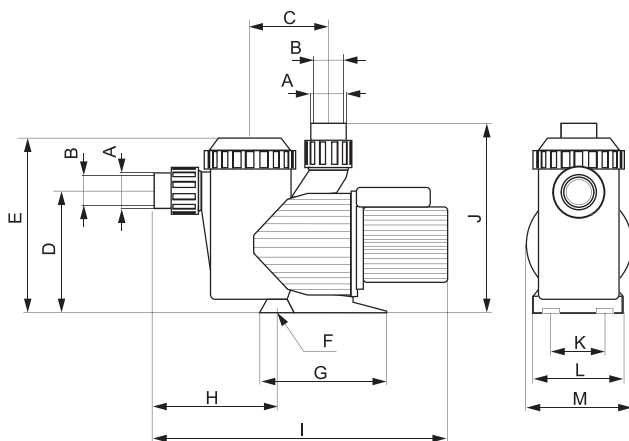
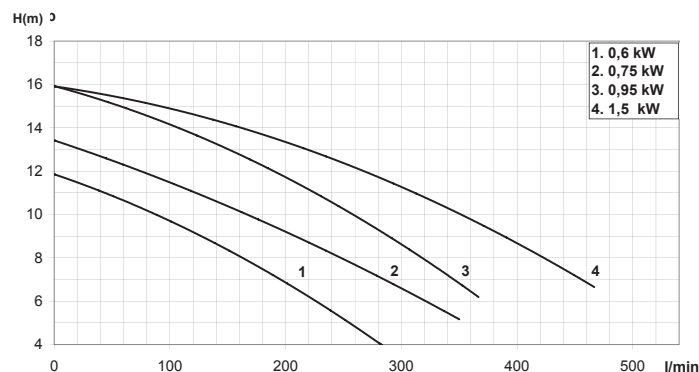
This water cooled plastic pump is so designed, that the fluid surrounds the rotor and the bearing of the motor. The fluid lubricates the pump bearing and cools the component parts. The design gives the pump an extremely silent operation and demands a minimum of service.



Advantages

- Patented water cooled motor
- Vibration free bearing without ball bearing
- Free of maintenance without mechanical shaft seal
- Light and compact design

Pump capacities 0,60-1,5kW



Technical data				Ampere	
Item no.	kW	Phase	Volt	400V	230V
115900	0,60	3	230/400	1,7	2,9
115910	0,75	3	230/400	1,9	3,3
115920	0,95	3	230/400	2,9	4,9
115930	1,5	3	230/400	3,4	5,8

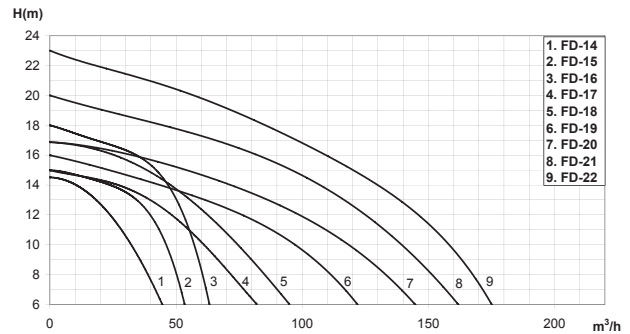
Dimension													
Item no.	A	B	C	D	E	F	G	H	I	J	K	L	M
115900		Ø50	160	250	360	Ø9	256	265	525	366	116	186	210
115910		Ø50	160	250	360	Ø9	256	265	560	366	116	186	210
115920	Ø63		160	250	360	Ø9	256	300	595	400	116	186	210
115930	Ø63		160	250	360	Ø9	256	300	595	400	116	186	210

Centrifugal pump FD 1,5-9,4kW 3000 rpm

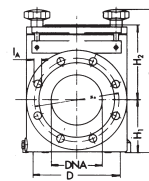
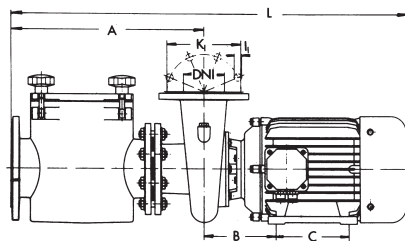
Pahlén FD centrifugal pumps are developed for filtering pool water and have a large pre-filter, which is easy to keep clean. The pump is designed to pump large volumes of water with low back pressure. The FD pump and pre-filter are manufactured from cast iron and utilizes a bronze impeller mounted on a stainless steel shaft with ceramic sealing. The strainer basket is made from stainless steel. IP55. The pumps can also be supplied in bronze.



Pump capacities 1,5-9,4kW



Technical data			220/380V 3-phase		380/660V 3-phase			H(m)				
			Ampere		Ampere	6	8	10	12	14	16	18
Item no.	Type	kW	220V	380V	380V	m³/h						
12010	FD-14	1,5	5,7	3,3		45	38	32	25	10		
12011	FD-15	2,25	8,3	4,8		53	51	46	39	26		
12012	FD-16	3,0	10,7	6,2		63	61	57	53	47	36	
12013	FD-17	3,0	10,7	6,2		82	72	61	48	28		
12014	FD-18	3,75	13,6	7,9		95	85	75	62	48	28	
12015	FD-18	3,75			7,9	95	85	75	62	48	28	
12016	FD-19	4,5	16,4	9,4		122	111	98	75	45		
12017	FD-19	4,5			9,4	122	111	98	75	45		
12018	FD-20	5,6	19,5	11,3		145	132	120	98	72	35	
12019	FD-20	5,6			11,3	145	132	120	98	72	35	
12020	FD-21	7,5	25,9	15		162	151	140	125	107	84	45
12021	FD-21	7,5			15	162	151	140	125	107	84	45
12022	FD-22	9,4	32	18,5		175	168	158	146	130	110	85
12023	FD-22	9,4			18,5	175	168	158	146	130	110	85



Dimensions

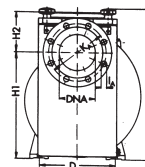
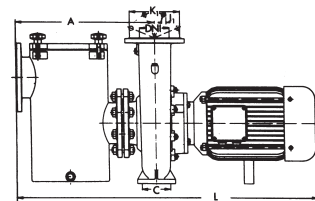
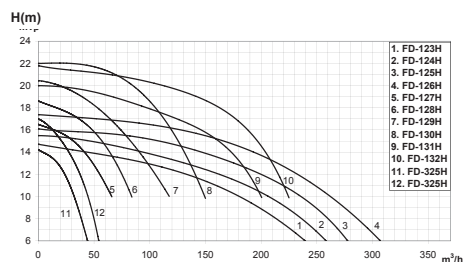
Type	DNA	KA	IA	DNI	Ki	Ii	A	B	C	D	G	H1	H2	L	kg
FD-14	DN80	160	18	3"			383	62	84	144	320	120	130	710	47
FD-15	DN80	160	18	3"			383	62	84	144	320	120	130	735	50
FD-16	DN80	160	18	3"			383	62	84	144	320	128	130	756	53
FD-17	DN100	180	18	DN100	180	180	420	104	84	144	320	128	190	807	62
FD-18	DN100	180	18	DN100	180	180	420	108	112	176	320	132	190	827	69
FD-19	DN125	210	18	DN100	180	180	420	108	112	176	358	132	190	877	82
FD-20	DN125	210	18	DN100	180	180	470	176	140	216	358	132	190	930	93
FD-21	DN125	210	18	DN100	180	180	470	176	140	216	358	132	190	968	100
FD-22	DN125	210	18	DN100	180	180	470	176	178	216	358	132	190	968	109

Centrifugal pump FD-H 1,5-11,3kW 1500 rpm

Pahlén FD-H centrifugal pumps are developed for filtering pool water and have a large pre-filter, which is easy to keep clean. The pump is designed to pump large volumes of water with low back pressure. The FD-H pump and pre-filter are manufactured from cast iron and utilize a bronze impeller mounted on a stainless steel shaft with ceramic sealing. The strainer basket is made from stainless steel. The pumps can also be supplied in bronze. IP55



12030

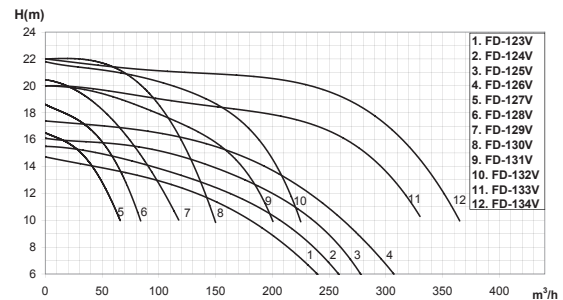
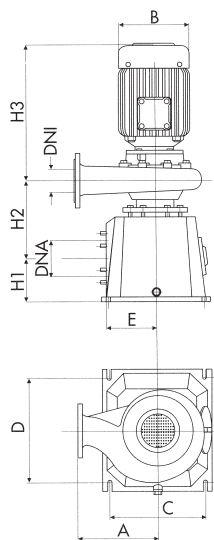


Technical data			220/380V 3-phase		380/660V 3-phase	H(m)				
Item no.	Type	kW	Ampere		Ampere	6	8	10	12	14
			220V	380V	380V					
12030	FD-123H	7,5	28,4	16,4		240	215	181	132	48
12031	FD-123H	7,5			16,4	240	215	181	132	48
12032	FD-124H	9,4	37	21,5		258	235	208	165	95
12033	FD-124H	9,4			21,5	258	235	208	165	95
12034	FD-125H	9,4	37	21,5		278	260	235	198	149
12035	FD-125H	9,4			21,5	278	260	235	198	149
12036	FD-126H	11,3	40	23				260	230	200
12037	FD-126H	11,3			23			260	230	200
12028	FD-325H	1,5	6,5	3,75		44	38	32,5	24	5,6
12029	FD-326H	2,2	9,6	5,6		54	50	44	37	27
12038	FD-127H	3	13	7,5				66	55	42
12039	FD-128H	4,1	16,5	9,5				84	75	64
12040	FD-128H	4,1			9,5			84	75	64
12041	FD-129H	5,6	24	13,8				115	107	94
12042	FD-129H	5,6			13,8			115	107	94
12043	FD-130H	7,5	28,4	16,4				151	140	132
12044	FD-130H	7,5			16,4			151	140	132
12045	FD-131H	9,4	37	21,5				200	189	173
12046	FD-131H	9,4			21,5			200	189	173
12047	FD-132H	11,3	40	23				225	215	204
12048	FD-132H	11,3			23			225	215	204

Dimensions														
Type	DNA	KA	IA	DNi	KI	Ii	A	C	D	G	H1	H2	L	kg
FD-123H	DN150	240	22	DN125	210	18	585	120	315	622	440	165	1075	207
FD-124H	DN150	240	22	DN125	210	18	585	120	315	622	440	165	1100	212
FD-125H	DN150	240	22	DN125	210	18	585	120	315	622	440	165	1100	218
FD-126H	DN150	240	22	DN125	210	18	585	120	315	622	440	165	1200	225
FD-325H	DN100	180	18	DN50	125	18	400	95	220	405	180	225	822	80
FD-326H	DN100	180	18	DN50	125	18	400	95	220	405	180	225	822	85
FD-127H	DN100	180	18	DN65	145	18	400	120	280	450	200	250	840	95
FD-128H	DN100	180	18	DN65	145	18	400	120	280	450	200	250	860	103
FD-129H	DN125	210	18	DN80	160	18	473	120	315	480	200	280	980	131
FD-130H	DN125	210	18	DN80	160	18	473	120	315	480	200	280	1016	141
FD-131H	DN150	240	22	DN100	180	18	755	120	315	622	440	115	1100	210
FD-132H	DN150	240	22	DN100	180	18	755	120	315	622	440	115	1200	243

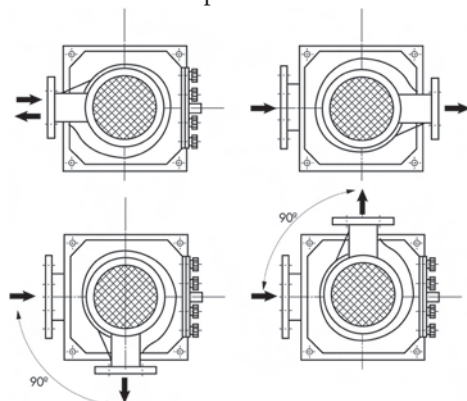
Centrifugal pump FD-V 3,0-18,75kW 1500 rpm

Pahlén series of vertical pumps are designed for filtering pool water. They can be installed in a variety of positions. The pumps are manufactured from cast iron and have a bronze impeller mounted on a stainless steel shaft. The pre-filter and large capacity strainer basket are made from stainless steel. The pumps can also be supplied in bronze. IP55.



Technical data			220/380V 3-phase		380/660V 3-phase	H(m)					
Item no.	Type	kW	Ampere		Ampere	m³/h					
			220V	380V	380V	6	8	10	12	14	16
12050	FD-123V	7,5	28,4	16,4		240	215	181	132	48	
12051	FD-123V	7,5			16,4	240	215	181	132	48	
12052	FD-124V	9,4	37	21,5		258	235	208	165	95	
12053	FD-124V	9,4			21,5	258	235	208	165	95	
12054	FD-125V	9,4	37	21,5		278	260	235	198	149	
12055	FD-125V	9,4			21,5	278	260	235	198	149	
12056	FD-126V	11,3	40	23		310	284	260	230	200	
12057	FD-126V	11,3			23	310	284	260	230	200	
12058	FD-127V	3,0	13	7,5				66	55	42	15
12059	FD-128V	4,1	16,5	9,5				84	75	64	49
12060	FD-128V	4,1			9,5			84	75	64	49
12061	FD-129V	5,6	24	13,8				115	107	94	80
12062	FD-129V	5,6			13,8			115	107	94	80
12063	FD-130V	7,5	28,4	16,4				151	140	132	121
12064	FD-130V	7,5			16,4			151	140	132	121
12065	FD-131V	9,4	37	21,5				200	189	173	147
12066	FD-131V	9,4			21,5			200	189	173	147
12067	FD-132V	11,3	40	23				225	215	204	189
12068	FD-132V	11,3			23			225	215	204	189
12069	FD-133V	15,0	55	32				330	315	300	250
12070	FD-133V	15,0			32			330	315	300	250
12071	FD-134V	18,75	67	39				370	350	330	315
12072	FD-134V	18,75			39			370	350	330	315

Installation examples



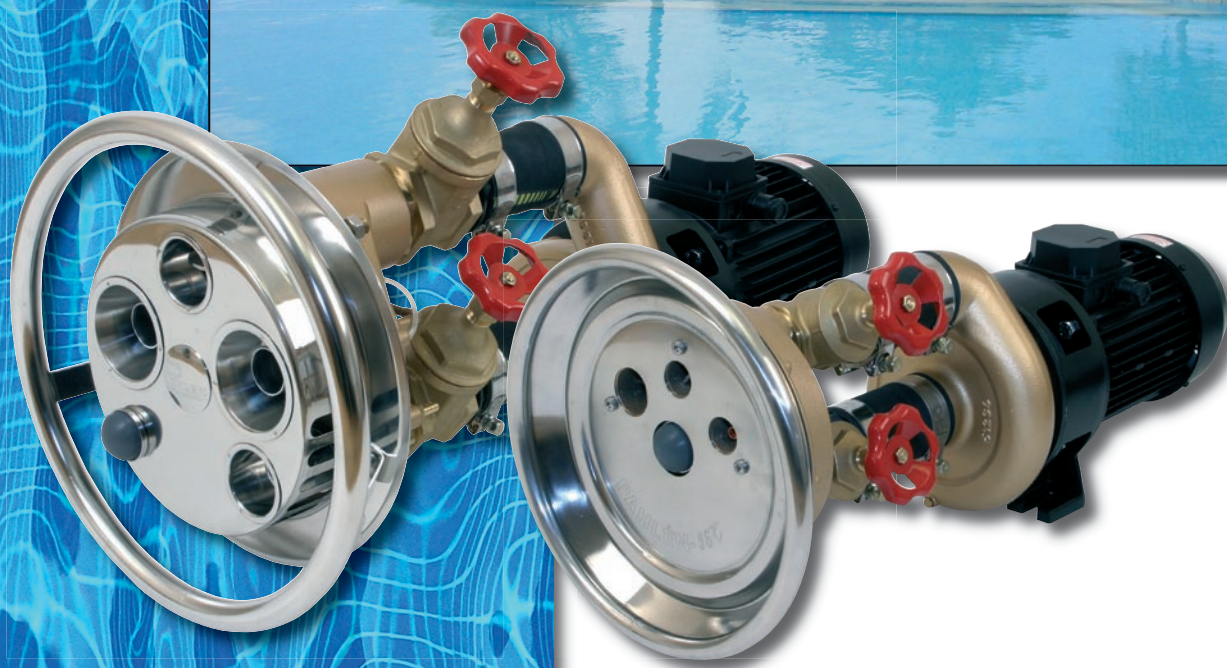
Dimensions

Type	DNA	DNI	A	B	C	D	E	H1	H2	H3	kg
FD-123V	DN200	DN125	355	Ø260	420	520	215	205	345	490	175
FD-124V	DN200	DN125	355	Ø260	420	520	215	205	345	515	180
FD-125V	DN250	DN125	355	Ø260	460	550	235	230	370	515	193
FD-126V	DN250	DN125	355	Ø310	460	550	235	230	370	677	208
FD-127V	DN100	DN65	250	Ø190	360	420	185	160	260	440	102
FD-128V	DN125	DN65	250	Ø235	360	420	185	160	260	460	110
FD-129V	DN125	DN80	280	Ø260	420	420	185	160	285	507	128
FD-130V	DN150	DN80	280	Ø260	420	520	215	205	330	543	150
FD-131V	DN200	DN100	280	Ø260	420	520	215	205	345	515	176
FD-132V	DN200	DN100	280	Ø310	420	520	215	205	345	677	210
FD-133V	DN250	DN125	355	Ø310	460	550	235	230	370	721	196
FD-134V	DN250	DN125	355	Ø310	460	550	235	230	370	721	219

Jet Swim and massage equipment

Jet Swim is the perfect accessory for exercise, fitness and fun.

With a Jet Swim installed in the pool the training effect is that of a much larger pool. By swimming "on the spot" in the pool you can train and practise your swimming technique at the same time building up your strength and endurance. Jet Swim also functions as a massage and rehabilitating muscle trainer. Of course, the children also love to bathe in the invigorating, bubbling current of water which can be varied in strength.



Jet Swim



1200 2,2kW p. 35



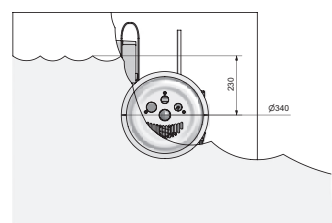
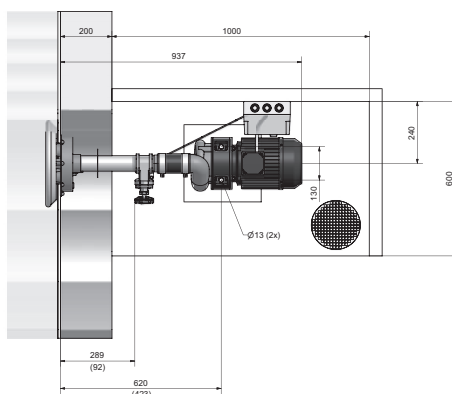
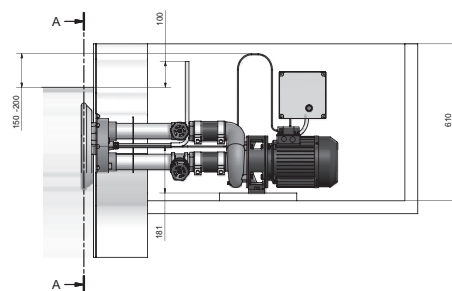
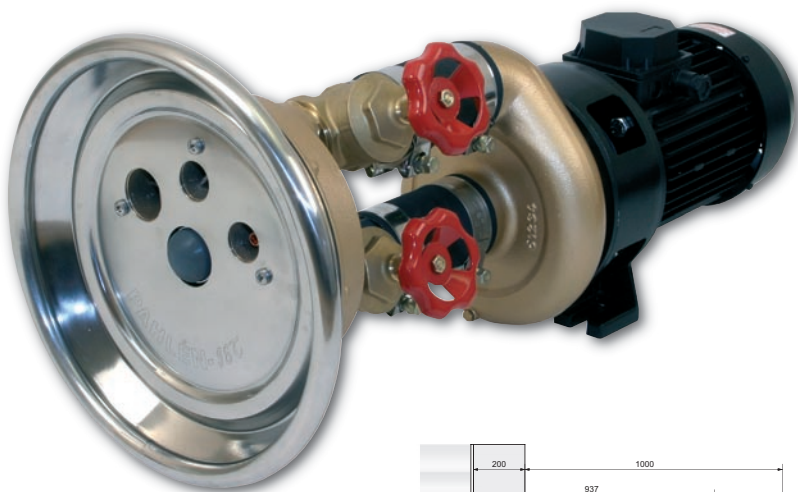
2000 4,0kW p. 36

Massage equipment



Side channel blower 0,75-3,0kW p. 37

Jet Swim 1200



Model Jet Swim 1200

- Jet Swim housing made of bronze and front of polished acid-proof stainless steel AISI 316 for mounting in concrete, wood or building block walls
- Bronze pump with 2,2kW motor
- Control box including contactor and overload protection
- Air mixture control
- Air mixture hose
- Hose connectors
- Hose clamps
- Hoses for suction and pressure
- Valves

Item no.

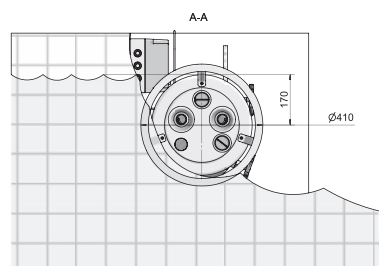
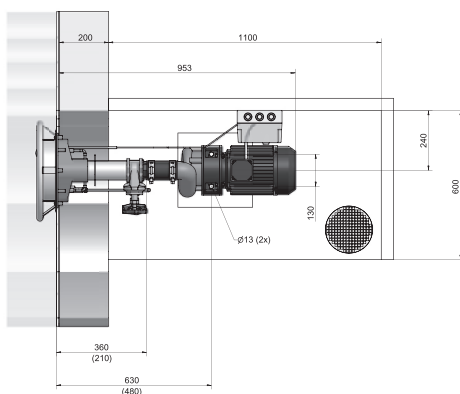
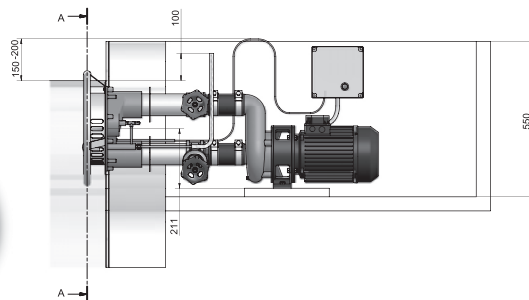
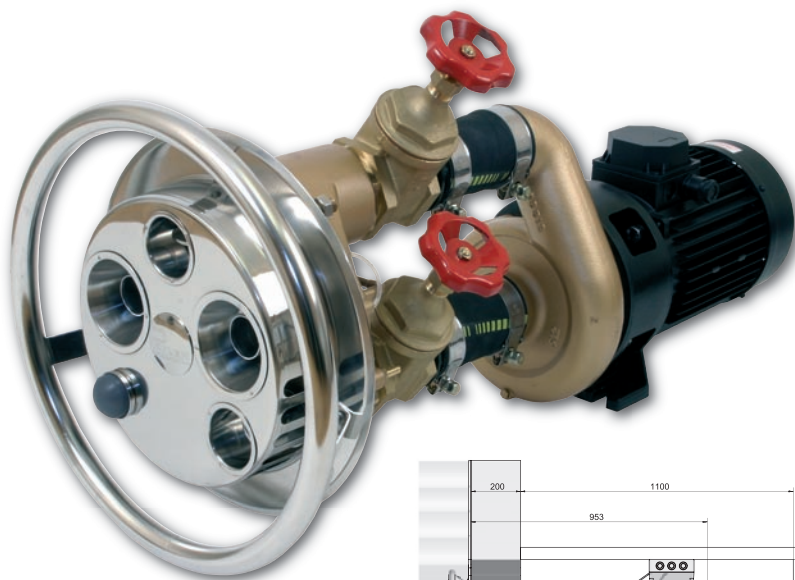
- 1301200 Jet Swim unit 1200
- 1301210 Jet Swim assembly kit 1200 for liner pool
- 1301220 Jet Swim assembly kit 1200 for concrete liner pool
- 1301230 Jet Swim assembly kit 1200 for concrete pool
- 1301280 Jet Swim pump, 2,2kW
- 1301290 Control box Jet Swim 2,2kW

Complete Jet Swim consists of Jet unit, assembly kit, pump and control box.

Technical data

Model	1200
Motor, kW	2,2
Voltage, V	230/400
Current, A	4,8
Capacity, l/min	900
Pipe connection	2"
Material	bronze/stainless steel

Jet Swim 2000



Model Jet Swim 2000

- Jet Swim housing made of bronze. Front and handle made of polished acid-proof stainless steel AISI 316. For mounting in concrete, wood or building block walls
- Bronze pump with 4,0kW motor
- Control box including contactor and overload protection
- Air mixture control
- Air mixture hose
- Hose connectors
- Hose clamps
- Hoses for suction and pressure
- Valves

Item no

- | | |
|---------|--|
| 1302000 | Jet Swim unit 2000 |
| 1302010 | Jet Swim assembly kit 2000 for liner pool |
| 1302020 | Jet Swim assembly kit 2000 for concrete liner pool |
| 1302030 | Jet Swim assembly kit 2000 for concrete pool |
| 1302080 | Jet Swim pump, 4,0kW |
| 1302090 | Control box Jet Swim 4,0kW |

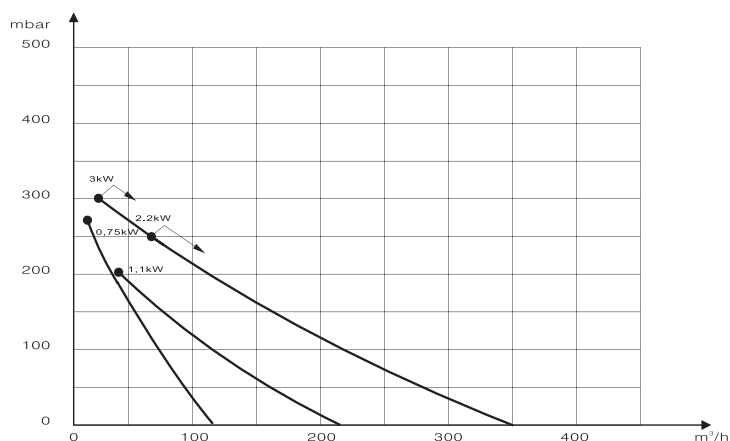
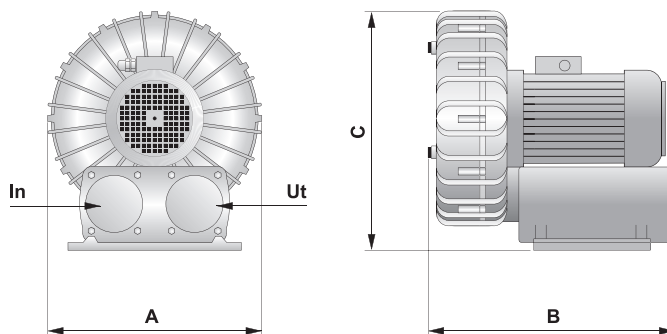
Complete Jet Swim consists of Jet unit, assembly kit, pump and control box.

Technical data	
Model	2000
Motor, kW	4,0
Voltage, V	230/400
Current, A	8,3
Capacity, l/min	1300
Pipe connection	2½"
Material	bronze/stainless steel

Massage equipment

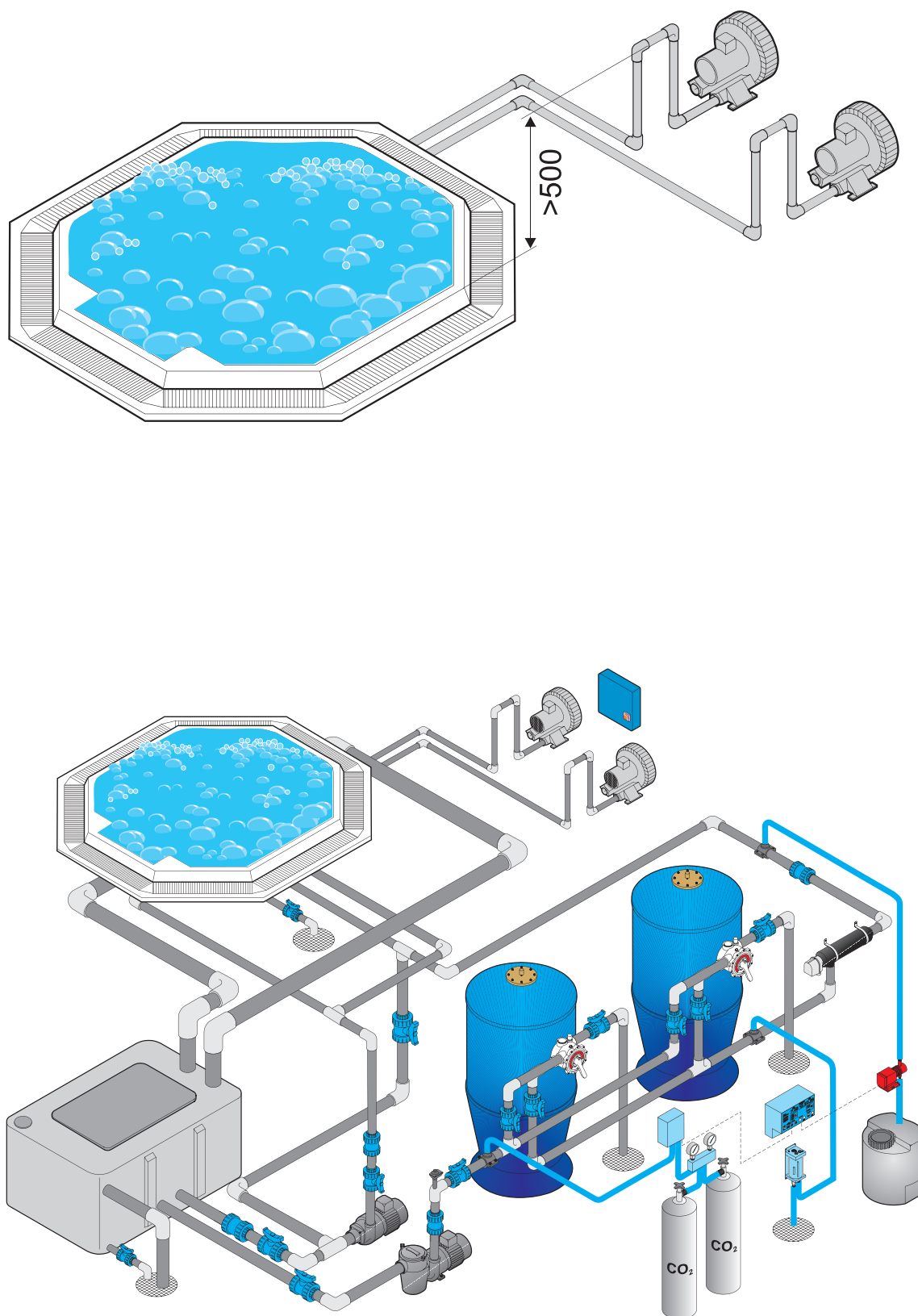
Side channel blower

Direct driven side channel blower for air massage in spa pools and swimming pools. The fan may be operated from the pool side either pneumatically or by a low voltage controller. It can be mounted either vertically or horizontally. Pipe connections are made via an air loop 50cm over the water level. The fan housing, fan wheel and side channel are in cast aluminium. A filter and silencer are available as accessories.



Technical data							Dimensions			
Item no.	Type	Capacity kW	Voltage V	Current A	Sound dB	Pipe connection	Weight kg	A (mm)	B (mm)	C (mm)
81200	SC10	0,75	230/400	3,1/1,81	72	1½"	18,5	296	330	340
81201	SC20	1,1	230/400	4,1/2,4	75	1½"	22	360	360	400
81202	SC30	2,2	230/400	8,1/4,7	78	2"	36	395	445	450
81203	SC30	3	230/400	11,4/6,5	81	2"	40	395	445	450
Accessories										
81210	Filter incl. silencer (0,75-1,1 kW)									
81213	Filter incl. silencer (2,2-3,0 kW)									
81211	Silencer (0,75-1,1 kW)									
81212	Silencer (2,2-3,0 kW)									

Installation example



Heating equipment

Pahlén pool heating equipment is well known throughout the world and can be found installed in all types of small and large installations.

Pahlén manufacture electric heaters from 1,5 - 72 kW and heat exchangers from 13 - 308 kW. The Pahlén heating equipment is manufactured from acid-proof stainless steel, titanium or plastic to achieve a maximum maintenance free length of life.



Heat exchanger



Maxi-Flo
40-308 kW p. 41



Hi-Flow
13-75 kW p. 42



Hi-Temp
40, 75 kW p. 46



Plate heat exchanger
p. 48

Electric heater



Standard
1,5-18,0 kW p. 50



Compact
1,5-18,0 kW p. 51



Compact titanium
1,5-18,0 kW p. 53



Electric heater spa
1,5-3,0 kW p. 57



Air heater
1,5 kW p. 57



Electric heater plastic
3,0-18 kW p. 58



Electric heater plastic spa
1,5-3,0 kW p. 58

Heat pump



Maxi Heat
18-72 kW p. 54

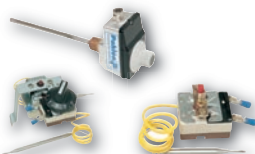


Heat pump p. 55

Heating elements and accessories electric heaters



Heating elements
1,5-18,0 kW p. 60



Thermostat, overheating
protection p. 61



Electric control box, pressure switch,
flow controls p. 62

Heat exchanger Maxi-Flo

Pahlén Maxi-Flo is a well-trying and tested heat exchanger with effective heat transference capabilities. It is intended for swimming pools and other applications where there is a demand for high capacity together with a low-pressure drop. All models can be installed together with boilers, heat pumps, solar panels or other heat sources. These heat exchangers are light and compact and have fully welded jackets and a soldered pipe system for the transfer medium. The material used is acid-proof stainless steel AISI 316. Stainless steel adjustable fixings are included. Maximum pressure: Primary 10 bar – Secondary 10 bar.



11365

Heat exchanger in acid-proof stainless steel

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11365	MF 135	40	135	25	0,05	200	0,8

Capacity at 60 °C temperature difference



11366

Heat exchanger in acid-proof stainless steel

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11366	MF 200	60	200	30	0,15	250	1,4

Capacity at 60 °C temperature difference



11367

Heat exchanger in acid-proof stainless steel

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11367	MF 260	75	260	35	0,4	300	1,8

Capacity at 60 °C temperature difference



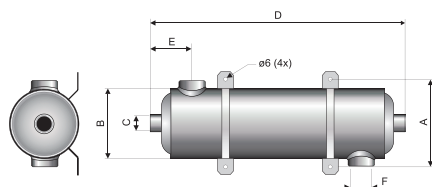
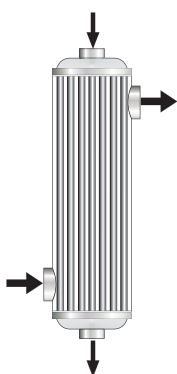
11368

Heat exchanger in acid-proof stainless steel

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11368	MF 400	120	400	50	0,65	360	2,4

Capacity at 60 °C temperature difference

Installation instruction



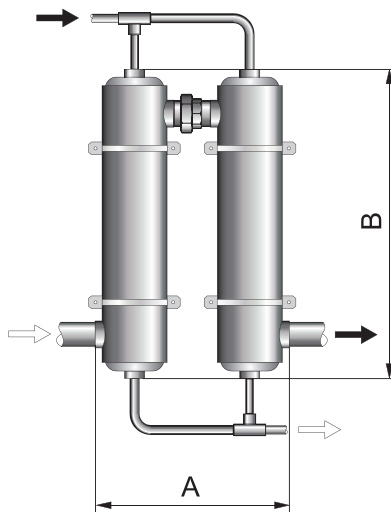
Dimensions

Item no.	A	B	C	D	E	F
11365	139	129	1"	355	92	1½"
11366	139	129	1"	485	92	1½"
11367	139	129	1"	600	85	2"
11368	139	129	1½"	1070	83	2"

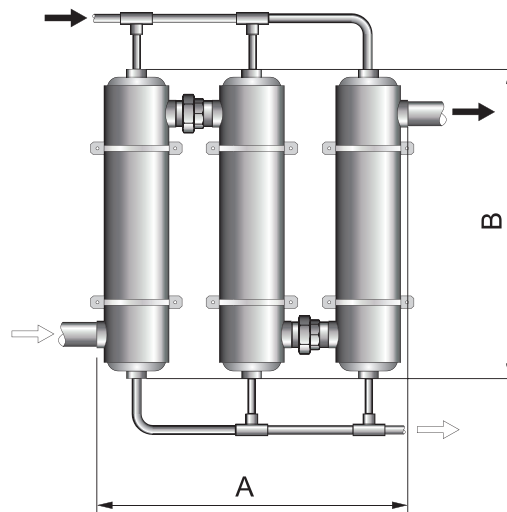
Heat exchanger Maxi-Flo series connection

Pahlén heat exchangers Maxi-Flo connected in series are designed for swimming pools and other heating applications, where there is a demand for high capacity together with a low-pressure drop. All models can be installed together with boilers, heat pumps, solar panels or other heat sources. The heat exchangers are manufactured from acid-proof stainless steel AISI 316 and are interconnected with union couplings made of brass.

Maximum pressure: Primary 10 bar - Secondary 10 bar.



113672, 113682



113673, 113683

Heat exchanger Maxi-Flo connected in series										Dimensions	
Item no.	Model	Capacity		Primary side, hot water		Connection	Secondary side, hot water		Con.	A	B
		kW	kBtu/h	l/min	press. drop H(m)		l/min	press. drop H(m)		mm	mm
113672	MF 435	127	433	70	0,2	1"	300	1,6	2"	385	613
113673	MF 665	195	665	105	0,2	1"	300	1,9	2"	610	613
113682	MF 695	204	696	100	0,7	1½"	360	2,8	2"	385	1070
113683	MF 1050	308	1050	150	0,7	1½"	360	2,9	2"	610	1070

Heat exchanger Hi-Flow

Pahlén Hi-Flow is a well-trying and tested heat exchanger with effective heat transference capabilities. It is intended for swimming pools and other applications where there is a demand for high capacity together with a low-pressure drop. All models can be installed together with boilers, heat pumps, solar panels or other heat sources. These heat exchangers are light and compact. The material used - acid proof stainless steel AISI 316 - is chosen with regard to working conditions where there is a risk for corrosion. Stainless steel adjustable fixings are included. Maximum pressure: Primary 60 bar - Secondary 10 bar.



11391

Heat exchanger in acid-proof stainless steel							
Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11391	HF 13	13	45	25	0,9	200	0,6

Capacity at 60°C temperature difference



11392

Heat exchanger in acid-proof stainless steel							
Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11392	HF 28	28	95	25	1,7	300	1,6

Capacity at 60°C temperature difference



11393

Heat exchanger in acid-proof stainless steel							
Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11393	HF 40	40	135	60	1,6	300	1,8

Capacity at 70°C temperature difference

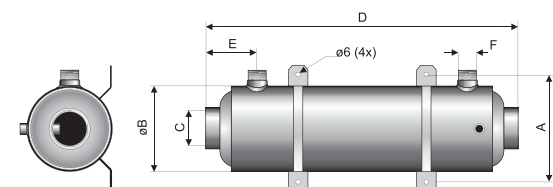
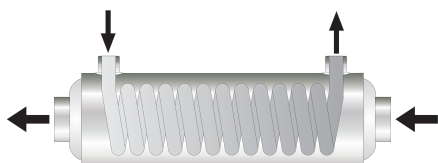


11394

Heat exchanger in acid-proof stainless steel							
Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11394	HF 75	75	260	60	2,1	300	0,9

Capacity at 70°C temperature difference

Installation instruction



Dimensions						
Item no.	A	B	C	D	E	F
11391	139	129	1½"	235	72	¾"
11392	139	129	1½"	407	72	¾"
11393	139	129	1½"	455	85	1"
11394	139	129	2"	702	85	1"

Heat exchanger Hi-Flow titanium

Pahlén Hi-Flow titanium is a heat exchanger with excellent heat transference capabilities. The unit is intended for swimming pools and other applications where there is a demand for high flow rates together with a low-pressure drop. Titanium is chosen for its high resistance to corrosion and is therefore suitable for pools and spas with aggressive water, salt water and where a salt chlorinator is used. The titanium heat exchanger is light and compact with welded jackets and pipe system for the transfer medium. Titanium heat exchangers can be installed together with boilers, heat pumps, solar panels or other heat sources.

Maximum pressure: Primary 30 bar - Secondary 5 bar.



11332

Heat exchanger in titanium

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11332	T 28	28	95	20	1,3	300	1,6

Capacity at 60°C temperature difference



11333

Heat exchanger in titanium

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11333	T 40	40	135	40	2,8	350	1,6

Capacity at 60°C temperature difference



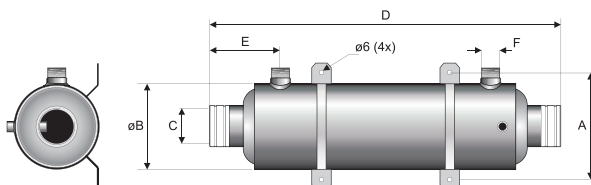
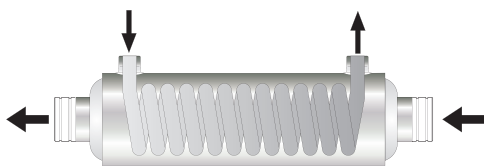
11334

Heat exchanger in titanium

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	pressure drop H(m)	l/min	pressure drop H(m)
11334	T 75	75	260	45	7,2	350	1,9

Capacity at 70°C temperature difference

Installation instruction



Dimensions

Item no.	A	B	C	D	E	F	G
11332	139	113	1½"	470	95	1"	51
11333	139	127	1½"	510	108	1"	51
11334	139	127	1½"	754	108	1"	51

Heat exchanger with circulation pump & control panel

Complete heat exchanging unit including heat exchanger, circulation pump and check valve together with an automatic control panel for primary connection to a boiler, heat pump or similar. The control panel includes a thermostat and a contactor for continuous or time controlled operation of the pump. Indicator lamps display the current status of operation of the pump and heater. The control panel is available in both 230V single-phase or 400V three-phase and is classed IP40.



11392C



11273

Circulation pump

For primary side to heat exchanger.

Item no

11273 Circulation pump for hot water to heat exchanger, 230V, single-phase with three capacity stages. Connection: 1"

Technical data						
Item no.	Heat exchanger capacity	Max pump capacity	Pump voltage	Length (mm)	Height (mm)	Depth (mm)
11392C	28kW	1kW	1-phase 230V	418	420	155
11393C	40kW	1kW	1-phase 230V	469	420	155
11394C	75kW	1kW	1-phase 230V	714	420	155
11392D	28kW	3,5kW	3-phase 400V	418	420	155
11393D	40kW	3,5kW	3-phase 400V	469	420	155
11394D	75kW	3,5kW	3-phase 400V	714	420	155

Heat exchanger Hi-Temp

Pahlén Hi-Temp heat exchangers are designed to suit all types of swimming pools and spas, where low pressure drop and high heat capacity are required. The heat exchangers are supplied with union connections for adhesive bonding of Ø 50 mm pipes. All models are light and compact and can be connected to a boiler, heat pump, solar collector system or other heat source.

Hi-Temp

The secondary (pool water) side is made of glass-fibre-reinforced plastic and the primary (hot water) side is of acid-resistant stainless steel.

Max. pressure: Primary side 5 bar, Secondary side 4 bar

Max. temp: Primary side 100 °C, Secondary side 100 °C



11312



11314

Heat exchanger Hi-Temp

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
				Pressure drop		Pressure drop	
		kW	kBtu/h	l/min	H(m)	l/min	H(m)
11312	HT 40	40	135	34	2,4	300	0,5

Capacity at 60 °C temperature difference

Heat exchanger Hi-Temp

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
				Pressure drop		Pressure drop	
		kW	kBtu/h	l/min	H(m)	l/min	H(m)
11314	HT 75	75	260	43	6,0	300	1,0

Capacity at 60 °C temperature difference

Hi-Temp titanium

The secondary (pool water) side is made of glass-fibre-reinforced plastic and the primary (hot water) side is of titanium. This heat exchanger is corrosion-free and is suitable for swimming pools with aggressive water, e.g. salt water.

Max. pressure: Primary side 5 bar, Secondary side 4 bar

Max. temp: Primary side 100 °C, Secondary side 100 °C



11322



11324

Heat exchanger Hi-Temp titanium

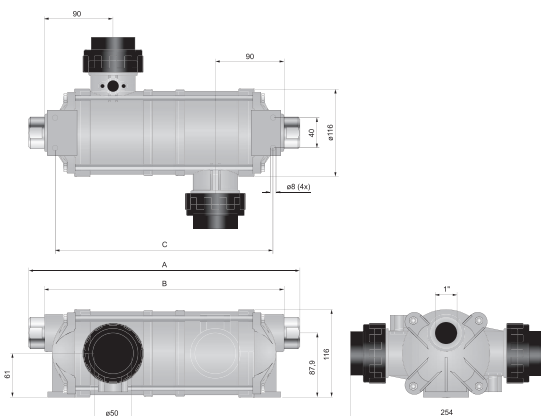
Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
				Pressure drop		Pressure drop	
		kW	kBtu/h	l/min	H(m)	l/min	H(m)
11322	HTT 40	40	135	52	1,7	300	0,8

Capacity at 70 °C temperature difference

Heat exchanger Hi-Temp titanium

Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
				Pressure drop		Pressure drop	
		kW	kBtu/h	l/min	H(m)	l/min	H(m)
11324	HTT 75	75	260	58	2,8	300	1,4

Capacity at 70 °C temperature difference



Hi-Temp

Dimensions

Item no.	kW	A	B	C
11312	40	359	317	277
11314	75	534	492	452

Hi-Temp titanium

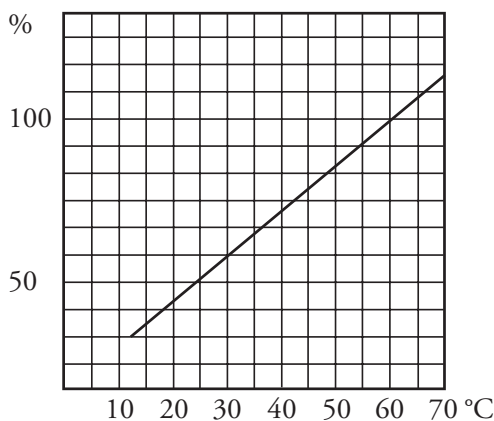
Dimensions

Item no.	kW	A	B	C
11322	40	417	375	335
11324	75	667	625	585

Dimensioning a heat exchanger

The capacity of a heat exchanger varies according to the liquid flow through the primary (hot) and the secondary (cold) circuits and the temperature difference between both media. From the table of capacities a nominal thermal output for each heat exchanger may be obtained. This output is based upon given liquid flow through both circuits, which is quoted in the table, and a temperature difference between the incoming primary and secondary media. As an example heat exchanger type MF 135 has a thermal output of 40 kW when the liquid flow is 25 l/min on the primary side, 200 l/min on the secondary side, and the temperature difference between both incoming media is 60°C. By the use of diagrams A and B, the thermal output may be calculated for other liquid flows and temperature differences than those quoted in the table.

Diagram A. Nominal heat effect

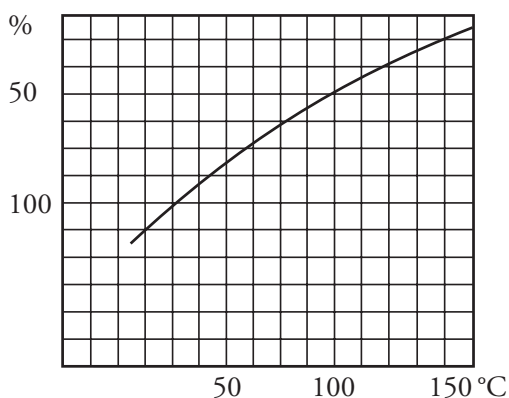


Difference in temperature between incoming warm water (primary) and incoming cold water (secondary).

Diagram A

shows the variation in thermal output with changes in temperature differences between the incoming media. This output is virtually proportional to this temperature difference.

Diagram B. Nominal heat effect



Nominal flow

Diagram B

Represents the variation in thermal output with changes in liquid flow. This diagram is based upon the nominal values given in the table of capacities, which values represent 100% on the graph. If the flow in both primary and secondary circuits is in the same relationship to the nominal values, then the rate of the thermal output from the heat exchanger may be read from the graph. If, however, the flow in both circuits do not have the same relationship to the nominal values, the thermal output can be approximated as the average of the two separate readings from the graph.

Theoretical heat calculation

- Power required to increase water temperature by ΔT degrees in a fixed time (t), assuming no heat loss.
Formula: $P = 1.16 \times \frac{\Delta T}{t} \times V$
- Time taken to increase water temperature by ΔT degrees from a fixed power input, assuming no heat loss.
Formula: $t = 1.16 \times \frac{\Delta T}{P} \times V$

P = Power in kW
 t = Time in hours
 ΔT = Temperature difference °C
 1.16 = Constant
 V = Volume in m³

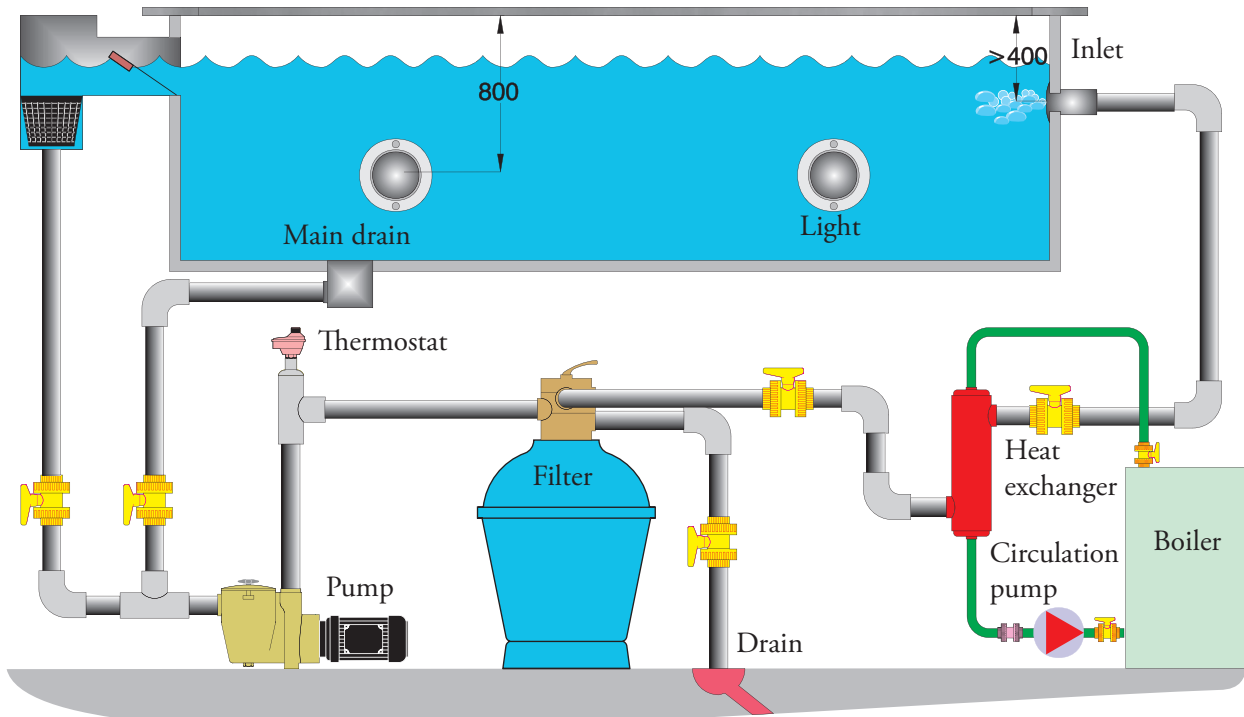
Example: Time taken to heat 30 m³ of water from 5°C to 25°C with a 6 kW heater, assuming no heat loss:

$$t = 1.16 \times \frac{(25-5)}{6} \times 30 = 116 \text{ hours}$$

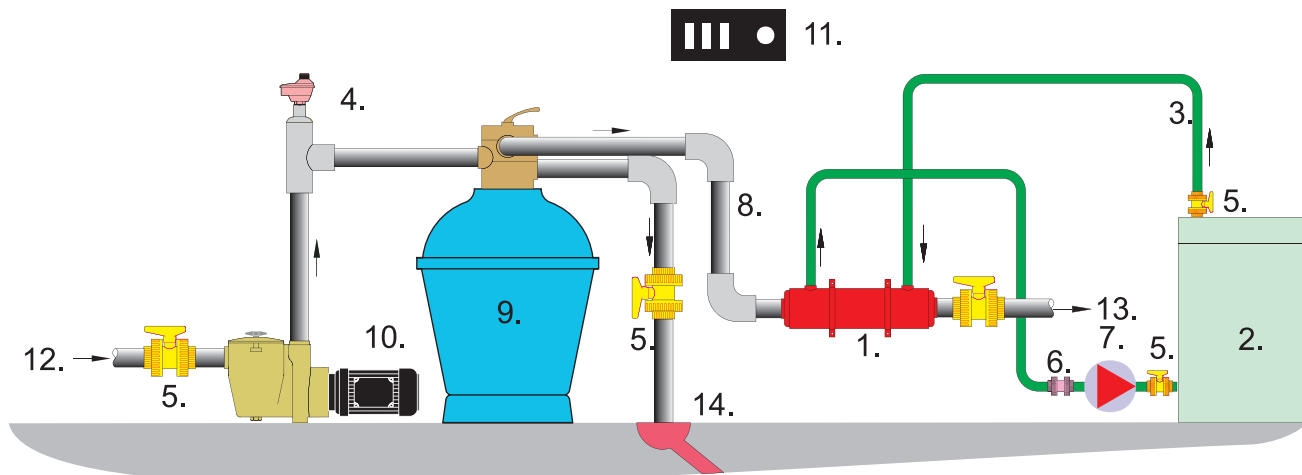
Installation instructions Maxi-Flo and Hi-Flow

Maxi-Flo

Skimmer



Hi-Flow



1	Heat exchanger	8	Secondary (pool water) circuit
2	Boiler, solar collector or heat pump	9	Filter
3	Primary hot water circuit	10	Pump
4	Thermostat	11	Electrical control box
5	Gate valve	12	From pool
6	Check valve	13	To pool
7	Circulation pump	14	Drain

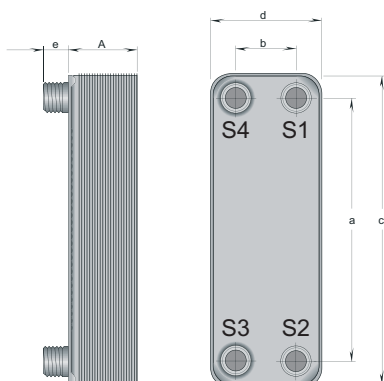
Plate heat exchangers

The heat transfer surface consists of thin, corrugated plates in acid-proof stainless steel placed upon each other. Parallel flow channels are created, where the two fluids travel in opposite directions. The high thermal efficiency makes these plate heat exchangers extremely effective and also easy to install where there is little space. They do not have any gaskets and are therefore suitable in processes with high temperature and/or high pressure, e.g. in district heat systems.

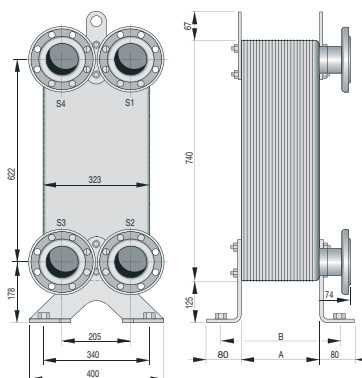


Plate heat exchangers							
Item no.	Model	Capacity		Primary side, hot water		Secondary side, cold water	
		kW	kBtu/h	l/min	press. drop H(m)	l/min	press. drop H(m)
113510	CB14-20H	40	135	16,9	0,08	23	0,13
113512	CB14-40H	75	260	31,7	0,08	43,2	0,14
113520	CB27-25M	100	340	42,3	0,07	57,5	0,13
113522	CB27-50M	200	680	84,5	0,08	115,1	0,17
113570	CB77-35L	400	1365	197,2	0,08	261,5	0,16
113572	CB77-70L	600	2050	295,7	0,05	392,3	0,14
113580	CB200-44L	800	2730	338	0,08	460,4	0,16
113582	CB200-56L	1000	3412	422,5	0,08	575,5	0,16

Item no.	Model	Max working pressure bar		Connection	
		Primary	Secondary	Primary S3, S4	Secondary S1, S2
113510	CB14-20H	32	32	¾"	¾"
113512	CB14-40H	32	32	1"	1¼"
113520	CB27-25M	32	32	1"	1¼"
113522	CB27-50M	32	32	1"	1¼"
113570	CB77-35L	25	16	2"	2½"
113572	CB77-70L	25	16	2"	2½"
113580	CB200-44L	16	16	LF-DN80	LF-DN80
113582	CB200-56L	16	16	LF-DN80	LF-DN80



Dimensions							
Item no.	Model	a	b	c	d	e	A
113510	CB14-20H	172	42	208	78	24	55
113512	CB14-40H	172	42	208	78	24	102
113520	CB27-25M	250	50	310	112	45	69
113522	CB27-50M	250	50	310	112	45	129
113570	CB77-35L	519	92	618	191	48	110
113572	CB77-70L	519	92	618	191	48	209,5



Dimensions			
Item no.	Model	A	B
113580	CB200-44L	130	210
113582	CB200-56L	162	242

Electric heater standard 1,5-18,0kW

Pahlén electric heaters are designed for continuous flow with the lowest possible pressure drop. These heaters may be used in a variety of water heating applications such as swimming pools, heat pumps, floor heating, central heating etc. The outer jacket and connections are made of acid-proof stainless steel AISI 316. The heaters are supplied with a 2" heating element of Incoloy 825, a high-alloy steel with excellent characteristics against aggressive water.

Maximum pressure: 10 bar



127314

Electric heater with tripolar overheating limit control 60°C

Item no.

12701	1,5kW
12711	3,0kW
12721	4,5kW
127314	6,0kW
127414	7,5kW
127514	9,0kW



137022

Electric heater with unipolar thermostat 0-45°C and tripolar overheating limit control 60°C (from 12kW unipolar 60°C)

Item no.

137000	1,5kW
13700	3,0kW
13701	4,5kW
137022	6,0kW
137032	7,5kW
137042	9,0kW
137052	12,0kW
137062	15,0kW
137072	18,0kW



127612

Electric heater with unipolar overheating limit control 60°C

127612	12,0kW
127712	15,0kW
1278112	18,0kW



129092

Electric heater with tripolar combined overheating limit control and thermostat 6-85°C (Not intended for swimming pools)

12901	1,5kW
12903	3,0kW
12904	4,5kW
129062	6,0kW
129072	7,5kW
129092	9,0kW

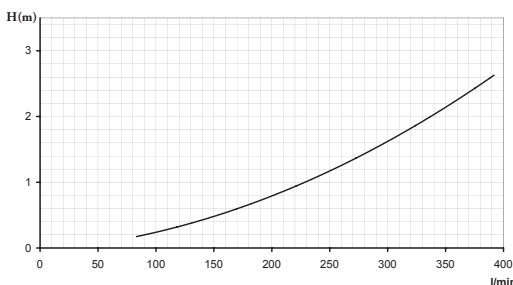


140022

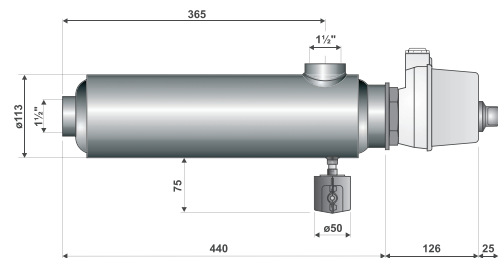
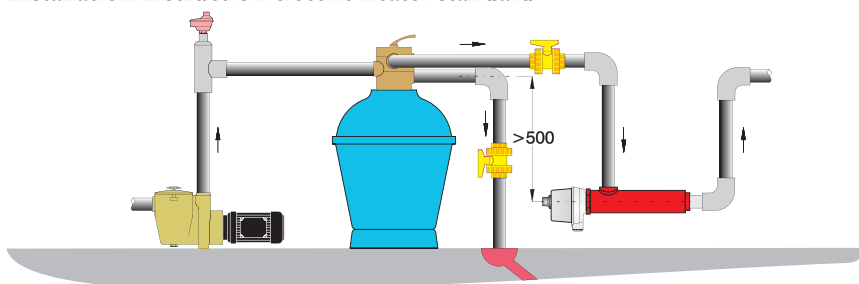
Electric heater with pressure switch, unipolar thermostat 0-45°C and tripolar overheating limit control 60°C (from 12kW unipolar 60°C)

140000	1,5kW
14000	3,0kW
14001	4,5kW
140022	6,0kW
140032	7,5kW
140042	9,0kW
140052	12,0kW
140062	15,0kW
140072	18,0kW

Pressure drop



Installation instruction electric heater standard



kW	Ampere 3-phase	
	230V	400V
3,0	8	5
4,5	12	7
6,0	15	9
7,5	19	11
9,0	23	14
12,0	31	18
15,0	38	22
18,0	46	27

Electric heater compact 1,5-18,0kW

Pahlén compact electric heaters are designed and constructed for continuous flow with the lowest possible pressure drop. The compact design allows installation where there is little space. The outer jacket and the connections are made of acid-proof stainless steel AISI 316. The heaters are supplied with a 2" heating element of Incoloy 825, a high alloy steel with excellent characteristics against aggressive water. A variety of models are available with different combinations of overheating limit control, pressure switch, thermostat and flow switch. Maximum pressure: 10 bar

Heaters with flow switch

Electric heater with unipolar thermostat 0-45°C, flow switch

	Item no.	
	133111	3,0kW
	133311	6,0kW
	133511	9,0kW
	133611	12,0kW
	133711	15,0kW
133111	133811	18,0kW

Electric heater with unipolar thermostat 0-45°C, tripolar overheating limit control 60°C, flow switch

	139111	3,0kW
	139211	4,5kW
	139311	6,0kW
	139511	9,0kW

Electric heater with unipolar over heating limit control 60°C, flow switch

	134111	3,0kW
	134311	6,0kW
	134511	9,0kW
	134611	12,0kW
	134711	15,0kW
	134811	18,0kW

Electric heater with unipolar thermostat 0-45°C, unipolar over heating limit control 60°C, flow switch

	132111	3,0kW
	132311	6,0kW
	132511	9,0kW
	132611	12,0kW
	132711	15,0kW
	132811	18,0kW

Electric heater with tripolar overheating limit control 60°C, flow switch

	138111	3,0kW
	138211	4,5kW
	138311	6,0kW
	138511	9,0kW

Heaters with pressure switch

Electric heater with tripolar overheating limit control 60°C, pressure switch

	Item no.	
	13811	3,0kW
	13821	4,5kW
	13831	6,0kW
	13851	9,0kW

Electric heater with unipolar thermostat 0-45°C, tripolar over heating limit control 60°C, pressure switch

	13911	3,0kW
	13921	4,5kW
	13931	6,0kW
	13951	9,0kW

Electric heater with unipolar overheating limit control 60°C, pressure switch

	13411	3,0kW
	13431	6,0kW
	13451	9,0kW
	13461	12,0kW
	13471	15,0kW
	13481	18,0kW

Electric heater with unipolar thermostat 0-45°C, unipolar over heating limit control 60°C, pressure switch

	13211	3,0kW
	13231	6,0kW
	13251	9,0kW
	13261	12,0kW
	13271	15,0kW
	13281	18,0kW

Electric heater with unipolar thermostat 0-45°C, pressure switch

	13311	3,0kW
	13331	6,0kW
	13351	9,0kW
	13361	12,0kW
	13371	15,0kW
	13381	18,0kW

Electric heater compact 1,5-18,0kW

Electric heaters with thermostat

Electric heater with unipolar thermostat 0-45°C, unipolar over heating limit control 60°C



13111

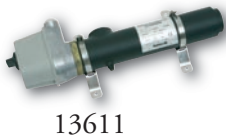
Item no.

13111	3,0kW
13131	6,0kW
13151	9,0kW
13161	12,0kW
13171	15,0kW
13181	18,0kW



13511

Electric heater with unipolar thermostat 0-45°C, tripolar overheating limit control 60°C



13611

13611	3,0kW
13621	4,5kW
13631	6,0kW
13651	9,0kW



132110

Electric heater with tripolar combined overheating limit control and thermostat 6-85°C
(Not intended for swimming pools)



12911

12911	1,5kW
12913	3,0kW
12914	4,5kW
12916	6,0kW
12917	7,5kW
12919	9,0kW

Electric heaters with overheating limit control

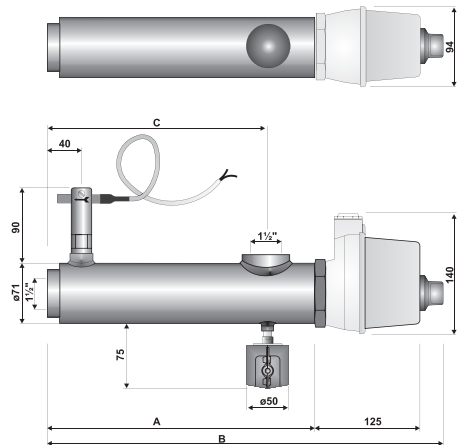
Electric heater with tripolar overheating limit control 60°C

Item no.

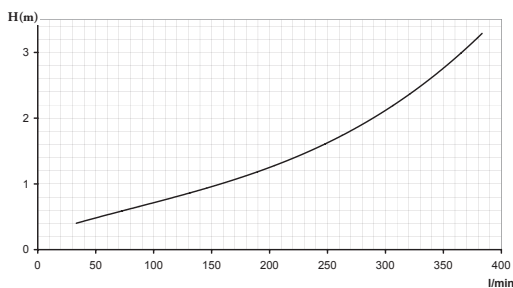
13511	3,0kW
13521	4,5kW
13531	6,0kW
13551	9,0kW

Electric heater with unipolar overheating limit control 60°C

132110	3,0kW
132310	6,0kW
132510	9,0kW
132610	12,0kW
132710	15,0kW
132810	18,0kW

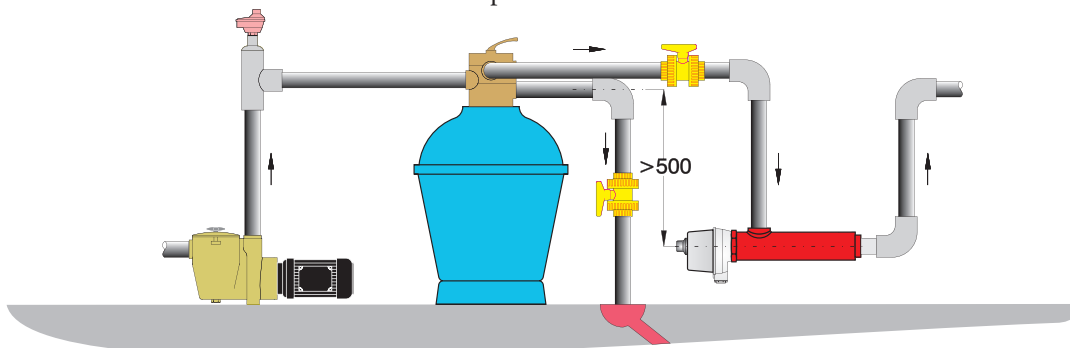


Pressure drop

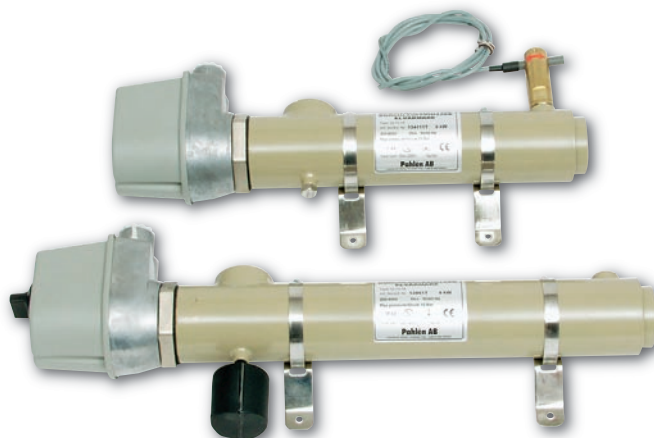


kW	Ampere 3-phase		Length (mm)		
	230V	400V	A	B	C
3,0	8	5	315	465	260
4,5	12	7	315	465	260
6,0	15	9	315	465	260
7,5	19	11	415	565	360
9,0	23	14	415	565	360
12,0	31	18	415	565	360
15,0	38	22	415	565	360
18,0	46	27	415	565	360

Installation instruction electric heater compact



Electric heater compact 3,0-18,0 kW titanium



All Pahlén compact electric heaters can be supplied from 3,0 to 18,0 kW with outer jacket made of titanium and Nic-Tech treated heating element. The electric heaters are designed for swimming pools with aggressive water, where there is a high risk for corrosion or large quantities of chlorides present, i.e. in pools with salt water, where a salt chlorinator is installed and also in industrial processes.

When ordering, use the item no. for compact electric heaters of acid-proof stainless steel, page 51-52, and add a "T" after the item no.

Example:

Item no. 133111T= Electric heater compact made of titanium with a Nic-Tech treated heating element 3 kW, unipolar thermostat 0-45°C and flow switch.

Dimensions, installation, pressure drop and electrical data are identical to compact electric heaters of acid-proof stainless steel.

Electric heater Maxi Heat

Pahlén Maxi Heat electric heater is a compact and effective heater for swimming pools, designed for continuous flow and low pressure drop. The heater body and connecting sleeves are made of acid-proof stainless steel AIS 316, the casing of powder coated, galvanized steel. The heating elements are made of Incoloy 825.

The heater is supplied with built-in contactors, thermostat 0-45°C, overheating limit control 60°C and flow switch. Max. pressure: 2 bar.



Electric heater Maxi Heat

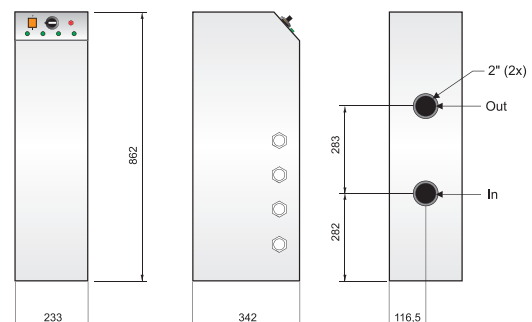
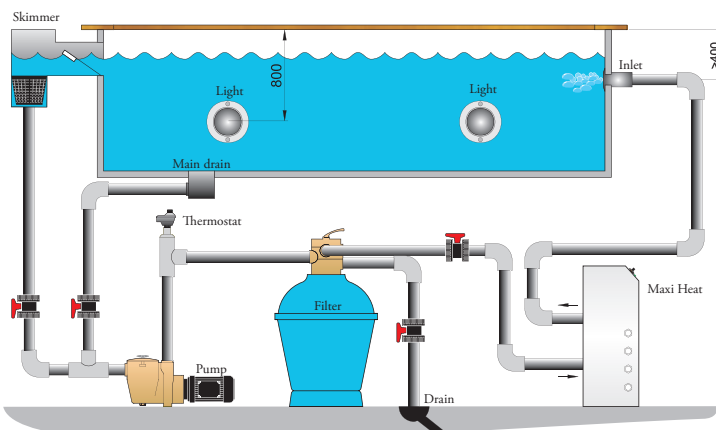
Item no.	Model	Voltage	Capacity kW	Ampere	Connection	Max flow
1271840	MH 1118	3x400	2x9=18	2x14	2"	350 l/min
1272440	MH 1124	3x400	2x12=24	2x18	2"	350 l/min
1273040	MH 1130	3x400	2x15=30	2x22	2"	350 l/min
1273640	MH 1136	3x400	3x12=36	3x18	2"	350 l/min
1274540	MH 1145	3x400	3x15=45	3x22	2"	350 l/min
1276040	MH 1160	3x400	4x15=60	4x22	2"	350 l/min
1277240	MH 1172	3x400	4x18=72	4x27	2"	350 l/min

Electric heater Maxi Heat

Item no.	Model	Voltage	Capacity kW	Ampere	Connection	Max flow
1271841	MHA 1118	3x415	2x9=18	2x13	2"	350 l/min
1272441	MHA 1124	3x415	2x12=24	2x17	2"	350 l/min
1273041	MHA 1130	3x415	2x15=30	2x21	2"	350 l/min
1273641	MHA 1136	3x415	3x12=36	3x17	2"	350 l/min
1274541	MHA 1145	3x415	3x15=45	3x21	2"	350 l/min
1276041	MHA 1160	3x415	4x15=60	4x21	2"	350 l/min
1277241	MHA 1172	3x415	4x18=72	4x26	2"	350 l/min

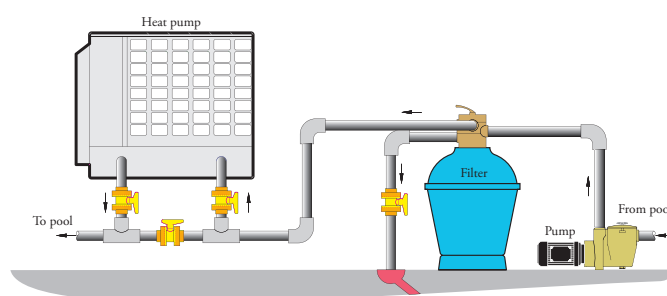
Electric heater Maxi Heat

Item no.	Model	Voltage	Capacity kW	Ampere	Connection	Max flow
1271823	MHB 1118	3x230	2x9=18	2x23	2"	350 l/min
1272423	MHB 1124	3x230	2x12=24	2x31	2"	350 l/min
1273023	MHB 1130	3x230	2x15=30	2x38	2"	350 l/min
1273623	MHB 1136	3x230	3x12=36	3x31	2"	350 l/min
1274523	MHB 1145	3x230	3x15=45	3x38	2"	350 l/min
1276023	MHB 1160	3x230	4x15=60	4x38	2"	350 l/min



Heat pump

Pahlén heat pump makes use of energy from the air, is efficient and economical with energy, easy to install and occupies only a small space by the pool. It is equipped with a scroll compressor for optimum efficiency, minimal vibration and long life. The R407C refrigerant is environmentally compatible and biodegradable. The casing is made of stainless steel and the condenser, the heat exchanger of the pool, is made of titanium. The heat pump is installed outdoors, and is connected directly on the return pipe of the pool.



Technical data	Maxitemp 35 Item no. 149 900 35	Maxitemp 51 Item no. 149 900 51
Output at pool temperature 10°C *		
Input (kW)	1,2	1,6
Output (kW)	6,6	9,5
Coefficient of performance (COP)	5,5	5,9
Output at pool temperature 15°C *		
Input (kW)	1,3	1,7
Output (kW)	6,6	9,4
Coefficient of performance (COP)	5,1	5,5
Output at pool temperature 20°C *		
Input (kW)	1,4	1,8
Output (kW)	5,9	8,5
Coefficient of performance (COP)	4,2	4,7
Output at pool temperature 25°C *		
Input (kW)	1,5	1,9
Output (kW)	5,4	8,4
Coefficient of performance (COP)	3,6	4,4
Maximum flow (l/min)	200	300
Pressure drop (H(m))	0,6	1,6
Pipe connection	inside 1½"	inside 1½"
Electrical connection	1-phase 230V/10A	1-phase 230V/16A
Sound level (dB)	58	58
Air flow (m³/h)	470	700
Length (mm)	870	930
Width (mm)	295	340
Height (mm)	700	760
Weight (kg)	47	62

* The figures stated are for an air temperature of 15-20°C

Nic-Tech – an alternative to titanium

Pahlén has developed a special treatment for stainless steel, Nic-Tech, that is very resistant to aggressive water in swimming pools or in industrial processes.

All the electric heaters and heating elements within our range can be treated with Nic-Tech to prolong their operational life. This treatment makes the items much more resistant to corrosion and fretting (800 Vickers).

Nic-Tech is an excellent alternative to titanium in installations where there is a high risk for corrosion or there are large quantities of chlorides present, salt water for example. Pahlén pumps and other items manufactured from bronze may also be treated with Nic-Tech to increase their working life when operated in a corrosive environment.

Nic-Tech has good endurance against many chemical agents. The table below gives several examples. Generally the product is coated with 20µm Nic-Tech but if required the coating may be increased to 40 µm.



Agency (solution in water)	Temperature	Loss of Nic-Tech µm per year
Acetic acid 98-100%	20	0,8
Acetone	20	0,08
Aluminium sulphate 27%	20	5
Ammonia 25%	20	16
Ammonium nitrate 20%	20	15
Ammonium sulphate, saturated	20	3
Sodium chloride, saturated with CO ²	95	5
Sodium chloride, saturated with hydrogen sulphite	95	0
Calcium chloride 42%	20	0,02
Citric acid, saturated	20	7
Copper chloride 5%	20	25
Ethylene glycol	20	0,06
Ferric-III-chloride	20	200
Hydrochloric acid 5%	20	24
Hydrochloric acid 2%	20	27
Lactic acid 85%	20	1
Hydrochloric acid 1%	20	25
Oxalic acid 10%	20	3
Phenol 90%	20	0,2
Phosphoric acid 85%	20	3
Sodium carbonate, saturated	20	1
Sodium hydroxide 45%	20	0
Sodium hydroxide 50%	95	0,2
Sodium sulphate 10%	20	0,8
Sulphuric acid 65%	20	9
Water pH 3,3	20	7
Water, distilled, nitrogen free	100	0
Water distilled, saturated with oxygen	95	0
Water, sea, 3% salt	95	0

Electric heater

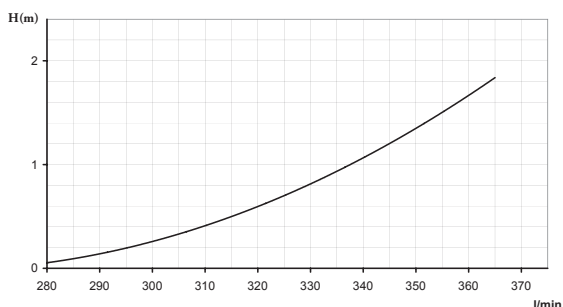
Electric heater 1,5-3,0 kW

Pahlén electric heater is designed for continuous flow with the lowest possible pressure drop. The compact dimensions make it suitable for spa pools, small swimming pools and installation in restricted spaces. The heater is manufactured from acid-proof stainless steel AISI 316. It is available in three sizes of 1,5 kW, 2,0 kW or 3,0 kW and is fitted with an adjustable thermostat 0-45°C together with automatic over heating protection. Maximum pressure: 10 bar



12708

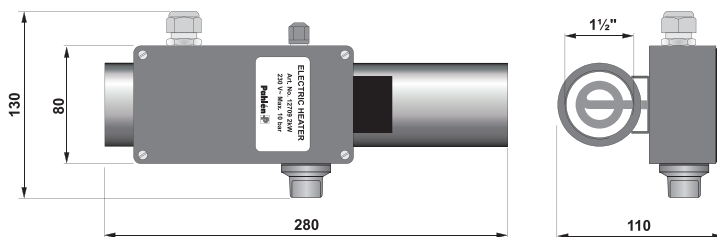
Pressure drop



Technical data

Spa heater, single phase 230V

Item no.	kW	Length mm	Pipe connection
12708	1,5	240	1½"
12709	2,0	240	1½"
12710	3,0	240	1½"



Air heater 1,5 kW

Pahlén air heater for spa pools heats the incoming cold air before it is mixed with the water. It is made of acid-proof stainless steel AISI 316 and is supplied with hose connections. The air heater is equipped with an adjustable thermostat 30-80°C and overheating limit control.

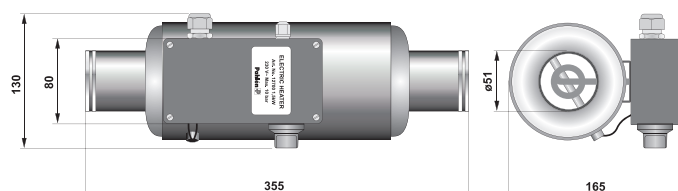


12700

Technical data

Air heater, single phase 230V

Item no.	kW	Length mm	Pipe connection
12700	1,5	360	Ø 51 mm



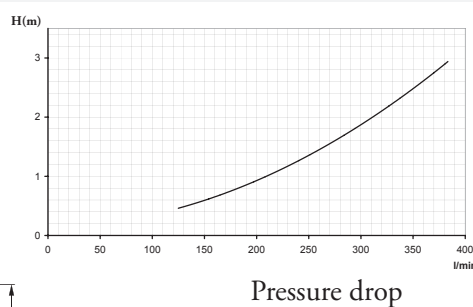
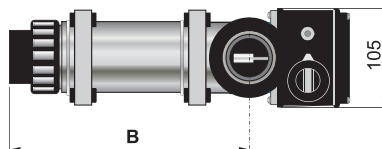
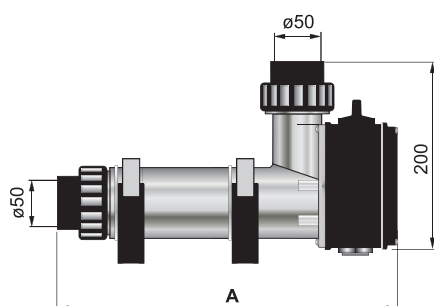
Electric heater plastic

Pahlén electric heaters 3,0-18,0 kW made of plastic are designed for a continuous flow with the lowest possible pressure loss. The compact design enables installation where there is little space. The outer jacket and the junction box are made of plastic and the heating element is made of Incoloy 825. The heater is supplied with union couplings for adhesive bonding of Ø50 mm pipes. All heaters are equipped with thermostat 0-45°C, high limit control 60°C and flow switch.



141600

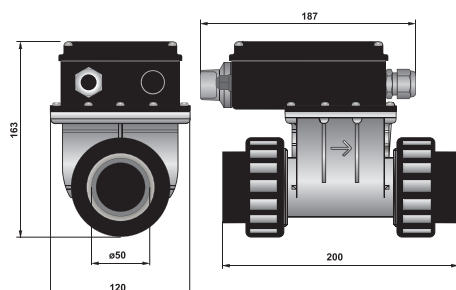
Technical data		Ampere 3-phase		Length mm	
Item no.	kW	230V	400V	A	B
141600	3,0	8	5	355	255
141601	6,0	15	9	355	255
141602	9,0	22	14	540	440
141603	12,0	29	18	540	440
141604	15,0	36	22	540	440
141605	18,0	44	27	540	440



Electric heater plastic spa

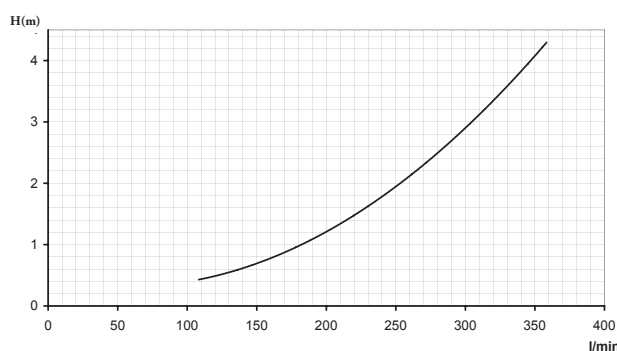
Pahlén electric heaters for spa pools and small swimming pools are designed for continuous flow with a minimum pressure loss. The compact design enables installation where there is little space. The heater is made of plastic with a heating element of Incoloy 825, a high-alloy steel with excellent characteristics against aggressive water.

The heater is available in three sizes, 1,5 kW, 2,0 kW and 3,0 kW, and is delivered with an adjustable thermostat 0-45°C, overheating limit control 60°C and flow switch.



Technical data			
Item no.	kW	Length mm	Pipe connection
141650	1,5	200	Ø50 mm
141651	2,0	200	Ø50 mm
141652	3,0	200	Ø50 mm

Pressure drop



Heating elements, thermostats, control equipment

Heating elements

Pahlén heating elements are primarily intended for water heating and can be used in a variety of applications. The elements are supplied with threaded brass connections as standard, 2" outside thread.



Materials used

Acid-proof stainless steel AISI 316:

An excellent material which is suitable for the majority of heating applications.

Incoloy 825:

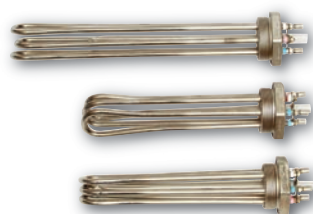
A high-alloy steel with generous amounts of nickel, chrome and molybdenum, which makes it suitable for use in aggressive water.

Nic-Tech:

All heating elements may be supplied treated with Nic-Tech for use in salt water installations and industrial processes or where corrosion protection is a major factor.

Heating elements

Incoloy heating elements should be used in swimming pools and spa pools. In other heating systems (floor heating, central heating etc.) the surface output of the heating element should not exceed 12W/cm².



Heating elements acid-proof stainless steel AISI 316 2" 230/400V

Item no.	Capacity (kW)	Surface capacity (W/cm ²)	Installed length (mm)
12724	4,5	8,9	355
12733	6,0	8,8	255
127332	6,0	10,5	380
12746	7,5	8,0	330
12756	9,0	8,9	355
127561	3+6	8,7	465
127562	2x4,5	11,1	385

Used in heating systems.

Heating elements acid-proof stainless steel AISI 316 2½" 230/400V

Item no.	Capacity (kW)	Surface capacity (W/cm ²)	Installed length (mm)
12734	6,0	7,5	270
12744	7,5	7,5	330
12745	9,0	7,5	390

Used in heating systems.

Heating elements Incoloy 825 2" 230/400V

Item no.	Capacity (kW)	Surface capacity (W/cm ²)	Installed length (mm)
127044	1,5	6,2	255
127144	3,0	8,5	255
127244	4,5	12,8	255
127344	6,0	17,0	255
127544	9,0	17,7	355
127644	12,0	23,0	355
127754	15,0	29,3	355
127854	18,0	35,1	355

Used in electric heaters for swimming pools and spa pools.

Heating elements Incoloy 825 2½" 230/400V

Item no.	Capacity (kW)	Surface capacity (W/cm ²)	Installed length (mm)
127143	3,0	8,5	255
127343	4,5	12,8	255
127443	6,0	17,0	330
127543	9,0	17,7	355
127643	12,0	23,0	355
127746	15,0	29,3	355
127846	18,0	35,1	355

Used in electric heaters for swimming pools and spa pools.

Heating elements Incoloy 825 and Nic-Tech 2" 230/400V

Item no.	Capacity (kW)	Surface capacity (W/cm ²)	Installed length (mm)
127144N	3,0	8,5	255
127344N	6,0	17,0	255
127544N	9,0	17,7	355
127644N	12,0	23,0	355
127754N	15,0	29,3	355
127854N	18,0	35,1	355

Used in electric heater titanium for swimming pools and spa pools.

Thermostats, overheating protection



128461

Combi thermostat with graded control knob, tripolar with overheating limit control. Max. 16A(1,5-9 kW), for mounting in a junction box. Not intended for swimming pools.

Item no.	Temperature range
128461	6-85°C



12843

Thermostat with graded knob, unipolar for mounting in a junction box.

Item no.	Temperature range
12843	0-45°C
12842	30-85°C
128455	0-45°C incl. fixing bracket, cable shoes for mounting in junction box 147002.
128458	30-85°C incl. fixing bracket, cable shoes for mounting in junction box 147002.



12840

Precision thermostat, unipolar, with graded knob for setting and automatic control of water temperature. Equipped with 160 mm probe. Connection 1/2" for fitting onto a pipe.

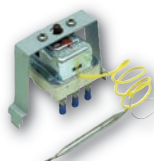
Item no.	Temperature range
12840	0-40°C
12837	10-60°C
12839	30-110°C
12838	30-160°C



128441

Overheating limit control, unipolar, for mounting in a junction box.

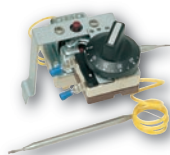
Item no.	Temperature range
12844	60°C
128441	80°C
128457	60°C incl. fixing bracket, cable shoes for mounting in junction box 14700.
128442	80°C incl. fixing bracket, cable shoes for mounting in junction box 14700.



128576

Overheating limit control, tripolar. Max. 20A(1,5-12kW) for mounting in a junction box.

Item no.	Temperature range
128572	60°C
128573	98°C
128576	60°C incl. fixing bracket, cable shoes for mounting in junction box 14700.
128577	98°C incl. fixing bracket, cable shoes for mounting in junction box 14700.



128453

Thermostat set with overheating limit control.

Item no.	Temperature range
128453	Unipolar thermostat 0-45°C/tripolar overheating limit control 60°C, incl. fixing bracket, cable shoes for mounting in junction box 147001.
128451	Unipolar thermostat 0-45°C/unipolar overheating limit control 60°C, incl. fixing bracket, cable shoes for mounting in junction box 147001.

Junction boxes, pressure switches, flow switch



14700

Junction box for heating elements, L=140mm, W=95mm, H=110mm.

Item no.

- | | |
|--------|---|
| 14700 | For overheating limit control |
| 147001 | For thermostat 0-45°C and overheating limit control |
| 147002 | For thermostat 0-45°C |
| 147003 | For combi thermostat 6-85°C |



Fixing brackets for overheating limit control and thermostat suitable for junction box no. 14700.

Item no.

- | | |
|--------|--|
| 12848 | Thermostat |
| 128481 | Overheating limit control |
| 128482 | Thermostat and overheating limit control |



12850

Pressure switch mounted in an enclosure including housing and a connection nipple 1/4". Cut off at a pressure below 0,2 bar.

Item no. 12850



12856

Pressure switch for mounting on an outer jacket. Connection 1/8".

Cut off at a pressure below 0,2 bar.

Item no. 12856



12860

Flow switch. Cut off at a flow less than 43 l/min. Connection 1/2". 230V, 80W

Item no. 12860



11232

Electric control box

Electric control box for regulation and control of circulation, heating and lighting.

Supplied complete with enclosure, contactors and main switch.

Item no.

- | | |
|---------------|---|
| 11232 (A,B,C) | Control box for 3 phase pump + heating max 9 kW + lighting |
| 11234 (A,B,C) | Control box for 3 phase pump + heat exchanger + lighting |
| 11235 (A,B,C) | Control box for 3 phase pump + heater max 2 x 9 kW + lighting, shared effect. |

Please state size (kW) of pool pump

A= Rated current of motor 1,0-1,6 A, 0,37-0,55 kW

B= Rated current of motor 1,7-2,4 A, 0,75 kW

C= Rated current of motor 2,5-4,0 A, 1,1 - 1,5 kW

Lights Pool equipment

Pahlén manufacture lighting and other pool equipment in acid-proof stainless steel and bronze. These are intended for large installations, smaller pools and also for spas, and guarantee a long and reliable operating life.

Pahlén can also supply pool equipment in other materials if the customer should desire.



Pool lighting in stainless steel, spa lighting



Pool light 300 p. 65



Corner-/wall light p. 66



Pool light 200 p. 67



Spa light p. 68

Underwater window, lighting accessories



Underwater window
p. 68

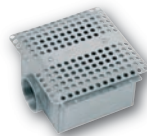


Spare parts lights p. 69

Pool equipment in stainless steel



Inlets p. 70



Main drains p. 71

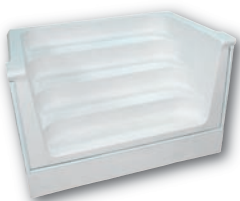


Skimmers p. 72



Ladders p. 75

Pool stair, pool equipment ABS plastic



Pool stair p. 75



Skimmers p. 76



Inlets p. 76



Pool light p. 76

Pool lighting in stainless steel

Underwater lighting is not only attractive in a swimming pool, but also provides a safety factor for night time bathing. All lighting units are manufactured from high quality material, acid-proof stainless steel AISI 316, and are supplied with a 2,5 m long 2-wire connection cable, which is connected to the lamp unit via a watertight bush. Lamp changing can easily be accomplished without the need for draining the pool water thanks to the long connecting cable.

Lamp type: PAR 56, 12V, 300W, Sealbeam, i.e. lamp, glass and reflector are in a sealed unit.

Recommended lighting:

300W For outdoor pools - 1 light unit per 25 m², for indoor pools - 1 light unit per 15 m².

25W LED For outdoor pools - 1 light unit per 12 m², for indoor pools - 1 light unit per 7 m².



12250

Lighting unit 300, 300W, 12V, IP68

Item no.

- 12250 Type 300A, for concrete pools. Supplied complete with comprising stainless steel niche for permanent in-wall installation, a lamp unit with polished front and screws.
- 12270 Type 300CA, for pools with liner. Supplied complete with lamp unit, polished front, niche, gasket, screws and a supporting ring of noryl.



123280

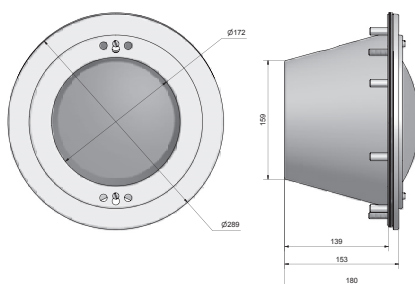
Lighting with LED-diodes in red, green and blue.

Totally 16 different colours, change of colours and flashing light.

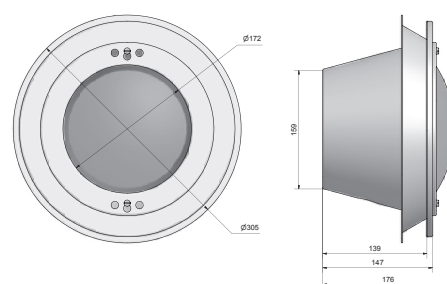
Lighting unit 300 LED, 12V, IP68

Item no.

- 123280 Type 300A LED, for concrete pools. Supplied complete with comprising stainless steel niche for permanent in-wall installation, a lamp unit with polished front and screws.
- 123290 Type 300CA LED, for pools with liner. Supplied complete with lamp unit, polished front, niche, gasket, screws and a supporting ring of noryl.
- 122706 Niche fixtures, stainless steel for model 300CA, set of 4. Recommended for wall type concrete with liner.



12270, 123290



12250, 123280

Pool lighting in stainless steel

Pahlén corner and wall lights are manufactured from acid-proof stainless steel AISI 316. They are mounted on the inside of the pool wall and are suitable for concrete or liner pools. The light units are supplied with a 2,5 m connection cable, which is attached to the lamp via a watertight bush.

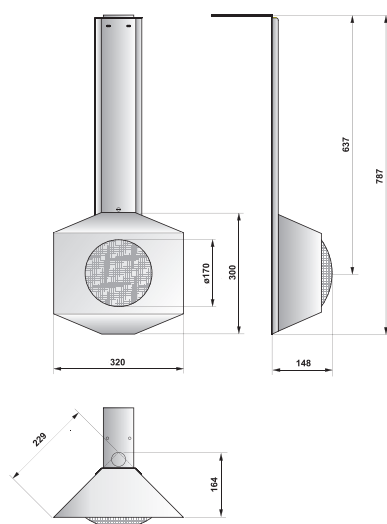


12280

Corner light 304, 300W, 12V, IP68

Item no.

12280 Light unit, intended for corner mounting. Has a polished front and a polished bracket for fixing under the pool coping.

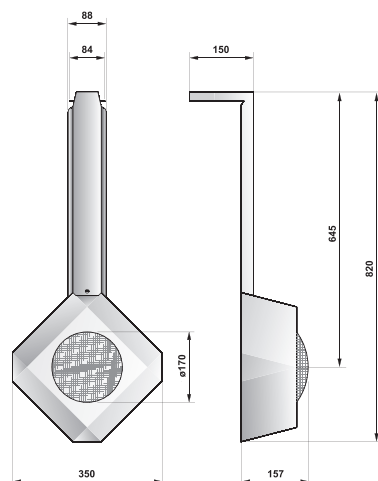


12290

Wall light 303, 300W, 12V, IP68

Item no.

12290 Light unit, intended for wall mounting. Has a polished front and a polished bracket for fixing under the pool coping.



Pool lighting in stainless steel



122600

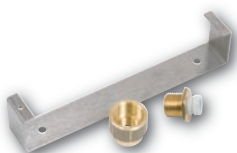
Pahlén light unit model 200 is suitable for the majority of underwater installations such as pools and fountains.

Light unit model 200

Item no.

122600 Halogen 150W (2 x 75W), 12V, IP68. Manufactured from acid-proof stainless steel AISI 316 with a polished front, reflector, tempered glass and 2 m silicon cable (2 x 2,5 mm²). Fixing kit is not included.

122610 Same as item no. 122600 but including high temperature cut-out. Fixing kit is not included.



122602

Fixing kit for light unit model 200

Item no.

122601 Kit for liner pools, complete with brackets, screws and water tight cable gland.

122602 Kit for concrete pools, complete with brackets, screws and water tight cable gland.



12297

Pahlén wall light model 200 is intended for all types of pools and is easily installed under the pool coping or deck.

Wall light model 200

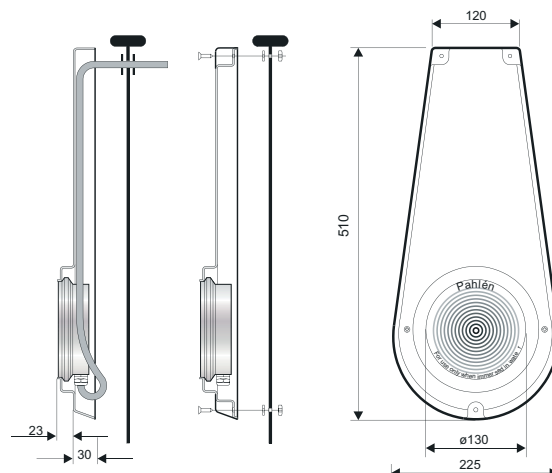
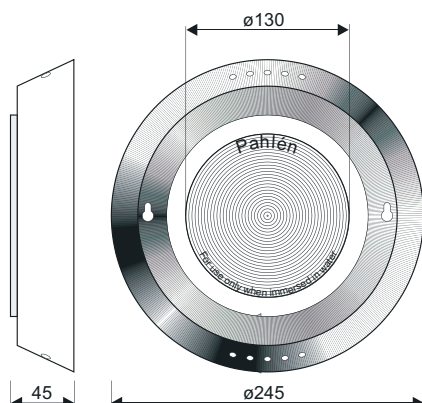
Item no.

12297 Halogen 150W (2 x 75W), 12V, IP68 with a white plastic frame, light unit of acid-proof stainless steel AISI 316 with tempered glass and 2 m silicon cable (2 x 2,5 mm²)

12298 Same as item no. 12297 but including high temperature cut-out.

12297

122600



Spa light, underwater window

Underwater lighting with a halogen lamp 50W/12V for spas and smaller pools. Manufactured from plated brass and with a removable front retaining ring. The lamp is protected behind strong tempered glass and may be replaced from inside or outside the pool. IP68.



Spa light

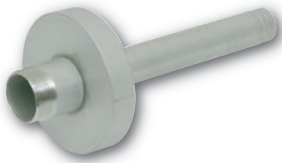
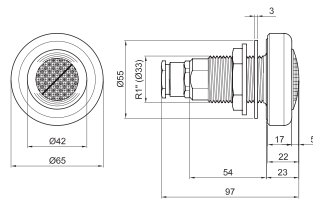
Item no.

12265

This unit is supplied as standard with 1,2 m heat resistant silicon cable, fittings and gaskets for direct installation in the pool wall. The front ring is made of polished acid-proof stainless steel AISI 316.

12265B

With white enamelled front ring.

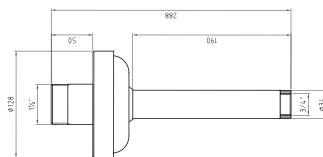


12631

Non leak flange for spa light, for concrete pool.

12632

Non leak flange for spa light, for liner pool.



Underwater window

Underwater window for mounting in concrete pool walls. Triple layered safety glass and a 298 mm light opening. Mounting unit of bronze combined with a stainless steel tube which is adjusted to the pool wall thickness. White front ring of bronze, (two-component paint).

Item no.

122740

Underwater window with 298 mm light opening including bronze fixture. The wall thickness is to be stated on the order.

Lighting accessories and spares



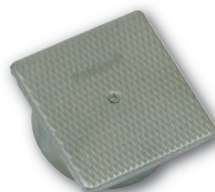
12340

Transformers

Item no.

12273 Transformer 60W, 12/230V, IP44.

12340 Transformer 300W, 12/230V, IP54 with built-in fuse.



12310

Junction box

Item no.

12310 Cable seal in the base, with attachment for cable conduit and connection block.



12330

Cable conduit

Item no.

12330 Protects the cable between the junction box and the lamp unit, length 900 mm.

12854 Jointing sleeve internal 3/4" PVC. For extension of cable conduit.



12307

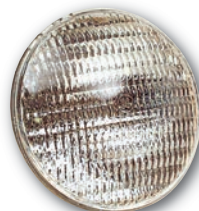
Spare lamps

Item no.

122660 Halogen lamp 12V, 50W. For light unit item no. 12265.

12307 Halogen lamp 12V, 75W.
For light unit item nos. 12297, 12298, 122600, 122610.

12300 Lamp 12V, 300W, PAR 56, Sealbeam, i.e. lamp, glass and reflector in one sealed unit.
Suitable for item nos. 12250, 12270, 12280, 12290, P2000.



12300

123252 Lamp LED 12V, PAR 56, type Sealbeam, i.e. lamp, glass and reflector are in a sealed unit.
With LED diodes in red, green and blue. Totally 16 different colours, change of colours and flashing light. The lamp fits and can replace all actual pool lights with bulb type PAR 56, 300W/12V.



122662

Lighting cable

Item no.

122662 Cable for lighting, model Spa, 2 x 1,5 mm²/m

122646 Cable for lighting, model 200, 2 x 2,5 mm²/m

12360 Cable for lighting, model 300, 2 x 4 mm²/m

Pool equipment in stainless steel



12670



Non leak flange

Item no.

12670 Acid-proof stainless steel AISI 316, with sealing flange. Inside and outside thread 1 1/2". Length 290 mm.

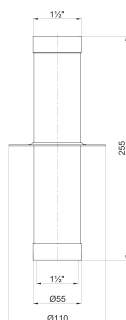
12640 Acid-proof stainless steel AISI 316, with sealing flange. Inside thread 1 1/2". Length 255 mm.

12675 For main drain. Acid-proof stainless steel AISI 316, with sealing flange. Inside and outside thread 1 1/2". Length 600 mm.

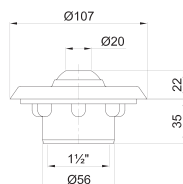
126751 For main drain. Acid-proof stainless steel AISI 316, with sealing flange. Outside thread 2". Length 600 mm.



12640



125990



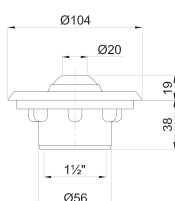
Inlet

Item no.

125990 Bronze, with acid-proof stainless steel front AISI 316, screws and rubber gasket. 20 mm jet nozzle. Inside thread 1 1/2". For liner pools.



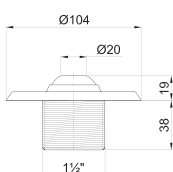
125991



125991 Bronze, with acid-proof stainless steel front AISI 316, screws and rubber gasket. 20 mm jet nozzle. Inside thread 1 1/2". For concrete, fibre glass and building block pools with liner.



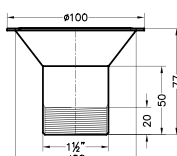
126090



126090 Acid-proof stainless steel AISI 316. 20 mm jet nozzle. Outside thread 1 1/2". For concrete pools.



12550



Bottom inlet nozzle

Item no.

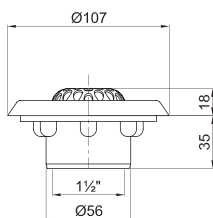
12550 Acid-proof stainless steel AISI 316, adjustable for different flows. Outside thread 1 1/2". For concrete pools.

12560 Acid-proof stainless steel AISI 316, adjustable for different flows. Outside thread 2". For concrete pools.

Pool equipment in stainless steel



12652



Outlet

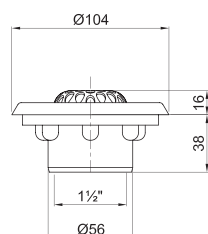
Item no.

12652

Bronze, with acid-proof stainless steel front AISI 316, screws and rubber gasket. Grille opening. Inside thread 1½". For liner pools.



12654

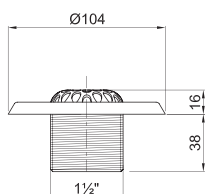


12654

Bronze, with acid-proof stainless steel front AISI 316, screws and rubber gasket. Grille opening. Inside thread 1½". For concrete, fibre glass and building block pools with liner.



12650



12650

Acid-proof stainless steel AISI 316. Grille opening. Outside thread 1½". For concrete pools.



125935

Main drain

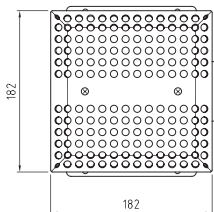
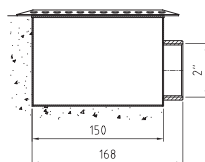
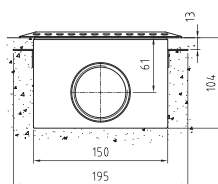
Item no.

125930

Acid-proof stainless steel AISI 316. Complete with flange, rubber gasket and screws. The polished grate is detachable with two screws. Connection: Inside thread 2". For liner pools.

125935

Acid-proof stainless steel AISI 316 with flanges for embedding in the concrete floor. The polished grate is detachable with two screws. Connection: Inside thread 2". For concrete pools.



Water level control



11250

For automatic level control in swimming pools, spa pools, ponds etc.

Item no.

11250

Electronic level control incl. sensor. Built-in safety device with programmable refilling time for solenoid valve.

112501

Solenoid valve ½", soft closing.

112503

Cover made of stainless steel for level control.

112505

Non leak flange for cable of level control.

Pool equipment in stainless steel

Skimmer made of acid-proof stainless steel AISI 316, equipped with a spacious strainer basket, automatic floating weir and lid. Connection: Inside thread 2".



112971

Skimmer with short neck

Item no.

112971 With short neck for liner pools. Equipped with a polished front, screws and gasket. The front has a flange for fixing to the pool wall.

112978 Same as skimmer 112971 but with openings for water filling, overflow and cable bushing for water level control.

112900 Clamps, corrosion free for skimmer 112971 and 112978. Set of 4 pcs. (Recommended for wall type concrete with liner.)



112972

112972 With short neck for concrete pools. The inlet has flanges for embedding in the concrete wall.

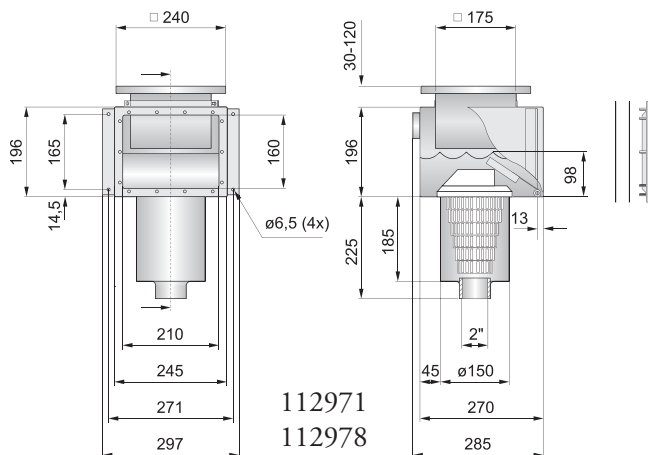
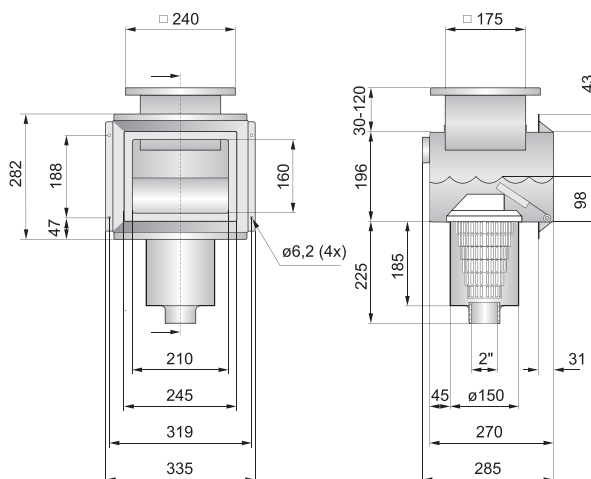
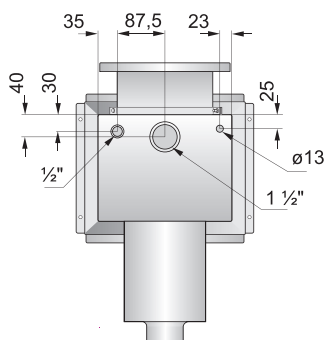
112979 Same as skimmer 112972 but with openings for water filling, overflow and cable bushing for water level control.

Skimmer with openings for water filling, overflow and cable bushing for water level control.



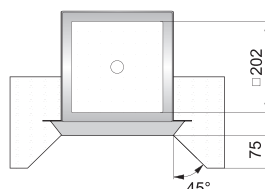
112978

112979



112971

112978



112972

112979

Pool equipment in stainless steel

Skimmer made of acid-proof stainless steel AISI 316, equipped with a spacious strainer basket, automatic floating weir and lid. Connection: Inside thread 2".



112981

Skimmer with standard neck

Item no.

112981 With standard neck for liner pools. Equipped with a polished front, screws and gasket. The front has a flange for fixing to the pool wall.

112988 Same as skimmer 112981 but with openings for water filling, overflow and cable bushing for water level control.



112982

112982 With standard neck for concrete pools. The inlet has flanges for embedding in the concrete wall.

112989 Same as skimmer 112982 but with openings for water filling, overflow and cable bushing for water level control.



112991

Skimmer with extended neck

Item no.

112991 With extended neck for liner pools. Equipped with a polished front, screws and gasket. The front has a flange for fixing to the pool wall.

112998 Same as skimmer 112991 but with openings for water filling, overflow and cable bushing for water level control.



112992

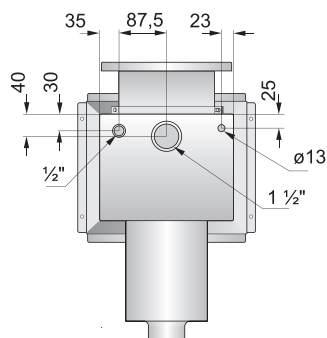
112992 With extended neck for concrete pools. The inlet has flanges for embedding in the concrete wall.

112999 Same as skimmer 112992 but with openings for water filling, overflow and cable bushing for water level control.

112900 Clamps, corrosion free for skimmer 112981, 112988, 112991 and 112998.

Set of 4 pcs. (Recommended for wall type concrete with liner.)

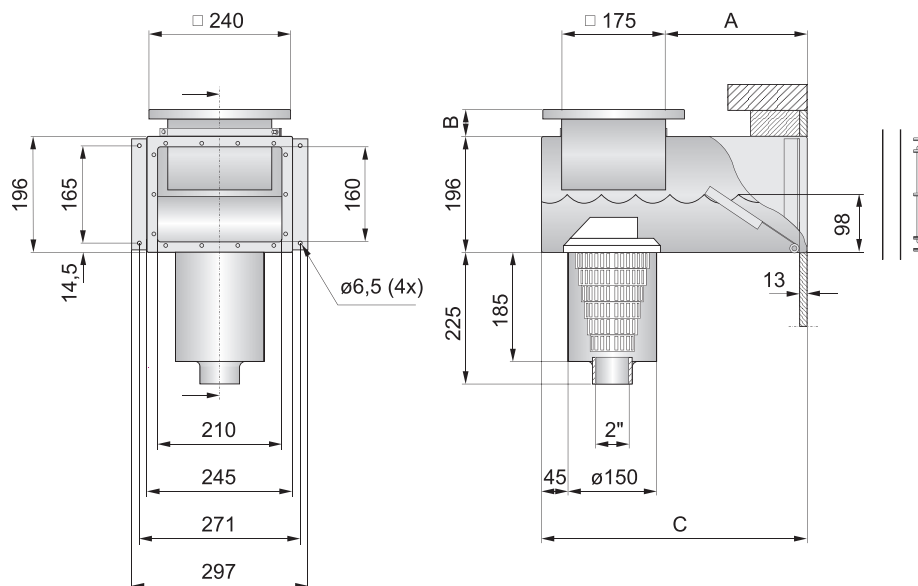
Skimmer with openings for water filling, overflow and cable bushing for water level control.



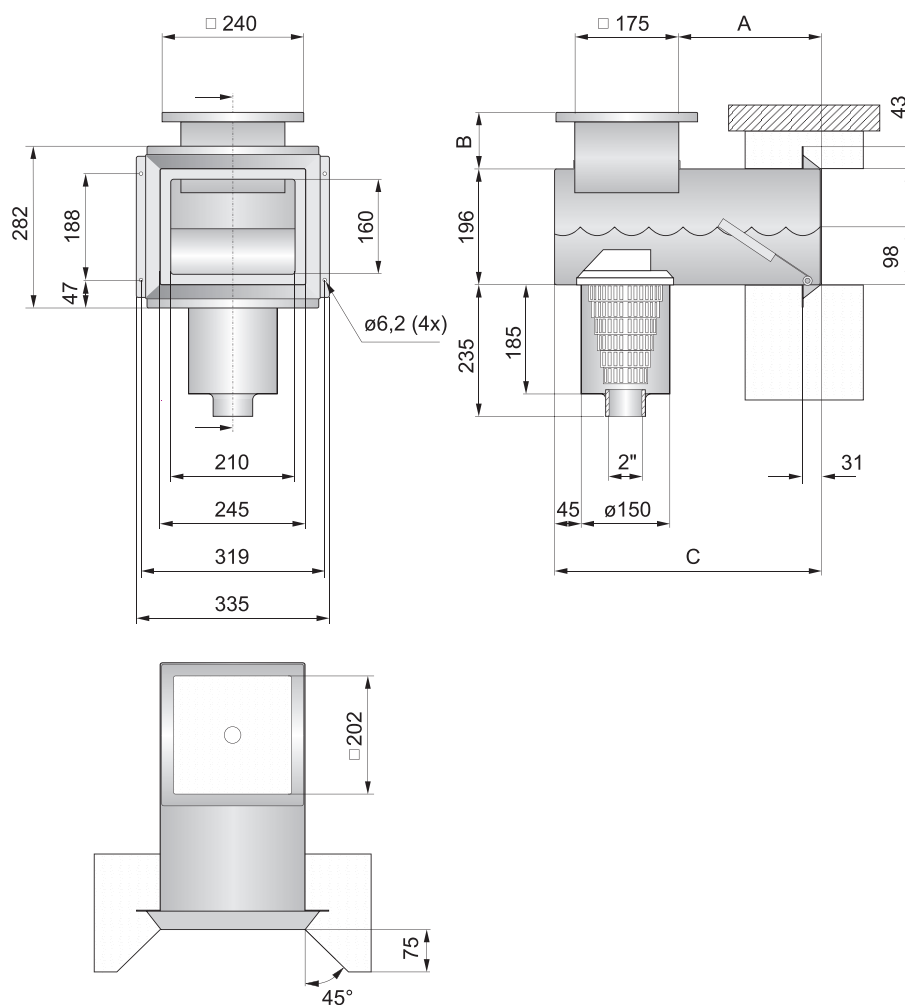
112988, 112989

112998, 112999

Pool equipment in stainless steel



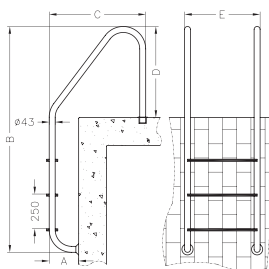
112981, 112991



112982, 112992

Item no.	A	B	C
112981, 112982	240	30-120	450
112991, 112992	440	30-120	650

Stainless steel ladders, pool stair

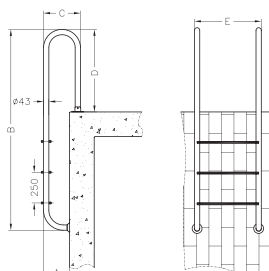


12380

Fixed ladder

Intended for fixing in the pool deck. Manufactured from polished stainless steel. Supplied with stainless steel steps, fixing details and escutcheons.

Dimensions (mm)						
Item no.	Steps	A	B	C	D	E
12370	2-step	200	1328	710	630	543
12380	3-step	200	1578	710	630	543
12390	4-step	200	1828	710	630	543
12395	5-step	200	2078	710	630	543

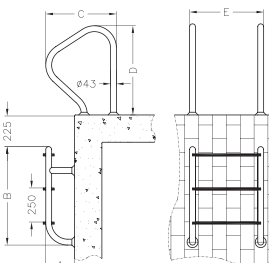


123981

Hinged ladder

Intended for fixing to the pool deck. Manufactured from polished stainless steel. Equipped with lockable hinges to fix the ladder in a raised position to allow space for a pool cover. Supplied complete with hinges and stainless steel steps.

Dimensions (mm)						
Item no.	Steps	A	B	C	D	E
123981	3-step	200	1640	300	670	543
123971	4-step	200	1890	300	670	543

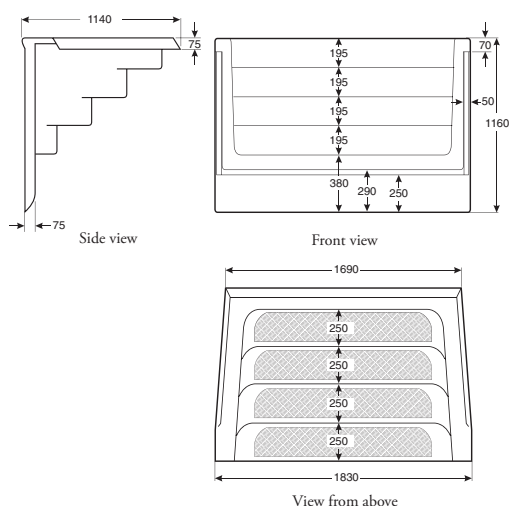


12385

Two pieces ladder

Manufactured from polished stainless steel. Supplied with stainless steel steps and fixing details.

Dimensions (mm)						
Item no.	Steps	A	B	C	D	E
12385	3-step	200	765	440	778	543
12386	4-step	200	1015	440	778	543



15585000

Pool stair manufactured of vacuum shaped acrylic, reinforced with glass-fibre reinforced polyester, intended for liner pools. The stair is resistant to UV-light. It is colourfast and easy to maintain.

Four steps with built-in slip protection make it easy and safe to get in and out of the pool.

The Pahlén spa light, item no. 12265, can be installed in the stair wall to lighten the steps and accentuate the stair in darkness.

Pool equipment ABS plastic



P1004

Skimmer

Item no. Model
P1004 SL-111

Skimmer, standard neck, liner. Adjustable height. Bottom connection 2".



112620

Skimvac

Item no.
112620

Skimvac disc with horizontal opening.



P1062



P1070



P1080

Inlets

Item no. Model
P1062 RL-321
P1070 RL-327

For liner pools. Inside bonding Ø 50 mm.

For thin pool walls with nut and seal.

Inside bonding Ø 50 mm.

P1080

For liner pools. Inside thread 1½"



P2000

Pool light

Item no. Model
P2000 PL-84

Standard, screw fixed lamp unit, liner, 300W/12V incl. cable conduit, cable 2,2 m.



P2080

Junction box

Item no. Model
P2080 BC-84

Junction box with 3 cable connections.



P1076



12620

Accessories

Item no. Model
P1076 JO-210
12620

Nozzle for inlet, inside thread 1½".

Nozzle for inlet, outside thread 1½".



61570

Floor grating for overflow channel, length 500 mm each. White

Item no.
61570 UV resistant PP-plastic, width 180 mm
61571 UV resistant PP-plastic, width 240 mm
61572 UV resistant PP-plastic, width 300 mm

Monitoring and dosing equipment

With Pahlén Autodos the free and total chlorine, redox and pH values in a pool or spa can all be controlled automatically.

The monitoring and control of the water quality is achieved by automatic precision dosing resulting in the economic use of expensive chemicals. Autodos continuously provides pure, safe and clean water and can be equipped with communication interface and memory module for PC.



Monitoring and dosing equipment



Autodos 700 p. 79



Autodos 2000 p. 80



Autodos 4000 p. 81



Autodos 5000 p. 82

Autologger



Autologger p. 83

CO₂ pH-regulation



CO₂ pH-regulation p. 84

UV Viodes



UV Viodes p. 84

Dosing pumps



Dosing pumps p. 85

Accessories Autodos



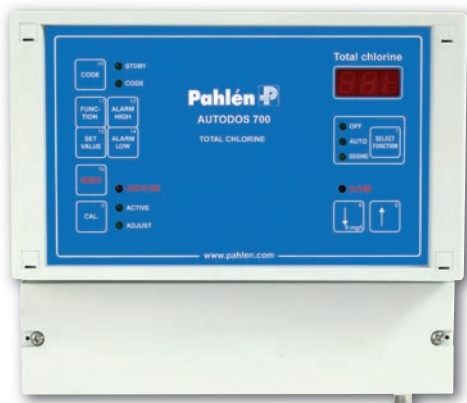
Accessories dosing and dosing equipment p. 87

Accessories dosing pumps

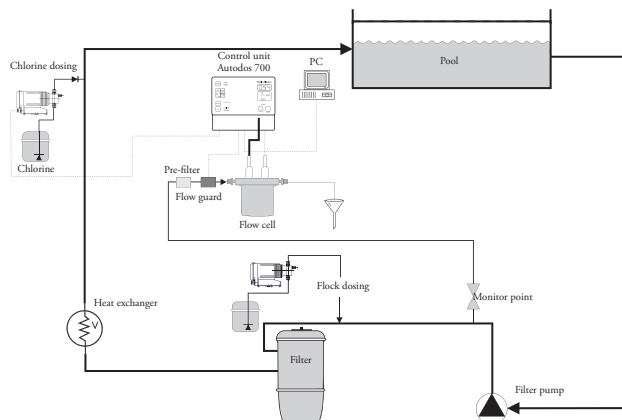


Accessories and spare parts dosing pumps p. 88

Autodos 700 pH/redox/free chlorine/total chlorine



41613



Autodos 700 are one channel equipment for measuring and dosing. The set levels are controlled automatically. The alarm limits and required values are set at the front panel by means of clearly defined buttons. Autodos 700 measures pH, free chlorine, total chlorine or redox. The result is displayed using three clear LED digits. Autodos 700 can be equipped with communication interface and memory module for PC.

Measurement and control unit

Item no.

- 41613 Measurement and control unit for free chlorine/total chlorine
- 416138 Measurement and control unit for redox
- 416139 Measurement and control unit for pH

Complete systems

Item no.

- 4161397 Autodos 700 for pH
- 4161302 Autodos 700 for free chlorine with PB 100 unit
- 4161304 Autodos 700 for free chlorine with Prominent measurement CLE 3
- 4161308 Autodos 700 for redox
- 4161306 Autodos 700 for total chlorine with Prominent measurement CTE 1

- including
- measurement and control unit
 - flow cell
 - probes incl. cable
 - measuring water hose
 - connections and valves
 - buffer solutions (4161397, 4161308)
 - filter (4161302)
 - flow guard (4161302)
 - mounting panel
 - probe cleaning detergent



4161304

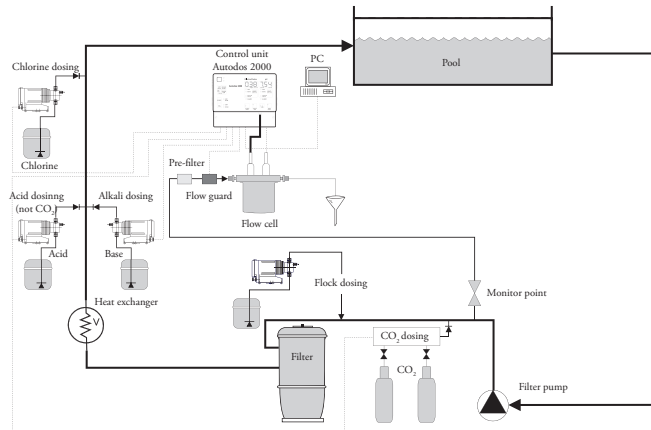
Technical data

- Monitoring: pH, free chlorine, total chlorine or redox.
- Display: 3 digits, 7-segment LED.
- Dosing: selectable on/off or frequency dosing. Dosing may be manual or automatic.
- Frequency dosing via P or PD control.
- Calibration: two-point calibration of pH and chlorine, one-point of redox.
- Alarm: for high/low values, for low flow, prolonged dosing time.
- Inputs: digital input for external flow guard.
- Relay outputs: dosing, alarm.
- Power outputs: selectable 4-20 (0-20) mA, max load 400 ohm.
- Programming: in/out functions via software set-up routine (stored in EEPROM).
- Safety: code lock, that can be activated when necessary.
- Encapsulation class: IP54.
- PC-communication (option).

Autodos 2000 pH - free chlorine/redox



41614



Autodos 2000 may be installed in all types of pools, where pH and free chlorine/redox have to be measured and controlled. It is fully automatic and the monitored values are displayed using clear digital figures. Alarm values and set points are set using clearly marked buttons on the control panel. Autodos 2000 can be equipped with communication interface and memory module for PC.

Measurement and control unit

Item no.

41614 Measurement and control unit for pH - free chlorine/redox

Complete systems

Item no.

4161406 Autodos 2000 for pH and redox

4161402 Autodos 2000 for pH and free chlorine klor with PB100 unit

4161404 Autodos 2000 for pH and free chlorine with Prominent measurement CLE 3

- including
- measurement and control unit
 - flow cell
 - probes incl. cable
 - measuring water hose
 - connections and valves
 - buffer solutions
 - filter (4161402)
 - flow guard (4161402)
 - mounting panel
 - probe cleaning detergent

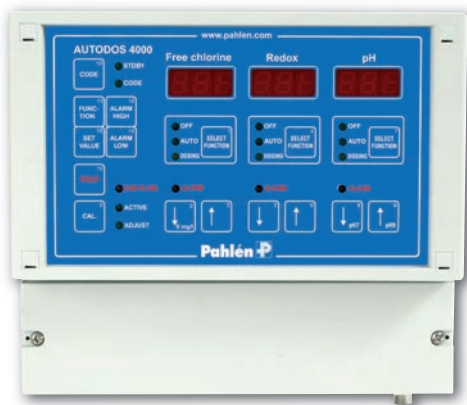


4161402

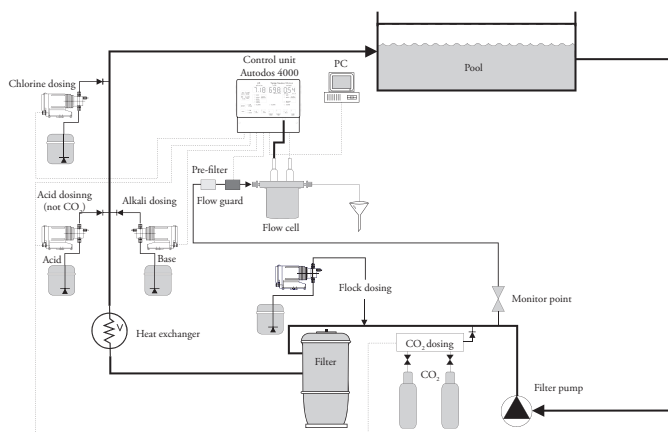
Technical data

- Monitoring: pH and free chlorine or redox (separate inputs for each probe).
- Display: 2 x 3 digits, 7-segment LED.
- Dosing: acid and base (pH-regulation) and chlorine. Selectable on/off or frequency dosing. Dosing may be manual or automatic.
- Calibration: two-point calibration of pH and chlorine, one-point of redox.
- Alarm: for high/low values, for low flow, prolonged dosing time.
- Inputs: digital input for external flow guard.
- Relay outputs: acid/base and chlorine dosing, alarm.
- Power outputs: two for channel 1 and 2 selectable 4-20 (0-20) mA, max load 400 ohm.
- Programming: choice of displaying and in/out functions via software set-up (stored in EEPROM).
- Safety: code lock, that can be activated when necessary.
- Encapsulation class: IP54.
- PC communication (option).

Autodos 4000 pH - redox - free chlorine



41615



Autodos 4000 automatically monitors and regulates pH, redox and free chlorine. The values are shown on three separate displays using clear digital figures. Autodos 4000 can be equipped with communication interface and memory module for PC.

Measurement and control unit

Item no.

41615 Measurement and control unit for pH - redox - free chlorine

Complete systems

Item no.

4161408 Autodos 4000 for pH, redox and free chlorine with PB 100 unit

4161410 Autodos 4000 for pH, redox and free chlorine with Prominent measurement CLE 3

- including
- measurement and control unit
 - flow cell
 - probes incl. cable
 - measuring water hose
 - connections and valves
 - buffer solutions
 - filter (4161408)
 - flow guard (4161408)
 - mounting panel
 - probe cleaning detergent

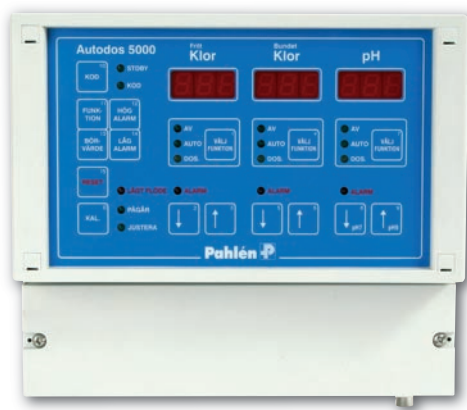


4161408

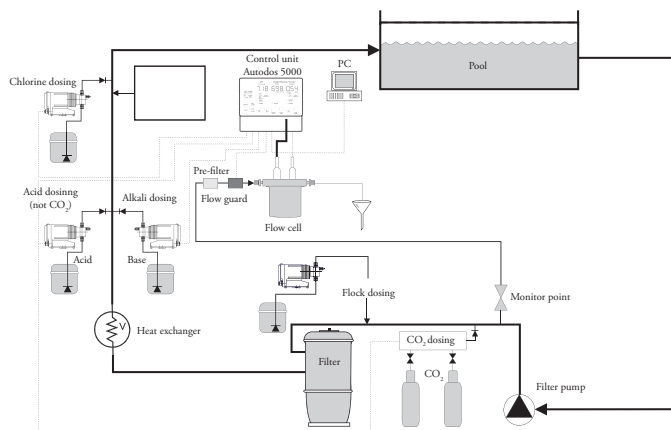
Technical data

- Monitoring: pH, redox and free chlorine.
- Display: 3 x 3 digits, 7-segment LED.
- Dosing: acid and base (pH-regulation) and chlorine. Selectable on/off or frequency dosing. Dosing may be manual or automatic.
- Calibration: two-point calibration of pH and chlorine, one-point of redox.
- Alarm: for high/low values, for low flow, prolonged dosing time.
- Inputs: digital input for external flow guard.
- Relay outputs: acid/base and chlorine dosing, alarm.
- Power outputs: three for channel 1, 2 and 3 selectable 4-20 (0-20) mA, max load 400 ohm.
- Programming: choice of displaying and in/out functions via software set-up (stored in EEPROM).
- Safety: code lock, that can be activated when necessary.
- Encapsulation class: IP54.
- PC communication (option).

Autodos 5000 pH - free chlorine - combined chlorine



41616



Autodos 5000 can be used for all types of pools, where free chlorine, combined chlorine and pH values are to be monitored and regulated. The alarm limits and required values are set at the front panel by means of clearly defined buttons. The measured levels are displayed using clear digital figures. Autosdos 5000 can be equipped with communication interface and memory module for PC.

Measurement and control unit

Item no.

41616 Measurement and control unit for pH - free chlorine - combined chlorine

Complete systems

Item no.

41605 Autosdos 5000 for pH, free chlorine and combined chlorine

- including
- measurement and control unit
 - flow cell
 - probes incl. cable
 - measuring water hose
 - connections and valves
 - buffer solutions
 - filter
 - flow guard
 - mounting panel
 - probe cleaning detergent



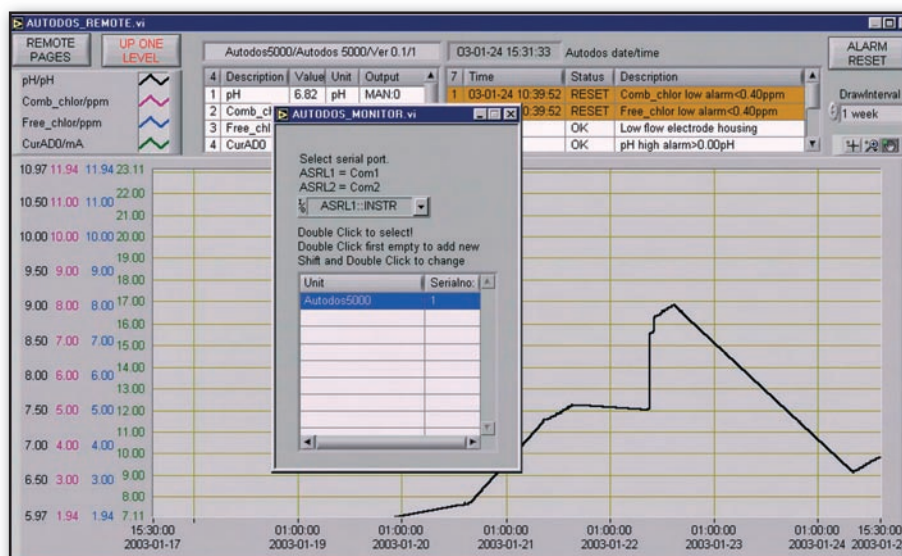
41605

Technical data

- Monitoring: pH, free chlorine and combined chlorine (separate inputs for each probe).
- Probes: pH, free chlorine: PB 100, combined chlorine: CTE 1-mA-10ppm.
- Display: 3 x 3 digits, 7-segment LED.
- Dosing: pH: reduction or increase, free chlorine: increase, combined chlorine: reduction. Selectable on/off or frequency dosing. Dosing may be manual or automatic.
- Calibration: two-point calibration of pH, free chlorine and total chlorine.
- Alarm: for low/high values, low water flow and prolonged dosing.
- Inputs: digital input for external flow guard.
- Relay outputs: 3 floating relay outputs (for dosing) and alarm.
- Power outputs: three for channel 1, 2 and 3 selectable 4-20 (0-20) mA, max load 400 ohm
- Programming: choice of displaying and in/out functions via software set-up (stored in EEPROM).
- Safety: code lock, that can be activated when necessary.
- Encapsulation class: IP54.
- PC communication (option).

Autologger for Autodos 700 - 5000

Autodos 700-5000 can be connected to a PC with a simple to install circuit card. The card is fitted using the connector and a plastic clip provided and it is either connected to an external communication module via a two-wire loop or via a RJ45-connector direct to a PC with serial channel or modem.



Autologger

Item no. 41625

- 32 kB EEPROM
- Real time clock
- 24 kB (4500 values) with average values per minute for 4 channels
- 8 kB events (255 pcs) e.g. alarm or calibration

Communication module

Item no. 41620

- RS232-communication to PC, cables included
- Two-wire communication to Autodos
- External transformer 9VAC for voltage supply

Pahlén CO₂ - pH-regulation

This equipment is mainly intended for pool water, but can be used for other types of water control. CO₂ dosing is achieved via a control unit with an adjustable flow meter. The Autodos unit, for monitoring and control of chlorine and pH, can easily be connected to the equipment to give automatic and safe pH control.



Pahlén CO₂

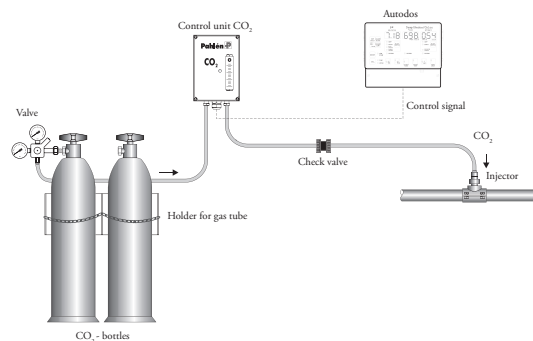
Item no. 41480

- Control unit CO₂
- Valve 6 bar for 1 bottle
- Injector connection ½"
- Container for 2 bottles
- 10 m gas hose 6 x 8 mm

Extra equipment for the CO₂ installation

Item no.

- | | |
|----------|--|
| 16090200 | Measurement and control unit for CO ₂ , 6 bar |
| 41487 | Valve 6 bar for 1 bottle |
| 41488 | Injector |
| 41491 | Holder for gas tube, 2 pcs |
| 41493 | Pressure hose 8 x 6 mm, /m |
| 41495 | Check valve 8 x 6 mm |



Technical data control unit CO₂

Voltage: single phase 230V

Regulation: on/off via Pahlén Autodos

Flow control: 0-6,5 l/min

Indicator lamp when dosing

Gas hose connection: 8 mm

Advantages of pH regulation by CO₂

- cannot create chlorine gas together with sodium hypochlorite
- improved working conditions when using CO₂
- easy storage and handling
- reduces the risk of corrosive water
- easy dosing with no need for dosing pumps
- it is not harmful, flammable or explosive

Pahlén UV-cleaning Viodes



Pahlén UV Viodes is designed for disinfection of swimming pools, spas and other water treatment applications. Together with UV the chlorine content of the pool can be reduced to a minimum. UV in combination with reduced quantities of chlorine gives a clean and clear water with a good effect on our environment and the health of the bathers.

The UV lamp produces short wave ultraviolet UV-C radiation with 254 nm wavelength. This is an optimum to neutralize bacteria, viruses and algae. UV-C also reduces the combined chlorine, that causes the smell of chlorine and irritated eyes and skin.

The UV unit is made of acid-proof stainless steel. The connection box, that contains ballast coil, hour counter and on/off switch, can be installed on a wall alternatively on the casing.

UV Viodes

Item no.	Model	Power	UV-C radiation at 254 nm	Lifetime UV lamp	Max pressure	Voltage	Connection
417750	Viodes 75	75W	25W	9000 h	10 bar	230	2"

Dosing pumps

Pahlen/Prominent Beta is a microprocessor controlled magnetic dosing pump with high precision throughout its working range. The liquid end is manufactured from plexiglass and the suction and pressure details are of PVC. These materials are chosen for their known resistance to the majority of chemicals used in water treatment. The pump can be controlled on/off or externally by pulses from a monitoring and controlling device, for example by using an Autodos with an external cable (extra equipment).



Dosing pump Beta with plexiglass liquid end (NPE). All pumps have on/off or frequency control and are supplied with injection and footvalves and 2 m of suction and 5 m of pressure hose.

Item no.

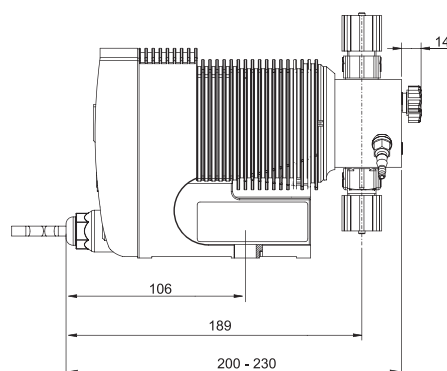
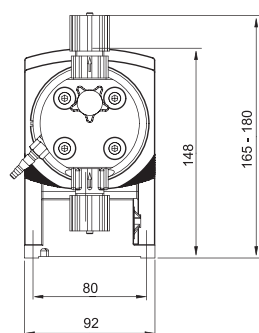
413152 Beta/4A 1602 NPE

413162 Beta/4A 0708 NPE

413172 Beta/4A 0220 NPE

413182 Beta/5A 0232 NPE

413142 Flocculation pump Beta/4A 1000 PPE (liquid end of polypropylene)



Technical data

Item no.	Type	Control	Connection mm	Max capacity l/h	Capacity ml/stroke	With max pressure bar	Max capacity l/h	Capacity ml/stroke	With average pressure bar
413142	Beta/4A 1000	On/off external	6x4	0,74	0,07	10	0,82	0,08	5
413152	Beta/4A 1602	On/off external	12x6	2,1	0,19	16	2,5	0,24	8
413162	Beta/4A 0708	On/off external	12x6	7,1	0,66	7	8,4	0,78	3,5
413172	Beta/4A 0220	On/off external	12x9	19,0	1,76	2	20,9	1,94	1
413182	Beta/5A 0232	On/off external	12x9	32,0	2,96	2	36,2	3,35	1

Dosing pumps

Pahlén/Prominent Gamma/L is a technical advanced microprocessor controlled magnetic dosing pump. The external control can be made by floating pulses or by an analog signal 0/4-20mA. The pumps are delivered with an input for a two-step float switch for level control of the chemical tank.



413153

- Display of feed rate in l/h
- Capacity range 2,1-19 l/h, 16-2 bar
- Infinitely variable setting of stroke length from 0-100%
- Digital accurate adjustment of stroke frequency via buttons and a large LCD display
- External control by floating pulses or by analog signal 0/4-20 mA
- Connection for a two-step level control

Dosing pump Gamma/L with liquid end of plexiglass. All pumps can be controlled on/off, by pulse or analog signal 0/4-20 mA. Delivered with injection- and foot valve, 2 m suction hose and 5 mm pressure hose.

Item no.

413153 Gamma/L 1602 NPE

413163 Gamma/L 0708 NPE

413173 Gamma/L 0220 NPE

Technical data

Item no.	Type	Control	Connection mm	Max capacity l/h	Capacity ml/stroke	With max pressure bar	Max capacity l/h	Capacity ml/stroke	With average pressure bar
413153	Gamma/L 1602	On/off Puls 0/4-20mA	6x4	2,1	0,19	16	2,5	0,24	8
413163	Gamma/L 0708	On/off Puls 0/4-20mA	8x5	7,1	0,66	7	8,4	0,78	3,5
413173	Gamma/L 0220	On/off Puls 0/4-20mA	12x9	19,0	1,76	2	20,9	1,94	1



413201

Pahlén/Prominent Sigma/1 is a power operated membrane pump with the working range 42-78 l/h, 10-7 bar. The liquid end has an integrated overflow valve for additional safety. The pump can be controlled on/off or by pulses from e.g. an Autodos via an external cable.

Dosing pump Sigma/1 is a power operated membrane pump, that can be controlled on/off or by pulses from e.g. an Autodos.

Item no.

413201 Sigma/1 12035 PVT

413202 Sigma/1 07065 PVT

Technical data

Item no.	Type	Control	Connection ("/DN)	Max capacity l/h	With max pressure bar	Stroke/min
413201	Sigma/1 12035	On/off Puls	¾"/10	42	12	172
413202	Sigma/1 07065	On/off Puls	¾"/10	78	7	240

Accessories Autodos and dosing equipment

	Item no.				
	41425	Flow cell plexiglass for pH, redox, temperature and Prominent free chlorine unit			
	41426	Flow cell plexiglass with flow control and flow guard, for pH, redox, temperature and PB100 unit for free chlorine			
	41426	41626	Flow cell with flow control and flow guard for Autodos 5000 for pH, PB 100 and Prominent CTE 1		
	Item no.				
	41434	Redox probe epoxy SN6 connection			
	41435	Redox probe epoxy BNC			
	41436	pH probe glass BNC			
	41437	pH probe glass SN6 connection			
	Item no.				
	41440	Cable for free chlorine cell PB100, 3 m			
	414401	Cable for free chlorine cell PB100, 0,5 m			
	Item no.				
	41441	Cable for CLE2.2			
	41441	41640	Cable for CLE3, CTE1		
	Item no.				
	41433	Flow guard			
	Item no.				
	41427	Temperature sensor with cable			
	Item no.				
	41468	Filter unit			
	Item no.				
	16085140	Hose connection 8x6 mm x 1/4"			
	16085150	Hose connection 12x9 mm x 1/4"			
	Item no.				
	41432	Valve 1/4"			
	Item no.				
	41428	Measuring water hose 8x6 mm / 10 m			
	413620	Measuring water hose 12x9 mm / 10 m			
	Item no.				
	41501	Chemical tank 35 l			
	41502	Chemical tank 60 l			
	41503	Chemical tank 100 l			
	41501	41500	Chemical tank 140 l		
	Item no.				
	41512	Collecting vessel 35 l			
	41507	Collecting vessel 60 l			
	41512	41513	Collecting vessel 100/140 l		
	Item no.				
	41438	Chlorine cell PB100, free chlorine			
	Item no.				
	41439	Chlorine cell CLE 2.2, free chlorine			
	416391	Chlorine cell CLE3, free chlorine			
	Item no.				
	414392	Chlorine cell CTE1, total chlorine			
	Item no.				
	41460	Quinhydrone 50x20 ml			
	Item no.				
	41444	Membrane cap for CLE 2.2, CLE3			
	414441	Membrane cap for CTE1			
	Item no.				
	41445	Fastening kit for CLE 2.2, CLE3, CTE1			
	Item no.				
	41446	Electrolyte for CLE 2.2, CLE3			
	414461	Electrolyte for CTE1			
	41448	Repair kit CTE1 incl. 2 membrane caps and one bottle of electrolyte			
	Item no.				
	414461				
	Item no.				
	41465	Probe cleaning detergent			
	41450	Buffer solution pH 2, 0,5 l			
	41451	Buffer solution pH 7, 0,5 l			
	41452	Buffer solution pH 8, 0,5 l			
	41453	Buffer solution pH 9, 0,5 l			
	41451				
	Item no.				
	41462	Calibration tube 20 ml			
	41462				

Accessories and spare parts dosing pumps



41374

Item no.

41374 Multi function valve 1,5-10 bar

41375 Multi function valve 1,5-16 bar



41372

Item no.

41370 Float switch Concept, 2m cable

41371 Float switch Concept, 5m cable

41372 Float switch Beta, Gamma/4, 2m cable

41373 Float switch Beta, Gamma/4, 5m cable



41336

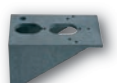
Item no.

41335 Foot valve 6x4 mm

41336 Foot valve 8x5 mm

41337 Foot valve 12x9 mm

41338 Foot valve 12x6 mm



41378

Item no.

41378 Wall mounting bracket Beta, Concept, Gamma

41379 Wall mounting bracket Sigma



413193

Item no.

413191 Connection kit 6x4 mm

413192 Connection kit 8x5 mm

413193 Connection kit 12x9 mm

413194 Connection kit 12x6 mm



41340

Item no.

41340 Injection valve 6x4 mm

41341 Injection valve 8x5 mm

41342 Injection valve 12x9 mm

41343 Injection valve 12x6 mm



413460

Item no.

413450 Injection lance

413460 Injection lance with ball valve

413450



413852

Item no.

413802 Repair kit Beta/4 1000

413812 Repair kit Beta/4 Gamma/L 1602

413822 Repair kit Beta/4 Gamma/L 0708

413852 Repair kit Beta/4 Gamma/L 0220

413862 Repair kit Beta/5 0232

41380 Repair kit Concept 1601

41381 Repair kit Concept 1201

41382 Repair kit Concept 0703, 0803

41383 Repair kit Concept 0306, 0308

41384 Repair kit Concept 0212, 0215



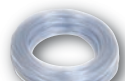
41361

Item no.

41360 Dosing hose P.E 6x4 mm

41361 Dosing hose P.E 8x5 mm

41362 Dosing hose P.E 12x9 mm



41355

Item no.

41355 Suction hose PVC 6x4 mm

41356 Suction hose PVC 8x5 mm

41357 Suction hose PVC 12x9 mm



41363

Item no.

41363 Dosing-/suction hose PVC arm. 12x6 mm

413631 Dosing-/suction hose PVC arm. 24x16 mm



413891

Item no.

413881 Liquid end PPE 1000 Beta/4

413891 Liquid end NPE 1602 Beta/4 Gamma/L

413901 Liquid end NPE 0708 Beta/4 Gamma/L

413921 Liquid end NPE 0220 Beta/4 Gamma/L

413931 Liquid end NPE 0232 Beta/5

41388 Liquid end NP 1601 Concept

41389 Liquid end NP 1201 Concept

41390 Liquid end NP 0703/0803 Concept

41391 Liquid end NP 0306/0308 Concept

41392 Liquid end NP 0212/0215 Concept



41366

Item no.

41365 Cable for frequency control Beta, Concept, Gamma 5-wire 5m

41366 Cable for frequency control Beta, Concept 2-wire 5m



41330

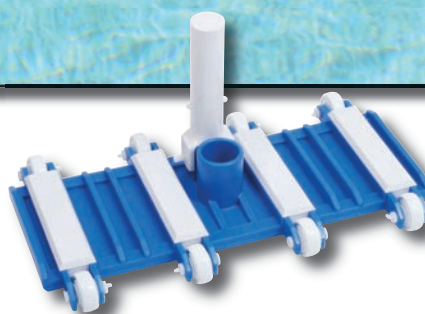
Item no.

41330 Flocculation station incl. tank and pump

Pool care equipment

Test instruments

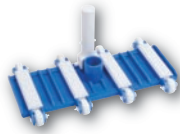
It is important and easy to keep a pool both clean and fresh with the right equipment and accessories. Pahlén offer a complete and well tested range of pool care equipment and test instruments to simplify the work involved in pool care.



Pool care equipment



Vacuum cleaner trolley
p. 91



Vacuum head p. 91



Vacuum brush p. 91



Automatic vacuum
cleaner p. 91



Vacuum hose p. 92



Telescopic handle p. 92



Leaf rake p. 92



Chlorine dispenser
p. 92

Measuring and test instruments



Autocheck p. 93



Test-set p. 93



Test tablets/accessories p. 94

Pool care equipment

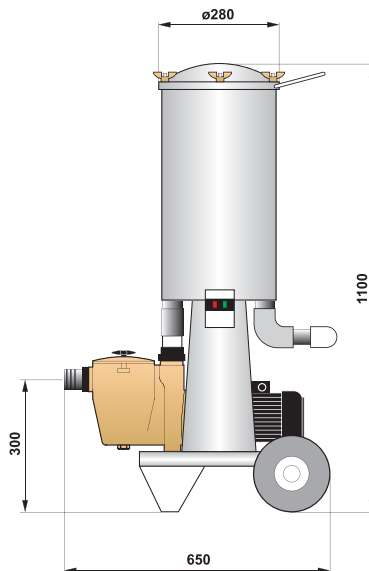
Vacuum cleaner trolley

Item no. 31225

For large and commercial pools. The cleaner is equipped with a cartridge filter in a stainless steel container and has an effective surface area of 9,7 m², which ensures long periods of service. Swimming pool pump 0,55 kW of bronze with high capacity (200 l/min). Air bleeding of the vacuum hose is automatically controlled by the pump. The cleaner is supplied complete with 25 m of cable and a motor contactor for single phase, 230V, electrical connection. All the equipment is mounted on a stainless steel platform and trolley. Ground fault relay is included.



31225



312901

Vacuum head

Item no.

31291 Fairlock vacuum head with wheels and replacable brush. Heavy design. Hose 40 or 50 mm. Width 470 mm.

31290 Rigid construction and flexible vacuum head with lead weights and 8 wheels. Provided with snap-in fixing. Hose connection 40 mm. Width 350 mm.

312901 As 31290 with side brush.



31292

Vacuum brush

Item no.

31292 For brushing and suction with lead weights. Hose connection 40 mm. Width 300 mm

312921 As 31292 with side brush.



31289

Automatic vacuum cleaner

Item no.

31289 Reliable automatic vacuum cleaner incl. 10 m hose. Minimum size of pump 0,37 kW. Width 200 mm.



31293

Vacuum hose

Vacuum flexible floating hose of soft PVC with end cuffs. Suitable for skimmers and vacuum heads. Connection 40 mm.

Item no. Length

31293 7,5 m

31294 9,0 m

31295 10,0 m

31296 12,0 m

31297 15,0 m

31298 18,0 m

31299 /m Heavy duty hose. Foremost intended for vacuum cleaner trolley.



31250

Telescopic handle

Strong telescopic anodized aluminium handle. Adjustable operating length and snap-in connection for accessories such as brushes, rakes, suction fittings etc.

Item no. Length

31250 2,4–4,8 m

31252 3,6–7,5 m



31285

Leaf rake - surface

Item no.

31285 Shallow rake for cleaning the pool surface (leaves, insects etc.). Aluminium strengthened frame and nylon net. Snap-in fixing. Dimensions 380 x 355 mm.



31286

Leaf rake - bottom

Item no.

31286 Deep rake for cleaning leaves etc. from the pool bottom. Aluminium strengthened frame and snap-in fixing. Dimensions 530 x 220 mm



31288

Pool brush

Item no.

31288 Strong wide nylon brush with curved ends. Snap-in fixing. Width 440 mm



31283



31284

Chlorine dispenser

Item no.

31284 Floating chlorine container with adjustable chlorine dosing facility.

31283 Floating chlorine container for small pools.



41305



41307

Thermometer

Item no.

41305 Standard

41307 Buoy

41308 Deck



41308

Measuring and test instruments

For manual testing of chlorine and pH-values etc.



Photo: Conny Sturesson



21298

Autocheck I

Item no.

21298

Photometer test equipment for free and total chlorine, from which the combined chlorine is calculated (0,05-6,0 mg/l), pH (6,5-8,4) and cyanuric acid (1-80 mg/l). Values are digitally displayed.



21299

Autocheck II

Item no.

21299

Photometer test equipment for free and total chlorine, from which the combined chlorine is calculated (0,05-6,0 mg/l), pH (6,5-8,4), cyanuric acid (1-80 mg/l), calcium hardness (50-500 mg/l) and total alkalinity (5-200 mg/l). Values are digitally displayed.



21285

Test set chlorine – pH

Item no.

21285

Test set for measuring free chlorine and pH-value. Chlorine 0,1-3 mg/l. pH 6,8-8,2.



43316

Test set bromine – pH

Item no.

43316

Test set for measuring bromine and pH-value. Bromine 1-8 mg/l. pH 6,8-8,2.

Measuring and test instruments

For manual testing of chlorine and pH-values etc.



Photo: Conny Sturesson



21291

Test tablets Photometer

Item no.

- 21291 Free chlorine DPD No.1, 10 tablets
- 21293 Total chlorine DPD No.3, 10 tablets
- 21292 pH phenol red, 10 tablets

- 21295 Cyanuric acid, 10 tablets
- 21296 Alkalinity, 10 tablets
- 21297 Calcium hardness, 10 tablets



21286

Test tablets Test set

Item no.

- 21286 Free chlorine, bromine DPD No.1, 10 tablets
- 21289 Total chlorine DPD No.3, 10 tablets
- 21287 pH phenol red, 10 tablets

212901

212982



212981

212985

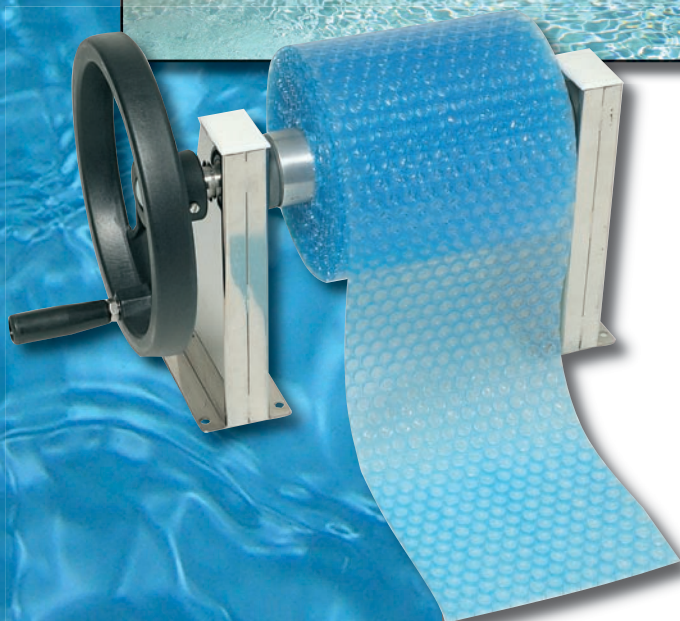
Accessories Photometer

Item no.

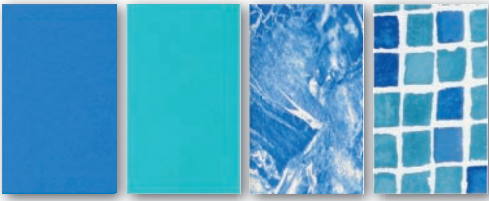
- 212981 Test tube Autocheck I and II, Ø 24 mm
- 212982 Test tube calcium hardness Autocheck II, Ø 16 mm
- 212901 Test tube cuvette square
- 212985 Stirring rod

Pool liners, covers and protection

A pool cover has many important functions. To save energy, to reduce chemical consumption, and to keep the pool free from leaves and insects. A pool cover is even recommended for indoor pools to reduce the humidity in the poolroom. Pahlén offer a complete range of pool liners and pool covers plus an approved, completely automatic, childproof pool cover, Pool-Guard.



Pool liners

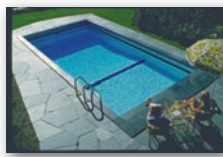


Pool liners and accessories p. 97

Pool covers, automatic pool protection

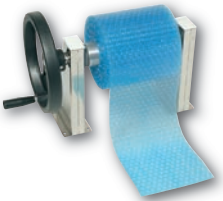


Pool cover p. 98



Pool-Guard p. 100

Storage reel for pool covers, sun foil



Storage reel p. 99



Sun foil p. 99

Pool liners

Pool liners – suitable for all types of pools

If you are building a new pool or replacing a liner in an old one it is important to choose the right material and supplier. The pool liners are welded from UV-stabilized PVC foil, which is treated to withstand the effects of chemicals in the pool water. Liner thickness: 0,75 mm (0,50 mm on request).

Pool liner with overlap.

Dimensions refer to the pool size.

Overlap: Pool depth 1,4 m + 100 mm

Pool depth 1,5 m + 150 mm

Item no.

48150	Pool liner, turquoise 3x6x1,4 m
48151	Pool liner, turquoise 3,5x7x1,4 m
48152	Pool liner, turquoise 4x8x1,4 m
48154	Pool liner, turquoise 5x10x1,4 m
48180	Pool liner, turquoise 3x6x1,5 m
48181	Pool liner, turquoise 3,5x7x1,5 m
48182	Pool liner, turquoise 4x8x1,5 m
48184	Pool liner, turquoise 5x10x1,5 m
481501	Pool liner, blue 3x6x1,4 m
481511	Pool liner, blue 3,5x7x1,4 m
481521	Pool liner, blue 4x8x1,4 m
481541	Pool liner, blue 5x10x1,4 m
481801	Pool liner, blue 3x6x1,5 m
481811	Pool liner, blue 3,5x7x1,5 m
481821	Pool liner, blue 4x8x1,5 m
481841	Pool liner, blue 5x10x1,5 m
431504	Pool liner, mosaic 3x6x1,4 m
431514	Pool liner, mosaic 3,5x7x1,4 m
431524	Pool liner, mosaic 4x8x1,4 m
431544	Pool liner, mosaic 5x10x1,4 m
431804	Pool liner, mosaic 3x6x1,5 m
431814	Pool liner, mosaic 3,5x7x1,5 m
431824	Pool liner, mosaic 4x8x1,5 m
431844	Pool liner, mosaic 5x10x1,5 m
431503	Pool liner, marble 3x6x1,4 m
431513	Pool liner, marble 3,5x7x1,4 m
431523	Pool liner, marble 4x8x1,4 m
431543	Pool liner, marble 5x10x1,4 m
431803	Pool liner, marble 3x6x1,5 m
431813	Pool liner, marble 3,5x7x1,5 m
431823	Pool liner, marble 4x8x1,5 m
431843	Pool liner, marble 5x10x1,5 m

Snap-in pool liner.

Dimensions refer to the pool size.

Item no.

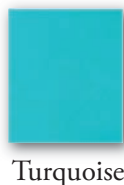
48160	Pool liner, turquoise 3x6x1,5 m
48161	Pool liner, turquoise 3,5x7x1,5 m
48162	Pool liner, turquoise 4x8x1,5 m
48164	Pool liner, turquoise 5x10x1,5 m
481601	Pool liner, blue 3x6x1,5 m
481611	Pool liner, blue 3,5x7x1,5 m
481621	Pool liner, blue 4x8x1,5 m
481641	Pool liner, blue 5x10x1,5 m
431604	Pool liner, mosaic 3x6x1,5 m
431614	Pool liner, mosaic 3,5x7x1,5 m
431624	Pool liner, mosaic 4x8x1,5 m
431644	Pool liner, mosaic 5x10x1,5 m
431603	Pool liner, marble 3x6x1,5 m
431613	Pool liner, marble 3,5x7x1,5 m
431623	Pool liner, marble 4x8x1,5 m
431643	Pool liner, marble 5x10x1,5 m

Special pool liners

Pool liners can be supplied to specification to suit all types and shapes of pools. The following four colours are available:

Item no.

43158	Pool liner, turquoise
431581	Pool liner, blue
431584	Pool liner, mosaic
431583	Pool liner, marble



Turquoise

Blue



Mosaic

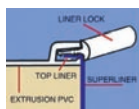
Marble



Pool liner accessories:



43199+431991



431995

Item no.

43199	Hang rail for fitting on the pool crown, 2,4 m
431991	Hang rail for fitting under the coping
431995	Snap-in sealing Linerlock. 50m/per pack
43145	Glass fibre fabric for levelling the pool floor. Width 5 m
43140	Wall tissue Etafoam for lining the pool walls. Thickness 5 mm, height 1,5 m, length 75 m.
43141	Glue Etafoam 1,0 kg
43189	Repair kit for pool liner

Pool cover, accessories and winter equipment

Pahlén pool cover of green tightly woven polyethylene. With strengthened seams and eyelets on all edges. The material is UV-stabilized and allows the passage of rainwater, which makes it easy to handle. The weight is 200 g/m² and e.g. a 4 x 8 m pool cover weighs 7 kg. It is supplied complete with eyelets, rubber straps and strap anchors with screws.



41237

Pool cover

Item no.

- 41236 Pool cover 3,2x6,2 m
- 41237 Pool cover 3,7x7,2 m
- 41238 Pool cover 4,2x8,2 m
- 41230 Pool cover 4,7x9,2 m
- 41239 Pool cover 5,2x10,2 m
- 4123099 Pool cover special shapes to order. Size and shape after sketch.



41255

412512

Pool cover accessories

Item no.

- 41255 Rubber strap
- 41257 Strap anchorage incl. screw
- 41258 Slots for ladder /pair
- 41252 Pocket for aluminium tube
- 41254 Aluminium tube 6 m
- 412512 Fastener (for aluminium tube) complete with screws and washers



412205

Winter equipment

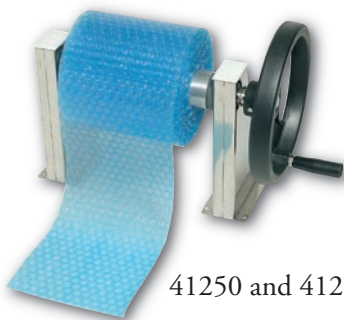
Item no.

- 41220 Winter cover of painted corrugated steel /m²
- 412205 Winter plug 1½"



Photo: Conny Sturesson

Storage reel, sun foil



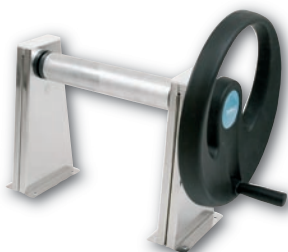
41250 and 41251

Storage reel for sun foil

Item no.

- 41250 Stainless steel construction excluding aluminium tube
- 41251 Aluminium tube for storage reel. Length 5 m
- 412510 PVC sleeve for extending aluminium tubing

Complete storage reel consists of item no. 41250 and 41251.

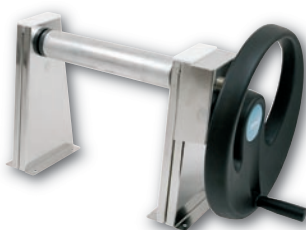


412080 and 41259

Storage reel for pool cover

- 412080 Stainless steel construction excluding aluminium tube
- 41259 Aluminium tube, telescopic, for storage reel. Length max 6,5 m

Complete storage reel consists of item no. 412080 and 41259.



412090 and 41259

- 412090 Stainless steel construction with gearing excluding aluminium tube
- 41259 Aluminium tube, telescopic, for storage reel. Length max 6,5 m

Complete storage reel consists of item no. 412090 and 41259.



18080102

Sun foil

A strong UV-stabilized cover of polyethylene with air bubbles. It floats on the water surface and is easy to fit or remove. This cover reduces heat losses by 70% and reduces evaporation by 90%. At the same time it allows the pool water to absorb solar heat at the rate of 40-60 kWh per day. Chlorine consumption is also considerably reduced. (When using storage reel, add 1 m in length.)

Item no.

- 18080102 Sun foil 3x7 m
- 18080202 Sun foil 3,5x8 m
- 18080302 Sun foil 4x9 m
- 412610 Sun foil special size under 10m²
- 412611 Sun foil special shape according to sketch
- 412612 Channel welding
- 412613 Hemming /m
- 412614 Welding of edges /m
- 412615 Eyelets, short side

Pool-Guard, fully automatic pool protection

A protective cover for pools designed with regard to appearance, load-bearing capacity and child safety. Pool-Guard can be automatically operated by means of the water pressure in the pool filter system or it can be manually operated.

Material and construction

The Pool-Guard consists of a safety cover of tough PVC (thickness 0.6 mm, weight 600 g/m²) together with guide rails, wheeled bearings, struts and a coping of anodized aluminium. With automatic operation, piston pressure pipes and a control valve are also included. The guide rails are fixed to the long sides of the pool and the wheeled bearings that travel in these are joined in pairs across the pool by struts (Ø 10mm) which also carry the cover. The cover is also attached to the rear of each pair of wheeled bearings. At one end of the pool the cover is firmly secured, and at the opposite end of the pool the cover is fitted into a rail, which in turn is connected to the front pair of wheeled bearings. Between each strut the cover has three or four drain holes, depending upon the width. The guide rails provide space for the pressure pipes and hoses and also support the aluminium coping. With automatic operation the pressure pipes are connected to the pump water in the pool filter system by the control valve. This pressure inside each pressure pipe operates upon a piston, which is connected to a draw wire controlling the cover. By means of the control valve the pump water can be fed into either end of the pressure pipes so that the pool cover may be closed or opened.



This cover may be operated either mechanically or automatically but manual operation is only recommended with smaller pools up to 4 x 8 m. When closed the cover can only be opened by using a special key.

Size

The Pool-Guard is available for pools up to 6 m in width and up to 16 m length. Other sizes can be offered upon request. The guide rails must be fixed at least 180 mm over the water level (with 5 m wide pools the rails should be at least 200 mm over the water level and for 6 m wide pools at least 220 mm).

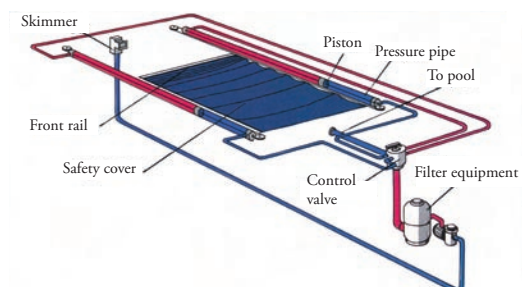
Appearance

The standard cover is available in either dark blue or green but other special colours can be offered.

Available in standard sizes and including surrounding rails, automatic kit, supporting bars and covers in either dark blue or green.

Item no.

412830	Pool-Guard max 3x6 m
412831	Pool-Guard max 3,5x7 m
412832	Pool-Guard max 4x8 m
412833	Pool-Guard max 5x10 m
412840	Pocket for Pool-Guard
412841	Fixing kit for wood
412842	Fixing kit for concrete
412843	Aluminium coping 3x6 m
412844	Aluminium coping 3,5x7 m
412845	Aluminium coping 4x8 m
412846	Aluminium coping 5x10 m



Spa pools

This is about improving your life style - to luxuriously bathe in warm spa water and feel the stream of pearl-like air bubbles massage your body, and, if you wish, also experience the invigorating water jets. Anybody who has immersed themselves in a bubbling pool knows what a wonderful experience it is. It is balm for both body and soul.

Pahlén supply a full range of spa pools for domestic and large public installations, utilizing the latest manufacturing techniques and support equipment.

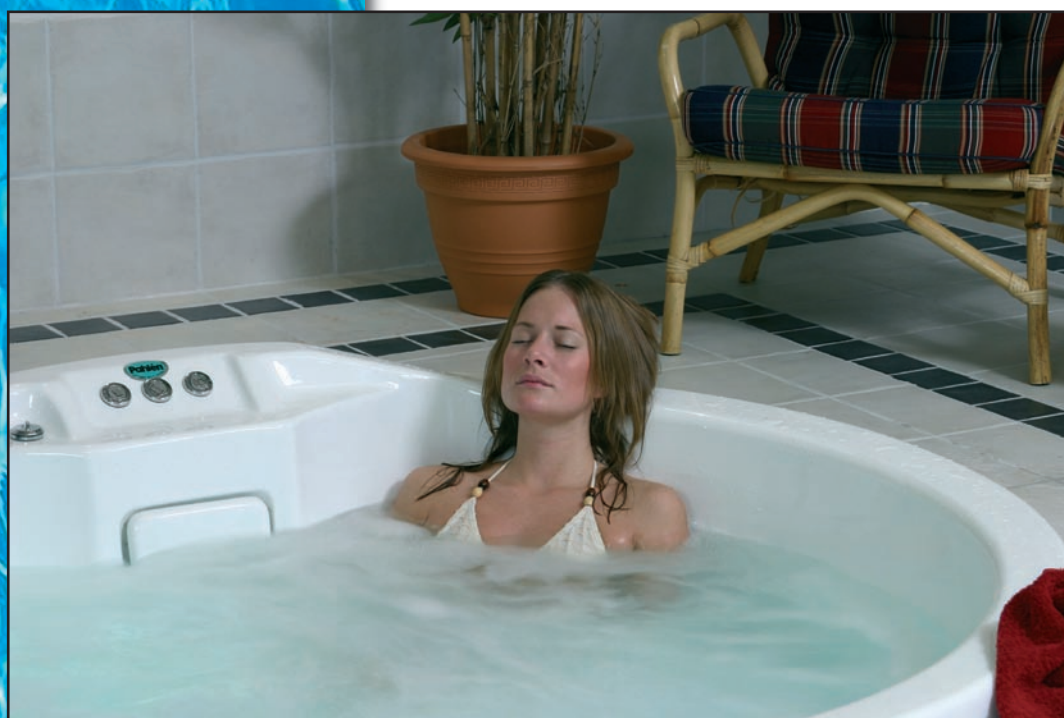


Photo: Conny Sturesson

Spa pool Olympic

Pahlén Olympic is a spacious octagonal pool for up to 10-12 bathers. It is ideal for public use in adventure and amusement installations, recreation parks and hotels etc. The Olympic is elegantly sculptured to represent a volcano with the water bubbling and erupting from the centre before gently running down over the edges to be collected into the wide overflow channel. Pahlén Olympic - the spacious spa combining modern techniques with a luxurious design. Available in three models.

Technical description

Vacuum formed sanitary grade acrylic backed by fibreglass reinforcement.
Colour: White.

Olympic with low overflow channel

Item no. 81133

- Self supporting construction with 9 adjustable supporting legs
- Low overflow channel with covering grating and connections to a balance tank
- Double air channel system for air massage
- 10 adjustable air/water therapy jets
- Bottom mounted inlet and drain
- 2 x 50W, 12V lighting units
- Pre-plumbed



Olympic pool with overflow channel

Item no. 81134

- Self supporting construction with 9 adjustable supporting legs
- Overflow channel with grating and connections to a balance tank
- Double air channel system for air massage
- 10 adjustable air/water therapy jets
- Bottom mounted inlet and drain
- 2 x 50W, 12V lighting units
- Pre-plumbed

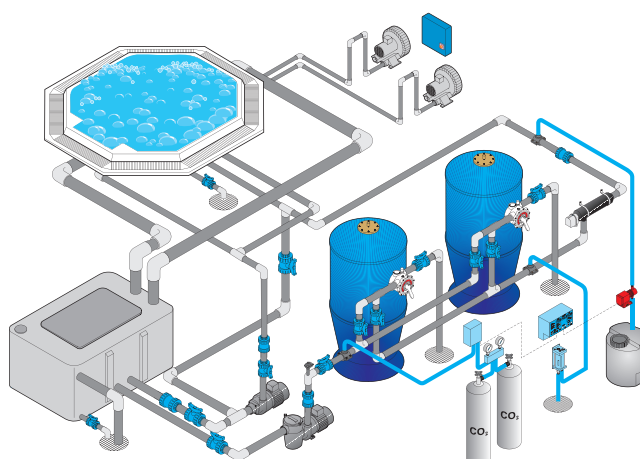
Olympic Mini without overflow channel

Item no. 81130

- Self supporting construction with 9 adjustable supporting legs
- Double air channel system for air massage
- 7 adjustable air/water therapy jets
- Bottom mounted inlet and drain
- 2 x 50W, 12V lighting units
- Pre-plumbed
- Skimmer

Extra equipment to Olympic

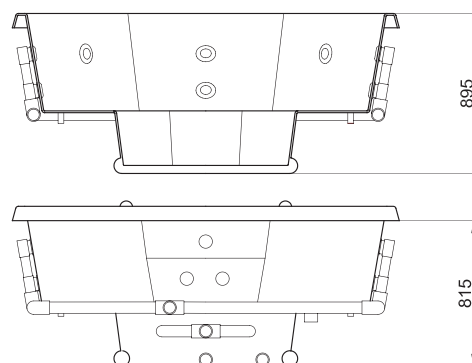
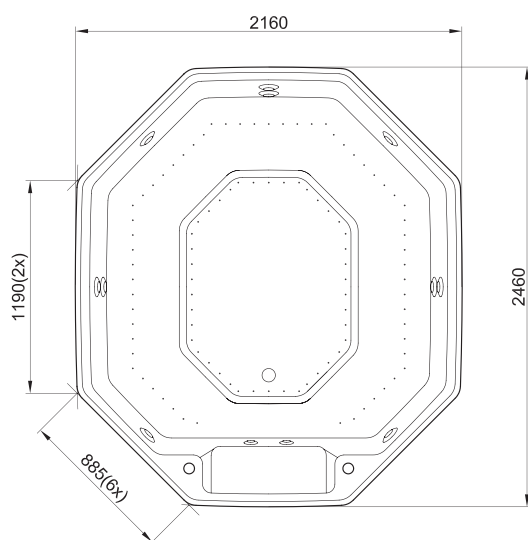
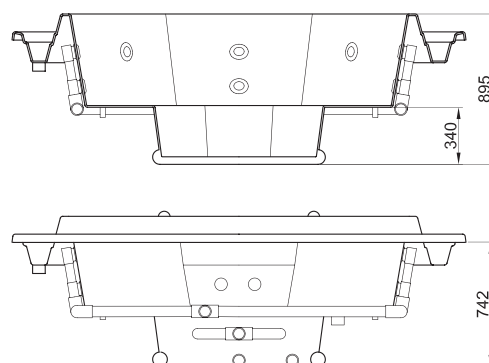
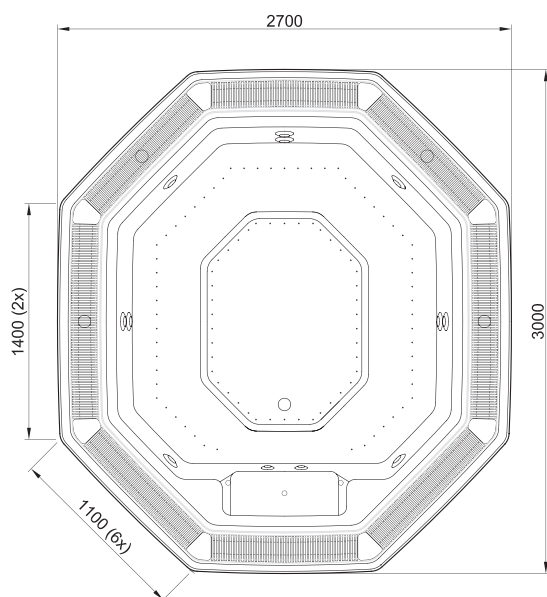
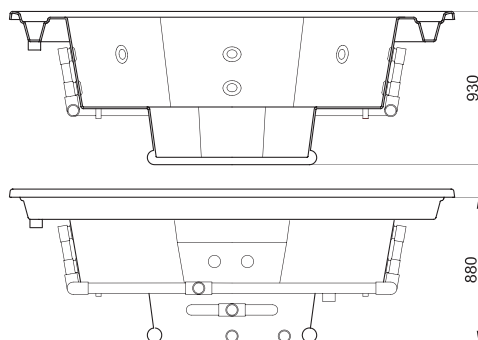
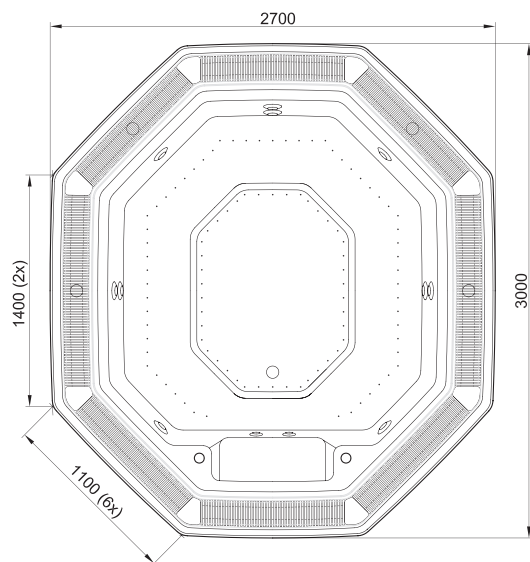
- Balance tank complete with manhole
- Pahlén sand filter
- Filter pumps of bronze 1,1-4,0 kW
- Therapy pumps of bronze 1,5-5,5 kW
- Air massage blowers 1,1-3,0 kW
- Electric heater 6,0-12,0kW
- Precision thermostat and pressure switch
- Pahlén Autodos automatic measuring and dosing equipment for maintaining correct chlorine and pH levels
- Dosing pumps and chemical tanks
- Automatic water level control



Technical data

Item no.	Size (l x w x h)	Volume	Weight
81133	3000 x 2700 x 895 mm	2500 liter	1250 kg
81134	3000 x 2700 x 930 mm	2500 liter	1250 kg
81130	2460 x 2160 x 895 mm	2500 liter	1150 kg

Spa pool Olympic



Balance tanks and other spa pools

Balance tanks

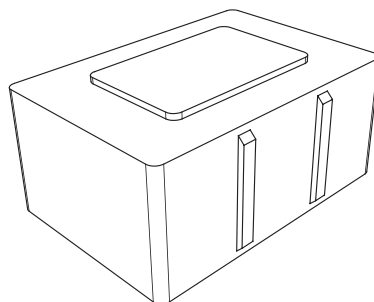
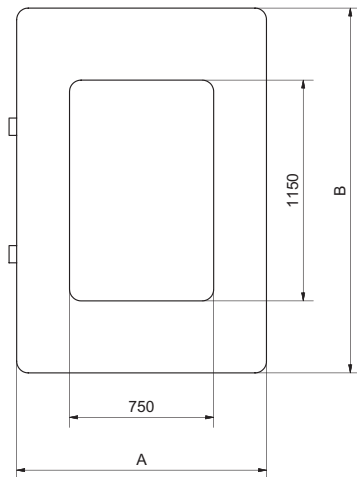
Item no. 81096

- Dimensions: 1900 x 1300 x 840 mm
- Volume 1700 liter
- Manhole 1150 x 750 mm
- All necessary connections included



Item no. 81097

- Dimensions: 2100 x 1700 x 840 mm
- Volume 2500 liter
- Manhole 1150 x 750 mm
- All necessary connections included



Technical data

Item no.	A (mm)	B (mm)
81096	1300	1900
81097	1700	2100

There are a number of Pahlén spa pools for private use.
Please contact us for more information.

Spa pools



Solo



Ono



Mio



Duo



Rondo



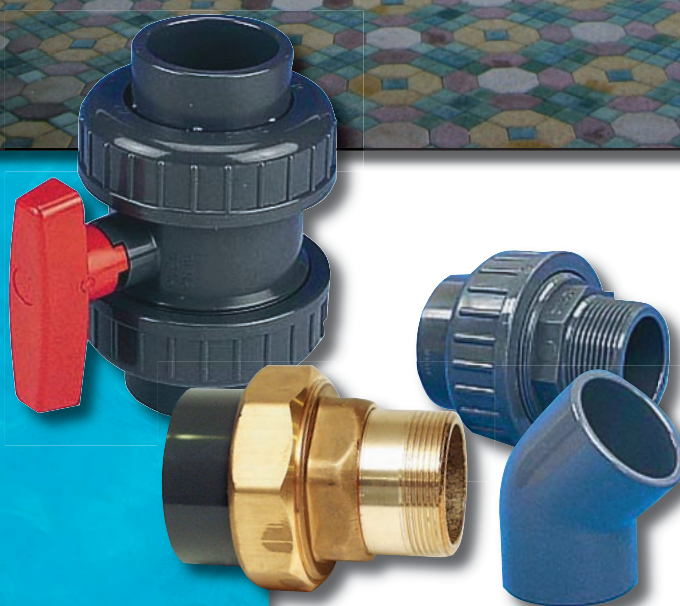
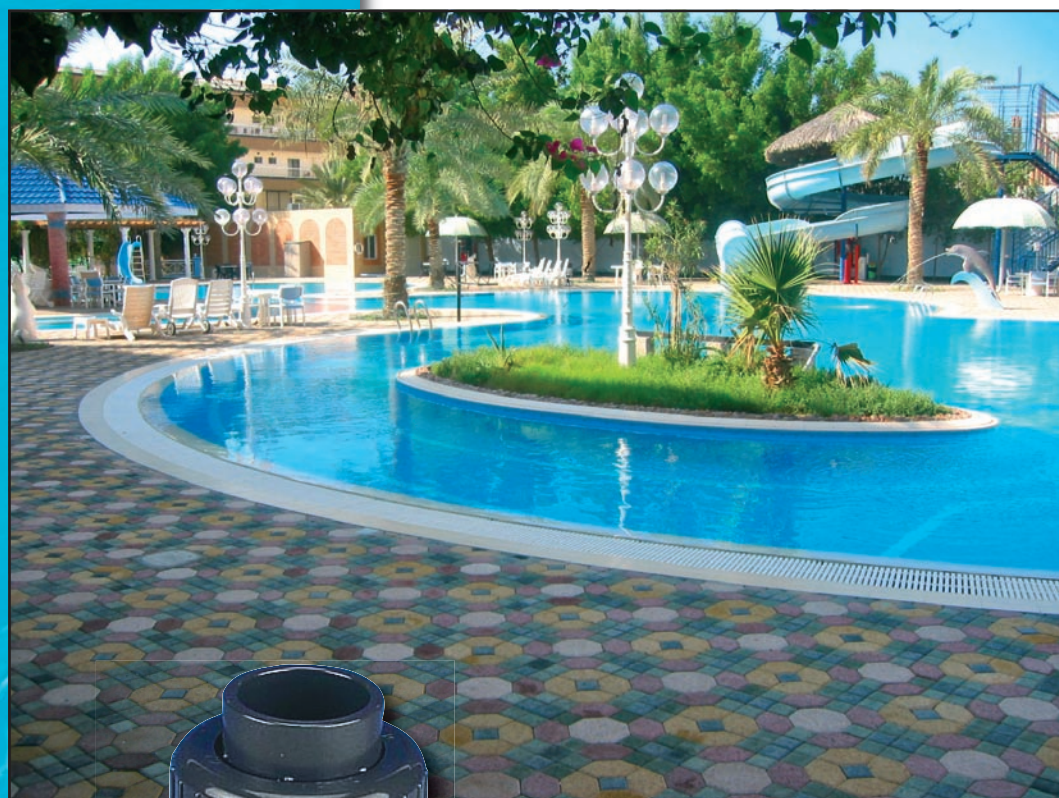
Cosmo



Classico

Pressure pipe fittings

Pahlén supply a selection of pipes and pipe fittings for swimming pools.



Pressure pipe fittings in PVC

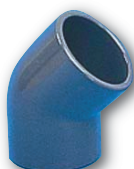


92061

Elbow 90° solvent socket, PVC, PN16

Item no.

- 92061 Elbow 90°, 50 mm
- 92079 Elbow 90°, 63 mm
- 92087 Elbow 90°, 75 mm

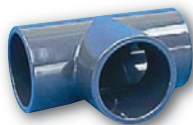


92863

Elbow 45° solvent socket, PVC, PN16

Item no.

- 92863 Elbow 45°, 50 mm
- 92871 Elbow 45°, 63 mm
- 92889 Elbow 45°, 75 mm

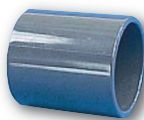


94067

Tee solvent socket, PVC, PN16

Item no.

- 94067 Tee, 50 mm
- 94075 Tee, 63 mm
- 94083 Tee, 75 mm



97060

Socket solvent socket, PVC, PN16

Item no.

- 97060 Socket, 50 mm
- 97078 Socket, 63 mm
- 97086 Socket, 75 mm



79070

Union coupling solvent socket, PVC, PN10

Item no.

- 79070 Union coupling, 50 mm
- 79088 Union coupling, 63 mm
- 79089 Union coupling, 75 mm



99587

Bushing solvent socket, PVC, PN16

Item no.

- 99587 Bushing 63x50 mm
- 99610 Bushing 75x50 mm
- 99611 Bushing 75x63 mm



79063

Union coupling PVC inside solvent socket, outside thread PN10

Item no.

- 79063 Union coupling PVC, 50x1½"
- 79061 Union coupling PVC, 63x2"



94110

Nipple, inside and outside solvent socket/outside thread, PVC, PN16

Item no.

- 94110 Nipple 50x40x1½"
- 94111 Nipple 63x50x1½"
- 94112 Nipple 63x50x2"
- 94113 Nipple 75x63x2"



79090

Union coupling PVC/brass, inside solvent socket, outside thread PN10

Item no.

- 79090 Union coupling 50x1½"
- 79091 Union coupling 63x2"



128603

Saddle clamp for plastic pipe, PP, PN10

Item no.

- 128603 Saddle clamp 50x1½"
- 128604 Saddle clamp 63x1½"



78750

Ball valve solvent socket, PVC, PN10

Item no.

- 78750 Ball valve 50 mm
- 78763 Ball valve 63 mm
- 78775 Ball valve 75 mm



77745

Pressure pipe, PVC, PN10

Item no.

- 77745 PVC-pipe 50 mm
- 77752 PVC-pipe 63 mm
- 77760 PVC-pipe 75 mm



10083500

Coupling and hose

Item no.

- 10083500 Clamping ring coupling, made of PP, Ø50 mm x 1½"
- 10083502 Clamping ring coupling, made of PP, Ø50 mm x 2"
- 10083550 Tee socket clamping ring Ø50 mm
- 19985520 Armoured PVC-hose Ø50 mm (complete roller only, 50 m)



19985520



17090200

PVC-adhesive for hose

Item no.

- 17090200 PVC-adhesive, Cepex 125ml



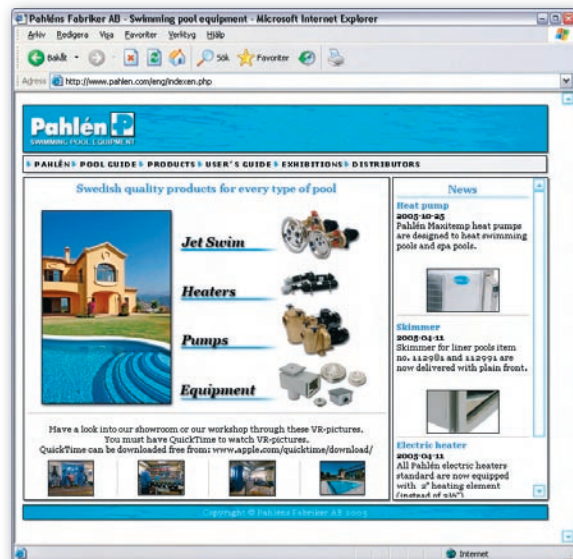
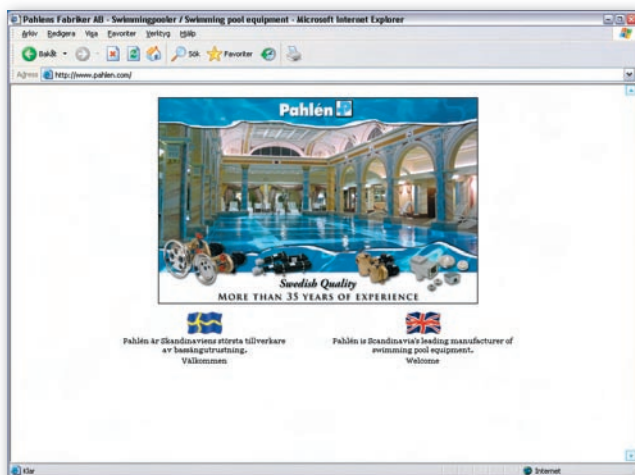
90219

PVC-adhesive

Item no.

- 90219 PVC-adhesive, Pevicol 570 g

Visit Pahlén on the internet



www.pahlen.com

